management, but we must not forget that there are exceptions to the rule of able and conscientious commissioners; and that if the public confidence be misplaced in this direction, an arbitrary, dogmatic, and tyrannical board may take the place of the private practitioners in lunacy, with great detriment to the public service, and with greater detriment to the unfortunate lunatic.

We do not, therefore, agree with Dr. Monro in his general views. The intrusion of almost irresponsible public boards into the management of matters wholly within the legitimate sphere of the profession, is a growing evil, and may eventually inflict serious mischief on society. The great danger that such boards will be charlatanic in their principles and practice, is obvious; with such principles, and an immense power over private interests and conduct, they require to be narrowly watched, and rigidly subjected to the salutary control of public opinion.

Art. XIII.

Traité des Fistules Vésico-Utérines, Vésico-Utéro-Vaginales, Entéro-Vaginales, et Recto-Vaginales. Par A. J. Jobert (de Lamballe), Docteur en Médecine, Chirurgien de l'Hôtel Dieu, &c. &c. Avec 10 Figures.—*Paris,* 1852. 8vo, pp. 420.

A Treatise on Vesico-Uterine, Vesico-Utero-Vaginal, Intestino-Vaginal, and Recto-Vaginal Fistulæ. By A. J. Jobert (de Lamballe), D.M.P., Surgeon to the Hôtel Dieu, &c. &c.

In the midst of an almost complete dearth of really new and valuable medical literature, on the continent of Europe no less than in this country, the treatise before us may fairly claim no slight amount of attention. The condition of a woman suffering under incontinence of urine, or from inability to retain the contents of the rectum, is so truly deplorable, that we think no apology can be necessary for making more widely known the success which has attended the treatment of these cases in the hands of M. Jobert. We do not profess to present a complete view of the subject; on the contrary, our object will be fully attained if we succeed in awakening the reader's attention to the labours of M. Jobert, which appear to have resulted in a more satisfactory issue than those of any preceding or contemporary operator. The difficulties of the subject are acknowledged, but from recent accounts would appear in some instances to have been exaggerated. At all events, there is an opportunity given for further experiment in this country, and we can hardly conceive any practical investigation which promises more encouraging or more useful results.

M. Jobert's treatise is divided into seven parts, and illustrated with a few wood-engravings incorporated in the text, which very much enhance its value, and render descriptions clear which without them would be rather obscure. We shall not notice each of these divisions fully, but shall select such portions as appear most adapted to the object we have in view.

A paper, by Dr. Marion Sims, on Vesico-Vaginal Fistula, has also appeared in the 'American Journal of the Medical Sciences,' for January,

1852. Its chief point seems to be, to recommend the employment of a particular kind of clamp-suture, which has been found very efficacious in the author's practice.

Vesico-Uterine Fistulæ are situated at the upper part of the commencement of the vagina, and establish a communication between the vaginal portion of the neck of the uterus and the corresponding part of the bladder. Most commonly the fistula occupies that portion of the bladder and of the neck of the uterus which is uncovered by peritoneum; but when the exciting cause has engaged so large a space as to invade the serous membrane, the fistula necessarily occupies a higher position.

Although these vesico-uterine fistulæ are generally single, yet Professor Stoltz of Strasburg has pointed out that it may so happen that both the opposite walls of the uterus have been involved, in which case there is a double fistula—a vesico-uterine fistula, and a utero-abdominal fistula; so that there is, in fact, a double communication between the mucous surface of the bladder and the peritoneum.

Sometimes the communication resulting from a loss of substance is by a round aperture; sometimes by a sort of fringed opening, more or less irregular; and occasionally, a thickened membrane covers the opening. Sometimes, again, the os uteri is sound, but is more often partially destroyed; and in various cases the interior of the uterus is red and vascular, or sometimes studded with indurations.

The cause of these fistulæ is sufficiently obvious—namely, a tedious, difficult labour, whether produced by the pressure of the child's head, by the use of instruments, or by fragments of bone when the infant has been destroyed; but it does not seem necessary, in this place, to follow the author's speculations on the exact manner in which these various causes act, especially as his observations are chiefly derived from a memoir on the subject, published by Dr. Stoltz of Strasburg, and from Madame Lachapelle's well-known treatise.

The sign by which this accident may be known, is the constant escape of urine when the patient is in bed, and its partial escape when she is in the upright posture; but it is not so easy a matter to detect the exact locality of the opening. The speculum reveals nothing, and manual examination only shows that the septum between the bladder and vagina is entire. It is only by closely examining the os uteri, that one observes the escape of urine by its central orifice; and it is necessary further to assure oneself, by pinching the neck of the uterus, that the urine actually passes out of the os uteri, and does not merely flow over the os, in escaping from the fistula which is in its neighbourhood. By injecting the bladder the matter may be made more sure, but it is necessary to use the eye very carefully in order not to be led into error. If the fistula be large enough, the introduction of a sound into the bladder, and of another into the uterus, and making them meet each other in the axis of the neck of the uterus, will assist the diagnosis.

