Thesis for M.A. degree. 
Entered also for the Cunning Magiz Obstetrics

"On Backward Desplacements of the Gravid Uterus
-an enquiry, mainly historical."

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April 1889.
MEMORANDUM.

From the Dean of the Faculty of Medicine:

To Professor J. R. Fraser

Prize Theses.

Have the goodness to circulate as follows:

Professor Ehrene: June 24th

Simpson

Rutherford: July 9th

O. D. St. John's Thesis has not been returned, which please send to Professor Ehrene.

P. Dean,

A. O. Sinclair

May 15, 1889.
This condition of backward displacement of the gravid uterus is now so well recognized that we find it difficult to realize that the fact that it is only about 120 years since the first case was actually put on record.

As Mr. John Harvey Price in 1887 as follows: "Hic factum care fatum, quod noster noster in fatuo quasi Demosthenes conditus die solutum. In medicorum systemate est inventionem Medicis, quid nunc, quid non curandum succipserunt? Quidem enim quaeque Medicis percutiam factum in morbo ignoto? Malevalem ergo cum systemate esse.

Nowadays every text-book on midwifery* mentions the condition and discourses it more or less fully; numerous cases have been put on record and the dispute has been fairly urged between those who hold different views as to its causation and the treatment to be adopted for its remedy.

Few of the modern writers, however, seem to have taken the trouble to consult carefully those who first wrote upon the question and the object of this paper is, while carefully and dispassionately reviewing the history as at present held, more

*The numbers in red ink refer to the bibliography at the end of the paper, p. 153.
especially to direct attention to those who first recognized the condition and who practically laid the foundation for all our present knowledge. A fairly complete list of these early writers will be given at the end of the paper, many of them having been consulted in the original, to other references have been found in other writings; unfortunately circumstances have prevented the list of modern writers from even pretentiously to be in any way whatsoever a complete one.

Early writers allude to the condition in a vague sort of manner without describing it properly or thoroughly understanding it. Hippocrates is quoted by Plato as having written this: "Si eccegeta rectum mentem, non fuerit magia in illa genera tua." (Hipp. 2. De mot. animal. Sect. v. p. 142.) Tyler Smith, on the other hand, states that Hippocrates seems to have known reversion of the gran'd uterus, since he states that some ancient authors refer to it and describe a mode of relieving it by passing two fingers into the rectum or thus shifting the fundus uterus to its proper place. We have not been able to verify either of these references. Tyler in further states to have written of this condition, but on referring to his works, we find that although he recognized reversion, he does not notice it as in any way affecting pregnancy or producing symptoms during that period.

Moxonii Anastroctiae in 1628 signis, "Si in hanc
intenciam obiit, spiritus sublimis est, levius est spiratio.18
Denia adhibitatione ac movenim non gust. Si recte, aut infra videbitur
miserore sequitur, et intrinsequer cervix motus difficultis, aut place
interceptas, ac in gentes abolitis qui inter sedentem accipiantur, magis
prospectam si versus an unum retroflexa fistula vomerina, alia
suffrinovia, quaeque clysternum admittit, nisi semel, patrum
imminet. Speaking of the causes he says Contingat praecipue
his affectus membrantium percutiendi, violae et sive, quod quo
partem statuere facta sunt, ac frequenties frequentie quodam
et difficultias affectus. Further he goes on to point the treatment
ut si eo uter subscriptum sit, aut arceo offusque uter versus
problemum fist, obiectum velificati, aut digito in venae sinus
utrum profectum. This is the earliest reference to the condition
of retroversion occurring in pregnant women that we have been
able to discover, and it seems to be a sufficiently distinct
one.

Pertinentia co-bevorta about 1630 is quoted by Herriman
as follows: Gratiam adhibitatione membranaceae
secretae fluid, et sequin per surceta causa carnegia putridum
que sequatur, uter amebae afflicere habetia, donee continuantur
et inde intermittit, quod etiam per auctium suo fluent, obiectum
voluti partus est sedem et inguinalia flurite, et in utrumque vi
tamen obstetra. Herriman considers that he refers her to retroversion
of the gravid uterus but more probably he was describing the condition
of extra-uterine pregnancy; the quotation is however extremely
interesting as repeated here because we see from it that even in that
early stage, evacuating part of the uterus in order to remove certain kinds of
potentially toxic material was somewhat practiced.

Jadonius wrote in 1721 as follows: "Si le cul de la
vessie est pressé par l'abaissement du propre corps de la Matrice,
comme il peut avoir dans les premiers mois de la grossesse aux
femmes qui sont sujets aux demences de la Matrice; pour lors la
vessie se remplit entièrement d'urine, l'quelle y demeure avec
grande douleur ni en pourrait pas être expulsée; l'autant que
le pouce de l'urine à cause de cette compression ne peut plus
s'ouvrir si partiellement qu'à l'ordinaire pour la laisse écouter.....
puis lors on aura recours au dernier remède, qui est de faire sortir
l'urine avec une sorte forcée, et si la suppression en fera de
soulagement, à la femme de la même façon jusqu'à ce que les accidens
soient apparaîtras.... Here although he does not recognize the condi-
tion as being a retroversion, he describes the symptoms produced by it
sufficiently accurately to convince us that he is in reality dealing
with that condition.

Seventy writing in 1725 compared the position of
the uterus viz. prevents, backward to the side, to the four
weeks of which he does not notice the occurrence of any symptoms
during pregnancy, due to backward displacement, he speaks of
as cause of delay in labour ypes on to say "II est non
manifestement fondé selon cet; si ejeter obstetrique entre, movent
sont vis aciès rectus postérior, etiam坚定不移 postérior, qvantein,
illud in oblique susto a recto sustenuecessit ac adiò plus minus
The following case recorded by La Motte, Traité complet des Accouchements, t. 1, chap. 20 p. 88, published at Leyden in 1729, is quoted by Herriman as a case of abortion of the gravid uterus, in which the woman suffered from a total suppression of urine which could not be relieved by a catheter on account of the pressure of the
head of the fœtus on the neck of the bladder. If this specially a case of
ground detachment, it is the first one recorded or described but on
looking up the reference we cannot agree with Themison in his
conclusion but rather think that it was nearly a case of prolonged
labour where retention of urine was caused by the pressure of the
fetal head.

Somewhere about the middle of the 18th century,
Spaggiari while lecturing at Paris instanced an instance of this
condition; his lecture does not appear to have been ever published but
it was due to his lecturing that attention was first properly
drawn to the condition 
that it was recognised & carefully
observed.

In October 1754 Hunter read a lecture on the
following case, although he did not actually publish it till
sixteen years after. The case is so historically interesting &
the original is so difficult for most people to obtain, that
we may be excused for quoting it in his own words—"A
young woman about 4 months advanced in her first pregnancy
after a fright was taken ill, & could not without great difficulty
stand or even walk. Her complaint grew worse daily till on Saturday
the twelfth of October (1754) both these evacuations were entirely suppressed.
The suppression of urine continued without any relief being given, till
Thursday the seventeenth when Dr. Hariett Dall, surgeon, was called to
her assistance. He drew off by the catheter about seven or eight quarts
of urine. He then attempted to throw off a clots but very little passed off.
it had no manner of effect. In the afternoon about three quarters of
an hour after the said bowel was drawn off by the catheter. In order to
examine the cause of these symptoms, Mr. Wall introduced a finger into the
vagina, which could not pass up in account of a large tumour that lay
behind the vagina pressed upon it close to the middle of the base pubis. As
there was not room to pass the finger he could neither reach the tumour
of the vagina nor could he discover anything like the ovary. After
this he examined the symptom, found that the same tumour, or both lay
above a before the joint, pressed it so strongly against the middle of the os
cervix so that the finger could only be passed a very little way.
These circumstances made Mr. Wall reflect on a case of a contracted
uterus which Dr. Gregory had given in his lectures at Paris. He then
concluded that this was a case of the same nature, and attempted to reduce
the tumour by laying the patient on her back, by assisting with one finger in the
vagina, and then in the arm as before. Gregory had described; but without any
success. The poor woman continued in great pain, Mr. Wall came to
me on Saturday the nineteenth, gave me an account of what had passed, of
desiring me to visit her with him. He found her exceedingly weak, and suffering
great pain. She was lying upon her back. He passed his finger between the
tumour and the middle of the os pubis, a little to one side of the vestiure, upon which
a considerable quantity of urine was discharged, as my finger removed the
pressure upon the uterus. He then proposed a second attempt to reduce the
uterus to its natural situation for which purpose he placed his upon his
hears elboun, and with her hands and thighs as low as possible. He introduced
one hand into the vagina, and two fingers of the other into the anus and
endeavored to explore the uterus, by forcing it up with the two fingers, at the same time by trying to draw down the upper part of the vagina, which was considerably elevated from its natural situation. But the attempt was all in vain; she became weaker every hour, which on the Monday following, Dr. Wednesday, we were allowed to open the body. Upon cutting into the abdomen, we found the bladder astonishingly distended with urine, filling up almost the whole anterior region of the abdomen, like the intestines in the last months of pregnancy. When the urine was discharged by opening the bladder, we observed that the lower part of the bladder, which connected with the vagina's anterior part, into which the uterus is inserted, was raised up as high as the lower pole of the uterus, by a large round tumour (viz. the uterus) which entirely filled up the whole cavity of the pelvis. We then passed a catheter of the vagina, observed that it ran up the bladder, at the top of the tumour; a demonstration that the upper end of the vagina consequently the uterus was situated there, and, upon making a supravaginal incision through the bladder, vagina at that place, we found that it actually rose. The incision made the summit of the tumour upon which the bladder rested, and the uterus adhered was turned down towards the coagulated humour. The uterus, in that adhered state, was grown so large, that it was inserted in the pelvis, that we could not take it out till we had cut through the symphyses of the coccygeal bones, and tore these bones considerably, in order to enlarge the space between the bones of the pelvis &c. &c.

The results of the post-mortem examination are figured in "Anatomia Alter Humanarum Corpora Tabulæ Illustrata. Tab. 26." which was published at Birmingham in 1744. Four illustrations are preserved.
1. Woman fully opened, showing bladder.

2. Bladder cut down through its middle & opened at the lower part, to show the situation of the ureters.

3. A back view of the whole contents of the pelvis, consisting principally of the uterine vessels.

4. The womb opened to show the secondary & tertiary contents.

This preceding account is a full & complete one of the symptoms, result & post-mortem examination of a typical unrelieved case of retroversion of the gravid uterus; we cannot help being struck with curiosity with which even the minutest details have been described & noted. The actual publication of the case did not take place for some years, as has been already stated, & before that we have Smellie writing about the condition of recording cases. Thus in 1756 he writes as follows: "... total suppression of urine. The complaint will be: first, if the womb is found too low in the vagina, or if the Teurn, instead of adhering to the fundus, ascends into the whole part in the middle of the back which accordingly first undergoes distortion ... After the womb is enlarged, the fundus will be last of all, stretched till the end of the puerperium, the woman be happily delivered. But, as the stretching begins down from this then in a common case, the uterus must consequently press against all parts of the pelvis, before it can rise above the pelvis; and that pressure sometimes produces an obstruction of urine & difficulty in going to stool." In 1758 he published the following cases: - A primipara, at the end of the 4th month of
pregnancy had total suppression of urine for 50 hours causing great pain. 
A dilatation of the bladder, which was immediately relieved by the catheter. 
Dr. Granstein, he says, "I felt the uterus lower down than usual." She 
was ordered to be "blooded" and to have a cysto-adenoma. About 
true suppression, "I felt the uterus fixed still lower down 
y the pressure of the enlarged bladder, indeed, it was so low that I 
could feel the length of the oeal and stratchings of the fauces, which seemed to 
fall off the whole cervix, which was at the bottom, 
strongly against the bowels, as well as the bladder, 
loose and uncommonly hot. I concluded that the whole body was inflamed."

The urine was drawn off for nearly a fortnight when she recovered to 
the full term. She had the same trouble in her next pregnancy, but 
by bleeding and keeping her body open, it was prevented from being 
total," he says further. "I have had two other patients troubles 
with the same complaint, about the same period of gestation, which 
continued 14 days, and was overcome by the same method."

I have frequently known a difficulty in making water "boupees" at the end of 
the fourth, in about the middle of the fifth month."

I was 
then called to a woman in the 5th month, "I felt the bladder utters 
exerted upward backwards, to the lower part of the bowels, the bladder 
being pressed against the inside of the left groin. The bladder under 
part of the bladder was so pressed, that the patient had not urinary 
gone several days; the vesicar was stretched up to the Dorsica 
bowels, a fluctuation was felt as in cancer. The male catheter was 
used, because the other was too short, and emptied a great quantity of
scene, so that the distension of the bladder continued still diminishing. Next day after the same operation she was carried, ... she was in two or three days carried off by convulsions."

We see then that although Hunter had ere this lectured upon a case of this disease, to Smellie belongs the credit of being the first to record in print an account of a well-authenticated case.

In Holland the condition had also been observed, for even before 1750, Professor of Midwifery at Göttingen, published in 1765 two cases of 1. "Pavisse anatomiae inordinata distentione atur delphina lethalia, in gravitate, atque vero utrque "Subpressione, pati Nuctem ignoscatur." A primipara, 2 months pregnant, had difficulty in micturition, although she passed a certain amount of urine daily. He diagnosed this as of the womb, and prescribed the laconics; he says, further, that it is a sign common and frequent accident status utrae, orificii excretionis indagaverit, quod resilient, utrum cum sequatur, tempus uterum necat, et notae summonit tam "posteriorum retrectum at tangi, digestione nascetur." (Although he states that the uterus was backwards, not of reach, it is much more probable that it was really above the pubis; that the reason of it was one of retroversion.) She soon died. On making a post mortem examination, he found a greatly distended bladder which had ruptured, while the uterine was almost entirely filling up the cavity of the pelvis. He goes on to say: "Sic etiam ante contemplationem inter protractione uterina lethalia si quis affectum jam adf recitum tempus illam, orbitum pelvis dimensionem hoc suo accidetem.
Ut in gravis expansionis sequit in casum occasione, quae augmentata procerorum symptomatis propter. Hoc enim factum est, ut partibus genus continebat sparsit satisque, ut impressum non supepassit.

Hinc scribemus, quod considerant diuturum et diuturnum reatum, et diuturnum ac longiturnum ab antiquo distans. Primum uti admodum alte factum est, totum in parte exterso pelvis pone ova pulicis secondum, tanta difficiet. Singulimque quaeque est

Maxime atque subjecta, ut fore dictum verum, ut in totum contigeret vertetum lumbalem, est corporegius, praebere in parte qui tarsi continereat, valde est expansus. Hoccumque tumore, qui sita erecta adimplerat omnem pelvis cantatam, et appararet foramen Tursum illud, quem expansit, vertie et duct. atque adhuc indicient, sique quae Priscium facilis autrosam et suorem adscendat.
autem ella cupinae partis uterii posterioris et quaedam ut incipit et aliae prolatae; hoc est, ut se habeat, quod nihil nisi uterum contumacem

He seems to think that the distention of the bladder was the

causing cause of the displacement of the uterus, aided by the large size of

the pelvis. In later days, each of these theories of cause or

to the cause of the displacement of the uterus is the distention of the bladder

has been advocated, and has been most strenuously maintained.

Servet, who was also a pupil of Gregoire at the same

time that Wall was, does not seem to have benefited much by

the teaching he received at Paris. In 1666 he wrote as follows:

"Jamais deux les femmes bien comprenne le fond de la Matrice

ne peut se porter directement en arrière, comme devant et ses

parturientes l'ont eue jusqu'à présent...... Lorsque la Matrice porte

son fond en arrière et vers le haut, tandis que le museau de la

Matrice se dirige vers le bas, cela depend presque toujours de ce

que des vertebres des sommets se trouvent angules à contre-sens de

l'état naturel." He is further stated by Mangelroch that he

described the condition as "transverse inversion" (Journal de Pharm.

1742, p. 270), to distinguish it from inversion properly so-called.

In 1771, Lynca published his "History of a fatal

Inversion of the Uterus & Nuptioe of the Bladder in Pregnancy." This

instance was really a case of gravid retroversion, which proved fatal.

Everyone of the bladder occurring as a complication is best treated

for the first time. He also proposes supra-pubic puncture of the

Bladder as an adjunct to treatment.
It was as an appendix to the case of dypsia that Pasteur published his case which has been already quoted above; he moreover proceeded to discuss the case as says: "Observing the incoagulated urine in the thrown into that unnatural position, it continues in it for some time, it will probably always remain so unless reduced by art before it becomes so bulky as to be lodged in the grist of the pelvis in proportion as this process advances the discharge both of urine and stool will become more difficult, and length both will be entirely suppressed. When such suppression once begins, they aggravate the evil, not merely by causing pain, but by occasioning a load of accumulated urine to form in the abdomen above the uterus which presses it still lower in the cavity of the pelvis at the same time that the distension of the bladder in this state draws up that part of the vagina and cervix uteri with which it is connected, so as to throw the fundus uteri still more directly downwards."

Again in 1799 in his "Summary Remarks on the Distressed Utero" he wrote: "The growing bulk of the uterus in the first month of pregnancy, before it rises above the line of the pelvis has a natural tendency to produce irritation, dyspepsia, and suppression of urine. The particular form of state of the pelvis in many women may contribute much to such complaints as even to the retroversion itself in various degrees. The pelvis which is most spacious below, increased above will be the most disposed to such disorders. A hemorrhage that many supplant women will seldom or never have the complaint. When the lower part of the pelvis is very spacious especially when there is little adhes
to fulleffect, the enlarged uterus in the second and third months, will occupy the lower part principally of such a pelvis; it will press more upon the ureter, more than upon the upper part of the bladder, thereby causing the patient more to dyspnea and suppression &c. the uterus increasing daily in bulk will at length be so jammed in the pelvis as to bring the patient into a very dangerous hazardous situation; being kept down by the distended bladder, which was, or it ranged frequently, powerfully downwards by the efforts of the patient, it is pressed against the perineum especially the lower parts of the pelvis where those fasciculi are long as mentioned to the cavity of the pelvis, but where fleckly & yielding, it swells outwards & forms projections which for it almost invisibly in that situation. One of the most usual causes of the full retroversion, we may suppose, is the distension of the bladder, which, as it rises upwards into the abdomen, where it has room to expand, naturally tends to drag along with itself the cervix uteri, & adjacent part of the vagina to which it is fixed.

To put his theory simply in a few words: owing to certain predisposing causes, slight retroversion occurs, this then causes some retention of urine & accumulation of feces in the rectum above the fundus uteri & then these in their turn tend to increase the retroversion & render it complete. The lesson he drew from this was, to try to reduce the retroversion as soon as possible so as to prevent the occurrence of this vicious circle of events. This theory was held until Simmon brought it forward in 1801 & so charged the recognized ideas as to treatment. Hunter also
in 1771, discussed the propriety of perforating the uterus with a small convex, so as to discharge the liquor amnii, so as to render the uterus smaller, more lax, more capable of reduction. He also noticed the occurrence of spontaneous reposition in one case after the bladder section had been emptied.

Meanwhile, this condition was written about in Germany by Merki & Sambrotta in 1775, by Allozy in 1777; by Osler, Gartshore, Hooper & Delone in England in 1799; in the same year by Evans, Parcell & Swan in Scotland. If these Hooper had the honour of being the first to put on record a case where recovery ensued, all the previously recorded cases having proved fatal. Gartshore describes a case which was evidently one of retroflexion of the gravid uterus, being the first recorded case of this condition that we have been able to discover; — A weak delicate woman, accustomed to lift heavy burdens, was supposed to be 6 months pregnant; she was suddenly seized with pain in lower part of abdomen, attended with a difficulty in making water. She threw off the urine & expelled a few days later. The abdomen was hard & swollen as high as the navel. There was a circumcinated tumour between the vagina & rectum. The os tenue was not turned upwards, but lay towards the pubes, could easily be felt about the middle of the pelvis..... Notwithstanding the situation of the os tenue, it still suspected a retention of the utero. The uterus was eventually replaced & pregnancy went on well.

