ART. III.—An Essay on the nature and treatment of Prolapsus Uteri, with a plate. By LUKE BARKER, M. D., Member of the Royal College of Surgeons, London. (Read before the Medical and Philosophical Society of New-York.)

OBSTETRICAL writers have generally been in the habit of dividing this disease of the womb into three stages or degrees: the first stage or degree is called relaxation; a greater degree, prolapsus; and the third procidentia, or a protrusion from the external parts. The first of these distinctions is, in my opinion, unnecessary, if not improper, as from a moment's reflection we shall be led to see, that relaxation is a cause, and not the disease itself; I shall, therefore, in a subsequent part of this paper, consider it under that head. The second and third are terms nearly implying the same thing; the former from prolabor, to slip down; and the latter from procido, to fall down. The complaint, then, will be considered under two stages, and whether the name prolapsus or procidentia is used, is immaterial; we may, for distinction's sake, call the former internal and the latter external prolapsus, or procidentia, upon the same principle as we speak of internal and external hæmorrhoids.

From the peculiar structure and situation of the womb, it is liable to be displaced, or in other words, to fall or slip down; and every variety is met with, from its first descent, to that stage when it projects through the external parts, dragging with it the vagina, and forming a large tumour between the thighs of the woman. This situation of things will naturally cause an alteration of the pelvic and abdominal viscera; in the former, the bladder, instead of being contained in the anterior part of the cavity of the pelvis, falls into the tumour, distorting the urethra, so as to prevent the introduction of the cathèter in the usual direction. The rectum, instead of taking its usual course along the concave sacrum, falls into the posterior part of the tumour; whilst the fallopian tubes and ovaria descend with the womb. The small intestines, or some other part of the abdominal contents, will be found to occupy the vacated pelvis, and even, in very severe cases, a part of the prolapsed tumour itself.

The complaint may be years in arriving at this state of things, as it not unfrequently happens, that when the womb has prolapsed, so as to rest on the perineum, a diminution of the symptoms, and a suspension of the disease, take place for some time; this, however, is in general but of short duration, for by and by the parts project externally, producing, as a matter of course,

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very great inconvenience and distress to the poor patient. When this state is present, the rugæ of the vagina will be obliterated, and more particularly so when the bladder is distended; the skin of the tumour, too, which is the inner membrane of the vagina, after having been exposed some time to the action of the air, loses its florid colour, and becomes like that on other parts of the body.* The vagina loses also its peculiar sexual irritability, and is in a great measure insensible to moderate pressure. The convexity of the abdomen is also somewhat destroyed, owing, as has already been stated, to a displacement of some of its contents, which fall into the cavity of the pelvis as soon as the womb is displaced. When the prolapsus is slight, on introducing the finger into the vagina, we find it very much corrugated, or inverted, and the womb lower than natural, round which we can pass our finger, and easily feel the os tincæ.

Causes of Prolapsus.

Perhaps the most frequent cause of prolapsus uteri, is the too early rising after delivery, particularly in delicate constitutions, and those who have suffered much from frequent abortions and long continued discharges, so as to have produced a previous relaxation in the uterine organs. When we consider that the womb, for some time after delivery, is many times heavier than in the unimpregnated state, we need not wonder why an erect posture should, under previous indisposition, materially favour the descent of the parts; and this too, I conceive, may take place in many cases from its own weight, although the predisposition be wanting.

Menorrhagia, leucorrhoea, and other discharges which produce general weakness of the system, and relaxation of the vagina, and of the ligaments of the womb particularly, may also become frequent causes of the complaint. A cough, under previous indisposition, may be the exciting cause of the disease. A case of this kind is recorded in the 8th volume of the Philadelphia Journal of the Medical and Physical Sciences.

Dysmenorrhoea, fulness of the uterine vessels, a chronic disease, or inflammation of the womb, or whatever produces a determination of blood to the parts, can evidently cause the complaint.