A vesico-uterine fistula is a very serious accident, which has a constant depressing effect on the physical and moral health, and leads to extensive changes both in the uterine and genital functions, and therefore demands the most prompt attention. Such fistulæ as consist in a simple perforation of the neck of the uterus and of the bladder, are much less dangerous than

those which are accompanied by softening, ulceration, or destruction of the posterior wall of the uterus, and by a wound of the peritoneum, which may inflame in a greater or less degree, and give rise to diffused peritonitis, instead of to adhesive and reparative inflammation, when an operation is attempted.

The treatment of these accidents is of course the most interesting question for us. With respect to prevention, M. Jobert's observations have led him to the conclusion, that malformations in the mother are very seldom the cause of urinary fistulæ; but that it is to the size of the child's head, and to its prolonged detention in the pelvis, that the accident is attributable. But however this may be, it is necessary, in order to cure them, not only that the course of the urine be changed, but further, that the opening itself be entirely blocked up. Of late it has been recommended to attack these fistulæ by the nitrate of silver carried into the interior of the neck of the uterus; but this caustic is so difficult to manage in a locality where the eyes can afford no assistance, that few good effects can be anticipated from it. It is impossible, also, to produce obliteration by so mild a caustic as this; which, indeed, has the further disadvantage, that it may produce most violent inflammation if used too freely. This may be readily understood, when we reflect that in vesico-uterine fistula, produced either by labour or by foreign bodies, there is a loss of substance such as is impossible to be repaired by granulations, which in this situation, on account of the structure of the parts, attain only the minimum of development. It is therefore only by the knife, by paring the edges, and by suture, that these fistulæ can be cured.

The author, in this place, again repeats that all his operations are founded on observations made on the dead subject; and that from different experiments he is convinced, that by following his directions it is quite feasible to divide the neck of the uterus to a considerable distance, without wounding the peritoneum. These incisions are to be made in the course of the commissures, as far as the insertion of the vagina into the uterus; and M. Jobert has observed that the obliquity of the neck does not produce such noticeable changes in the relations of the uterus to the surrounding parts, as to require any modification in the method of operating. A straight probe-pointed pair of scissors is the preferable instrument, which in its progress divides the neck of the uterus and the vagina, and finally penetrates the loose cellular tissue of the great ligament. In no instance on the dead subject has the uterine artery been divided, even when the incision was made very high up.

There is always danger in overstepping the point where the vagina is attached to the neck of the uterus. A lateral incision made to the right and to the left, affords great facilities for the examination of the communication between the bladder and the neck of the uterus, and gives space for any manipulations that may be necessary. This will be more readily understood, when it is recollected that the bladder rests upon the anterior part of the neck, which is the situation in which to search for the fistula.

After having made this double incision, the aspect of affairs will be this.

1st. Two incisions will be observed at the root of the vagina, which run parallel in the axis of the neck of the uterus, and follow the course of the commissures.

2nd. These divisions permit the two halves of the os uteri to be turned respectively backwards and forwards.

3rd. Two openings are seen in the shape of fissures, which are continuous with those in the lateral halves of the os uteri. These edges being left to themselves, come in close contact with each other. By their natural gravity and attachment to the vagina, they are prevented at any time from widely separating; and the maintenance of the contact between the eight edges which are formed by the quadruple division to the right and to the left of the vagina and uterus, necessarily permits of their easily uniting.

Having disposed of these preliminary considerations, the author now proceeds to give an account of the manner in which the operation is actually to be put in practice; and this account he divides into ten stages.

In the first operation the attempt is to be made to obliterate the aperture in the bladder, leaving to a later period the uterine fistula.

The neck of the uterus is first to be divided to the right and to the left in the course of the commissures.

The vagina is also implicated here, and requires to be carefully divided laterally and above.

The finger is from time to time to be inserted between the lips of the wound, in order to detect the vesical opening of the fistula.

As soon as this is found, the os uteri is raised up, and the scarification of the fistula effected with forceps, scissors, and probe-pointed bistoury. Sutures are then inserted into the sides of the wound, where they can be readily brought into contact.

In the second stage, all communication between the uterus and the vagina is cut off, so that the bladder alone communicates with the uterine canal. Here the resection is carried, not only over the opening in the bladder, but extends also to the surface of the neck of the uterus; for its object is to close the opening between the vagina and the bladder. The paring requires to be effected gently, and after the division of the neck in the course of its commissures. The knife must be carried not only on the surface of the neck, but it must also pare whatever is left of the neck itself. Thus when the operation is completed, there are two bleeding surfaces, which can readily be adapted to each other, by means of two lateral sutures in the course of the commissures, and one suture in the middle. These stitches form three loops which embrace a certain thickness of the uterus and vagina. They should be placed as low as possible, in order to leave the upper portion of the uterine canal quite free; and they may be successively withdrawn from the sixth to the tenth day. The operation, therefore, allows of a ready approximation of the edges of the wound, so that it can heal easily, and this because of the natural tendency of the edges to come together, and of the position of the sections, which gives the opportunity of keeping them in contact almost without effort. When the wound has healed, it is plain that the communication between the vagina and the uterus must be closed, and that the uterus, on the other hand, communicate with the bladder, into which the menstrual discharge is poured at every catamenial period.

The actual practice of this operation is detailed at length by the author, in the following case, which we shall present entire to the reader's notice:

Rosalie Lazillaire entered the clinical ward on the 5th of August, 1849.