Parcell's essay which he sent to the Medical Society of
Estonia, is especially interesting as a prolonging section of the symphysial fossa in order to facilitate reduction of the uterus. In writing this operation, which has hitherto been performed only for the extraction of the foetus in cases for which the Caesarean section was formerly recommended, promises to be productive of still greater advantage in cases of retroverted uterus, which would otherwise prove fatal. In actual practice, however, the advantages which he predicts for this operation have not been found to exist.

In 1779, Katynsker, Pogers and Walk wrote about this condition.

In 1784, Cheston recorded a case of retroverted uterus, in which the Paracentesis device was successfully performed. This appears to be the first occasion, in this country at all events, when this operation was performed for retention of urine due to a retroverted gravid uterus. He wrote: "I punctured the bladder with a needle-sized bore, which I passed into the uterus about two inches above the os pubis."

Although many, both in this country and on the continent, continued to write on this condition, nothing very important seems to have been brought forward until John, in the year 1784, wrote his important essay "On Retroversion." He recognized the existence of the two forms of retroversion, i.e., retroversion and retroflexion, and described them thus: "Decs laterum hytius male pedes fingendo eae censeo: alterum, si totius uteri declinatio, alterum, si in ortho..."
In some cases of ulceration on the surface of the digit, the exploratory incision does not always extend to the bone. In other cases, however, the ulcer may extend to the tendon and the bone, involving the flexor profundus muscle in the palm, as in old, pulpy, or acute adhesions.

Baudelocque, in his Principles of Surgery, of which a translation was published by Heath in 1790, says: "This inversion may take place slowly or suddenly, and the determining causes are often different. When it takes place slowly, it seems to depend on the slight but continuous pressure of the floating abdominal viscera on the fundus of the stomach, either on its anterior or posterior part, according to the position of the patient, or sometimes on the pressure sometimes occasions the anteflexion or sometimes the retroversion. This is the same mechanism that both hands take place suddenly, or that requires a stronger impulse." This appears to be a faint foreshadowing of the idea which years later was elaborated by Steindler, that the condition of retroversion of the fundus is merely an exaggeration of a retroversion which already exists to a certain extent. He records an interesting case when, by passing his finger between the tumor from the neck of the bladder, he enabled the patient to make water for ten days. He then replaced the atonic state. He says: "That to resist the atonic state of the immediate pressure of the tumor, he began by incising two sides of the fundus, a very thick layer of elastic gum, invented by the Sieurs Gouraud, which served after the reduction to fix the atonic state." This appears to be the first recorded case of any instrument to help the
and in effecting reduction. He also regarded the genu-fetal position as an aid to reduction, deserving the teaching of Hegaric which had been to place the patient on her back. He also seems to have recognized retroflexion, for he says: "We must not always judge of the extent of the displacement by the height of the uterine, or the degree of difficulty we find to reach it with the forceps. Sometimes it is very accessible, though the inversion is as great as it can be, because the neck of the uterine uterine hands like the neck of a bottle, as I have observed in cases of retroflexion, as well as of obliquity."

Jackson in 1798 records in his "Cautions to Women suffering the state of Pregnancy" what was, in all probability, a case of "incomplete retroflexion," a condition more fully described by elkhan many years after; he writes: "There is no instance on record of a woman reaching the full period of gestation with a retroverted uterus. Such a case, however, I had an opportunity of seeing about two years ago." The woman had dysmenorrhea, but never entire suppression of urine; her labour lasted several days, "but the gradual efforts of nature, at length, completed her deliverance, by restoring the womb nearly to its natural position." Should there have been really a case of incomplete retroflexion, it is probably the first recorded one.

Duncumb in 1799 wrote in the "Anatomy of the Female Uterus" as follows: "This is a disease which in many instances depends upon the connection of the uterus with the bladder, which is so intimate, by means of the peritoneum, cellular substance, that adherence..."
the bladder nearly distension, the interum must rise also. Now, as the bladder, in globular, & the point of adhesion between the two organs is only at the inferior part, it follows that the interum must go off, as a tangent, from the globe of the bladder, its fundus being thrown further back, at the same time that its surface is carried higher up. This happens in every case of retention of urine; so in some cases the surface does not enough, but the fundus turns down, doubling on its neck, which bends. This more frequently happens after delivery, before the parts have assumed their proper size & firmness. It has received the name of retroflexion, but its treatment is the same. Here the reader sees a tendency to depart from the view of Warton & an approach to those of Senman why as we shall see later, accorded all retroflexions to distention of the bladder.

Bell's theory in 1800 draws attention to the well-recognized fact, that the main danger which we have to fear is inflammation of the bladder & that our great endeavor must be to guard against the occurrence of this complication.

The year 1807 is an important one in the history of this disease, for in it we find Senman writing about it in his "Introduction to the Practice of Midwifery," & bringing forward that theory as to its connection with which his name is now so intimately associated. He makes no mention of the condition in the earlier editions of his book which he published.

After describing the arrangement of the peritoneum going to form the pouch of Douglas, he writes: But from the same cause (the reflection of the peritoneum) woman becomes liable to various
disease, to the retroversion of the uterus. But quadrupled by their horizontal position are exempt from every disadvantage to which the inflation of the peritoneum may subject woman. He then proceeds to propound his theory that retroversion of the gravid uterus is entirely due to distension of the bladder, this latter always preceding the retroversion. He inflated the urinary bladder in some cadavers thus showed to his own satisfaction at all events, that the uterus must always be elevated before it can be retroverted; he then says: "There appears to be no cause, besides the distension of the bladder, capable of elevating the uterus and at the same time projecting its fundus backwards.

... it is more reasonable to conclude that the suppression precedes the retroversion, if we do not allow to be a cause without which the retroversion cannot exist. Moreover, if the uterus is in a state which permits it to be retroverted, when the bladder is much distended, a retroversion is a necessary consequence, and may be produced by a very trifling accident." He considers that the distension of the bladder, which is necessary to produce the retroversion, is most often due to neglect to attach to the suffusion of water frequently from a sense of false modesty. He goes on to say: "Though the suppression of urine precedes to the uterus its first inclination to retrovert, yet the position of the ovum is such, in the act of retroversion, of the humour formed by the fundus is sometimes so large, when actually retroverted as to become, in their turn causes of the continuance of the suppression of urine." This then is "Gemman's Theory of the cause of retroversion," i.e. that it is exactly opposed to "Hawes's Theory," what Hawes looks on as cause, Gemman considers to be
The natural result of this theory was a conflict, in every case, about the method of treatment adopted by those who believed in it. Fortunately, for the sufferings of patients, a minority of the practitioners of the day. I am now proceeding to make the following extraordinary statement:—
"At the present time, no practitioners of credit consider it as a case of any difficulty, or feel any solicitude for the event; provided he be called to the relief of the patient before any mischief is actually done." — a sentiment that probably was "practitioners of credit" of the present day would venture to echo. He advocates non-interference with the uterus unless section is perfectly easy; while continued retraction of the may injure the uterus itself, their evacuation may prove, in some cases, a cause no alarm, for:—"If the uterus be injured, there will be no further growth of the ovum; and if the ovum should continue to grow, it is the most unfavourable proof that the uterus has not received any natural injury." Such an one who could write like this, not only had had the practical experience of the disease, but had not even taken the trouble to read the records of those cases in whose way such experience had come. He goes on to say;—"It is remarkable that, in the most deplorable cases of the retraction of the uterus, those which have terminated fatally, the death of the patient has been declared to be owing to the injury done to the bladder only; —
Hunter had previously taught that the uterus should be replaced as soon as possible after drawing off the water. He had written; — "We must not presume that every woman in danger who has a retroverted uterus? And when we can easily, at once, remove her pain, put he
into a state of security, can it be advisable to be favouring the effort of
15 days weeks together till the uterus recovers itself, even if we could
be sure that this would happen?" - Sherman now came forward
saying that the woman was in no immediate danger, all that was
necessary to be done was to draw off the urine regularly and attribute to
the bowels leaving the rest to nature which would effect all that
was necessary! If this doctrine was held by the use of treatment
recommended by him ever at all widely adopted, it is fearful
to think of the number of lives that must have been sacrificed need-
lessly in those days & the amount of pain & discomfort that
must have been left unrelieved.

After this period there was an immense flood of
literature on the subject, consisting mainly of reports of cases
observed, with some at paper.

Thomson in 1810 published a "Dissertation on
Retorsion of the Uterus" an extremely able & interesting essay
in which he tried to show that a large number of so-called cases
of extra-uterine pregnancy were in reality cases of grand retorsion.

After carefully considering all his arguments & cases, however,
one cannot but feel that he has hardly succeeded in establishing
his point in the majority of the cases.

Joseph in 1812 records a case in which he performed
the procedure from the vagina, a method of treatment which
had already been suggested by Hunter, but which had not as far as
we have been able to discover, been previously put into actual
practice. Abdominal was produced in the woman recurred lest she lose
on the operation as a dangerous one. "La jonction de la
matrice était toujours une operation grave et dangereuse."

In 1816 Gardner strongly recommended section of the
symphysis pubis as had been already proposed by
Serres. He says that it is an operation "qui sauverait l'enfant, en supposant
que la mère ait la force que me le feraient la jonction de la matrice
et travers la partie frontale du vagin?... la femme revient parfait
apres une accouchement grave par cette operation."

Next, in 1816, speaking of the same operation. Says;
J'ai aidé, en 1798, le professeur Lephyne Lévy dans cette
opération sur une femme dont le bassin était trop étroit, et
elle en est sortie presque de son accouchement, au point dont
marcher que très-difficilement, je ne crois pas même qu'elle soit
encore élable. For these reasons he strongly opposed
the operation.

Calotin also in 1817 in his "Systéma Chirurgical"
recommends abdominal section in order to replace the uterus; a bold
operation indeed for a surgeon to advise in those days, although we
now a day should probably feel no surprise if one of our eminent
abdominal surgeons were to venture the advice. His actual words are;

"Il suit prudéslection, incision abdominale facta, que ci s'accolent
sit, for section cesare propositae, maxime in abdomine inutile,
et titres refusém en retour naturelmente retracée, hand neglecta
sequent tractation Indicata."
Caldeon in 1817 drew attention to what is now clearly recognized as a past and not a reductio in the
placement of the fundus uterus to one or other side of the promontory
of the sacrum, instead of directly afterwards, he wrote, "... une fracture
à observer serait l'incidence du col de la matrice vers la courbure ostéoblastique
générale, et défend vers la symphyse sacro-iliaque droite, on éviterait
pas à l'intestin rectum qui pourrait offrir plusieurs sources de
résistance."

Bayham in 1839 tapped the uterus per rectum in
a case where he had failed to reduce it by ordinary means.

Various artificial means to aid reduction of the
uterus are described, in order to overcome the difficulty which
was met with in many cases.

Doetin & Dupuy in 1833 recommended the
adoption of the following means in order to aid in drawing down the
eredit, - on bien on pourrait se servir d'une force algébre
placée dans l'utérus et jusqu'à dans le sacrum (Collange, Soliman)
par un cordon ou cordon, sur la masse de l'utérus qui se déplace
en même temps qu'on élève le fond."

Zalzer in 1840 recommended that the vagina
should be inflated with air by means of Higginson's syringe; he says
that air being then forced into the bladder, the uterus rises itself.

He states that he has succeeded by these means in reducing a uterus
at the fourth month of pregnancy, which had resisted all other endeavor.
A truly remarkable assertion if we should believe him.
In 1859 we find Olthoe describing what he terms "a complete resorption of the gravid uterus at term" a condition which had not been previously observed until care from his case he deduced the following inference: "That it conforms the opinions of Derringer, as derived from his cases, that pregnancy may go on to term with a complete resorption of the womb, and that this displacement may form an important conflict of labour" - a statement, with the latter part of which nobody would be inclined to find fault; however much they may be inclined to differ from him as to the truth of the first part of it.

We have already seen how Harder was practically the first to describe this disease, how a second epoch in its existence is associated with the name of Denman, and in the year 1860 we reach still a third stage in the history, for in this year Skinner published a series of exhaustive papers in the British Medical Journal, in which he propounded the theory that in a large number of cases of gravid retention, the displacement be existed before conception took place, a theory which is now almost universally held. Excellent as his papers are they are defective perhaps in some respects, but there are many of his statements from which we must differ. He begins by stating that for all practical
purposes retroversion & retroflexion of the gravid uterus are one & the
same, dividing them up however into *Retroversion Uteri ante
Conceptionem* & *Retroversion Uteri post Conceptionem*. He then gives
a table of the causes observed in 63 cases & goes on to say—“I think
the sixty-three cases warrant me in concluding that so far as the
mechanism of the displacement is concerned, there are five distinct classes of cases on
record, viz,—

1. Those which have already alluded to, when the
retroversion occurs at or before conception.

2. Cases where it has occurred suddenly from a self-evident
cause, such as a fall on the concave or tertius ischii, the bladder being
more or less full.

3. (Germain's theory). Cases arising from over-distension of the
bladder; such as negotiating a passage called to urinate, or a fright, or
other mental emotion likely to damage the function of the bladder,
particularly in young vital females.

4. (Hunt's theory)......

5. Cases arising from excessive action of the abdominal
muscles.....; the bladder being empty or nearly less distended in all,
without dysesthesia or retension previously existing.

A sixth class might be formed by a combination of any
of the foregoing conditions grouped under Classes 2, 3, 4, or 5.

The first of fourth varieties are necessarily slow in their
formation, while the second, third & fifth are more sudden in
their occurrence.
He then lays great stress on the fact that the displacement may have existed in a large number of cases before conception, although he fully recognizes the importance of the other causes that have been stated to act in producing the condition.

This then practically completes the history of this disease, for although a great deal has been written within recent years upon it, yet little fresh information has been added to our store. In many of the essays on the subject, the history which is of such great interest is extremely deficient, yet it is on this account that we have entered into the early history, with some reservation in this paper, and have considered with less detail the more modern writers, which are for the most part built up upon the statements of these early writers, without however any acknowledgment on the part of their authors of the sources from which they have obtained their information.

Of the more recent papers we may perhaps especially mention those of Schleary & of Dames in the Medical Gazette. To the latter of these reference will be frequently made in this paper, it being one of the most able and complete treatises on the subject in the English language of at all recent date.
In this paper we propose to consider all conditions of backward displacement of the fundus uteri, that is to say all conditions in which the fundus lies behind its position which it should normally occupy. The displacement may be very slight, so that, in fact, it produces no symptoms and is only of importance so far as it tends to the production of the more marked forms, as we shall see later, or it may be extreme so that the fundus lies right back in the broad part below the peritoneum downwards; or it may lie in any position between these two extremes. Hunter recognized these varying degrees when he wrote that the uterus may be "1. Fully retroverted, 2. Half retroverted, or 3. So far in its natural state, that the surface of the uterus shall be downwards." The last sentence probably refers to retroflexion.

Further, in spite of what Skinner wrote, we intend to separate completely the two conditions of Retroversion and Retroflexion. Meaning by Retroversion, the condition in which the fundus uteri is turned backwards while its cervix is proportionately turned forwards, so that the long axis of the organ remains straight; by Retroflexion, the condition in which the fundus is turned backwards, the organ is bent upon itself so that its axis is a curved line, the fundus and cervix being approximated to one another, the cervix being very slightly, if at all, displaced from its normal position in the vagina.
In the first place we propose to consider only the condition of Retrusion, leaving Retraction for the latter part of the paper.

Retraction of the gravid uterus, in its slightest degree, is probably fairly common, and the condition producing no symptom, will pass for the most part unnoticed. The maximised degree, which produce symptoms are not very common, although probably a large number of cases occur; produce these symptoms, and spontaneous reposition takes place without the cause of the symptoms ever having been discovered; this was most likely especially the case in the early days of the discovery of the disease; in fact, we find Hunter saying: "The existence of this disease having been controverted till late at least, in a neighbouring enlightened country..." Now a day there should be less chance of such cases being overlooked, since attention has been so frequently called to the disease. Most authors state that it is rare even now, while Baudeloque in 1790 wrote that it is "less known and more rare than the plague," a statement which nobody is likely to dispute.

There seems to be a great diversity of opinion as to whether this condition is more likely to occur in primiparous or multiparous; some state one they write with equal justification, and others the other. Skinner says that it concludes from 63 cases that it is much more liable to accompany the
first, second or third pregnancies, than subsequent ones, so that
pregnant females are most of all the subjects of the
displacement." We are not in a position to confirm this
statement, neither, on the other hand, can we contradict it.

It is possible however to speak with much more
certainty as to the period of pregnancy at which it occurs, or
rather we would say, the period at which the symptoms appear
for it is impossible to assert definitely that the retention occurs
when the symptoms appear only. 
Yemon says that it generally
occurs about the 3rd month of pregnancy; 
Remondot says
that it can only occur just when the uterus is arising out of the
pelvis i.e. usually between the 3rd and 4th months, "but it is in some
degree regulated by the size the organ has acquired at this particular
time, i. e. also by the capacity of the pelvis itself." 
Nancie says:
"La rétention est rare, et n'apparait qu'au troisième mois de
la grossesse."

From an examination of 35, of which we have examined
the records, we have found that 1 occurred at the 2nd month;
1 between the 2nd and 3rd; 7 at the 3rd; 8 between the 3rd and 4th;
6 at the 4th; 3 between the 4th and 5th; 2 at the 5th; 1 between the
5th to 6th; 2 at the 6th; 4 at full term.

The symptoms then appear as a rule just as the
funders enter in rising above the rim of the pelvis i.e. somewhere
about the 3rd or 4th month of pregnancy; they may appear however
earlier or later than this depending upon the relative size of the
pelvis large, then if the pelvis is small at the growing dates long, the symptoms may appear earlier; if the pelvis is large at the return, small they may be later in their occurrence; they may more or less occur at any time, so long as the fundus uteri can pass beneath the promontory of the sacrum and the fets caught there.

Simeon has noticed the late occurrence in some cases for he has written, "I have frequently known a difficulty in making water happen at the end of the 4th, or parish about the middle of the 5th month." Spielberg too says that the symptoms may sometimes not appear till the end of the 5th or beginning of the 6th month — this is seen when the pelvis is very wide, the uterus relatively small, or the patient not of a very sensitive temperament.

Slamon said that "from the 4th to the 5th month is the most dangerous period," though why he puts the period of occurrence so late, it is difficult to see.

In a few words the see may sum up the whole question and say that — The period of occurrence usually centers round the 3rd month of pregnancy, but is entirely dependent upon the relative size of the pelvis and return. In some cases no symptoms may appear until labour comes on, these however will be considered later.

We now proceed to discuss the causes of this disease; already we have alluded partly fully to the views put forward by Harto and Semman; in considering these however we
great once struck by the fact that although Hunter ever asserted the truth
than Denman when he considered that the retention of urine was due
to the retroversion, yet he failed entirely to discover any modifications
in the bladder which would tend to their most ingeniously to account for
It will be unnecessary to repeat here what we have already
said of Hunter's theory, suffice it to say that when we come to speak
part of retention of urine occurring as a result of the retroversion, reference
will be made to the mechanism again.

If Denman's theory a little more may be said, others like
him had already been struck with the fact that the outstanding

symptom was retention of urine; had consequently come to look upon
It as a cause. Thus we find in Denman in 1765 mention of the post
mortem examination of one of his cases—

"Necesse, ut antem trahisque
Partial inter. Reitero, restaque cunctato, a ducturnere uercie exfarer,
antic, quoniam tuto pelvis est anaeplasia.

John Moore & in 1785 gave the disease as a cause of abortion,
for he wrote as follows—

"Utens ipsa suspensoria, hanc caputula tali
Aetatio ac uercis diutinius. . . . . Non fuerant semelles uercias
Stimulation at obliterarer per urtem sedentarium, quantum exteri,
sectio magno. Sic utuau versus umbilicum adscendera nequit, ob
hane uercia tumescit prominentem satiet: complicata, prumo
fundi, tumen retrovertetur . . . . uercia lato epanza, quaqua
versum tendit, aliis tenet, speculare spatium circumstit, praeceptiva cura
salva alta. Hoc est, tamen, quod ipse accipit et una
ALLELIO CALENTA AVERAT
incoherentem. Hanc teneam, tamen, Dehann's theory proposed
quaranteen years before he brought it forward in 1827, for our reference
seems to be made to the disease in the earlier editions of his works;
the credit of the theory then belongs to John & not to Dehann if at
least his rights.