Ergot of rye, as it is now so very improperly used in abor-

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^{*} A case of external prolapsus, illustrating this fact, came under my care about twolve years ago, presenting exactly the appearance just described.

tions, both by professional and non-professional practitioners, will be found to be a fruitful cause of prolapsus. A case in point fell under my notice a few weeks ago. A female was threatened with an abortion; it was a little too tedious for the physician, who, to save time to himself and pain to his patient, gave her the baneful remedy, which soon produced its effects, but left the patient from that moment with a bearing down of the womb.

Falls and contusions, lifting heavy bodies, such as wash-tubs, &c., and long continued exercise in the erect posture, are justly ranked among the causes of prolapsus. Two cases, illustrating these facts, fell under my care a few years ago. One was that of a young lady, who was violently thrown out of a gig, and received considerable concussion about the hips and pelvis. When she had recovered so far as to be able to walk about, it was discovered that a pretty severe form of prolapsus existed, which retarded her recovery for some time. The other was occasioned by lifting a heavy wash-tub; the protrusion of the womb, almost externally, was instantaneous. Both cases completely recovered.

A lacerated perineum is said, by some, to be an exciting cause, but I am inclined to think otherwise; it merely acts as a secondary one, in favouring the descent of the parts when they arrive at the os externum.

No period of life is exempt from the disease, though it occurs most frequently between the ages of 15 and 45, or that period in which women are capable of propagating their species; yet it is by no means uncommon to find it occurring after the cessation of the menses, and even sometimes in childhood. Several cases in advanced life have lately been under my care, and Dr. Monro relates the case of a procidentia in a very young girl; it was preceded by a bloody discharge. Saviard relates a case in childhood; the prolapsed part was mistaken for the male penis, Prolapsus occurs more or less in the early months of pregnancy, and even, sometimes, to such a degree as to be very troblesome; it may also occur during the latter stages of pregnancy, as well as during parturition. A case of the last kind, in a partial degree, once occurred in my practice; and some years since, I had quite a severe case of prolapsus vaginæ, during the latter period of gestation. Burns, in his work on midwifery, states, that prolapsus is sometimes accompanied with stone in the bladder; and as a natural consequence, we should anticipate it, in some cases. of polypus, and other large tumours of the uterus.

Symptoms of Prolapsus.

At the commencement the patient complains of a pain in the



back, and this, sometimes, lasts for a length of time without any other symptom; but as the disease progresses, a dull heavy pain is felt in the hypogastric region, accompanied with a sense of bearing down, which is increased after exercise. These symptoms in a great measure go off when the patient lies down, though in some cases, particularly during the first stages of the complaint, she will remain very uneasy and restless for some time after. Pain is likewise felt in the groins, extending into the labia, with a fulness of the parts, and an increased discharge of mucus from the vagina. There is pain also often felt in the pubis, together with sharp shooting pains in the hips and thighs, and sometimes spasmodic affections in the legs. The flow of urine, in some cases, is obstructed: although not a constant symptom, yet, when it does occur, the patient is generally annoyed with it until relieved of the complaint. Pain is also felt in the course of the urethra and about the vulva, accompanied with great heat in making water. Pain in the left side, extending from the false ribs to the spine of the ileum, is said, by Dr. Dewees, to have been a leading symptom, in several cases which he has put on record, in the Philadelphia Journal of the Medical and Physical Sciences.

On examination, which ought always to be done in an erect posture, if possible, the uterus is found lower than natural, the vagina is corrugated, and sometimes swelled and thickened, forming a circular protrusion at the vulva. If the examination be conducted in a horizontal position, we are apt to be deceived both as to the nature and extent of the disease.

From sympathy, the stomach is generally affected; the appetite is irregular, or totally lost; the bowels, too, lose their tone; the spirits are very much depressed; employment becomes both irksome and difficult; and life itself, in the language of the worn-

out patient, is scarcely desirable.

The vaginal discharge varies in quantity; in some cases it will be but trifling, while in others very great; it, however, generally increases as the prolapsus progresses, until this becomes external; when, after a short time, it considerably diminishes, or ceases altogether. In debilitated habits, menorrhagia is not unfrequently troublesome; occasioned no doubt by weakness of the system, and laxity of the uterine vessels; which last permit blood, as well as the impaired menstrual fluid, to flow in too great a quantity.