She had been confined on two occasions at the Maternité; the first time six years before, and the second three years back; but her labours had been long and difficult, and had not been completed without the employment of instruments. In both instances the children were still-born. On the 5th of December, 1848, she menstruated for the last time, and is supposed to have become pregnant within a few days afterwards. According to this calculation, which also corresponded with the size of the uterus, she was in the eighth month when admitted, and proceeded to the completion of the full period without any accident. The patient's diminutive height, various indications of rickets, and the difficulties which had attended her two former accouchements, all pointed to some malformation of the pelvis; and M. Paul Dubois accordingly found, on admeasurement, that the antero-posterior diameter was not greater than from eighty-five to eighty-six millimétres. It was therefore determined to induce premature labour. On the morning of the 9th of August, Prof. Dubois introduced a sponge-tent five or six centimétres long, and fifteen millimétres in circumference at its base, and maintained it in contact with the neck of the uterus by means of pieces of common sponge placed in the vagina. A few trifling pains occurred during this day and the following night; but at ten o'clock on the following morning they became more frequent and violent. This day also passed, however, without any definite result; and on the following morning a larger piece of sponge similarly prepared was substituted.

On examination the next day, the night having passed without an instant's sleep, the os uteri was found to be considerably dilated, and the upper lip soft and dilatable. A gum-elastic bougie, armed at the point, was passed into the uterus, and the membranes ruptured eight or ten centimétres from the orifice. About eighty grammes of liquor followed the puncture. During the remainder of the day, and the ensuing night, sharp irregular pains followed each other, at irregular intervals. On the 13th, they were still more frequent; the neck of the uterus had almost disappeared, but was a little dilated. At three o'clock, the os uteri had attained the size of a franc-piece, and at eight the dilatation had proceeded as far as eight centimétres. The membranes swelled out at each pain, the head being moveable and situated above the brim. At a quarter-past six, the membranes were ruptured, and discharged a considerable quantity of greenish, fœtid fluid. After five minutes' rest, the pains recommenced with increased violence; the head, however, did not become fixed, and it was impossible to determine its position. The child's heart beat regularly 144 or 148 times in the minute. At half-past nine the patient was put into a tepid bath, and a lavement, with twenty drops of laudanum in it, was thrown up the rectum. After frequent attacks of vomiting, the head became engorged, and at four in the morning, the woman was brought to-bed of a dead female child, which weighed 3300 grammes. The first few days after the labour passed without remark, but on the sixth day the patient perceived that her linen was soiled, and that she could not make water voluntarily, but that it escaped every moment without her being able to retain it. As this condition continued, M. Depaul recommended her to M. Jobert, and on the 22nd October, 1849, she was admitted by him into the Hôtel-Dieu.

On examination of the external organs, little was found but slight

inflammation, with some granulation about the labia majora and the fourchette, accompanied with œdema, and a few hæmorrhoids at the anus.

The speculum showed that the vaginal septum was entire, and the question arose, whence did the urine proceed which filled the vagina, and flowed over the external organs of generation. A careful examination, made by separating the labia majora, and depressing the recto-vaginal septum with the univalve speculum, showed that a flow of urine escaped at the os uteri. It was only by raising the anterior lip, that the spot was found whence this urine flowed, but it was not difficult to see that a considerable portion of the posterior lip had been destroyed in the progress of the labour. A finger introduced into the dilated os readily passed into the bladder, proving that a lesion existed, which was rightly called a vesico-uterine fistula. It was evident that all the anterior parts of the neck of the uterus had been destroyed, together with the corresponding portion of the bladder. As the patient was anxious that something should be attempted immediately for her relief, the following operation was performed on the 24th October.

1st. The os uteri was seized anteriorly by two hooks, and gradually the neck was brought down. As soon as the uterus was brought as low down as practicable, two incisions were made at the sides of the os, in the course of its commissures; and in thus enlarging the uterine orifice, the vagina was also detached laterally.

2nd. The neck being widely open, it was possible to scarify the track of the urine, to pare its thickened edges, and to dissect-off the utero-vesical mucous membrane. The lateral openings were then allowed to come together near the vesical opening, and sutures were inserted.

3rd. This stage, that of inserting the sutures, was the most difficult of the whole operation. It was necessary, in fact, to bring the sides of the fistula into contact by numerous points of suture, and this M. Jobert was enabled to do without any very extreme difficulty, by having taken care to *detach* the vagina from its attachment at the neck of the uterus, as well as to its sides. Two lateral sutures, and a third in the centre, were inserted.

A bleeding vessel was tied; injections of cold water were thrown into the vagina; a plug of amadou was introduced, and a gum-elastic catheter left in the bladder. Nothing remarkable occurred for some hours after the operation, but, in the course of the day, a flow of blood took place by the side of an artery which had been tied. The house-surgeon kept up pressure by means of a piece of agaric introduced into the vagina. The same evening, the patient began to complain of colic, and of a desire to vomit, the belly being distended with flatus. The next day she vomited several times, but M. Jobert considered her symptoms to be principally spasmodic, such as are common after many operations, and he therefore merely prescribed some carminatives.

On the 25th October, the gastro-intestinal tenderness had almost disappeared, and the pieces of agaric came away in the midst of clots of blood.