James also wrote in 1799:—This is a disease whose
etiology in cases, depends upon the connection of the tissues with the
bladder, which is so intimate, by means of the peritoneum of
or cellular substance, that whenever the bladder arises by distension,
the tissues must rise also. Now, as the bladder is globular, the
point of adhesion between the two organs is only at the inferior part
of the bladder, its fundus being thrown farther back, at the same
time that its outlet is carried higher up. This happens in every
case of retention of urine."

The views of Dehann, which are practically an exact
reproduction of those of John, have been already quoted & need
not be here repeated. Dehann, in 1818, spoke to a
great extent with him. He said:—"Though over-distension
of the bladder may be considered as the principal occasion of the
accident; yet it will frequently happen that there must be the
combination of some external cause to produce it. Great emotion of
the mind or creature of the body, may give that shock to the distended bladder, which is sufficient to retract the wound; and perhaps would not have taken place at least to so great a degree, if such external cause had not operated. This will account for the popular opinions respecting the cause of this complaint."

Many probably agreed with this theory, for instance Sammelbohm wrote in 1821: "The original cause of the misfortune is generally a previously distended bladder, aided probably by some momentary occurrence giving to it increased effort. By an unusual degree of pressure, the uterus gets an inclination downward, which assisted by its own weight and volume, turns the whole mass towards the lap." It will be granted by all that the attachments of the bladder receive at one so close that the tension of the bladder will tend to draw up the cervix retroverted the uterus, but the weak spot in this theory is that no sufficient cause is given for the primary division of the bladder, since the publication of John A. Newman that it is due to neglect of the calls to urinate will certainly not account for all the cases which occur. We may quite well allow then that the division of the bladder, although it is not a cause of the retroversion, yet may increase any slight displacement that exists; this action is pretty generally recognized by A. Sammelbohm wrote in 1790: "The retention of urine somewhat often becomes as it were an additional cause which concur with the others so as to render it more considerable, y as to oppose its reduction, but it is only in that species called retroversion. The bladder cannot be
greatly distended, presents the cavity of the abdomen, without bringing the neck of the uterus forward, or drawing it towards the upper part of the pubis, nor without acting on the body of that organ, already depressed towards the sacrum, at least with a force equal to the weight of the uterus contained; that weight may amount to more than 10 or 12 pounds in some cases. He says also that forces tend to accumulate above the fundus of the uterus.

We will the crisis expressed in these words nearly 100 years ago, we would entirely agree.

Tyler Smith wrote in 1889: "No doubt one of the most important phenomena of complete retroversion is the distended bladder as a primary cause of retroversion and of little consequence."

Spiegelberg also says that while distension of the bladder may increase backward displacement, it cannot produce it.

When once the distension of the bladder has been set up by any cause, it tends to increase the retroversion already existing, so to speak, and increase the distension.

In the next place we come to the theory first propounded by Schultze in 1860, that the retroversion existed before the pregnancy began. It has been maintained by some that conception cannot take place in a retroverted uterus; this Schultze wrote: "Si circumvallatio uteri menstruationis quiescet urinae in illa stagnat." Many writers even up to compounding recent times have agreed with this statement. Such is not the case, however, although it is an undoubted fact that retroversion is a hindrance to conception, to some extent; that their true abdominal.
will probably soon admit.

Skene, writing on this subject of conception, says that from his observations of those of others, he does not think that retroversion is a great hindrance to conception. He records a case wherein for at least two years "the uterus has never been in any other position than that of retroversion, except when it has been artificially reduced during pregnancy...."

What has just supplied similar evidence, will be seen from Enfield's statement, that conception may occur. Churchill & Rigby hold the opposite view.

Tyler-Smith gives cases where patients who had the uterus retroverted became pregnant.

Dr. Enfield allows that conception may take place, but says that it does so less readily in retroversion than in anteflexion.

There seems then to be every reason for believing that conception can quite well occur in a retroverted uterus; granting this fact, we can quite well understand that gravid retroversion is in many cases at all events, of not almost always, is preceded by the condition of simple retroversion of the uterus.

Skene, as we have already seen, thought that this condition in a large number of cases was due to conception occurring in an already retroverted uterus.

Tyler-Smith, too, writing in 1860, says that as the result of observation, he thinks that "the most common cause of retroversion of the uterus is not to be found in the state of the pelvis, or the condition of..."
the bladder, but in the occurrence of incarceration in the retroverted uterus, in
the tendency of the organ thus incarcerated to grow and relocate itself during the
early months of pregnancy, in the retroverted or retroflexed position?" He
recalls a case where a woman suffering from complete retroversion or
retroflexion became pregnant without fail time.

Barnes evidently inclines strongly to this idea for he writes: "I have observed retroversion of the gravid womb under all
the following circumstances. First, there is the condition of premature
retroflexion preceding early pregnancy; secondly, it may be a continuation
of retroversion existing before the actual pregnancy, the result of a previous
labour...... Thirdly, the retroflexion may have been caused by a tumour
of the posterior wall of the uterus, or by adhesions dragging the fundus backwards.

Furthermore, I have several times observed, retroversion of the gravid womb
succeeds to prolapse of the non-gravid womb..... It may arise, fifthly,
suddenly, where there may have been no previous of the accidental displacement
will be the typical retroversion of Hunter and Barnard, the only form at one
time known."

Lastly, we may just quote Sporletti as says: "Displacement
of the gravid uterus backwards, pre-suppose the existence of that abnormality
before conception," - a very strong statement, but probably nearly true.

These are in addition to other main causes, a number of
secondary ones, which may tend to favour the production of the
displacement. These must now be noticed, many of them have been
looked upon by some as the actual primary causes.

The portion of the cervix on the walls of the uterus, has been
supposed to tend in some cases, viz. when it was attached to the posterior wall, to aid in producing retroversio; but Smellie, writing in 1756 of suppression of urine says: "The Urn, instead of adhering to the fundus, descends into the wide part in the middle of the neck which accordingly first undergoes distension."

Sartorius seems to have held this view for John writes in 1797: "Profuse a vena about C. Sartorius, ostentans unigen. placenta adhesiones, idque, in omnium fallor, recte."

This portion of the ovum on the posterior wall of the uterus may perhaps aid in pressing down an already partly-retroverted uterus; it has yet to be shown, however, that in these cases of partial retroversio the placenta is more often situated in the position than elsewhere. If even this should turn out to be the case, we must always remember that of the uterus retorted at the time of conception, the placenta will on that account be more likely to rest on the posterior wall, so it may be merely a sort of coincidence, without in any way being a cause of the condition.

By the earlier authors fright seems to have been looked upon as the determining cause, though how it acted they do not pretend to explain; an explanation is however offered in the Dictionary des Sciences Medicales published in 1814, where it is said to act by causing contraction of the abdominal muscles. Gauthier, moreover, in 1816, speaking of another case says that the fright "me para". Lavoisier, occasionally producing some contraction of the uterine muscles, says that the bladder of the diaphragm and the muscles of the diaphragm are very often and it is only a sort of contraction of the muscular system, which may be likened to a strain or helping to produce the condition.
Closely allied to fright as a cause come strain, which is
seen very frequently as a cause or at any rate as having been noticed
in connection with its occurrence; thus the symptoms appeared "after a
day's work in the field"; "when lifting a heavy burden" (Evans); when
hard worked women were obliged to lift heavy bales (Gatibo); when
she "got a fall going down a well" (Swar); when "she had been very much
in need of rest" (Olmers); after a strain while washing (Flahanan); or
when while stooping to glean some corn she felt something suddenly
press away at the bottom of her belly & fell down towards her back. (Lynne)
185;
46, 45. This strain probably acts by causing the abdominal
muscles to contract & so press the uterus against the rectum, which
may be forced backwards if it is already slightly retroverted. This
was a slight retroversion recognized by Baudelocque when he wrote that: "The
it takes place slowly, it seems to depend on the slight but continuous
pressure of the floating abdominal viscera on the fundus of the uterus;
either on its anterior or posterior part, according to the species of
obliquity it has taken; so that this pressure sometimes occasions the
anterversion & sometimes the retroversion. We by the same mechanism
that both kinds take place suddenly; but that requires a stronger impulse."
We should be inclined that this cause can only act suddenly or will
be stated afterwards.

In the same relation John writes that among the causes of
"casus, violenta et incongruentia corporei motus, ponderis et moti
instantiae, sectionis utriusque sides cecidentia et id genre sibilina. Alterum
quaque æqualesque æquum aequomomantius motus, temp. terro et
In the Dictionnaire des Sciences médicales, it is said to be carried back suddenly. "Par suite de la pression des viscéres antérieurs, soit dans les efforts de vomissement, soit dans ceux que l'on fait pour rendre ses excréments, pour soulever une paroi de l'intestin.

Also, Durnez says in 1833 that: "Bien plus souvent, l'accident est subit, avec forte secousse, un effort musculaire sans pression violente sur l'abdomen est instantanément produit ou au moins achevé & déplacé."

Leavitt of the uterine ligaments cited look upon, some as a very rare predisposing cause; thus John writes: "In uterine suspension inside the uterus contra Johnston's contends... others its prominent cause being corporis habitus et serum pancreas hydrocephalus." In reading over the cases, one is struck with the fact that the condition often occurs in weakly women whose ligaments might well be supposed to be deficient in tone.

Lynn mentions that in his case the woman was a multipara of low habit & says that "Dilatation is general... particularly of the uterine ligaments & appendages was the grand predisposing cause."

So also Gaudier wrote in 1816 that: "La mobilité utérine de la matrice... est la cause prééminente de cette espèce de déplacement."

We may certainly allow that laxity + want of tone in the uterine ligaments is very likely to act as a predisposing cause in the production of the displacement.
By very many writers the shape of the pelvis or its size have been considered important factors in the production of this displacement; the most important malformations in this respect are too great prominence of the promontory of the sacrum or large size of the pelvis, the latter condition has been noticed to be present in several of the recorded cases.

Mr. Secreve, writing in 1663, says of one of his cases:—

"Dicit si attente contemplan, causam praelongationem levis hiemig, aequa jam subces, aciam manche olim afecta pelvis dimensionem, hanc non accedere. Uter gravide expansa eam causam occasione bellum aequum est, hemiomenium symptomatum produmt. Non enim factum est, ut postum, quas contrect pelvis, spectum satis magnum, libertaque non usurparet."

Hacket also wrote in 1774:—The pelvis which is most capacious suffers most manifestly, and will be the most disposed to such disorders, and I imagine that very capacious women will seldom or never have the complaint. When the lower part of the pelvis is very capacious, especially when there is little aptness to fill it up, the enlarged uterus in the second or third months will occupy the lower part principally of such a pelvis.

"Denman also in 1631 wrote:—"A woman who hath a capacious pelvis is when the extension of the uterus is most likely to occur."

The above writers all refer to the size of the pelvis mainly, but other speak also of too great convexity of the convexity of the bones, than Secrewe wrote in 1663;—"Jamais dans les femmes bien..."
complains, it fond de la Matrie se porte d'un ton nerveux, comme
sentant et se partant l'air en joue et précipitant. Malgré la Matrie se dresse
son fond en arrière et vers le haut, tandis que la sueur de la Matrie se dirige
vers le drap, cela est de si longue durée que les vertèbres des lombes
se touchent arquées à contre sens de l'état normal. 

Qu'est-ce donc qui s'est passé

L'apaisement de 1797, ...

sursauts, il y eut à de rares occasions
un creux hémisphérique de la suture sur lequel, in fine, le trou de
la suture, le plus susceptible de retomber, est en même temps que la
suture, peut être trouvé. C'est l'effet de

John pris un casse.

qu'en l'état du fœtus en procédant,

l'apaisement, l'apaisement, l'apaisement,

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Il est possible que le passé n'a pas d'importance.

surtout la suture et l'apaisement,

Aussi bien que de la suture du sacrum, voire de l'apaisement, pour

Many other points to the same effect, as may perhaps just

quote the following remarks in confirmation of the view:— "On observe

plus partout ce cas accident chez les femmes dont l'innovation

est ébranlée, tandis que le décroit soudain est rares."

Gardien.

In several cases in which retroversion has taken place, there found

the form of the pelvis not well-formed; there has been an unusual projection
of the prominence of the sacrum, which has mechanically prevented the feces of the faeces from "(from below)."

21. Deccin: Supposed as the chief cause - "un certain souffle d'atresie du bassin, et surtout une forte colique du sacrum sur une, une area forte pressurante de l'angle sacro-vertébral."

The form of the pelvis may perhaps in some few cases be slight relief to the more complete development of the atresion, to the production of symptoms it may also perhaps prevent the occurrence of spontaneous reposition which so often occurs frequently does so without the cause of the symptoms having been discovered. But we should rather agree with Shenan in his words as follows: "So far as the limited number of facts go, I think we are justified in concluding that the accident may happen quite irrespective of the form of the pelvis, that a caput omni or will admit of the displacement at a later state than when it is of a smaller type; or that a contracted womb indirectly favouring the accident, by offering an obstacle to the ascent of the uterus to its normal or artificial position."

Such then are the causes that have been alleged to produce this displacement together with the views that have been held by many writers on the subject. We may justly state briefly what seems to be the probable real state of affairs. - In all cases where gravid atresion occurs, there was a retroversion more or less marked, before conception took place; for it is an unanswerable fact that conception can occur a retroverted uterus. The retroversion may be very slight, or that...
case as pregnancy advances, the uterus may right itself & symptoms appear. On the other hand, should the woman be subjected to a sudden strain & exertion or to a fatigue, the fundus uterus may be driven further back & the retroversion increased so that as pregnancy advances, the fundus is caught below the symmetrical of the sacrum & symptoms appear. This will be more liable to happen if the size of the pelvis is narrowed in any way, the accident may occur before the uterus has risen out of the pelvis or even after this period, if the shock is insufficient to force the fundus back again into the pelvis.

Should the retroversion be complete from the beginning or become complete during the first four or five months of pregnancy or a result of the increasing weight of the uterus & of strain & difficulty of labor, it is more liable to occur during the second & third months of pregnancy. The occurrence of the symptoms will probably be more gradual. For the uterus will not at first be large enough to cause any symptoms by pressure but will, however, there will come on the uterus of the occurrence, especially in the 6th, 7th, 8th, 9th, & 10th months of pregnancy. If the uterus be pushed back, if a sudden enjoyment of the pelvis contacts with the blood should occur e.g. as the result of a chill. It must be remembered however that as Barboni wrote, "Don't enlarge me. I depend not only upon its size but upon its condition."

When retention of urine & feces once occurred...
produced they tend to aggravate the retropulsion + so to increase the
retroversion of the uterus and cause a vicious circle of events, for as Hunter says:
"When such suppressions once begin, they aggravate the evil, not merely
by causing pain, but by occasions a load of accumulated semi-solids
focusing in the abdomen above the uterus, which press on it still more
in the cavity of the pelvis; at the same time that the distention of the
bladder in this state, draws up that part of the vagina and cervix which
it is connected, so as to throw the fundus uteri still more directly downwards.

When there is a slight tendency to retroversion, it is quite
conceivable that the occurrence of retension of urine from any cause
may increase the condition of so appear to be the actual cause of
the retroversion, but the real primary cause even in this case
is the slight retroversion, while the retension only acts as the exciting
tissue could not have acted by itself alone.

In the next place we have to consider the signs or
symptoms that may occur in this displacement, together with
its diagnosis. A. L. Castro writing in 1628 says: - Si in lemnos (abdomen)
encumbit, spemus tumultuos oart. Latino est suffocatio, densa
ralentia, ac more nunc uirtat. Sineuro, et nigra incinat, tuberc
secutatis, et utroque cruris muniti difficilis, et plus in tripites prae
anguis crassis griposi sed aduentur. Hailston eset
In a case where he had found the uterus to be retroverted, concluded that it remained in this position because the woman felt the movements of the foetal movement at her back and sides, not in front—a very unusual reason for maintaining the diagnosis.

The first great symptom is pain; this seems always to be present; this appears to be a most curious sharp sudden in its occurrence, it is variously described in the different cases—"she felt something suddenly give way at the bottom of the belly, fell down towards her back (Lyman);—she was immediately seized with pains like those of labour (Hooker);—catty pains in her belly" (Said);—"some pain of the back, loin, pelvis, and thigh";—some pain in the lower part of abdomen (Gartshore);—"she suddenly felt a weight and heavy bearing down in the vagina, and was soon seized with eruminating pains in the lower part of the belly" (Sears). This sudden pain seems to be pretty constant; as the case goes on it usually gets worse, the woman gets weaker and weaker, and suffers to severely from shock, often with fever; this condition is recorded in nearly all the cases e.g. in Newton's case, the woman was exceedingly weak and suffering great pain.

John also wrote: "The pain is not extreme, but is present," and "the patient has a difficult suction, with the child's head, and the child's arm is set.

Barber speaks of shock as a symptom and says that it is the result of pain, irritation of bowel and bladder, function of the local violence due to the displacement of the womb. There is common in the later stages, e.g., in Willet's case, the pulse was quick, tongue dry.
Small wound from in the region will prove.

Which frequent vomiting brings. 

The seems to increase until the patient before death may get into a sort of typhoid condition.

This is said in some cases to occur, from manes of the by suggesting paraplegia (Bedford).

The most prominent symptoms of the condition the one that occurs almost constantly is retention of urine. It is in fact so constant a symptom that if overlooked long time, we may have already seen, looked upon as an accident. The mechanism by which this retention is brought about has been already partly discovered. It will be more fully considered later. In the place we need only notice as being the most important symptom is the one that attracts the patient's attention in almost every case. The retention may not be absolute at first. It may be only a difficulty in making water. Thus further water. Malum feces incivit um litorum.

Dificultate dolouc ia in ipusen....... Semecem persistuntque remittent matricubulae vescica et alia retroresede facultatem......

Lego engraves a symptomata et suspendi perfecta totis suspensorio aliquam adstatutias sic at negatim quadrato vel illum obiis qutiam......

Atque hase quadrum malo ad tantum hexapiici patiuntur pro-

venientes at illam catheteri, hanc biphone leasure ne licet. This is a very good description of how the difficulty in retention may increase gradually until actual retention results. The retention in this cases is gradual in its onset in many cases however we find that the retention comes on quite suddenly, or absolute from the very first—this is found to be the case in a large proportion of the recorded
cases. Smellie wrote that grand retention in produce... sometimes
though seldom, a total suppression—a statement to which there appears to
be no foundation. Semmian wrote: "There is an easy case together
with extreme pain, first a retention and afterwards a suppression of urine....
The suppression of urine is frequently absolute, only before the retention of
the urine or during the time of evacuation; for when the retention
is completed there is often a discharge of some urine.... But it appears
that all the painful symptoms are chiefly in consequence of the suppression
of urine." In this statement he probably refers to the fact which is
now well recognized, that as the distension of the bladder increases a
gradual overflow or dribbling results, known as stillingium; the
patient is often observed by this with believing that her retention has
been relieved, while in reality the bladder is still over-distended.
This condition has been often noted, thus John wrote: "Patienta
Kamen stream auxilii ameni profugio;"—in Parthenope's case the want
first total suppression of urine & then for 8 days some need to make
involuntarily. Volzine "record in his case: "I was informed herein
distilled from her involuntarily." Ross wrote in 1724 that the
first symptom is inability to pass urine, distension of the bladder
then occurs & passes back to the water, followed by an arising of
urine. Speikberg says that the bladder symptoms are most
dangerous: that the urine may dribble away voluntarily or
involuntarily while enormous distension still remains. The importance
of remembering this is very great.
This disagreeable symptom is connected with the action in many cases; thus they may be considered troublesome as in typhus and some others; also constipation is apt to result from the absence of the feces in utero on the uterus; Dandoloque remarks that even the most liquid feces may be unable to be passed, while John Locke, "observes foetura dura, praetentura ut uterum canum similis est" an observation of which we have been unable to find any confirmation.