When prolapsus is external, the surface of the tumour, which is the membrane of the vagina, soon becomes hard and dry, and ceases to secrete mucus,—although it did so, in considerable quantity, while it was within; this circumstance accounts for the remarkable fact, that a patient labouring under external prolapsus, is actually stronger than when the disease had not so far advanced. The tumour is subject to deep seated pains, inflammation, and ulceration. The friction, to which it is exposed, the irritation from the urine, and very often a severe tenesmus, tend, no doubt, directly to produce these symptoms, and to increase the sufferings of the poor patient.

Treatment.

The treatment of prolapsus, like that of most other diseases, must be conducted on general principles, adapted to the variety of constitutions and habits of our patients. In the first place, our attention will be required to remove the cause as far as practicable, then, to attempt a reparation of the general health, if it has at all suffered; and afterwards, to make use of some mechanical support to keep the parts in their proper situation. But, before speaking specifically of the treatment, I would beg to make one remark, viz. that rest, and generally in a recumbent position, is absolutely necessary in every species of prolapsus, except in those cases which arise from, or are kept up by, weakness and relaxation.

Suppose, then, a case occurs, during confinement, either after a natural or premature labour; we must, in the first place, insist on a horizontal position. If there are inflammatory symptoms present, which is sometimes the case, they ought to be removed as quickly as possible; and for this purpose, bleeding, general or local, according to the exigencies of the case and the peculiar situation of the patient, will be necessary. Cooling laxatives, both by the mouth, and per anum, together with such other means as are calculated to subdue inflammation in general, must be resorted to. If the pain and irritation of the womb are considerable, injections of tepid gruel, barley water, or flaxseed tea, with or without laudanum, according to circumstances, will be found very soothing and comfortable to the patient. The quantity thrown up at once ought never to be less than what the vagina is capable of containing; and, as it is desirable to retain it as long as possible, the patient must lie in a situation favourable for that purpose.

When the inflammatory affections have subsided, the course of treatment must be reversed; the diet may be light and nourishing; of such quality and quantity as has been known to agree best with her former habits. Tonics, such as quinine, gentian, serpentaria, &c., may be used with great advantage; they may be conjoined with gentle laxatives, to regulate the state of the bowels. Injections, consisting of some of the metallic salts, such as sulph. zinci, superacet. plumbi, sulph. ferri, alumen, aqua

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cis, &c., or decoct. querci, vel gallarum, &c. will be found highly serviceable. They may be used three times a day, and in quantity of not less than two or three ounces at a time. The syringes in common use for females are altogether useless, with the exception of that of Clark's. A more simple instrument, and one which I have for several years always recommended to patients, is an elastic gum bag, capable of holding about four ounces, attached to a pewter pipe of four or five inches in length, and of the circumference of a common clyster pipe, the end being slightly bulbed and perforated with four or five small holes.*

Combined with the above tonic plan, the patient must wear a broad bandage over the abdomen. It ought to be tightest at the bottom, in order that the cavity of the pelvis may be relieved as much as possible from the pressure of the intestines. The adjustment of a suitable bandage is of the utmost importance; so much so, that we shall frequently find the best directed efforts

fail when this is neglected.

Persevering in these means, there are very few cases of prolapsus, following parturition, which will not be effectually relieved in a short time; if, however, the complaint should continue, we must make use of some mechanical contrivance, in order to support the parts in their natural situation. For this important purpose, the pessary hereafter to be described will, perhaps, answer better than any other in use.

Seeing, then, that the too early rising after delivery is a frequent cause of the complaint, it is certainly of great importance that the obstetrical practitioner, in every instance where the least predisposition exists in the constitution of his patient, should insist on a stricter and longer confinement than usual, so that the uterus may get reduced to its natural size before much exercise is allowed; by this simple precaution, I am confident, many cases of prolapsus might be prevented.

Secondly. When the disease arises from leucorrhoea, and other weakening discharges, together with a predisposed habit of body, we shall find the complaint, under these circumstances, of all others, most difficult of cure. As these symptoms, generally, arise from or depend on some derangement of the stomach and bowels, or on some deficiency of the secretions, and, most probably, that of the bile; the treatment ought to be commenced with such medicines, diet, and exercise, as will have a tendency to restore the general health of the patient; while, at the same

^{*} These Instruments are sold by Patrick Dickie, Druggist, &c., 443

time, we must be particular to correct the morbid secretions of

the parts.