On the 27th, the patient had an opiate injection, as she had been four times purged during the night.

On the 28th, this was repeated as the diarrhœa had not ceased, and she was desired to abstain from everything except broth.

On the 1st November, an examination was instituted by injecting some tepid water into the vagina.

The next day, the injection having been repeated, the patient was examined by the speculum, and a suture was removed. A catheter, introduced into the bladder, drew off a quantity of thick fœtid urine; and this evacuation was followed by several jets of urine, such as are common in health, and proved that the functions of the bladder were being regained.

On the 3rd, the patient passed her water twice without the aid of the catheter.

On the 5th, another stitch was removed, and the edges of the wound were found perfectly adherent. A catheter drew off a large quantity of water, and the patient remarked, that none came out of the vagina, and that she was not at all wetted.

On the 8th November, there was much diarrhœa, which, however, ceased under the employment of sinapisms, lavements, &c.

On the 9th, the catheter was removed entirely.

On the 11th, frequent inclination to urinate distressed the patient, and on the 14th, this was so bad as to cause the patient to pass her water every eight or ten minutes.

On the 18th, this symptom was ameliorated, the patient retaining her water about half-an-hour; but whenever the desire was manifested, there was not power to retain it; and on the 26th, she was restless, and said she was wetted by the urine. M. Jobert examined with the speculum, and withdrew a suture, which, without doubt, had caused the vesical irritation, for the cicatrix of the wound was sound, and there was no water in the vagina. From this time all went on well, until the 4th December, when she retched several times, and complained of a sensation of weight in the belly and kidneys.

On the 5th and 6th December, there was a marked attack of intermittent fever, for which a *quinine lavement* was administered. These and various other similar symptoms subsided, and on the 10th December, another examination was made with the speculum. The vagina did not contain a drop of urine, but the bladder, on the contrary, held a certain quantity; and on introducing the finger into the vagina, a thread was felt in the locality of one of the sutures. Portions of it were removed by the forceps and scissors, but not an entire piece.

On the 11th, there was nothing remarkable to note, and the patient rose for a part of the day, and took her food with appetite. The urine could not be retained for any length of time, but escaped involuntarily at night, and indeed in the day also, when the patient was in the horizontal position; but was held well enough when she was upright.

On the 21st, at another examination with the speculum, when a catheter was introduced into the bladder, a small quantity of urine was found in the vagina, but this, it was clear, had got there owing to the presence of a suture, which was withdrawn.

On the 28th, at another examination, it was perceived that urine flowed from a catheter passed into the bladder; it was also clearly perceived in the interior of the vagina. There was, in fact, a small aperture, which permitted the escape of the urine, and explained the incontinence existing during sleep and in certain positions of the body. An injection into the bladder showed

this clearly, for the water was seen to distil from the anterior part of the vagina and to drop into this situation. The aperture, however, was so small, and so evidently produced by the presence of the thread, which had not been withdrawn from its original situation for two months after it had been placed there, that M. Jobert judged it to be sufficient to touch it a few times with the nitrate of silver.

Without tracing the history so minutely as is done by M. Jobert, it may be sufficient to state, that after various cauterizations, this fistula entirely closed, the bladder recovered its tone, and on the 22nd of January, 1850, the patient was pronounced well.

A final examination was instituted on the 4th of March, and disclosed the following state of things:

1st. The introduction of a sound into the bladder demonstrated that the organ had regained its normal capacity, and this examination also showed that the neck of the uterus was met by the sound when the instrument was introduced in the direct line.

2nd. The urine was perfectly clear and transparent, both that which had lain for some time in the bladder, and that which had only just flowed into it.

3rd. A digital examination showed that the vagina had very nearly recovered its natural dimensions; the anterior part was slightly more raised than in the natural state.

4th. The remainder of the posterior lip was completely healed.

5th. The anterior lip of the os uteri, which had not been interfered with during the labour, preserved as nearly as possible its natural position.

6th. There were a few linear cicatrices in the circumference of the vagina, in the position where it is attached to the neck of the uterus. There was not the slightest trace of a fistula anywhere existing.

It was thus shown that the sloughing had seized upon the neck of the uterus above the insertion of the vagina, and had formed a considerable opening into the bladder—that is, in the situation where it rests on the anterior surface of the neck; and this, too, without any interference with the vesico-vaginal septum. It was also curious to observe the destruction of the posterior lip of the os uteri, although the anterior one had not suffered the least loss of its substance. There was thus a large direct communication formed between the bladder and the uterus, by means of which the urine made its way through the orifice of the neck before entering the vagina, thus forming a true vesico-uterine fistula. M. Jobert has never since met with one of precisely the same character. In all other cases there has been a destruction of the anterior part of the neck, and of more or less of the vesico-vaginal septum, so that the fistula was properly called vesico-utero-vaginal. The case also shows that a thread left in the thickness of the tissues may, in time, form an aperture for the passage of the urine.