Although no cases of foetura can be found the obstruction, yet a cystic description is not at all an uncommon symptom.

With these other symptoms, the very frequent occur strangury, bearing down; thus Dandoloque describing his case in 1770 says:—"She was vomiting involuntarily the most violent efforts, being stimulated to it by the presence of a body which appeared at the entrance of the vagina of the size of half a crown, as well as by the necessity of making water. This body was the posterior part of the uterus, not on the coccyx, if the orifice was raised any high toward the perineum. I immediately reduced it; she became easy. There being no pain nor any fever common, e.g., she felt "a weight coming bearing down (corpus)" after a fall; she was immediately taken with bearing pain and suppression of urine (urine)."

It has been said that there may be some slight hemorrhage from the uterus; thus Rancié writes in 1816:—"Elles perdent souvent un peu de sang, quoique l'orifice de l'utérus ne soit pas dilaté;" in Hope's case some blood came from the vagina, whereas he suspected that she was going to miscarry, but did not do so. The withdrawal
a more accidental occurrence as a result of the operation of the placenta which is sure to occur.

When an examination is made of the patient, the first thing that strikes one is that the abdomen is very much swollen as a rule for more or less than it should be, according to the period of the pregnancy which she has reached; this swelling is due to the greatly dilated bladder, and more in the tumour in which the bladder forms, fluctuation can often be resolute. The condition of affairs has been noted by a large number of observers of whom we may quote a few. Dr. Johnstone wrote, "In medio acetabulum solitarius, peculiarm, cavo se comprimur, tumor deprehenditur." Dr. Gaskin's second case the abdomen was found to swell as high as the navel; in Hume's case he discovered a general tension of the abdomen, a large elevated tumour at the navel, which protruded so much as to resemble the half of a melon. This tumour subsided after the urine had been drawn off, showing that it consisted of the distended bladder. Dr. Tovey noted in his case considerable enlargement of the abdomen, while Roger records a case when the abdomen was distended and the umbilicus prominent. Dr. Penney says that "the abdomen, if the bladder is full, is peculiarly prominent, intensely painful to touch and percussion will mark out a tense fluctuating tumour occupying the portion of the gravid womb at the 6th or 7th month. Resonance will be marked out almost with the finger." Spigelberg also notices this tumour on palpation, accompanying the distension, which is always a well-marked and important symptom.

Another peculiar condition was noticed by Measham.
Boivin & Dugès - Maladies de l'Uterus. Planches XI. Figs.

Retroversion of the Gravid Uterus.
Barnes Obstetric Operations. p.188.
in one of his cases states: "pressing against the abdominal parietes, though the separated structure of which, the hand could distinctly detect the opening uterine mouth."

The most important sign is of course the per vaginam examination, which shows that the fundus uteri is more or less turned backwards, while the cervix is correspondingly turned forwards; the fundus may be only slightly turned backwards, or it may be quite right down, but the cervix may be some distance between these two extremes; similarly the cervix may be found only slightly displaced forwards, or it may be quite out from above the symphysse pubis in any position between these extremes; the state of affairs can be best illustrated by a few quotations, stating the condition of cases found. Sertori wrote: "Restet sin in societate postterminae sententia: sed utroque senescente uterino extente, vel ni secundum clauseam offendit, et tantum validius quae pro incipit facta est, lacrimal from of the seat, then cervice caput fundi recti, non objiciens utro adhuc senex esse, ac se findique sub cervice carci. Restet tamen, in hoc mox statu, pro incipit cerveiorem sententiam quam aliam.

"Si vis uterum, quod si digito dicto penetrabit, etiam capiti post tercitum globosum, laccumque seis vetustas aperturam sentiat, unde certe colligereost, enfrontem postrem cum uteri senecia sarsi minus appareat." (Neu. Scriver) In making the post-

Insertion examination of one of his cases adds: "explanation requires... the cervix to detect all parietes que posternum occurrentes

ejecinsh, satis genuin prolem, etram elasticum et assiduum, qui..."
appear hotam for soliis cantate, Jacqueline partum sus processus,
explore at curis pulled longitudo ab one distant. Deinici utrachom
alter processus et tum in parte anterioris fabris somos mpulius
accident, tacta difficula." These early descriptions then describe
well the state of affairs which would be found on examination.

Speidelberg says: "The posterior vaginal is found banded at
the upper edge of the symphysium a firm, round swelling which falls
of the superior vaginal portion, causes the posterior vaginal portion as well
as the bladder, are continuous with the cervical wall, while the posterior
part of the vaginal portion is thus distended to a fleshy disk, the anterior part
appears as a narrow empty shelf which is drawn upwards... a catheter,
introduced into the bladder shows that the latter can be pushed occasionally
far backwards... an important sign.

Hopper wrote that in his case: "I perceived the vagina
pushed forward to the pubes, by a rounded body resting behind it, with
some difficulty, reached with my finger the os intumens above the symphysi
of the os pubis." Samuel said that he felt the passages were
forced down backwards to the lower part of the vagina, the os uteri being
forward and above the incised of the left groin. It soon gives with an
extraordinary account of the condition of affairs that he found, for be says:
"I found the fundus uteri fallen down to the lower part of the pelvis,
presenting like a large ball equally at the anus and intumens, three fourths
of the vagina next to the levator muscles fallen without the os intumens, the os
intumens turned forwards to the os pubis raised above." As he describes
Han's Walls case said: "I introduced a finger into the vagina, which
Schroeder - Lehrbuch der Geburtshülfe. p. 395
could not place up an account of a large tumour that lay behind the vagina and pressed it close to the inside of the osseous pudic. As there was no room to pass the finger, he could neither reach the extremity of the vagina, nor could he discover anything like the ovum. In his and case too, the ovum could not be felt in the vagina, notwithstanding the finger easily passed beyond the tumour as far as it could reach. The tumour may be very low down so that the first they met with in the femoral artery lying on the bend of Bongers's bulge towards the posterior vaginal wall, thus Desmarres recounts a case when the tumour was less than two inches within the pelvis reckoning from the external surface.

Bernhard in describing one of his cases gives an account which is a very fair one of what is often met with; he says: "We ovum could be felt, the passage of the finger towards the osseous pudic was prevented by the attachment, and seemed of the posterior part of the vagina, to a large hard semiglobular substance, which occupied the whole of the vagina, descending through the pelvis being drawn gradually towards the perineum. This hard substance felt exactly similar to the womb, enveloping the head of the child, which sometimes occur in cases of pendulous belly; forwards, between this substance (the tumour) and the osseous pudic, the finger might be passed, though with some difficulty, as high as it could reach, but without discovering any tumour of the ovum."

A typical cesarean section in a well marked case of this condition may be thus described: immediately inside the uterine of the vagina the finger comes upon an elastic, soft tumour which seems
almost entirely to fill up the pelvic cavity, thus swelling prevents the finger from passing backwards, but obstructs it forwards instead; on passing the finger upwards and forwards, it will go between the tenons, & the os pubis; although pushed up as far as possible, it will in all probability be impossible to reach the os pubis, although this may perhaps just be touched with the index finger. The median Eminence will be found to be much displaced, probably to very difficult to make out often.

With respect to this latter statement, Barnes has written as follows: "The base of the bladder, the uterus attached to the anterior wall of the cervix where are pulled off, so stretching that the anterior wall of the vagina, with the uterus are removed out, the median Eminence is dragged up from its place, so stretched out that it is sometimes difficult to feel, or how to pass the catheter may be extremely puzzling. This important sign, which Bachele distinguishes, reversion of the ground vault from very other condition was particularly pointed out by Bachele at a dinner in the Obstetrical Society in 1894." After the reversion has produced its characteristic symptoms for some time, there will be found considerable heat of the vagena or discomfort; thus in the case of Smith, one of the famous act in this case, "feeling it extremely hot, I concluded that its whole body was inflamed." Vaginal exanime may also cause a good deal of pain, as in the case of Smith's.

If the samenton is now examined by the same examiner, the feeling will be felt a wear about her vaginia & it will be made out that it lies between the vagina's reversion. Thus Hunter says of his case: "Walls: He examined the rectum, found
that the same tension, which lay above, before the post pressed it so strongly against the inside of the scrotum, so that the finger could only be passed a very little way. The fundus uteri will be found to compress the section so closely that the administration of a census is often very difficult or even impracticable. This has been recorded in many cases e.g., that of Hunter, quoted by St. 

Spiegelberg says that not only may there be constipation, but not even any flatus will be passed.

The fundus uteri is, it lies backwards in respect to cause a too much bulging of the perineum; hence it is that the bulging of the anus perineum is seldom altogether wanting. Halberstadt recorded a case where the fundus uteri actually projected through the anus. A case in a case where the fundus uteri actually protruded through the vulva.

Hodgson has also been observed of the legs generally: 143.

Spiegelberg mentions a case of the uterus in the bladder, perhaps of the thigh, as having been recorded by him. Says that the legs were very red, and their fat was so much concealed to the lower limbs, labia were swollen, and the legs were so much so that compasses had to be removed to. There is also a case when the genitalia left by the legs were red, and

The above are the characteristic signs of symptoms of this displacement: much will be said of them when we come to treat of the terminations and complications that may be met with along its progress.

What about abdominal inspection?
The terminations & complications of this displacement are many & varied. They may be best shown in a tabular form:

A. I. Reposition & recovery without any external aid.
   II. Reposition after merely attending to the bladder. Results:
       1. Recurrence during the same pregnancy.
       2. Progress to full term.
   III. Reposition by artificial aid; then may then result:
       1. Recurrence during the same pregnancy.
       2. Progress to full term.

B. Retroflexion.

C. Reposition may have been delayed too long to have failed & there may then result:
   I. Abortion
   II. Bladder troubles - 1. Galacti - Simple
      II. Gangrene - 1. Simple
      II. Infected
   2. Rupture - 1. from simple distension
      II. from gangrene.
   3. Dilatation of the uterus.
   III. Death from sepsis & shock.
   IV. Peritonitis.
   V. Necrosis & Blood poisoning.
   VI. Partial or Incomplete Retroflexion.
   VII. Bladder troubles - 1. Inflammation in around the cæcum
        2. Gangrene of the cæcum.
position, even after the restitution has occurred for weeks; this indeed is very much the same favourable prognostic that Deman had the forebodings to give. Deman described an additional help to the more upward growth of the uterus, for he says: "The enlargement of the uterus from the increase of the liquor is so far from obstructing the ascent of the fœtus, that it contributes to promote the effort, the tension of the cervix becoming a balance to counteract the depression of the fœtus. I have found no cases of the restitution uteri admitted of a repetition with such difficulty, in women whose cases are not pregnant, in whom the uterus underwent no change." The best account is that given by Tyler Smith, who says: "The condition which favours the natural resolution of the restitution, is the ascent of the uterus and the growth of the uterus; together with the tendency even in the retroverted state, lying on the side or on the face in the horizontal position, where gravitation assists in drawing the uterus out of the pelvis; accumulation of serous matter in the section below the fœtus uteri: probably the early movements of the uterus and of the fœtus. Of the latter agency, growth appears to me the most important. The tendency of gravitation to render the axis of the uterus straight, and at length the fœtus lying somewhat after the manner of a bent lower above the promontory when gestation proceeds in the natural manner." Steggal also thinks that the muscular substance in the uterine ligaments may help to right it.

Reposition may occur after attention merely to the
Obstetric action; such was the line of treatment recommended and adopted by Jenner. In some cases where the uterus had not been ruptured, the action took place spontaneously; at the same time we must always remember that in these cases it is quite possible that uterine rupture might have occurred without any treatment at all, as in the last case.

Such cases may recur again during the same pregnancy as Jenner states, but we have not been able to find any such case recorded; they are more likely to go on to full term since the uterus is not likely to be in any way damaged as the pressure cannot have been very great upon it. Smellie records a case where rupture occurred after the treatment at the 4th month; the woman went on to full term; in her next pregnancy the same thing occurred again; he states that he had met with two similar cases. Fleischhauer records two cases, one at 8 months.
Hunter says that he has had several such cases, Hopfer recorded a case when he was only successful after prolonged attempts. He concludes the lesson that the attempt should be steadily pursued until for some time, even if there is no success at first, he also records another case. Reid, Gatinck, Evans, & Logan also record similar cases.

It has been stated that abortion may result from actrescence; this question will however be considered later when we come to describe that condition.

If reposition has been delayed too long or has failed for any reason, a long series of accidents may happen; the failure may be due either to adhesions resulting from some recent or old pectoritis or to the uterus being too large to pass through the fornix of the pelvis.

Abortion may result—Becker quotes Dusch as saying, "Weil in 95 behandelt Fällen bei der spontane Reposition nicht und bei den bis zu dem 4. Aborte verzeichnet, während bei den Fällen von der künstliche Reposition gemacht wurde, allenfalls Aborte entstehen." It is not far however to argue from this result that abortion is more likely to follow artificial reposition, than when the cervix is left to nature, as he does, for the probability is that artificial means were only used in the very bad cases, i.e., those which were most likely to abort. Gordon asserts that almost all attempts at abortion may cause abortion.

Tyler Smith says, "Abortion very frequently occurs from the mechanical
violations of the uterus. The tendency to miscarriage is so strong in cases of abortion, that I have little doubt some of the cases of habitual abortion are due in practice; and in this case, it is due to hydramia, more than to mechanical obstruction.

In cases where the uterus increases in size, hydramia will result from mechanical obstruction from pressure alone, both these tend to produce abortion. Should attempts at observation fail, the best thing that can happen to the woman is for abortion to occur, as having the bladder from being emptied, if it have not gone on too long, and if great force is employed to effect the evacuation, abortion may be brought about; otherwise, if abortion occur, the hydramia will disappear, and you will see no further of it. Barnes states that abortion may occur in the last stage of some weeks or days after observation. Smellie records a case where he merely drew off the urine of the woman who miscarried; she died two or three days later of retention. Ross in 1797 recorded a case where a woman for some time refused treatment, and at last consented; evacuation was effected; she then aborted safely. Caustie records a case where the uterus was replaced by a miscarriage followed by the woman recovered.

The fear of producing abortion should as no account deter the physician from attempting a position, as will be shown later.

Osteoarthritis are the most important complications of this displacement; all are agreed that they are the most dangerous.

"But it is remarkable that, in the most desirable
cases of the insertion of the uterus, those which have terminated fatally, the death of the patient has been discovered to be owing to the injury done to the bladder only. Almost all the fatal cases are found to be due either directly or indirectly to the mischief set up by the retention of urine, as their continued exposure is set up, the urine becomes foetid, even bloody, the bladder may become gangrenous or ulcerate, may result in death, come from shock or the absorption of the products of decomposition or from septic inflammation.

The case cited may be said at first to the 1829 to the affection of blood. It was related to the case of the bladder. The patient a state of disease, under which a large quantity of thick, viscid urine, sometimes mixed with blood, exudes from the vesical opening. Hunter says of his case, "In the afternoon about three quarts of urine, mixed with blood, were drawn off." Wilber, in the best mortuary examination of a fatal case where "The bladder was very much distended and its fundus extended higher than the head. The bladder contained a large quantity of bloody, coffee-colored urine, or more than half a pound of coagulated blood mixed in it." Dagres records a case where the urine contained a quantity of old effused blood, it became foetid after using the catheter. The urethral duct and the mucous membrane of the bladder then showed a number of hemorrhagic evolutions. Even when the strictest antiseptic precautions are used, the urine is very apt to become foetid, in fact it even does so when no catheter has been employed at all. The mere over-distension of the bladder, the pressure exerted by the uterus is apt to cause cystitis. Bell states that the pain...
larger to be guarded against is the inflammation of the bladder.

This simple cystitis may go on still further a gangrene, and the gangrene may be of the simple ulcerative form. Some may result the extremely interesting condition of exfoliation of its mucous membrane, a condition, the pathology of which has only quite recently been thoroughly worked out. If the simple ulcerative form is not very much has been observed. John wrote:—"Hereendum enim est, nec gangrena accidet proaction quam nascatce sequentia sepsis tauri, iam vero opacitatis obscurum, sanitatem admodum crescit aegra, Judicium mortis latent aegrum sub diea suspiciatur, nec fallit eius suspicio."

Casson in 1799 gave the post-mortem examination of a case where he found the walls of the bladder thickened, its coats separable, will fall between them in parts; no irregularity or sacculi. This was probably in early stage of the exfoliative form, although we hardly think it proved that the one does actually pass into the other. Well in according the post-mortem examination of his fatal case where abortion followed the ineffectual attempt of deflection, says that he found the bladder filled of fluid, enflamed, while its walls were considerably thickened, and had a gangrenous patch on them. Casson says that during the progress of a severe case "la vessie et l'intestin s'inflammant, se gangreen et se decolorent." Randoltham records a curious case where on post-mortem examination the walls of the bladder were found dead, no communication existed between the colon and the fundus of the bladder, which were adherent together; this communication was the result of inflammation.
In some cases a complete evulsion of the mucous membrane may result. When this may be separated, as it ever, an extra cast of the interior of the bladder. It cannot be more than proper here to this condition and this is not the place to enter into a discussion as to how the evulsion is brought about, interesting as such an enquiry would be nor as to what place in the bladder it is called to occur. The question is now being more fully pressed out and still not further. Sufficient to say on this point that while some say that it is merely an affection of the mucous membrane others such as Homan, both have already asserted that the muscular coat is also involved. Frickelberg says that the decomposing urine may lead to a so-called epithelitic inflammation even from one of the mucous membrane's subjacent strata. The mucous membrane with or without its innermost muscular layer may be detached; either on frontal detachment begins at the vertex, since then the external mucosa which opposes the distension is least of the serous external muscular coats can stretch more than the mucous external muscular coats. It remains attached longest at the vertex, it is here that regeneration again commences. Blood and urine collect in the sac so formed by the mucous membrane may pass over the neck of the bladder soon to prevent the escape of the urine by the catheter. This is an ingenious explanation of the condition but apparently a purely theoretical one.

Gallstone narrates a case where on the 28th day after the first appearance of symptoms the urine, having been regularly drawn off had a sediment like pus. The catheter was replaced. Two days later the patient became hot and uneasy, complained of pain extending from the umbilicus
Withered also records a case which occurred a while after the offensive urine had been drawn off for some time, the uterus regained its motion; she then passed per rectum a white substance of which she says: "It presented the appearance of a large bag, exactly resembling"...
As a matter of fact, the black body is a black body because of its color. The color of the black body is the result of the interaction between the light and the material. The black body absorbs all the light that falls on it, and therefore, it appears black.

The black body is an important concept in physics, particularly in the study of radiation and thermodynamics. It is defined as a hypothetical body that absorbs all the radiation incident upon it, and re-emits the absorbed radiation later on.

The black body is an idealized concept, and it is not possible to have a real black body. However, certain materials come close to the ideal of the black body, and they are used in practical applications. For example, blackbody radiation is used in the design of radiators and in the study of the properties of materials.

The Stefan-Boltzmann law states that the total energy radiated by a black body is proportional to the fourth power of its temperature. This law is a fundamental equation in thermodynamics and is used to calculate the energy emitted by black bodies.

In conclusion, the black body is a concept that is essential in the study of radiation and thermodynamics. It is an idealized concept that helps us understand the behavior of materials in the presence of radiation.

Bibliography:

For further reading and research, I refer you to the works of Stefan and Boltzmann.
... suffering severely from shock. The above account refers to cystitis from simple20
chronic disease, but similar signs also occur in a result of pregnancy in addition to the mere disease. I also write of the latter condition in connection with the quotation given on p. 81: "In a woman of the middle age, dilatation of the ureter, frequent, copious, sometimes distinct, is a frequent symptom. It is a well-known fact that the ureter is often dilated in the case of an incident in typhoid. Provocative injection of the dilated ureter often gives a..."