Of the medicines, I have found that alterative doses of mercury, every night, or every other night, and bitters combined with laxatives, in the form of watery infusion, taken twice or three times a day, have produced the best effects; indeed the amendment I have witnessed from a perseverance in these remedies, is truly astonishing, far surpassing any thing which could have been anticipated, or expected from the usual course of bark and wine.

The diet ought to be light and nourishing, adapted to the state and powers of digestion at the time; for, to burden a debilitated stomach with strong, indigestible food, would only have a tendency to increase its weakness, and thereby aggravate every evil under which the patient laboured. It is more agreeable to sound reason, to let the food consist of such materials, and be in such quantities only, as will sit easy; and should even less be taken than could be digested, instead of retarding, it would promote the recovery of the patient, as the stomach would sooner be restored to a healthy action.

When any part of the body is weakened or relaxed, it appears necessary that the individual should take exercise of some kind, proportioned to the age, situation in life, and peculiar circumstances of the patient. Although rest in a horizontal position has been strictly enjoined in the preceding pages, it is to be understood in reference chiefly to those cases where an inflammatory action exists in the parts; but, when the complaint arises from weakness and relaxation, I am pretty certain that confinement would only have a tendency to increase the disposition to the disease. The patient ought, therefore, to take exercise, proportioned to her age, strength, and state of body; e. g., walking, riding, sailing, or any other kind of exertion which does not fatigue too much, will be proper.

As the discharge from the vagina is, generally, pretty profuse, it will particularly claim our attention. Cold injections, of a solution of some of the metallic salts, or a decoction of oak bark, &c., may be used with very great advantage; for, besides their effect in suppressing the discharge, they have a happy tendency to contract and impart tone to the parts. Cold bathing may, also, upon the same principle, be used, and ought seldom to be omitted, except when the symptoms, or the severity of the weather, render it improper. In the winter season, sponging the back, hips, and thighs, with cold water, or salt and water, may be used as a substitute.

The abdominal bandage is of greater importance in this



species of prolapsus, than in any other; for, as we have already seen that the disease arises from, or depends, in a great measure, on relaxation of the pelvic viscera; therefore, too much care cannot be taken in its application, in order to preserve that cavity from the weight of the organs above.

When the predisposing and exciting causes have been removed, and the discharge, in some measure, corrected; unless an immediate amendment follows, the pessary ought to be used; and, if persevered with, in conjunction with the above means, the majority of cases of prolapsus will be cured, and the rest

very materially relieved.

Thirdly. In those cases which have arisen from too great an afflux of blood to the parts, such as in chronic inflammation of the womb, &c., our first step will be to subdue that action by the use of proper depleting remedies; and here it may be necessary to observe, that when general bleeding is thought inadmissible, leeches, in sufficient number, applied to the ostium vaginæ, will have a most happy effect. After the cause or causes have been removed, the general course of treatment as before pointed out, must be pursued, varying it, however, from time to time, as circumstances require.

Fourthly. When prolapsus is induced from a fall or contusion, &c., particular attention must be paid to the local injury; the same as if it had been received in any other important part of the body; and it is very probable, that by the time the patient has recovered from the effects of the accident, the prolapsus will be greatly mitigated. Should that not be the case, it will be proper to make use of astringent and other tonic remedies, as before advised, together with a more immediate support of the parts, by the use of the pessary. I would just remark, that prolapsus occasioned by external injury, is much more likely to be permanently cured, than from any other cause.