Vesico-Utero-Vaginal Fistulæ are more common than the simple vesico-uterine variety. They generally have a cavity into which the urine is received, and thence poured into the vagina, so that they form a species of cloaca—the result of extensive lesion both of the bladder and uterus, and also of the vagina. In short, they are the result of extensive sloughing, produced by the excessive pressure to which the parts have been subjected

during parturition. They produce precisely the same symptoms as the other fistulæ, the only difference between all such fistulæ consisting in the greater or less amount of urine which escapes from the bladder. They are easily detected when the vesico-vaginal septum has been destroyed at the point of its insertion into the neck of the uterus; and when this destruction is only partial, there is always a drain which points out the seat of the opening. But sometimes the neck of the uterus has been destroyed as well as the vagina, and there is nothing discernible but a round aperture, which permits the indiscriminate passage of the menses and of the urine; and it is only by introducing a sound into this orifice, that a cavity is to be detected at the base of the vagina, in which all the discharges accumulate. The prognosis of these cases depends upon the double or triple lesion which exists in the urinary and genital passages, and is rendered more grave by the locality of the lesion, and by the existence of disease within the pelvis, as well as by the presence of adhesions in the vagina, which impede the play of the instruments, or prevent the uterus and bladder from obeying the traction necessarily made upon them, in order to render them accessible to instrumentation. The principle of the former operation holds good here; and it is divided into distinct stages.

In the first proceeding, the vagina is separated in those points where it still retains an attachment to the neck of the uterus; and by means of lateral incisions, made obliquely through its sides, above and below, the passage is loosened, and the lips of the fistula are enabled to come together.

The second step consists in scarifying the remainder of the septum and of the neck of the uterus.

The third proceeding is that of bringing together the septum over the neck, so as to impose one bleeding surface on another, and to maintain their contact by sutures. The sutures ought to be so managed as to embrace the septum and a considerable part of the thickness of the neck of the uterus. If there is any tension of the parts, it is be remedied by incisions, and the threads should be withdrawn on the fifth or sixth day.

The second operation consists in scarifying the remaining portion of the neck of the uterus, and in dissecting-off a strip from the circumference of the fistula, so as to carry the dissection over all those surfaces which are nodulated.

The other steps consist in placing in contact the remnant of the septum and of the neck of the uterus by their extremities, without paying any attention to the cavity which exists behind the edges of the wound. The threads pass through the septum and the posterior part of the neck of the uterus towards its margin. When the reunion has taken place, that which is left of the neck of the uterus presents the appearance of a sort of flap, which, in looking at the septum, is seen to close the fistula like a lid. The neck of the uterus, in fact, performs the same office as the sole in partial amputations of the foot. A furrow is also to be made in the anterior part of the neck of the uterus, with the view of more easily keeping the vesico-vaginal septum in its situation.—Four cases, reported at great length, illustrate the practice here recommended.

Françoise Nodre, æt. 33, as the sequela of a tedious labour caused by a hydrocephalic child, laboured under incontinence of urine, which she discovered eight days after her confinement.

Examination showed that there was an aperture communicating with a sort of sac between the bladder and uterus, into which the urine was poured previously to its passing into the vagina. Behind this opening was the seat of the posterior lip of the uterus, and to the left of it a little elevation, which was nothing else than a rudiment of the anterior lip. No traction on the vagina and the remainder of the neck of the uterus sufficed to drag it to the external opening of the vagina, thus proving that strong adhesions existed between the vagina, the uterus, and the neighbouring parts.

On the 22nd November, 1850, M. Jobert proceeded to operate. As the organs could not be brought down to the vulva, the operator was obliged to manœuvre in the interior of the vagina. Both edges of the fistula were first pared by means of scissors and long-handled knives, and by this means increased somewhat in size, and then, after repeated injections of cold water into the vagina, the two surfaces were brought together by sutures in such a manner, that the remaining portion of the neck of the uterus was placed in apposition with the anterior part of the fistula, so that the communication between the cavity of the uterus and the vagina was interrupted.

After this, two lateral incisions were made, parallel to each other, traversing the whole length of the vagina, from the vulva along the side of the rectum, and a third transverse one was made behind the meatus urinarius in the substance of the septum. The object of these incisions was to permit the parts to approximate more closely, and to diminish tension.

A plug of sponge was placed in the vagina to guard against hæmorrhage, and a catheter put into the bladder to permit the escape of the urine.

On the 28th November, six days after the operation, the patient was examined. The recto-vaginal septum was pressed down by means of the univalve speculum, and at the base of the vagina a small quantity of pus was observed mixed with urine. This was cleared away by means of a little tepid water injected into the canal, and then the three threads constituting the suture were withdrawn. She was then put to bed, and a new catheter introduced into the bladder, with the effect of giving exit to a flow of urine.

On the 2nd December, at another examination, a certain amount of pus was found at the base of the vagina, but not a drop of urine. The incisions were nearly cicatrized, and everything betokened a speedy and complete cure.

On the 5th, in the middle of the day, the patient withdrew the catheter, in order to make water herself, and immediately became conscious, as she thought, that a stream of urine had passed into the vagina. This was, however, a mistake, for the next day nothing but a little pus was discovered in the vagina.

On the 12th, the catheter was removed, but as the bladder had lost the habit of retaining the urine, the patient was obliged to make water every ten minutes, and the following day it was replaced, in order to obviate this inconvenience.

On the 23rd, the urine became tinged with blood, which was manifestly the catamenial discharge that had passed into the bladder. With the exception of the irritability of the bladder, she was now quite well; this symptom, also, gradually subsided, and in a short time she left the hospital.