Together with the dilation of the bladder, there may be

...And records that in the post-mortem examination of the case, the bladder was almost without pain, while it was not longer than usual. This dilation is very important in that in some cases where a catheter is passed, some urine may come away, although the abdominal tension is not at all diminished, this being usually due to the emptying away of the dilated ureter. In some cases also the bladder may be so pressed down as to form two sacs of which the lower one only will be emptied by the catheter, until the pressure is removed.
Exhaustion and shock are very common complications to be found in every case that is at all protracted; they are very often also the cause of death, until there is often some fever which is covertly typhoid in character. Hence, mentions three as one of the three causes of death which he gives. Barnes also says that they are a common cause of death, that they enter into every case, but they may be the chief fatal factor.

In one case, however, they seem to have been the cause of death; in another case they were also probably so. In the former case death was due to these causes, he says: "She became weaker every hour, with the Monday following."

Peritonitis is very liable to occur, although it probably is never the actual cause of death; this condition will probably be found to appear in some degree in every fatal case. Thus Blackwell says: "A careful record, indeed, of the cases of abortion admitted to different institutions will show that where death occurs, it is usually either by irritation, inflammation, or involving the peritoneum or by rupture or bursting of the bladder." The peritonitis may be the result of the general irritation set up by the incisionation of the uterus or it may spread outward from the bladder involving the peritoneum, causing that organ in the first instance.

Barnes says that it may be fatal or not in uterine but "death by peritonitis, the shock of pain severely anticipate the actual death of peritonitis." He relates a case where the patient died of peritonitis two days after operation of the uterus. Great pain does not always mean that there is peritonitis, as shown by post-mortem examination.
The peritoneum may be set up by too rough manipulation in sucking the uterine.  Shattuck says that it may cause death, but rarely does so; it usually accompanies subsidence or inflammation of the uterus. He says that Mocroncy & Hinde have recorded cases of granule of the bladder where even the peritoneum fractured. Ross found on postmortem examination of a fatal case that the bladder was adherent to the anterior abdominal wall from the vault downwards; peritonitis was present. In this case: "the bladder [the attachment to the vault] was occasioned by inflammatory adhesion to the peritoneum during the abdominal muscles to that membrane where it is reflected from the muscles to the peritoneum, having been drawn upwards, or whether it was lacerated as described by von Gersdorff. It did not of the time death of investigating." Bell also found peritonitis in a case. 

Dwyer records a case where the bladder was entirely adherent to the abdominal wall — this condition is of course very important and under certain difficult or even impossible to completely separate the bladder from itsASE. In this case reported by Donaldson quoted on p. 66 there was also peritonitis causing the adhesions between the bladder and the peritoneum. In the case quoted by Harrow on where the fetus was disengaged for extraction after evacuation, the womb of course adhere due to peristaltic between the uterus and the uterus; it is however very doubtful whether he has successfully proved his point that there were really cases of atresion instert of extra uterine gestation.
Malnutrition and blood-poisoning are common complications of pregnancy, often the cause of a fatal termination. They arise from the absorption of the nutrient and from the action of the body, in some cases from failure of the kidneys to act due to the backward pressure upon them. It seems, says the blood-poisoning, due to retention in the system of matters which should be excreted by the kidneys in some cases a cause of death, as fact to say that this I believe to be the most frequent cause of a fatal termination. He also states that truer fear exists in amniocentesis as a cause of death. Special care states that the decomposed urine and gases may pass back to the kidneys, cause systemic or amniotic poisoning, which is the commonest cause of death.

In the second case reported by von Boeke, this was probably the cause of the fatal termination. In connection with this backward pressure of amniotic fluid mention here that great distention of the uterus is occasionally found; thus in Stein's cases, he found the uterus distended four fold.

A most important termination of this condition is that which it is termed Partial or Incomplete Retention: here the retained or retroflexed uterine remains is that condition, but it often protrudes, and when the uterus is distended, so that pregnancy may easily extend to full term. In all cases where retention or retroflexion occurs at or near the full term of pregnancy, are examples of this condition.

Cervically enough the only form of grand reversion known to date is this one, since he only recognized the occurrence of this
Displacement and delay in labour, and not recognising it during pregnancy, was noted. The womb is sunk too low in the vagina, or the uterus, instead of ascending to the fundus, descends into the wide part in the middle of the neck, which accordingly first induces prelabor disturbance. After the womb is enlarged, the tendons will be last of all, stretched till the end of gestation; the woman be happily delivered. But as the foetus begins to come down in this way, in a common case, the uterus must consequently press against all parts of the pelvis, before it can rise above the brim; the pressure sometimes produces an obstinate pain in the difficulty in going to stool. In the greater case in which of his own account, Sir Richard Jackson wrote in 1798, there is no instance on record, of a woman reaching the full period of gestation with a retained foetus. Such a case, however, had an opportunity of seeing about a year ago. He was aware in his assertion that no such case had been recorded, as was already seen. The condition of pain and retention of the uterus, or incomplete retention, is one which would be very liable to be overlooked by observers who were not on the look out for it; we shall see later in speaking of the differential diagnosis how the occurred in some accouche cases. The symptoms of retention in the early months may in some cases be very slight or even no particular. Then as the anterior wall of the uterus grows up into the abdomen, the pressure symptoms are relieved; the pelvis accommodates itself to its new circumstances. Further symptoms probably appear until labour comes, when the displacement may cause considerable difficulty and delay.
This may be due to the size of the uterus not being that of the pelvis so that the fragment affords an extra advantage to the small portion of the ovary which may require delicate manipulation. Even in Atwood's case, in the other basket, all may go well by the aided efforts of nature alone.

Benneman contended that a very large number of cases of so-called extra-uterine gestation were really examples of this displacement; he wrote: 'The uterus may remain in a state of retention for a very great length of time even to the completion of the period of extra-uterine gestation, without producing a total suppression of menses, or any other very common or alarming symptoms.' It is not necessary to quote much from his cases, nor seriously to discuss his paper, for all will be included, with the light of our present knowledge, to think that he failed to prove his case in most instances, the symptoms of extra-uterine gestation of general retention are very similar, without great care the two conditions might easily be mistaken; the differential diagnosis will be more carefully considered later; most of his cases suffered from shock no more severe than somewhere about the 4th month of pregnancy, which is rather characteristic of extra-uterine gestation. As regards his cases, not many, perhaps be given of one, when pregnancy was not normal up to five months, when she had a severe shock, which seemed to turn the whole inside upside down; at full term, symptoms of labour came on, but no waters could be felt; although there was a turn on posteriorly, the he says - five days after the access of labor, it was
Diagram showing the position of the uterus and of the fetus, as made out by examination.

in practiceable to carry the finger backwards in the vagina towards the rectum and even slightly and were directed by the uterine tumour towards the anus and pubis. Still it was impossible by the most particular careful examination to discover the ovum by the touch, but the day or with drawing the finger from above the pubic, a purulent discharge, tinged with blood, was perceived upon it, which furnished a convincing proof that the ovum was in that direction. Seman who also saw the case thought that it was one of extra-uterine gestation. On the next day a foetal child was born and the case ended well. This then was an additional case of grand retention of the ovum, but the only one of his service which really seems to have been such. He mentions as the termination of this condition that during labour the uterus may relax itself and well, or else some time may occur of the uterus on inflammation of the bladder subsequent liberation out of the uterus. Of this last condition he gives several examples, which however seem more probably cases of intra-uterine gestation.

Allman described a case which is quoted everywhere as the typical example of this condition; a case of his figure is annexed; he himself calls it a "complete retroflexion of the grand uterum at term." In this case the ovum was not exfoliated but at the same time could not be carried; he inserted a finger into the posterior as at was a depth penetration, and drew down its pole while at the same time he pushed up the head so that the fundus uteri was carried above the brim of the pelvis. He then says: "From this case the following inferences may be deduced: 1. That it confirms the
Incomplete Retroposition of the Gravid Uterus.

opinion of Harveyman is derived from his cases, that pregnancy may go on to term with a complete retroversion of the womb, 4 that this displacement may form an important complication of labour.  
2. That the symptoms which accompany the gradual growth of the womb in this direction are not necessarily severe or such as to excite the attention of the patient or husband;  
3. That this displacement may be reduced during labour, probably in some cases before or at the commencement of labour as the first step in the management;  
4. That it is better to do this than to leave the case to self-adaptation with the dangers of a prolonged labour, as in Harveyman's case, which lasted five days.

Darnes says of this condition, that known to the end of the second month of pregnancy, there is pelvic penetration with a perfect or almost perfect absence of curvature, the descent being to the growth of a part of the uterus into the abdominal cavity, so as to form a secondary pelvis or sac, while the posterior part of the fundus is retained in the pelvis throughout; the pelvic part may be partly drawn out from its lodgement, and partial restitution of the former relations of the uterus result while the peritoneum returns to the surface of the pelvis, on the other hand the peritoneum becomes fixed behind the symphysis, as in two of Harveyman's cases. Darnes says that partial retroversion is rather a fault of form than of position. It is always caused by the pressure of the part of the child upon the posterior lower wall of the uterus; it is especially observed when, with slight pelvic inclination the fundus of the uterus falls down through the incarcerated
abdominal wall. The breach of the child thus recurring forwards, the present head pushes the relaxed uterine wall into the navel hollow in the form of a sac. The vaginal portion (cervix) is pushed forwards. This process has only been seen in the last two months; it causes no interruption to pregnancy.

Cases are recorded by Becker, Holtam, Hillard, and Drumton.

This explanation of Scon gearbox is ingenious but hardly based on sound theory, nor on practical observation; as such, it is not worthy of much consideration. The fact at once strikes one as remarkable in the condition, namely that when the fetus continues to expand, it is the anterior wall of the uterus alone which must grow up into the abdominal cavity, while the posterior wall does not increase in size. More often however the fetus escapes in a small part of the posterior wall, rupturing the rest of the wall, taking part in the general growth of the uterus. Careful observations on this anatomical point are much needed.

Sheehley says that the anterior wall of the uterus which is least affected by the pressure of neighboring organs recedes into the pelvic region and enters the abdominal cavity, thus forming a secondary pouch in which the great mass of the fetus comes to lie, while the posterior wall remains in the pelvis. These cases have been called cases of extrusion during the second half of pregnancy, labour, of excessive dilatation of the posterior uterine wall. As a rule the pelvic part is last drawn up, the portion occurs. During presentation the head is usually in the posterior sac; cervix is pressed firmly against the upper edge of the symphysis, it does not move into the pelvis.
...the bulging wall is greatly stretched downwards, is occasionally broken through. At this stage separation may occur, but serious trouble may also occur when the bulging wall is not drawn up, merely as occasioned to stool (and communication) the place to lie in the horizontal and has to be removed by the hand. During pregnancy, the treatment is expectant; separation should be tried. During labour, place the patient in the puerperal position and push up the pelvic portion of the uterus per rectum while the abdominal portion is pushed firmly forward held by fully down the cervix by the fingers in the vagina which may itself be dilated.

Nothing for the need has been added to the various accounts which have been given above, except just to point out the great difficulty that may be met with during labour in effecting separation. This may sometimes be aided, when the hand can be got through the self, bringing down the by of the foetus which acts as a sort of wedge to open this means, deliver may actually be effected even when separation is impossible. If all else fails, means through the posterior wall of the vagina as recommended, the annex may be necessary.

In the next place we have to consider the complication that may occur in the uterus itself, viz. the fact that it is inflamed or inflamed around the uterus. It is given as one of the three causes of death in this displacement: "Inflammation of its consequences." While Speigelberg says: "Extreme inflammation with its sequelae parametrical phlegmon of obscure frequency cause death." We have been unable to find many such cases, although they may exist.
...except that it is extremely rare.

Alteration of the posterior wall of the uterus is said to occur in some cases: an unusual manner as a termination of this displacement, "sloping of the uterus posterior, reflex discharge of the contents by...

Theoretical theories are of course, all possible: but as a matter of fact, the patient would probably die of shock and shock before the complications before these had time to occur.

Bone's cases, if they are retroversions, belong to this class. He gives an as a termination of this displacement: "The uterus being unable to extricate itself out of the as the..." The slow process of elevation, the process may be concluded through the cystic or vaginal, the further remain alive." He narrates a case reported by Francois Pinard in 1721, in which he considers a case of this description: he also quoted the following:

Notandum delipit, intro invenire membra, ut invenire se, remuin in
infundibulo ut invenire se, locum constiter, id indicium est
quod constiter se, ut intram, sumptors, doloreque velut pustule et
solum et in nucemulare, et in uterus injectasent secreta." He then
quates a number of cases where parts of the uterus were passed through
the cystic or vaginal... It is difficult to believe to say that these
were really cases of retroversion.
Duplication of the uterus is mentioned by Clessin as a possible complication, but is an extremely unlikely one to occur.

Bancroft states that duplication of the posterior wall of the vagina caused by violence of the expulsive effort, has been noted, then goes on to say that actual bursting of the posterior wall may occur, that a case has been recorded by French where the uterus + ovaries protruded through a rent in the back part of the vagina, while a similar case is recorded by Delboeuf. Halberttina states that the anterior wall of the uterus may be protruded + the foetus escape per anum.

Bancroft also notes as a possible complication, the occurrence of Gangrene of the vagina + external parts.

Gynecote has been noted as occurring in one case recorded by Bell in 1800, where a multipara whose former pregnancies had been normal, was three months pregnant, she had extreme pain + difficulty in passing her urine, while retroversion of the uterus was found on making a per vaginam examination. He then says: 'a large portion of the uterus was pushed into the vagina, & protruded a considerable way beyond the external fundus uterus. The gynecote was perfectly contracted, + the protruded part might aptly be compared to a bone deprived of its covering. It formed, in fact, a true Ectocoon.
He failed to reduce the uterus & after abortion, she died that night.

After the abortion has been replaced, a woman often suffers after-effects andknown as a result of the compression, cardiac ary muscle of the bladder may ensue, with a paralysis of the sphincter.

Retrosion may also occur after delivery or in a future pregnancy, F. Franklin had recorded a case in 1831 where a woman who had suffered from grand retrosion of which could only be relieved by forcing abortion again became pregnant; retrosion again occurred but abortion was effected.

In Adams's case too of partial retroversion he records that it occurred in a woman whom he had seen three years previously suffering from a retorsion.

Bacon notices this partly, publically says that retrosion of the grand would "may be a continuation of retroflexion existing before the actual pregnancy, the result of a previous labour." He further says: "Often labour increases in my lid to fall back, either immediately or a few days, disposing to hemmorhage primary or secondary." Hemmings says that this usually occurs on the 2nd day, but he gives a case where it occurred on the 4th day. "Dr. Martin says that post-partum retroflexion is due to the placenta having been attached to the uterine wall of the uterus, the effect of which is to keep the womb larger than the foetus, & then to throw the fœtus back—a truly enigmatic thing, one moreover, the bulk of which
In the next place we proceed to consider the anatomy and pathology of the displacement. We are at once struck with the want of accurate drawings of the condition. The earliest representation that we have found of it consists of the drawings by Hunter of the post-mortem examination of his case: but these are not very clear and do not give the whole account of the true mechanism that characterizes the displacement. In 1833 we found a drawing by Bowen of a subject of which a copy is here given; but, however, I have all the subsequent diagrams to be found in 1853, seems to be diagrammatic and merely theoretical; what is wanted is an accurate drawing of examination of a sagittal section of a pelvis where the condition exists, a want that should soon now be supplied, since we have the means of obtaining such sections by freezing. As till then it obtained we cannot say that the anatomy of the condition is in any way understood; we must be content simply to reproduce the diagrams that have been already given, to quote the opinions of those who have written on the subject. By means of such a section, we shall be able to clear up the debated...
opinion of how the flame which causes the evaporation of water is directed towards the water, so as to cause the water to be heated. We have already discussed the complications which may occur, and need not repeat them. Therefore we shall merely discuss the portion of the fumes which enter into the flame on the water or distilled.

The fumes that are thus heated may be in any portion of the fire, either in the air, or in the water in contact with it. It is correspondingly colder for those that displace the air. Thus the displacement occurs as a whole, and not as Deacon stated when he said that the smoke begins the fire in the centre of displacement because the centre has to pass through a much smaller space than is done by burning, so that the smoke will reach the abnormal destination before the fumes will arrive at the bottom of the vessel.

Now, both them divided the condition into two classes: complete and partial. When he wrote: "There are two varieties of actinomosion—complete, when the fumes are thrown downward and backwards into the cavity of the vessel; partial, when the organ lies across the bottom diameter of the basin, its fumes entering only on the promontory of that basin." Herter had already recognized three varieties, viz. 1. Fully actinomotic; 2. Half actinomotic; 3. So far in its natural state, that the surface of the interior shall be down-grade."

Garden, too, in 1816 said: "Son fond actinomotic, d'où il sort tant plus d'eau que son officieur, tant qu'il sort de cette ligne, tant il plus". While Cattaneo wrote in 1817: "Nero actinomotic intro fonus placenter. — a. Pu frondius ad secrum proxinum tum aliquem, acclivum officii utrinius set suum punctum. b. in secundo sub-
retroversio major ad uterum rectum - e. in prolixum partum cetero, uterum vaginae ad uterum rectum reclinato, profunda uterum vaginae recti major ad uterum rectum, etiam in vaginae uteri uterum recti major ad uterum rectum abstainit."

We have already discussed the situation of the fundus cervix pretty fully. I need add nothing further to what has been already said.

Dr. Spencer in 1765 described the post-mortem condition very accurately. We may just quote a few words of Hunter describing how the uterus adapts itself to the shape of the pelvis; he says: "It is pressed against the plane of its cavity, and is contained in the cavity of the pelvis; but when freely yielding, it extends laterally, forms projections, which fix it almost immovably in that situation."

After, he stated that the cervix is elongated, he wrote as follows: "Erectum praeter longior solito et que ad unum superficie utroque vaginae in altera absque...." He further says of Cl. Santoff, "Vulvo caecum in longiorum arteria cervicem transport, sive vero cervicem talis magis in effecto quae pro causa habeatur. Fundus uteri in uteru sind in profundum retroter vulvae uterum excitat, quam facile fecit post, ut cervicem rectum longerum."

From the diagrams that have been given of the condition we do not find this elongation at all marked. In the one case of a hysteroscopium that we have ourselves seen it was a very marked feature of the case.

Rogers on the other hand records a case where in a spina para sit, there is an abortus ratio 5½ months present the cervix was located
We have already seen that the distension of the bladder is supposed to be due to the compression by the cervix; some suppose that it is the urethra which is compressed, others that it is part of the bladder; some also suppose that the urethra is elongated, others that the bladder.

Do we revert to these questions again when speaking of the process of the catetor in treatment? But we may here quote one or two passages on the subject; thus over topon in the post-mortem examination of his case says: "Uterum elonnum comprehendat urethram cavernosam ad dimidium pubis, sicque uterustro premium. Venere uterum supponit expansionem accutateverat." Also in 1799 raised the following question: "Was the urine retained by the mere pressure of the uterus against the widened, perhaps distorted urethra, without the uterine acting? Or does the extraordinary dilatation of that canal, under this circumstance, when more or less freed from compression, account for the large though untrapped quantity of urine?" Hunter in the post-morte examination of his case found: "The lower part of the bladder, which is united with the vagina and cervix uteri, into which the water accedes, was raised up as high as the brim of the pelvis, by a large round tumour (viz the uterus) which entirely filled up the whole cavity of the pelvis.... The water made the amount of the tumour upon which the bladder rested." Later too he wrote: "When the lower part of the pelvis is very capacious... the enlarged uterus... will press more upon the greater urinary than upon the upper part of the bladder... thereby expose the patient more to dyspy and suppression."
Tyler Smith too says: "The suspension of urine is believed to be vioweiably caused by the presence of the neck of the bladder acted upon by the pressure. The whole question of the exact position at which the presence is exerted is at present not decided, and has not yet been sufficiently accurate observations to determine the point exactly; from the records of cases, from published diagrams, although perhaps most of these are purely theoretical (of little value) and from a case we have seen, all from the evidence afforded by the passage of a catheter, we are inclined to think that in most cases at any rate the presence is upon the neck of the bladder or only very slightly upon the urethra.

The most important point is the way in which the fluid is nourished by the diaphragm of the bladder. When the neck is stretched from the anterior abdominal wall, this was recognized by John Glaser, who wrote: "Utterance of abdominal cavitation in part at a favorite point, a storey of substantia with substance of cellula, with muscular abdominal adherent." The practical bearing of the observation which has been repeatedly confirmed will be seen when the question of tagging the bladder is discussed.