Lastly. In the treatment of external prolapsus, our attention will naturally be directed, in the first place, to examine the state of the bladder and rectum; and afterwards to the tumour itself, to ascertain whether it is in a fit state for reduction. For, should there be much inflammation, or perhaps ulceration, it would be improper to attempt it, until such disease is somewhat corrected, by the use of proper remedies; such as bleeding, laxatives, fomentations, opiates, &c. If adhesion should have taken place to any extent, between the tumour and the surrounding parts, all attempts to replace the prolapsus would be improper; for, in such a case, we should have to content ourselves with a palliative mode of treatment. But, supposing the prolapsus be in a fit state for reduction, the operation ought imme-



diately to be attempted; and, if successful, the womb must be kept in its place with the assistance of a large pessary. The patient should afterwards be confined some days to her bed, or at least until such time as the irritation has ceased; after which, the case may be treated agreeably to the foregoing principles.

The instrument which has been alluded to for supporting a prolapsus of the womb, and the one which I have had the honour to introduce into practice, is of a globular shape. A bag of elastic gum, of a suitable size, is secured perfectly air tight to a tube of ivory and silver; the tube contains a valvular mechanism, capable of retaining such quantity of air as may be introduced into the bag, which is done by means of other tubes and a large elastic bottle; so that the pessary may, with the greatest ease, be either inflated or exhausted after it is introduced into the vagina. By a reference to the plate and explanation, a better idea of its principle may be gathered, than from any other description.

The advantages of a globular pessary have been universally admitted, particularly for protracted cases; but the chief objection to their more general adoption has been, I believe, owing to the pain and difficulty always experienced on their being introduced. This difficulty is now happily obviated; inasmuch as the inflation and exhaustion are always performed while in the vagina; besides, one of large dimensions is just as easily applied as a smaller one. Another, and what will be esteemed a great advantage, over all other instruments for a like purpose, is, that the patient, from a few words of instruction, can learn to introduce and withdraw it herself, and that too without one particle of pain.

It is necessary, in the use of this, and other globular pessaries, to remove them during menstruation; but some advantage would be derived from doing it oftener; say once a week. This would afford an opportunity to make use of astringent injections, so essentially necessary in restraining the discharge, which oftentimes is troublesome; as well as for the purpose of causing the relaxed parts to contract; so that the size of the instrument might be diminished from time to time, till at last it could be dispensed with altogether.

EXPLANATION OF THE PLATE.

Fig. 1. The pessary,

Fig. 2. A brass tube, (a) screws into the opening of the pessary, as is represented at (h) fig. 5, to push back the valve, fig. 6, for the admission of air into the bag; (b) a stop-cock.

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Fig. 3. A bent tube, to be connected with fig. 2 at (c), and fig. 4 at (e); each end fits perfectly air tight.

Fig. 4. The inflating bag, (d) the stop-cock, (e) to receive

the end of fig. 3.

Fig. 5. A section of the pessary tube. It is about 1-2 an inch in diameter, and 1-2 long; the silver end (f) screws on to the ivory tube (g) at (m); (h) the opening to receive the end (a) of fig. 2; (i) is intended to represent a thin layer of cork within the silver end or cap: the valve acting against it, renders the instrument completely air tight; (k) shows the bore of the tube, which is about 1-4 of an inch in diameter—it contains the valve and spring; (l) represents the opposite end, with several small perforations in it.

Fig. 6. The valve, which is made of ivory.

Fig. 7. The spiral spring, of silver wire.

Directions for its Application.

Take the brass tube, fig. 2, and screw it into the pessary, to open the valve; then expel the air by grasping the bag, and if the stop be turned, the bag will remain flaccid. In this state, the instrument is to be introduced into the vagina; when this is done, re-turn the stop, and connect the inflating bag to the tube already in the pessary, by means of the bent one, fig. 3. The pessary can now be easily inflated by grasping the large bag, and while in the act of doing so, before the hand is removed, turn the stop of fig. 2, to prevent the escape of the air. The tubes, then, may be separately taken away, and the pessary will be left behind filled with air. To withdraw it, the tube may be applied, as before, to push back the valve, and this is generally sufficient to allow of the instrument's being easily withdrawn; but, should any difficulty arise, the inflating bag may be connected, having the air previously expelled, and in a moment the pessary will be exhausted, when its removal can, without pain, be accomplished.

ART. IV.—Observations on Emetics. By H. T. JUDSON, M. D., of New-York.

In the animal economy, the stomach is an organ of the first importance. Those functions by which man is enabled to preserve his individual existence, are commenced in this viscus.



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