On the 6th January, a careful examination displayed the following

points among others. The vagina had lost something of its length, but nothing of its transverse diameter. There was no trace of the neck of the uterus in the vagina, and the cicatrices of the operation were not such as to be of any importance.

The next case is that of Madame B., a lady thirty-seven years of age. She was married at twenty-one, and in eight years had seven children, always brought forth after a difficult labour; only two of them survived, the rest either being still-born, or dying shortly after birth.

In the year 1848, she was confined of a still-born male child, of which she was in labour thirty-six hours. The forceps had been employed to deliver; and a few days afterwards the patient perceived that she laboured under incontinence of urine. Eighteen months subsequently, M. Jobert saw her, and after several minute examinations, made out that there was a considerable loss of substance of the vesico-vaginal septum, and of the anterior portion of the neck of the uterus; as a result of which, that part of the vagina which is attached in front to the neck of the uterus had entirely lost the antero-lateral portion of its circumference, whilst the posterior attachment was alone sound.

At the point of junction of the neck and body of the uterus, there was an elevation which marked the situation where the uterine canal was preserved in a state of integrity. Three fingers could be passed through the fistulous opening into the bladder. That portion of the vagina which protects the canal of the urethra still existed, and formed a thick cushion. The urine flowed continually into the vagina, and escaped involuntarily. So unfavourable a case as this was, offered little encouragement for an operation; but the result proved that such cases are never to be despaired of, however bad they may seem.

On the 16th December, 1849, the following operation was performed. The remaining part of the neck of the uterus was seized and dragged down in front, by means of hooks, and there kept during the whole operation, which occupied nearly three-quarters of an hour. The surface of the remainder of the septum was extensively scarified, as were also those portions of the os and cervix uteri which had not been destroyed, and to which the remains of the septum could be fixed. M. Jobert then carefully separated in its whole extent what remained of the vagina behind, at its insertion into the neck of the uterus. This dissection, or separation, loosened the wall completely, and permitted its lateral and anterior portions to obliterate the loss of substance, and it was then only necessary to carry the neck of the uterus from behind forwards to close up the enormous gap which had been left by the labour. A few strokes of the knife made near the neck of the uterus, and from below upwards, caused the tissues to yield so as to approximate closely. In carrying the dissection upwards, the greatest caution was necessary not to wound the peritoneum. Three sutures, one in the median line and two lateral ones, were sufficient to keep this vast wound in contact, but the needles were passed through the whole surface of the septum, and through a great part of the thickness of the neck of the uterus. A transverse incision from the left to the right was made so as to relieve all tension. The uterus being released from the hooks which had held it, reascended to its place, and a catheter having been passed into the bladder, the patient was put to bed. A plug of amadou was also introduced into the vagina.

On the 26th, an examination was made, and one whole suture and a portion of another were removed. The vagina contained a considerable quantity of urine.

On the 29th, another portion of the suture was removed, and more urine found in the vagina.

On the 4th of January, the union seemed complete, and the catheter was withdrawn. Half an hour afterwards, the patient felt a desire to make water, and was delighted to find herself able to pass it as does a person in perfect health, and with the same force.

On an examination instituted some time afterwards, M. Jobert found that the vagina had the same length and size as in the normal condition; and that it formed a complete cul-de-sac, not having the least communication with the uterus, whilst the latter opened into the bladder by the junction of the posterior part of the neck with the posterior wall of the urinary pouch. She was thus quite cured; the menstrual discharge passing at the regular periods into the bladder, and mixing with the urine, which it coloured red.

Two other cases are also related, in which this operation was practised. The first proved fatal by peritonitis; and the second, a most formidable one, was at last cured, after various operations had been performed. The patient had been seen in her confinement by M. Jobert himself, who was called into consultation after she had been in labour many hours. Sloughing of the internal parts took place to a frightful extent, resulting in the destruction of a great portion of the urethra, the neck of the bladder, the vesico-vaginal septum, and the neck of the uterus. A highly interesting account is given of the treatment necessary to cure this dreadful lesion; but as the principle of the operation was precisely similar to that which we have already detailed in two instances, we shall not now dwell upon it.

The next chapter is devoted to the subject of what M. Jobert calls *superficial vesico-utero-vaginal fistulæ.* These hold an intermediate position between vesico-vaginal fistulæ, and those which form a communication between the bladder and the uterus. The severity of this form is due to the destruction of the vagina surrounding the neck of the uterus, which shows no trace of its existence for a variable space. They involve the bladder, vagina, and neck of the uterus, in different degrees. The neck of the uterus is in general superficially affected; the loss of substance never extending to the cavity of the uterus. The vesico-vaginal septum, however, is very differently affected; being constantly destroyed at its insertion into the neck. Sometimes the fistula occupies only a part of the septum, but in other cases it extends for its whole length. Generally there is a large triangular opening, anteriorly at the top, and posteriorly at the base. The patients have all the symptoms of vesico-vaginal fistula; the urine constantly collecting, and flowing out of the vagina. They are more difficult to remedy than vesico-vaginal fistulæ, because the lesion is more extensive, and because in all cases the cure can only be effected by uniting the septum to the neck of the uterus, so that several successive operations have often to be undertaken.