The next point to be considered fully is the differential diagnosis of the condition, that is, to lay the list of conditions from which it must be differentiated.

In the first place it is recorded that the presence of the condition at all has been reversed altogether, and that the case has...
been supposed to be one of simple pregnancy, than his cases mention a case from "Perkins's Cases in Midwifery," p. 174, where a midwife found an enlargement in the vagina which she scratched through with her nails so as to evacuate the waters. Coleman also records a case where a midwife is said to have pinched the bulging in the posterior vaginal wall caused by this condition for the bag of membranes, presenting at the vertex, to have lacertated it in trying as she thought, to rupture the membranes. Præs seminal also tells that the case recorded by Simpson where he could find no water and thought that it had been closed by inflammation although he gives as history that might point to its occurrence of the water he made an artificial as "in a most rude and slovenly manner." was really a case of retention is that the liquor escaped from an occluded hole of vein not for amulet. Such a mistaken diagnosis as those recorded alone are hardly likely to occur nowadays except to unskilled midwives. The diagnosis need hardly be discussed.

Extra-uterine pregnancy in the condition where once in diagnosis is most likely to occur, yet is extremely difficult to say exactly how the two conditions are to be accurately distinguished. In all probability as has been already said the greater number of the cases recorded by Præs seminal belonged to this class. The great means of diagnosis is by a most careful bimanual examination. By this the
in extra-uterine pregnancy the uterus will usually be made out to be separate from although attached to the tumor felt in the posterior fornix.
of the vagina while in gravid uterus, the distinct conformation of the cervix with the uterus will be apparent, while the fundus uteri will not be felt in any other position; the portion of the cervix is not much aid, as it is only in those cases where it is displaced in retroversion that this is likely to be any difficulty. The previous uterine may help the in retroversion, the displacement may have been known to have ended previously, while in extra-uterine pregnancy there may be a desire of freeing inflammation or the cavity to the uterus of the sac containing the ovum. Examination per rectum will aid the diagnosis greatly.

Ashwell quotes a case from which the mistake occurred and says: "It cannot be difficult to distinguish a retroverted uterus from tumours growing in the recto-vaginal septum. As from its connection anteriorly with the cervix, the location of this latter part within the vagina will prevent mistake."

Dowen relates a case of a woman who at the 5th month of pregnancy had signs and symptoms pointing to gravid retroversion. Except that a sound readily passed several inches towards the rectum. The child & extra-uterine gestation was found. He says that the important differences are the determination of the portion of the uterus by sound, the os situated lower down; the free floating of the extra-uterine tumour, the escape of fluid or tarry with the consequent ability to feel the fetal bone. He then says: "Almost all bodies which get into Douglas' pouch come from above, so that the uterus not only towards but at the same time downwards, thus bringing the ovum within easy reach of pointing downwards. On the other hand
Retroversion of the uterus lifts the womb upwards & tends to throw it forward. Little help is given in the above remarks to the diagnosis, for usually, no body would ventured to pass a sound until they had assured themselves that it was not a case of gravid retroversion, more or less. Fluid escapes from a retroverted gravid uterus if this happened as has been recorded in some cases, the foetal bones can then also be made out. Rather must we trust to the history & to careful bimanual examination.

Retroversion hæmatocele is stated by Dames to be liable to be confounded with the condition, the signs that here the uterus is pressed bodily forwards preserving its normal axis & can be made out bimanually; proof is given by the use of a sound. The vertex is often flattened & in retroflexion is generally much lower down. It often descends into the abdomen & rarely falls so completely the lower part of the sacral hollow. It fills the uterus in one mass with itself.

Here again a protest must be uttered against the use of the sound until the diagnosis has been established. The previous history will of course help greatly in the diagnosis; then as in the former case a careful bimanual examination ought to differentiate the pelvic contents whilst in gravid retroversion the foetus will be much softer than in hæmatocele & more elastic. The menstrual history is also important.

From retroversion above, the diagnosis will not be
difficult and need hardly be discussed.

From a distance the posterior wall of the bladder is more difficult occasionally in diagnosing, but here also the history is very important. In this condition, Dames says that the ovum is generally lower down near the middle of the pelvis; the tumour is hard and not roundly rounded, while it embraces the cervix.

From a tumour behind the uterus there should be no difficulty in diagnosing by means of a careful bimanual rectal examination; but in the tumour is generally mobile. Docrin and Sykes found a tumour behind the uterus, between the vagina and rectum, in a case supposed to be one of gravid retention, as also did Jones, while Dames himself records a case in which proved fatal in which the mistaken diagnosis was made. Rogers also records a fatal case of the displacement where he diagnosed during life a fellow tumour pressing on the bladder and rectum.

Docrin and Sykes record that Leblond and Delcage, when called to a case of subinvolution, found present the condition of arterial ascites. The diagnosis here should not be difficult, as the point will be at once settled by passing a catheter and emptying the bladder.

We may just mention a case recorded by Wilson where
he said took the abdominal tumour formed by the distended bladder
for an umbilical hernia! The tumour had already been felt and
the woman had been informed by her midwife that she was
not pregnant!

Before proceeding to discuss the treatment of this condition,
a few words may just be devoted to the consideration of the
condition of Retroflexion of the Grand Utter.

It has been stated that Vesalius was the first to notice
this condition, but such is not the case as it was known before he
wrote his treatise. Although the difference between the two condi-
tions of retroversion + obstipation was not recognized, yet from the descrip-
tion given, it is obvious that Carus's second case must have been one
of retroflexion, he writes thus:—"The os tenuum was not turned upward,
but lay towards the pubis; I could easily be felt about the middle of the
pelvis——Notwithstanding the situation of the os tenuum, I still suspected a
retroversion of the uterus." This case was recorded in 1779.

Three years later, viz. in 1782, Johnson distinctly recognized the separate
existence of retroflexion, for he wrote:—"Deo autem rogavi multi partus
fugiendo nec causae; atque utern respecte accelerarere, ut ternam syncopae
in toto tergum, et ternam syncopae in medio pelvis, modo uteri, ut ille vis tenuis adprehensurus.

The description given by Dandoloque in 1787 is even more
accurate of the condition of the uterus, while recognizing as John did
that the situation of the occiput is different in the two conditions, poor
further notes not the bending of the uterine upon itself. He says: "We
cannot judge of the extent of the displacement by the height
of the occiput, or the degree of difficulty we feel to reach it with the finger.
Sometimes it is very accessible, though the inversion is great and can
be, because the neck of the uterus then bends like the neck of a Jaguar, as
I have observed in cases of retroflexion, as well as of obliquity."

Browne also noticed retroflexion in 1599, for he wrote: "In some
cases, the occiput does not rise up, but the fundus turns down, doubling
its neck which bends. This more frequently happens after delivery, before
the parts have assumed their proper size and firmness. It has received the
name of retroflexion; but the treatment is the same." This is the first
time that we have met with the term retroflexion applied to this
condition in the gravid uterus.

We now come to Sennare's account, written in 1601, where the
condition is very accurately described, as follows: "Such an alteration
in the position of the parts of the uterus, that the fundus is turned down-
wards and backwards between the rectum and vagina, while the uterine
remains in its natural situation; an alteration which can only be
produced by the curvature or bending of the uterus in the middle on
one particular state, that is, before it is properly contracted after a
woman has been delivered.... A suppression of urine existing at the
time is continuing, answered afterwards, in the course of the retroflexion
of the uterus in the single case of this kind of which I have been informed
by Dr. Thomas Cooper."
The two conditions, that of retroflexion and retroflexion, must be separated, although Siemens wrote that for all practical purposes they are the same as the same displacement. Fishell wrote of it thus: - "Thus retroflexion may be regarded as partial retroflexion, the same in every respect save one - the alteration of position of the cervix, which from its precarious to proper locality, renders occurrence or feeling of the body necessary to the production of the displacement." This however is an incorrect and misleading account of the condition.

Retroflexion, then, the cervix uteri returns to normal position or is only very slightly displaced forward, while the fundus uteri is displaced backwards, so may even be below the level of the cervix; in order that this may come about, the uterus must be bent upon itself - a small amount between the fundus and cervix.

This condition can hardly come on during pregnancy, as Fishell wrote: "It is easy to understand the improbability of its occurrence during pregnancy, at least after the earliest period; for subsequently the general enlargement of the uterus would preclude the displacement of one portion alone." For it to occur, there must be some place in an already retroflexed uterus; this may rather differ from the statement for often stating that it is a rare common displacement than retroflexion, he says: - "the placental state of the uterine wall (which accompanies the hypertrophy of the second infiltration of pregnancy) in conjunction with the obstacles which prevent any great displacement of the cervix forward or upward, usually converts aversion into a fixation; the displacement in most cases matter.
exactly the one another, but the axis of the cervix forms a curve which is
(1845, p. 53)
below the whole organ has the shape of a rent or Schultze's diagrammatic figure). This distension is however a prominent and sought for diagnosis.

The probability however seems greater that the condition may found where pregnancy occurs in an already retroflexed uterus, as has been said. This retroflexion may be primitive or acquired with respect to the other i.e. may just mention that Desmouls states that the uterus may bend back & become subject after delivery, this usually occurs in the 2nd day according to M'Burney but he gives an example of its occurrence late as the 9th day; & Martin states that post partum retroflexion is due to the placenta having been attached to the anterior wall of the uterus, the effect of which is to keep this wall longer than the posterior & thus to throw the furred back.

As to the severe symptoms, we first notice that the cervix entire is not displaced, we have already shown how this was early noticed but we may just quote Batinius who wrote in 1816: "le col se ressentant quelquefois à la manière d'un be de corne, peut être facile à attendre, quoique le renversement du fond soit très grand." But further the cervix may be very much flattened by the pressure of the enlarged fundus which is met with fully in the whole facing just as in retroflexion in fact we find the state of affairs paragryphic as in retroflexion except that the cervix is barely written back. Ranke also wrote in 1816: "Quelquefois le col est si légèrement recourbé".
djoigt
que on le trouve fréquemment avec le delègement, et cependant le fond est
fortement engagé entre le sacrum et la paroi postérieure du vagin.

Barney says also with regard to examination: "Since the
cervix uteri is not thrown up, the roof of the vagina is not dragged
up into an elongated cone to the same degree as in retroversion. For the
same reason the uterus prolapse is not so much pulled up, the urethra
is not displaced, retention of urine is not nearly so frequent.

The finger pressed into the angle between the cervix & body of the
uterus, may trace the continuity of the organ." There is said also
to be less bulging of theanus & perineum. The symptoms are
much the same as in retroversion, although according to some,
"retention is less common than in pure retroversion."

The terminologies & complications & the treatment are exactly
the same as in retroversion, & therefore need not be here discussed.
Numerous cases have been recited of the condition, in addition
to those already mentioned we may refer to cases recorded by
Whitbread, Robson & Fleischner.

We have already mentioned on p. 61 that retroversion has
been stated to end sometimes in retroflexion, & have stated that
shefjelley says that this may occur; we may also quote Naege, who says:
"It has been said that in part, if not in all cases, retroversion is
the first stage of retroflexion: that is, that as the cervix rises, the dragging
of the vagina & bladder, when its anterior wall becomes down-\n
\textit{ad.}\n\textit{ad.}\n\textit{ad.}\n\textit{ad.}\n\textit{ad.}
Before discovering the treatment of these backward displacements of the placenta, a few controversy had raged to the prognum. On this point, many device operations have been proposed; thus, we have already seen that 

Dennan did not consider the condition at all dangerous, and that no practitioners of midwifery considered it as a case of any difficulty, or felt any solicitude for the event, provided the life of the patient be saved. While 

Hunt said, "I won't presume that every woman is in danger, who has a retroverted uterus." Most practitioners would be inclined to agree now with the opinion expressed by Hunt, in opposition to that of Dennan, who was almost flatly denied by 

Bell. When he said, "Medical practitioners have not heard the complaint among the more inveterate class of female disorders." The actual occurrence of the uterus is not in itself dangerous, but it is from the results of the displacement of the abdominal bladder, blood poisoning, the patient suffers danger, and it is upon the absence or presence of one or more of these that the prognosis depends.

The only statistics that we have been able to discover are those of Senn, who says, that in 63 cases of undoubted retroversion of the gravid uterus, 15 mothers died, at least one lost. We must however remember, that in the days when these statistics were compiled, a very large number of undoubted cases would have been overlooked because the subject was so little known.
We now come to consider the treatment, a subject the history of which is of extreme interest and well worthy of our attention.

Recognizing, as we now do, that conception can quite well occur in an already contracted uterus, we cannot help acknowledging the importance of attempting to such cases before any symptoms shall arise even by available treatment than preventing the occurrence of such. Closely connected with this point is the subject of treatment after the uterus has been replaced, when symptoms have already occurred; we may here discuss the two questions together.

Tyler Smith fully recognized the importance of prehysteric treatment, as he wrote: "As long as attention was supposed to take place suddenly, little could be done to arrest it. But if, as we believe, the displacement dates from the very beginning of pregnancy, in the great majority of cases, we may be much by portion or attention to the bladder, bladder, to prevent any dangerous symptoms; and, aware of the condition of the uterus beforehand, we shall be more ready to give such mechanical assistance when it becomes necessary."

When then pregnancy occurs in a woman who is known to have a retroverted uterus or when the uterus has been reduced after symptoms have appeared, the etiology of great importance to get the uterus into good position, and to maintain it there until a portion of which probably a byodge is the best. Spiegelberg says that: "The replaced organ must be brought into a portion of contractions, may be attained thusly by a Schaltco or a hemipexy, till the change

16th
of eclampsia has passed. I have never seen any harm done by the use of narcotics in these cases, but many do not. Barnes says:

"This precaution (viz. the wearing of a farina) should never be omitted in the case of pregnancy occurring in a woman who has once suffered from retroversion or retroflexion, especially if she has had eclampsia." The farina need only be worn until the fourth month of pregnancy has passed by.

It is also extremely important to see that the bladder is kept empty, so that it does not become a keg of urine. The patient should also rest a good deal, yet may often be advisable to keep her in bed or at any rate on a couch. She should be encouraged to lie on her right or left side, inclining to the prone position, but avoiding recumbency (Tylo & Smith).

The administration of mineral acids is recommended by some. Sperin & Géry recommend a prescription which we are hardly likely to think necessary now, in which they say: "il pourrait même être prudent de tester, durant quelque temps, une sorte d'émulsion dans l'urine, comme le conseille le docteur Géry."

The advice only refers to the treatment of the affection has been affected later symptoms have already developed.

Knowing that a woman who suffers from retroversion or pregnancy we must always be on the outlook for the first symptoms of retention of urine and treat them at once by potty the urine into proper condition.
The most important symptom that a woman with proud uterine suffers from is the most constant one is of course retention of urine, it is to the relief of this that we must in the first place direct our attention before any efforts are made at repossession. Denman said: "All attempts to return the uterus to its natural position before the distension of the bladder is removed, must be fruitless, as the uterus will be irresistibly borne down by the pressure of the suppurant uterus." While Sheiner wrote: "It is next to impossible to reduce the uterus while the bladder is over-distended."

The most natural way to relieve the distension of the bladder is of course by passing a catheter, but before considering this operation we may note another manoeuvre which often allows of the passage of the urine very by passing back the uterus through the vagina, by which means the pressure on the back of the bladder is removed so that the urine can flow freely. This has been noted in a great number of cases of which a few examples may be quoted here. Thus Smith in writing of one of his cases says: "When I pressed my finger against the uterus, so as to raise it up, some of the urine was discharged." A remarkable case is recorded by van Eslen where a woman, who died on post mortem examination, to be suffering from a retroverted gravid uterus, used to relieve herself in this manner; he writes: "Joq quaque aqua diligent seti uterum digito elamem, et a nata varians apellando evacuationem urinae faciens, spondeque excruciatas tolerabiliores, redder."
In the account of this case too we read: "I passed my finger between the tumour and the sides of the os pubis, a little to one side of the matter, upon which a considerable quantity of urine was discharged, as my finger removed the pressure upon the bladder." Curneke, 61, 88. Prosper Vi
de noted a similar phenomenon in cases recorded by them; while Bandelocque goes the length of saying: "We begin in these cases by evacuating the urine, if possible to do it, either by incising the finger along, on one side the symphysis of the pubis, to remove the body of the tumour from the matter or, touch the bladder, or by introducing a catheter. In this manner I enabled a foreign body to make water during ten days, in the month of March 1769, and several times a day. She was about three months gone, and the tumour was in a state of complete atonisation."

This method of relief may be adopted with advantage as a temporary expedient where, for some reason or other, it is not possible at the time to pass a catheter; it is easy to imagine in a large number of cases will prove effectual, although we are hardly likely to continue its practice in any one case for the length of time that Bandelocque did in his case. All that requires to be done is to pass one or more fingers into the vagina, between the tumour and the symphysis pubis, then to press backwards so as to relieve the pressure upon the bladder; this manoeuvre we shall see later, is often useful in helping to pass the catheter, so that in performing this latter operation there is often a gush of urine.
As soon as possible after seeing a case of retroversion or retroflexion when there is retention of urine, it is advisable to pass a catheter to draw off the urine; this operation may require to be repeated as the bladder must be kept empty until the uterus can be replaced. Plenier says that the catheter should be passed "toutes les deux heures at least, or oftener, in the 24 hours." In cases where no attempt was made to replace the uterus, although the urine was drawn off regularly for a time, the retention of urine ceased after a time; thus Smellie records of one case, "I was obliged to draw off the urine once in 24 hours for eleven days before she could pass it in the natural way." Nelson records a case where the urine was drawn off for a fortnight with a catheter and was then passed naturally at the end of that period.

There may be great difficulty in passing the catheter, or fact ita frequent in the case; this difficulty may arise from one of two causes: 1. Difficulty in finding the urethra, or reaching the urethra minimus; 2. Difficulty in getting the catheter to penetrate the bladder after it has entered the urethra.

As to the difficulty in finding the urethra minimus, we have already seen that this is frequently drawn up, or may even be folded behind the symphysis pubis according to Stjelberg. Chetton too records a case where "the urethra minimus was so contracted that it was with difficulty found." Bouvier says speaking of the difficulty said: "on opère plus réellement en forçant avant la rencontre de la sonde, et on se servait de la sonde
aplate." In some cases a metal catheter may perhaps be useful, but in most an ordinary small gum-elastic catheter is to be preferred, & it is said that it is passed more easily of the concavity of it is directed backwards; it certainly is advisable in all cases when there is any difficulty, to give an anaesthetic, as by that means there will be more chance of reaching the meatus. Davis directs that, "the point of the catheter—a flexible male one, No. 9 or 10, should be rotated ... must be directed close up behind the symphysis." The discovery of the meatus & the passage of the instrument will of course be greatly aided by pressing back the urethral tumour. Shein营业收入 a curious method he adopted in one of his cases in order to aid him in his difficulty, he says: "In one of my cases at the 17th week, the meatus remained so far contracted that I failed in entering within the meatus several forms of gum-elastic & metal catheter. I then endeavoured to elevate the cervix with my finger in order to relieve the meatus, but in this I failed. Subsequently I passed a strong test between each tumour of the neck of the body, or neck of the diverticulum, sometimes dislodged away, but either the bladder was too much or too long distended to contract, or the meatus was compressed somewhere; because the patient was still unable to empty the bladder. By the swelling of the urethral tumour, however, the cervix was so far removed as to allow the meatus to be fairly seen & better felt, & a flat silver catheter with the concave surface looking towards the sacrum, was passed with ease almost directly backwards, when several jets of urine came away. I am not aware that silver tests have ever been tried before for such a purpose."
After the patient's condition has been found, the catheter introduced into it, there may still be considerable difficulty in passing the catheter into the bladder, this may either be due to distention or to compression of the bladder. In the first place it must be remembered that the bladder's blood without always displaced, so that it is necessary that the catheter should be placed close up behind the symphysis pubis in a direction directly afterwards.