The operation consists of two steps—viz. first, the scarification of the edges of the wound, which must include the vesical and vaginal surfaces equally; and, secondly, their approximation. The detail of the necessary

proceedings will probably be made more clear by an actual example, than by systematic description.

A female, thirty-five years of age, entered the hospital of St. Louis, on the 26th September, 1848, having sustained severe injury from a protracted labour two years before. The speculum showed that there was a large opening which occupied the whole base of the bladder, extending from the neck of the uterus to the neck of the urinary pouch, leaving an interval of barely two centimetres between the two. The fistula was triangular in shape, and usually filled by a hernia of the anterior part of the bladder, as large as a pigeon's egg. The anterior lip of the neck of the uterus was partially destroyed, and that which did remain was so soft and friable that it would not bear the employment of a hook; but at the operation it was brought forward as much as possible by indirect traction exercised on the vagina. The edges of the wound were first of all scarified, both on the bladder, and on the vaginal side. This was not merely carried out in the vesico-vaginal septum, but also in all parts of the neck of the uterus which were deprived of vaginal covering. Three sutures kept the central portion of the fistula in contact, and two others united the septum to the neck of the uterus. These three sutures were successively inserted into the base, the middle, and the apex of the triangle. Two long incisions were made along the sides of them, so as to take off all tension. A catheter was then passed into the bladder, and the patient was put to bed with the knees flexed and the thighs bent upon the pelvis, a pillow maintaining them in position.

The patient had a narrow escape of her life from an attack of fever, but eventually got over it; the fistula being about half closed.

Another similar operation was afterwards performed, attended with the same serious perils to the patient, and resulting in the almost complete closure of the remainder. The patient left the hospital to recruit her health in the country, promising to return and have the remaining small opening closed, but she did not do so. Enough, however, was done to demonstrate the feasibility of the operation, and to afford the unfortunate patient very considerable relief.

A similar case to this is that of Madame D., in whom the fistula presented a triangular form, the base resting on the uterus, which was completely closed, after several autoplastic operations, and a few subsequent cauterizations with the nitrate of silver.

A number of other such cases we are obliged, by that inexorable arbiter "space," to omit, notwithstanding their interest and importance. And we much regret being obliged to pass by the fourth division of the treatise, which relates to the cure of various kinds of fistulæ, and to the re-establishment of the functions of the urinary organs, which have been destroyed in the autoplastic operations.

Respecting *Intestino-Vaginal Fistula*, or communication of the vagina with the small intestine, M. Jobert gives a *résumé* of the knowledge possessed by the profession, and of the propositions for its cure which have emanated from various individuals—as, for instance, MM. Roux and Casamayor; but he does not appear to have had any opportunity of carrying into practice some ingenious proposals of his own, and we shall not therefore dwell upon it.

Recto-Vaginal Fistulæ may be either congenital or accidental. Of the existence of the former, however rare they may be, there can be no doubt; but of the exact causes which give rise to them, little can be said. M. Jobert relates the particulars of a few cases which are reported in various publications; but in this instance also his *personal* knowledge appears defective.

Accidental fistulæ of this kind generally result from labour, and are produced either by direct laceration, or by sloughing following excessive pressure; but there are also other and more infrequent causes which give rise to them. The latter class of fistulæ is called by the author constitutional, and comprehends such as have a syphilitic, a scrofulous, or a cancerous origin.

It is needless here to dwell upon the symptoms, physical or moral, which are produced by the existence of this lesion; it is sufficient to consider the treatment necessary for its cure. The employment of various caustics to cauterize and induce contraction of these fistulæ is well known to the profession, and needs but little illustration at our hands. The seton has been made use of chiefly in America, by Drs. Mott and Barton. The operation, however, recommended by M. Jobert, is an autoplastic one, and is to be executed thus:—

In the first place, it is of great importance that the patient's health be placed in as good a condition as possible, and that the parts themselves be prepared by removing from them every source of irritation.

The patient is to be placed on cushions, with the legs bent on the thighs, and the thighs on the pelvis. Two assistants are then to keep them in this position, and at the same time to separate the labia majora with their hands, or sometimes indeed hooks are to be employed for this purpose. A univalve speculum is also to be introduced into the vagina, for the purpose of raising its superior wall together with the bladder. The edges of the fistula are then to be thoroughly pared, and the scarification is to be carried a certain distance into the rectum and vagina, in doing which a considerable quantity of blood may be lost. This hæmorrhage is, however, easily controlled when the sutures are in their places. Interrupted sutures are afterwards to be introduced, taking care to insert them deep enough to maintain the whole thickness of the parts in contact, and to make use of so many as not to leave intervals through which gas or solid materials can escape. Following the rule which he has inculcated in his other operations, M. Jobert then recommends that lateral or transverse incisions be made into the vagina, in order to loosen it, and that a catheter be left in the bladder, or else be frequently introduced in the course of the day.

In the after-treatment, some recommend that the bowels be maintained in a constipated condition; and others,—as, for instance, Saucerotte,—that they be kept loose. Our author advocates the former plan, on the plea that everything which excites the movement of the rectum and the contraction of the neighbouring muscles is dangerous, so long as the sutures are left in their position; and he administers opium with the object of maintaining this constipation.