It is necessary also that the catheter should be sufficiently long for this reason, a male one is the most suitable, thus I shall be the says of one of his cases: "The male catheter was used, because other was too short, emptied a great quantity of urine."

It is said by some that the difficulty in introducing the catheter is due to a narrowing of the catheter caused by stretching, then

"Senman said that its passage is often difficult, because the catheter is elongated, at the end its direction is forced against the most pubis the urine formed by the administered urine. The remedy, he says, be use a flexible male or female catheter to pass it slowly through the catheter."

"Shinon also, in referring to a fatal case, Dr. Leoniheio says: "May not the difficulty in passing the catheter have arisen from the narrowing of the catheter of the urethra caused by the stretching?... In other cases the urethra is not only lengthened and contracted, but it is bent almost at a right angle, as in Mr. Hayman's case." He then says that its passage may often be aided by putting the patient on the lettoomy or genu parallel position and that in the latter position steady pressure on the fundus urinæ often helps, especially if the cutis is above the symphysis.

And may be given very often also by passing back the uterine
temper for vaginam: this has been very often noticed. Thus John wrote:

"The absolute eructus in vancet cateteter affection, in sanctor to a
mammor vaginae ex poullin expeime tumenam angustat."... 

The fact that cateteter in the methe." Lyson's case is also a very good instance of
this, he write: "Several attempts were made to pass the different kinds
of cateteter, but it was found impracticable, in every position we could think
of to introduce any one more than an inch or two into the methe without
draining off any urine." Then later he says: "The obstruction here met was
clearly distinctly felt under the symphysis of the coxa pubis, of the testa in
the vaginam though it considerably diminished its diameter, particularly in
its inferior part towards the os externum, did not in the least press upon the
methe;..." Consequently, was no obstacle to the passage of the cateteter.

The obstacle was much higher up, always impassable at a certain point
from the osseous mullar sort of pressure of the uterus bladder upon each
other, forcing the latter to become and even jlectric over the osse habit,
y to form an acute angle with the methe, occasioning such an insurmountable
obstruction as, although it admitted a small quantity of urine, to encroach
itself into the cateteter from above it could by no means admit that
eniment to pass it from below." This then forms yet a third
cause for the difficulty experienced sometimes in passing the
eniment. Dick & Oliver note cases when, after failing at
first, they succeeded when they forced back the cervix.

Even after th passage of the cateteter there is very
often considerable difficulty in emptying the bladder, the urine
sometimes will flow for a time or two cease while the bladder remains
distended, on other occasions, no urine will flow at all, various reasons
require for these phenomena. In the first place, it may happen that
the catheter has dilatations on it; the catheter passes into the
bladder, while it never reaches the bladder at all; this happened in
Leyden's case where, "The catheter seemed to pass rather further of the
meatus, repeatedly drew off a spoonful or two of dark-colored urine, sometimes
in one posture, sometimes in another." Shover too notes that the bladder
may not be entirely emptied, says, "In these cases, it has been supposed
that the meatus itself, or some portion of the neck of the bladder, becomes
distended, forming, a second cæcum." He then goes on to
say that in all probability it is due to collapse of the catheter, or
because its eye gets plugged or rests against the bladder wall.

Semon suggested that the bladder might be divided by fissure
into two sacs, when he said that the flow sometimes ceased "in such a
manner as to give us the idea of a bladder divided into two cavities.

Cheaton too records a case where he says that on passing a catheter, he
only drew off about a pint of urine, "without apparently reducing the
size of the bladder."

It is quite possible, of course, that the catheter may get plugged
by the clotted blood, shed of mucous membrane, & debris, that may be
present in the bladder. "Of this I lay it to that when anyone of the
bladders occurs, they may follow detachment of the mucous membrane, as we have already seen, & that remains attached longest at the cervix;
ing press over the neck of the bladder, preventing the passage of
urine when the catheter is passed.
The over-distension may cause paralyses of the walls of the bladder, which cannot on that account yield itself, or it is quite possible also that of adhesion takes place between its anterior wall and the abdominal walls, this may prevent its emptying; such an adhesion has been long noticed. Barnes objects that the catheter should be passed as far as possible and withdrawn slowly. He states that after reduction of the uterine mass is sometimes a spurt of urine in a copious gush, showing that the obstruction is sometimes mechanical or not due to paralyses.

The following interesting case recorded by Dornstotten in 1821 may be quoted as an illustration of a possible mishap that may occur, although it is hardly likely to occur with ordinary care. "Some years ago I was disturbed in the middle of the night by a message from a medical friend to go to his assistance in a case of retention of urine. He had attempted to introduce the catheter under a relaxed state of the bladder, but no urine escaped. Upon attempting to introduce the catheter, the instrument passed readily enough, but no urine followed. I therefore was satisfied that the instrument had made itself a new passage. After some trouble, varying the direction of the point in different ways, I was fortunate enough to regain the pathway to reach the bladder, upon which the urine flowed plentifully." It is especially necessary that the strictest aseptic precautions should be used, since decomposition of the urine setting up suppuratives, is extremely liable to follow the passage of the catheter, as is seen in a very large number of the recorded cases.

As has been seen, the difficulties to be met with in...
try to draw off the urine in these conditions, and how these difficulties can
best be met; in some cases, however, all our efforts to overcome them
are unsuccessful, or, since it is essential that the distension of the
bladder should be relieved, there is nothing left for us but to puncture the
bladder above the pubis. We draw off the urine. This operation, moreover,
is looked upon as a very simple one, and is attended with only very slight
danger to the patient, provided that suitable precautions are taken.

Paschke states that Schatiei was the first to recommend this operation;
we have not been able, however, to find the reference; but in 1784
Chlorton recorded a case where he says—"I punctured the bladder with
a pointed-sized trocar, which I passed into the tumor about two inches
above the pubis." He drew off about 3 parts of water and then cooled the trocar
for, he says, "I have been convinced by repeated experience that we should
not suffer the urine to run off too fast by means of a catheter, when the bladder
has been over-distended for any length of time; for having in a certain degree
lost its power of contraction, the sides fall together in a flaccid state, while
in some instances within my knowledge has laid the foundation of future
mischief." In this case the cannula slipped out of the bladder, and about
two parts of urine ran from the wound, a piece of plaster was put on.

This was late, she had a firming plaster on the lower part of the abdomen
which became very tender, and she then evidently suffered from absorption
of the decomposing urine; but after a pretty severe illness, recovered, went
on to full term. He recommends the introduction of a large catheter, after the
trocar, as to prevent the occurrence of this accident.

Before this, however, we find that Lyon proposed puncture of the
Maddern in his case but the woman refused to allow the operation. He then, after discovering the admirability of puncturing the uterus, says, "fright did not have been caused in the case, when no urine could be drawn off, and to have punctured the bladder alone the ovum fucus, that by this means the water being removed, the pressure removed, the uterus might the possibility have been restored." John P. Skinner both recommend this operation, he directed for its performance, thus John wrote; "see this next of which at once a facilitie verse, utramque parte successerat. Pedi si non fuerat utro est, ne apud feces, nihil restet nisi verse punctum 
un Prenchtm Lameus et, non si fuit as labe facultate instituta 
perseu."

We have seen how high up in the abdomen the bladder is seated in these cases; how much of its anterior wall is thus removed by puncture, and how in some cases the anterior wall is even adherent to the anterior abdominal wall; the puncture should therefore be made some distance above the symphyseal pubis, Skinner directs that a trocar should be introduced one or two inches above the symphyseal pubis directed upwards and backwards towards the promontory of the sacrum or last lumbar vertebra.

Fisching explains the reason for this direction of the trocar, for the relaxation of the puncture, thus, that it should be about three inches above the symphyseal pubis, so that the opening in it (the bladder) may remain in contact with the seat of puncture in the abdominal wall during the outflow of wine, and at the same time be above the seat of compression.

Demes states that Prenchtmigen has punctured the bladder, while Schlotz has punctured both the uterus + bladder + he directs that; "The punctu..."
should be made about three inches above the symphysis, or to allow for the descent of the bladder and become empty.

It is of course advisable, where possible, to use an aspirator or a fine needle to evacuate the bladder, particularly an existing small stone. Although they can be used in emergency, they answer the purpose fairly well.

After the bladder has been emptied, the next indication is to supply the bowels before attempting to replace the urine; this is best effected by an enema, a very necessary course, as we have already seen that pressure built up to collect above the funder of the obstructed ureter, can not and can not be relieved by the occasional incidence of diuresis which is often merely an indication of overactivity of the action, just as the inability of urine is a sign of overdistention of the bladder. It is often difficult to sometimes impossible to administer an enema owing to the consequences of the action by the funderueter as we have already noticed on p. 50. The fluid should be used 4 of after a reasonable trial, it is found that the attempt is unsuccessful, it should be discarded from.

This statement is in opposition to the view of Speigelberg, who states that an enema should not be given as it tends to produce tenesmus, for it cannot be got to pass beyond the funderueter.

Semeny, those who follow his leading consider that the above is all the treatment that is necessary, for although, after the bladder has been emptied, the return
Mary in some cases, as we have already seen, return to proper position
gut in the majority of cases it will not do. Yet we have only
traced the symptoms, and must now proceed to remove their cause
i.e. we must replace the uterus.

Sewall went so far as to say: "We shall also find that the longer
the attempt to replace the uterus is delayed, the more we at all the operation
will ultimately be of success, so certain." This statement is borne
in total opposition to all known facts. What he authority of fact,
it is difficult to say. The condition of retroversion is always fright
with danger as long as it persists; we should therefore try to remove it
as soon as possible. If we cannot the better the quote which he wrote
in 1799 on this point: "With regard to the treatment of the disease,
retroversion, as well as other injuries, has only confirmed what was at first
proposed. There have been taught indeed, that the retroverted uterus would of
itself recover its natural position, if, by the constant use of the
vagina, the bladder were kept in almost constant, the
her self, the bladder were kept inviscidly in the
many may, or ought to be so. And yet I think, when it can be done with care (for most
instances it may) it would be better to put an end at once to pain by
by replacing the uterus." Graves too wrote that "an exfoliation when
upon drawing off the water, has been productive of the most serious
real, if not in some cases of death itself." The only argument against
immediate interference is that it may perhaps cause abortion, this however
is a lesser evil than the persistence of the retroversion, which would not tend to
in our attempts, the fear of provoking an abortion ought not to check
the operation (Bancroft)."

Sewall who gave this
showing the great value of immediate interference as compared with a waiting policy says:—"I am inclined to think that it would be much more becoming a practitioner of midwifery to make a statement with which most people will now be inclined to agree.

Having decided then that it is advisable to reduce the action as soon as possible I now proceed to examine the various methods proposed to effect its reduction in detail. The whole varying object of all interference is of course to get the fundus uteri above the brim of the pelvis and four or five methods have been proposed to effect this.

In the first place we may briefly state that in some cases the difficulty is in no difficulty, the fundus can be pushed up by some one of the methods to be described below; in others the difficulty is very great and it may only be that after trying several of them success at last crowns our efforts, while in some cases there may be absolute failure.

There may in some cases be great congestion of the pelvic organs, especially if the symptoms have been present for some time and may therefore be sometimes advisable to try in the first place to relieve the congestion; for this purpose Cohersin recommended baths to be given. The earlier practitioners of course recommended bleeding as a preliminary: thus Shipley records a case where the woman, after being bled 10 times, had the same trouble but by bleeding & keeping her body dry
It was prevented from being total. Seven also lost a case, when "the vagina & neighbouring parts were so rapidly constricted that it could not think of handling them." Hooper, Seaver, Garden, all recommended bleeding while Garden also advised hot baths & fomentations. Asbell wrote: "In extremely bad cases of retention, when perhaps more than four months of pregnancy have elapsed; when every attempt at reduction has shown the form to be almost irrecoverably wedged in the pelvis, the exhibition of hot aids amputation, so as to induce nausea, the warm bath, are valuable adjunct remedies." Barnes, however, thinks that bleeding is not an advisable operation in these cases since the exhaustion, consequent to absorption produced by it are contraindications to its employment. Schemme recommends that the patient should be starved for some time.

While it is very doubtful whether bleeding is advisable, yet we should not lose sight of the fact that in these cases great pelvic compression exists, so that the way will be relieved, before any attempts at reduction are made, by means of hot baths, massage &c.

We have now to consider somewhat the various steps to be adopted in order to effect the replacement of the uterus. In the first place we must consider what is the best position in which to place the patient. Greggore seems to have recommended that the patient should be placed upon her back, & all seem to have tried this position in his case without success, as soon as he turned the woman he placed her upon her knees & elbows with her head & shoulders as low as possible. The dorsal position, although occasionally
recommended, seems to have been very soon given up in favour of the
parapneumal one. We find that Jaffé, before using artificial aid to
affect expulsion, administered an only conclusion is, and that object of the
reduced the patient to remain in bed with her shoulders low on her
back, "hoped from the above mentioned evacuation of the bladder stricta.
the uterus might return to its natural position without any assistance." This
method failed, so he reduced the uterus after placing her in the
parapneumal position. We should not now consider it right
to try any such palliative measures, but should at once attempt to
get the uterus into the right position.

68. Esclau society in 1846 thought that the parapneumal position was
an unnecessary r said: "On peut également décuser en la faisant mettre
sur le dos, pourvu qu'on ait l'attention de l'engager à faire le moins
d'efforts possible pendant que l'on s'occupe à replacer la matrice." On
the other hand, Larmor in 1847 recommended the parapneumal position
noise to place her on her back until her knees were flexed.

Breuer and Ziege in 1833 tried to explain the way in which
this last position acts, for they wrote: "On devrait quelquesfois même
avoir la suspension; mais la prononcé d'employer plus de facilités et
favorise le retour du fond de l'utérus en avant sous l'influence de sa
résistance en même temps qu'elle la dégage de la concurrence du sonru." 

Campbell in 1876 gave a further explanation of the method of
action, but one that hardly seems reasonable since the woman is not
sufficiently low in the position for the forceps that he mentions to come
into play. He wrote: "In several cases in which the impacted decidu
\text{...}

Accordingly, our only way is that the attempt should be made with the patient in the ordinary obstetrical position on his left side, of these fact it is advisable to place him in the semi-rectal position remembering the instructions of Campbell, in order that it may be effectually carried out. The dorsal position is not advisable, while the prone position recommended by Barne must surely be very favourable for the practitioner; of course when an anaesthetic is given, the semi-rectal position is almost impossible; the patient must be kept on his side.
It is certainly advisable that chloroform should be administered to the patient in all cases where there is any difficulty. By this means all resistance to the abdominal movements removed, the woman does not feel any of the pain which otherwise would be inevitable. Some give some useful advice when he says: "If the patient is not under chloroform, fingers should be inserted during inspiration only."

The next procedure is to try to get the performer to pass along the placenta. In some cases this is easy, in others difficult or even impossible. In the first place this should be tried by passing one or more fingers into the vagina and pressing forward; others recommend that the performer should be exerted with the fingers placed in the vagina, others that it should be exerted with fingers in both the vagina and rectum. Others again that the whole hand should be passed into the vagina or even into the rectum.

The natural method of the one recommended by nearly all practitioners is to pass one or two fingers into the vagina and to exert pressure with them.

Caesars wrote in 1628: "At necantur dissectione sect, aut aversis ipsisque utriusque prodicere frict, obstetrici exenterati, at digitum libere suos eximiarum rectaculat." Many others have followed this advice, recommending the method.

Others again have recommended that the fingers should be applied both for vagina and rectum. Thus Caesarius introduced one hand into the vagina and two fingers of the other into the amnion.

As one would hesitate to pass the whole hand into the vagina if it were necessary, it has been frequently done; however,
make use of a further manoeuvre for he introduced his whole hand into the
region 4, turning it into rotation. Before finally pulling the flat surface
formed by the backs of the first phalanges of the fingers by the thumb longer
bodily with them. This he called "rotation à fong forme" and he stated that
it was successful in four cases.

He would however hesitate before passing the whole hand
into the section as has been recommended to be done, still in extreme
cases where all other means have failed, it should certainly be tried.

Ed. de Saussure in 1786 adopted this measure and it was successful
as also it was with Cowperston in 1821. As well wrote: "I
have so great a dread of the continuance of rotation, so that I would
not hesitate to introduce the whole hand into the section, exerting
considerable power to accomplish the object; he gave a case where
he did this.

I would recommend that while two fingers of the left hand
should be inserted into the section, counter pressure should be exerted
above the finger with the right hand. Simmone however thought that
the right hand should only be used to guide the section into the
right diameter.

While all are quite agreed that the fractured skin should be
pulled up, there is a difference of opinion as to what should be
done with the cervix. Some recommend that while we pass of the
fingers with one hand for action, we should pull down the cervix
with the other, for vaginam; others again say that the cervix should
be left alone.

This we find Hart's way that he endeavored to replace the uterine by placing it up with the two fingers at the same time, by bringing down the upper part of the vagina which was considerably elevated from its natural position." Cope, too, in 1817 directed the cervix should be hooked down while the fundus was pushed up.

Woolf, on the other hand, says of one of his cases in 1879 that he tried to pull down the cervix, "but found my hand & fingers confined from the bulk of the womb, that I could do little or no service that way." This difficulty is sure to be met with & is a strong reason for not employing the method, other reasons against it have, however, been given, than those put in 1879. "Is the method proposed for effecting the reduction equally proper in every degree of retention, namely the raising the fundus uteri by means of two fingers in the uterus at the same time pulling down the uterine, or upper part of the vagina with two or more fingers of the other hand? By that manoeuvre, the retention of a spherical body in incomplete retention, may be effected, but when the fundus uteri is pressing against the perineum, & forcing out the lower portion of the vagina, the uterine may then be considered as of a longitudinal figure, pulling up & taking the form of the pelvis, probably wider below than above. In this case the fingers pressing on the uterus will be counteracting those in the uterus. Besides from being confined between the inner pubic ramus, they can in any case do little good, but probably much harm, by narrowing the space the tumour on which is to be returned through." He then recommends that the fingers
in the uterus vagina should be raised to above the line of the pelvis before any attempt be made to bring down the uterus, which by the attachment of the parts to the bones pelvis, will be prevented from rising higher, or must become the dependent part, when the uterus is removed to the abdomen. Provided the movable force being applied to four different points, will be less liable to injure the rectum vagina than when applied anteriorly.

Bigly also wrote, "We agree with Mott's in the latter method in attempting to bring down the ovaries."

Shaver took yet another view for, in accordance with his idea that the uterus is the first in the order of displacement, he asserted that it should therefore be the last in the order of displacement. He stated that drawing down the cervix is wrong, because being out of the natural order of reduction, it adds the substance of the cervix cervix to the tumour, thereby causing the largest diameter of the uterus to correspond to, and become jammed in the shortest diameter of the brim; it also takes away any possibility of gaining space by the elasticity of the abdominal muscles alone, the pulse, and any other direction than in an unyielding circle of bone.

It seems then not to be advisable to attempt to pull down the cervix vagina, but it is certain right that the free hand, preferably the right one, should be placed upon the abdomen over its strict cover, because: this is very necessary in order to prevent damage being done by the traction of too much force upon vagina, while it also may amount on jetty, the cervix into position.
Durnel also made use of this method in 1821, while Shipley and many others also recommended its adoption.

The greatest hindrance to the passage of the foetus is the process of the sacrum, which must get in the way of the foetal spine made directly upwards, hence it has been well recommended that the pressure should be so exerted that the uterine ring passes in one or other oblique diameter of the pelvis, preferably in the right one, so as to avoid the acetabulum. The exact reference to this seems to be in Garden's work in 1816, recommended its adoption because "on fait par ce déploiement que la matrice se présente plus entre le pubis et sacrum qu'en dehors, qu'à beaucoup moins d'effraction que son centre." Then in 1817 Lapreton wrote: "une préparation à

Lapreton great stress on this manoeuvre, directing that the cervix should be passed from the abdomen towards the left peritoneal cavity by making above the pubis, and passing the foetal head gradually from above downwards, so as to make the greatest diameter of the uterine cervix correspond to the transverse or right oblique diameter of the pelvis, these being the two largest. In fact in that transverse or oblique diameter, we have the greatest formable space, we can apply the greatest leverage, with the greatest muscular power, for
these diameters we have the least obstruction to overcome.

Abbottley gives very minute directions which are in some respects opposed, however, to the more usually recognized rules which we have already given: he says: "Make the woman lie perfectly horizontal, with varied pelvis, placed thighs, introduce four fingers in suction, apply steady pressure to the body of the uterus in the direction of the promontory, of which it has reached the latter, push the uterus from one side of the bladder (when easiest) into the great pelvis, while the other hand presses down the cervix from outside." Garcia, while directing that the thumb should be pushed up in the oblique diameter, says: "Apply the tips of them (the fingers) to one side of and under the uterine globe.

We may sum up the whole question in a very few words: place the patient on her side, introduce two fingers of the left hand into the vagina, push up the fundus uteri either with the tips of the fingers or preferably with the back of the first phalanges, so that the fundus uteri is forced to one side of the promontory of the sacrum; if necessary introduce the whole hand into the vagina, or introduce the fingers into the acetabum (perhaps in some cases the whole hand may be introduced) and push with a similar manner; at the same time exert counter pressure on the cervix through the abdominal wall, so as to regulate the amount of suction, and guide the cervix into position; if this fails the same laborious operation may be tried if the patient is not anaesthetized or perhaps the dorsal position with the knees of the feet spread.
The amount of force to be used is difficult to define. Bonnet wrote in 1821—let it be kept in mind, that the contents of the uterus are, in all probability, still possessed of vitality; and that too degree of force, inconsistent with that vitality, should be applied. We cannot agree with this, since the condition is such a dangerous one if untreated. Better to cause abortion than to leave the woman with a retained uterus and all its attendant dangers. If counters are required over the abdomen, we cannot too much hazard, although we should allow that be related to go as far as Lheraud, who is stated by Bonnet to have supplemented his own strength by that of one or two assistants.

Besides the method of operation by forcine the hands alone, a number of aids have been recommended at various times by different writers; some useful perhaps, others quite useless or not at all to be recommended.

In order to assist in freeing up the foetus, various means have been tried, all aiming at the production of a more gradual and prolonged traction than can be produced by the hand alone.

Thus Baudeloque recorded the treatment of a case in 1793, where he says: "Not to hurt the uterus by the immediate pressure of the finger, I began by inserting inside the fundus a very thick mass of sterile gauze, evincedly the Sierra gewand, which served after the reduction to free the uterus. This lady did not wear the gauze above 8 or 4 days, removed before the return period."

She then inserted compressed sponge into the vagina section.
(as much as possible to the left side, resting on the uterine part of the left colon, the left greater omentum, and the ligamentum teres), which he used at the same time with the jet of water. He also recommended the use of inflated bladders in the vagina.

Aaffari gives a case where the uterus was replaced by the urothelial lining of the vagina. He says, "I tried it in one case without success. In fact, a point Haffen describes below which the vagina is ill adapted to give; the shortness of the floor of the pelvis allows the bladder to expand downwards. And in most cases it would be difficult to get a bladder into the vagina.... It would be better to place the bladder in the uterus as I did, since there it gets more room, whereas in the uterus while the leading course of the section will direct the formerly fixed cervix to one side of the promontory."

Facio in 1851, just a bag, which he then dilated, into the section.

Haffen recommended in 1840 that the vagina should be inflated with air by means of a Riggen's syringe, which he says, the force to enter the bladder, and the uterus the right itself. He states that he ordered a syringe at the 4th month of pregnancy which had assisted all other attempts by this means. The difficulty, however, to understand the action of this method, he says, does not throw much light upon it.

The great objection to these methods are the difficulty in getting a good point for the bladder, because it is to act from within the fact that the presence for a long time of a foreign body in the vagina.
There are several methods for effecting a section in regard to caesarean section. Those have recommended different methods for helping to pull down the cervix, a proceeding which we have already seen not to be advisable. It will be interesting, however, just to mention them.

Gardner recommends that the fingers alone should be used in order to depress more accurately the amount of force being applied, mentioning that others have suggested that the fingers should be covered with linen.

Boerhaave, after recommending the use of the fingers, adds, "On bientôt pourra servir, d'une force aléatoire portée dans l'utérus et par où dans le mois (d'Haller, Haller) prendre, comme en lever, sur le muceau du manteau qui est dans le même que on éloigne le fond."

They recommend the use of an iron lacer in the vagina, which was used by Samuel Thomson with a well-furnished instrument of iron.

Barnes recommends that the cervix should be drawn down by means of a hook.

Such then are the methods that have been recommended in order to effect a section; there is one other that we shall notice later viz. abdominal section. These methods may, however, in some cases fail, and the case prove fatal in spite of all the skill employed as has happened to a large number of our best practitioners. We must be comforted by the words of John who wrote long ago, "Alguo haec quidem de sepsione, quae sunt ad sit operacionis, non unquam tamen..."
I should all attempts at abortion from unnatural causes left these methods of procedure viz.:... Should now be considered in detail. We have already seen that these attempts at abortion, whether successful or not, are some cases may cause abortion. In the case, however, it may be advisable to produce this effect artificially when we find that we cannot get the uterus back into its place, or can only do so by the employment of force which it would not be safe to make use of. This operation should certainly be avoided, when possible, before either cystectomy or abdominal section, since it is attended with less risk to the patient. John Howard thought otherwise for he recommended cystectomy as the first method of operative treatment of this kind: "Si, vero, ut illa syncytodermata fallit, utroque cisto cunctat maxima providentiam. Hancem colorem perficere nec triquetra." Different methods have been proposed for the treating of abortion in these cases; the most natural one is the fact to be tried, as the passage of a sound through the os uteri; this, however, as we shall see, is often an extremely difficult or even impossible operation; therefore the alternative has been proposed of puncturing the uterus as, let it off the ligature annie. The first method to be tried, then, is the passage of a sound, preferably an elastic ligature into the uterus through the os; the point...
difficultly her is to reach the os which we have seen is often hidden above the pubis. In the case of it is located, it is very easy to pass the sound beneath it or if passed above behind the pubis, if also in some cases the uterus is actually compressed.

We find Joseph Ludwig in 1814 that he tried in one case to pass a calotome into the uterus but failed;—“le col de l’organe trop fortement courbe, s’oppose à cette manœuvre dont je ne sais si je l’avais faite.”

169. Stenlieb, writing that the induction of abortion is all the more difficult the higher the for the reason the more firmly the sound is pressed against the promontorium the more the uterus is curved or opposed to “flared.” He recommends the use of a uterine sound or an elastic broad with a stilet, while the posterior lip of the cervix may be pulled down with a tenaculum a sharply curved metal cannula introduced through the os & the broad then pressed through this.

Little more need be said of this operation, it is often extremely difficult & should it fail, we must then consider the advisability of puncturing the fundus uteri through the vagina or the anterior.

22. We find Hunter discussing the question of puncturing the uterus with a small trocar, not to cause abortion, but to ease its swelling, more than incapable of reduction, owing to the pressure of the liquor amni.”

103. Lynn in discussing his fatal case, after considering the propriety of puncturing the fundus uteri for amnium, concludes towards
The advisability of puncturing the bladder, so as to enable evacuation of the
air to be effected, "so that having still remained indefinitely the
patient might at last have been opened, probably replaced." He looks
on the chance of success as being small but still worthy of consideration
as affording the only chance of saving the patient's life.

Cameron also in 1777, after narrating his fatal case, says
that of he met with a similar condition again, he thought he would
puncturate the uterus per vaginam with a small trocar.

Joubert narrated a case in 1812, where, after passing
a catheter into the uterus, he punctured the fundus per vaginam
"accidentlement, la matrice devint plus molle, le pouls, moins fréquent,
et l'état général de la femme sembla s'améliorer." Eight days
later he says that, "il se manifesterait des signes bénins d'amélioration
avec échappement gracieux et partiel de la suie et saindre inextensible
et abondante d'une dans la position verticale." Five days after
this the uterus came to its natural position & the person says "On
s'aperçoit ainsi qu'à l'époque de la grossesse, où l'opération a été
faite, les débris d'un foetus pourraient se dissoudre et disparaître
avec les liquides fournis par les membranes, sans qu'il y ait
échappement d'une manière distincte.... la fonction de la matrice
étant toujours une opération grave et dangereuse." This is that the
first recorded case apparently where the operation was actually
performed.

Cameron in 1817 says that it is better to puncture the
uterus than the bladder, since the great obstacle to reposition is the
size of the foetus. Probably nobody would now support his statement since we know that the exstension of the uterus is well nigh impossible while the bladder remains distended & we also recognize the great danger of softening in which event necessary follow such an operation.

Mr. Waterman had before this time fully recognized these great dangers for he wrote as follows:—'If however nature gives up the point, if it is found that the pains are unequal to the task of restoring the uterus to its place, or of accomplishing the delivery of the woman, it remains to be considered whether it is not more for the advantage of the patient that such an operation (e.g. to cut through the back part of the vagina & bring the child through the os uteri) should be performed so that she should by this means be released from her burden than that she should continue in the deplorable condition which attends the slow process of discharge a foetus through an elevated opening in the uterus or vagina.... We know from careful observation, that circumstances the latter have been so very generally fatal in this country in particular, that the operation ought never to be tried, while any reasonable expectation can be indulged of saving the patient by other means.'

Beecham records a case where after failing to reduce the uterus, he hacked it through the fundus for section.

Blundell gives a further suggestion for hacking the uterus & says that 'an instrument might be introduced into the uterus without much danger if then a contrivance were fixed upon the other.
end of it, so as to carry away the fluid by a sort of suction.” This suggestion is now acted upon, for when the uterus is tapped, it is always advisable to use an aspirator, a bottle to withdraw the fluid from it.

Sherman says that if all else fails, the remedy should be tapped for vaginismus through the fundus uteri or the coelom. Since the operation is performed for retention, the placenta is more liable to be injured.

The risk of piercing the placenta is also mentioned by Bessar, it is not easy to see why they should have any fear of piercing a needle through the organ, since there is not likely to be any greater risk from so long a stay. He says: “The risk of piercing the placenta, which is likely to be attached to the posterior wall of the uterus, should not deter, but must be encountered as lesser evil.” The best instrument is a sterile tap, which is perfectly safe. A client who refused special care should be taken to puncture the uterine wall, perpendicularly or the say, “The section is to be performed, because puncture there is more certain to stop the body of the uterus, and to keep clear of the cervix.”

He states that abortion will follow in a few hours that Anthony Bell had a case where the placenta was expelled in 36 hours and the woman recovered. Read (London Hospital Reports 1864), after puncturing the uterus was able to empty the bladder.

Spriglling directs that when a sound cannot be passed, the uterus should be punctured through the most prominent point of its body with antiseptic precautions; the puncture is to be made particularly not obliquely, for vaginismus not for retention and the
wound will soon close by contractions. He adds: "I must bow once again
cautious against interference being delayed till it is too late."

Or see that although this operation is undoubtedly a
dangerous one, still where no sound can be passed into the uterus it
is considered imperative to procure abortion, it may become necessary
to perform it. The vagina should first be stowed out with an
antiseptic solution; an aspirator should be used; it must be a strict
quite aseptic; the operation should be made as perpendicularly as
possible through the most prominent part of the fundus uteri; it
should be for vagianum not for rectum, since the danger of having
the placenta quite a serious one of the risk of sepsepsis vagianum
is infinitely less than for rectum; the ligament amnii should be
drawn off by the frequent but antiseptic clutches used, in order to
prevent sepsis or to stimulate the uterus to contractions; if possible
the uterus should be replaced after the dixy stop has been diminished
by the removal of the ligament amnii.

We must here notice for the last touched on, another
operation which has been proposed for the relief of the patient not
one which cannot in any case be recommended or one which is
largely likely to be adopted now; this operation has been named
symphysiotomy or symphysiostomy & consists in cutting through the
symphysis pubis so that the two halves of the pelvis may be drawn
asunder; the ears done under the impression that the pubic beam
would by these means be so much enlarged that the uterus could be
got though it into position: it has however been shown concluding that only a very small amount of additional space can be thus obtained without doing severe injury to the patient. The idea originated from the account given by Hunter of the post-mortem examination of his case, where he says: "The uterus in that retracted state was grown so large, and there so wedged in the pelvis that we could not take it out till we had cut through the symphyses of the sacrum pelvis, or torn those bones considerably around, taking the space between the bones of the pelvis." It will be noted that even here he had to tear the bones "considerably around," i.e., to say the least of it, doubtful whether such an operation would succeed in the living subject. Whitten also in 1749 says of the post-mortem examination of his case: "The pelvis was so filled up that, we could not reduce the uterus until we had divided the symphyses of the pelvis."

In 1749 Parrot published an essay, which he read to the Medical Society of Edinburgh, on the section of the symphyses. Publicis said that "the operation which has hitherto been proposed only for the reduction of the uterus in cases for which the American section was formerly recommended promises to be of still greater advantage in cases of retracted uteri, which would otherwise prove fatal.

Whitten also in 1785 suggested that in cases of birth it is impossible to reduce the uterus by forceps; should be resorted to as an aid.

In 1787 Salter spoke of this operation in the following
quant à l'original momme. - "Quoique lostende est setiis zechordaroam subi quisque proponere aquilodam ad cebum acque data in despectam pleuricae venacet, ha quidem casu movem sibi fundamentum possesse videtur; quiis in hae tamen die mala clarae
adfect. Sivemque abdomem matre, desces aduem, nasque tamen
consiliumere quid vide emisset. Quom quisque factum locorum
acere conforciro? Praete, sodeo, condictu tuae est; nam bene
factum et volapuet, ad exemplum Archagathus, cornificar vel
esse vel halef!"

60. Lacté recommended the operation in 1816, writing as
follows: "La mère et l'enfant étant destinés à fléer si lo
n'a pas recours à un moyen même qui facilite la réduction, ne
pourrait on pas sublimer, avec avantage, le procédé conseillé par
Aigrie et Guillaume Bantier, la section du pelvis, qui sauveront
l'enfant, en supposant que l'on voie la mère que se le
faisant fonction de la maturité à travers la paroi postérieure
du vagin?... Comme il se faudrait qu'un écartement modéré
pour réaliser la maturité au-dessus du détrit supérieur, la femme
devenant exposée à aucun accident grave par cette opération,
dans même qu'il serait prouvé qu'elle a les suites les plus
fâcheuses dans les cas où l'on a besoin d'un écartement considérable
pour faire cesser la disjonction."

We find the first case where the operation seems to
have been actually performed, recorded by Frauenknecht in 1816. He wrote
that: "J'ai aisé, en 1798, le professeur Alphonse Legay, dans cette
Opération sur une dame dont le bassin était trop étroit, et elle en est restée presque sans commodité, au point de ne marcher que très difficilement, je ne crois pas même qu'elle soit encore rétablie."

Il does not recommend the performance of the operation, a recommendation which Laperron opposed in the following year.

The advantages likely to be gained are, so slight that we cannot feel justified in recommending it. I can only mention it as a method of treatment which is based mainly upon theory.

Cette méthode de traitement qui a été abandonnée sans l'abdominal section, soit en surface le uterus le plus ouvert possible. The bold operation was recommended as early as the year 1814 by Callot, who, after saying that he had read of perforation of the uterus, goes on as follows: "Satis moles urinarum, in excision abdominalia facta, quae ci similis est, quam pro sectione uteri per funiculum, manum in utero primae, et uterum reflexum in uterus naturalen accedens, hanc neglecta sequente tractationi indicata."

D'Henri et Lejus, 1833. "Pourquoi, dans un cas d'accouchée, ouvrir l'abdomen par une incision à la région hypogastrique, pour tirer la main dans le bassin pour retenir l'utérus? Cette opération serait moins cruelle que l'opération Cassienne; mais il est évident qu'elle réunit dans tous les cas fréquente, sur le cordon de l'urètre, on ne peut déclarer la même, qui après avoir légèrement désymphyser le bassin.

"
Although the mere opening of the abdomen is an operation which nowadays is attended with comparatively little risk, it is certainly doubtful whether much good would be gained by it in this displacement, since the uterus is wedged in the pelvis and there is no way by which we could well catch hold in order to pull it out; the more rational treatment is to feed it up from below. Should this fail to effect the abortion, then our best plan is to procure abortion by one or other of the plans already discussed.

With this then we end our account of the treatment of this displacement, as also the enquiry into backward displacement of the ground uterus. The object has been to bring together the various views that have been held by different writers on the subject, to consider them mainly from an historical point of view; as far as possible the original papers and books have been themselves consulted, and the opinions of the authors quoted in their own words, since we have found the references in modern works often extremely incorrect. The enquiry too has been mainly confined to the older writers on the subject, since their ideas, which have laid the foundation of our present knowledge, are apparently but little known, and we have tried to show that nearly all the views as to the treatment pathology of the disease, which we now hold, are really but slightly modified from those brought forward by these early observers, while we have still much to learn and to observe before we can say that we really understand it.
Subjoined is a list of works to which reference has been actually made to or which we have found referred to in our investigations; the list of early writers is a fairly complete one, but the works of the modern authors have not been included in it since they are to be found in recent works to which we have unfortunately been preventedly unavoidable circumstances from obtaining access.

Bibliography.


   — London, 1844.


10. Berthelot — De Insolitis partum humanis, p. 34.
29. Calli
cen - Systima Chirurgice Medicinae. T. II p. 666 - Hafniae 1813.
36. Chaston - The Case of Exstirpated Uterus, in which the Parametrium Section was successfully performed. Medical Communications. Vol. II, p. 6 - 1798.
44. De Granges - Journal de Medecine.
53. Farrer - Cyclopaedia of Anatomy.
64. Gobet - Gazette des Hopitaux, 1857.
69. Grunne - Examen de Uterus retraherse - Jena, 1787.
52. Halphen - Dublin Medical Journal - 1840.
55. Head - London Hospital Reports - 1857.
Phila. 1887.
91. Keuning - Retrusion & Incarceration of the engorged uterus at 4 months.
93. Heinich - Klinische Beiträge über spezielle Pathologie und Therapie der
Krankheiten der weiblichen Geschlechts. 4 Band IV Auflage 1854. p. 21.
96. Locatelly - Véritable des accouchemens. 1. 371. 2. 915-1825.
97. La Motte - Traité Complet des accouchemens. Tom. 2. 385-387.
100. Lancet - 2. del del accouchemens. p. 50-Paris 1766.
102. Schmidt - Theken's Neue Sam. 3. 4. 371. 3. 141. 1795.
103. Lyman - History of a fatal Inversion of the Uterus & Retrusion of the Placenta.
- Dr. L. K. Krankenanstalt Rudolphi; Stiftung. Vol. (1854). 1855. 496.
106. Reinminger - A case of extra-uterine farious discharged by the section - Trans.
120. Hesley: Medical Times and Gazette - 1855.
131. Bécard - Belle Monographie de la suite dell'intto nella Gravidanza. -
132. Steadley et H. Sarvino - Contribution à l'étude de la détermination de l'intto
133. Bécard et H. Sarvino - Contribution à l'étude de la détermination de l'intto
140. Ramsbotham - Practical Observations on Midwifery part a selection
142. Ramsbotham - Medical Times - December. 1855.
143. Reid - On a labour obstructed from anGuinea. - Trans.
150. Serringer - Beiträge Medizin. 1866. IV, S. 53.
152. Scanzoni - Lehrbuch der Geburtskunde. 4. Aufl. 8. S. 58. 1855
170. Species — Medical Review. 1807.
175. von Steverem — Specimen Preparatum Academiacum, ad Monumentum
   Historicum, Anatomum, Pathologistum, et aliam Medicinarum,
176. Breit — Krankheiten der weiblichen Geschlechtsorgane in Briefen
   — Special. Pathologie. p. 249.
182. Wald — de ulcis granitis utrosquise — Hal. 1782.
183. Walton — L'Etosseron et enclavemen of un uticus graniti
   repointer; guerison; accouchement à terme — Ann. Soc. de
   Med. de Gand. LXVI. 121-140.—1887.
188. W. Kegel — de ulcis retroflex: nodos granitis utrosquise — May 1779.