On the sixth day the sutures are to be withdrawn; and when the cicatrix is firm, a purgative is to be given.

Of the cases related by M. Jobert, in which this operation was per-

formed, we select the following, as the one best adapted to show the nature and extent of the lesion which it is designed to remedy.

Madame H., a robust female, 35 years of age, was confined of her first child on 5th September, 1850. The labour, a tedious one, during which the ergot of rye was administered, terminated in her delivery, by the forceps, of a child with a large head, which had been dead about forty-eight hours. She suffered a good deal afterwards from retention of urine, and from diarrhœa, and in a short time found that she had incontinence both of urine and of fæces. The use of opium produced constipation, with such a solid condition of the evacuations, that only a small portion of them passed into the vagina when she went to stool; but the urine flowed incessantly into the vagina, without her having the power to retain a single drop. In the course of the next six months, she placed herself under M. Jobert's care, when he thus describes the condition of the parts.

The labia majora and minora, as well as the inside of the thighs, were erythematous, and the seat of a sort of nettle-rash, produced and maintained by the passage of the urine over them. The vagina was obliterated, except for a space of between five and six centimétres, at which exact spot there were two openings, situated one over the other; the superior one communicating with the bladder, the inferior one with the rectum, and thus forming the vagina into a true cloaca. On the 26th of June, after some slight constitutional preparation, the following operation was performed:— By means of two incisions, made parallel with the commissures, the thickened bundle of tissue which connected the fistulæ together was destroyed, and the two fistulæ made perfectly independent of each other, so that they could be more accurately examined. The edges of the vesico-vaginal fistula were then scarified for a distance of about a centimétre all round. Three interrupted sutures were inserted, and great care was taken, in tying them, to include a good quantity of tissue. There was nothing remarkable in this operation, except the rapidity with which it was possible to perform it.

The operator's attention was next turned to the communication with the rectum. By means of the univalve speculum the superior wall of the vagina was raised, and then the edges of the fissure into the rectum were scarified in the same manner as those of the other had been. In doing this a small artery was wounded, and bled a good deal. A single suture was placed in the centre of the fistula, and its edges brought together, and then two hare-lip pins were inserted, one at each end of it. Afterwards a semicircular transverse incision was made between the sutures and the fourchette, and two other longitudinal incisions were made on the sides of the recto-vaginal fistula, extending to nearly even with the vulva. Finally, two longitudinal incisions were made by the sides of the vesico-vaginal fistula, as far as the bulb of the urethra. The effect of these various incisions was to relax the parts entirely, and to take off all strain from the sutures. A tampon was also introduced into the vagina, and a catheter into the bladder, and the patient was put to bed with the thighs bent on the abdomen. For the first few days there were many disagreeable constitutional symptoms, especially sickness and vomiting; and on the 1st of July, the patient fancied she passed air through the vagina.

On the 3rd of July,—that is to say, seven days after the operation,—an

examination was made. The vesical opening was found to be quite closed, but it was not so with that into the rectum. The needle inserted into the left angle of the fistula had fallen out, and left an aperture through which air and liquid matter made their escape. The other needles were withdrawn, but the middle suture left in its place. All the right side of the suture was in a satisfactory condition.

On the 10th, the last suture was withdrawn, and the edges found to be perfectly united; but the surface of the cicatrices being granular, they were touched with nitrate of silver.

Some air still continued to pass through the vagina, but this gradually ceased, and on the 16th, the patient had a natural evacuation. We need not pursue the detail of the case further; suffice it to say, that the patient was cured of her infirmity, and that careful examination, instituted some time afterwards, showed that all the parts maintained their natural condition.

Art. XIV.

On Diseases of the Liver. By George Budd, M.D., F.R.S., Professor of Medicine in King's College, London; and Fellow of Caius College, Cambridge. Second Edition.—*London*, 1852. 8vo, pp. 486.

There have been fashions in physic. At one time, gout was on every physician's tongue, and the twinges of gout in every man's viscera. At another time, bile tinged all our thoughts, and physicians and surgeons, too, were as bilious, or perhaps more bilious, than their patients. Bile "flew about" where gout had been wont to wander. We believe that fashions in physic, so far as concerns physicians, are indeed bygones:—of course, we do not allude to the homœopathists, hydropathists, *et hoc genus omne;* they cater for the weak side of men's minds, and so long as there are weak-minded patients with deep purses, there will be knaves to play on their hopes and fears, and fools in the profession, too, to be gulled by these knaves. Fashionable works are, by their nature, transitory; those which aim to disseminate sound views in medicine, although less popular at the moment of their birth, may hope for a longer and a sounder life.

When Dr. Budd's book appeared in 1845, its worth was at once appreciated by one of our predecessors,* who analyzed it at considerable length. From that time it has taken its place as the standard British authority on the subject of which it treats. A second edition has now appeared, and Dr. Budd has evidently given a careful revision to the whole work. The two editions are got up in the same style, and printed in the same type; the present, however, is about one-sixth larger than the former; and some sections have been entirely re-written, so as to bring the work up to the present state of science on the subjects discussed. We shall offer our readers a brief outline of Dr. Budd's work generally, and a more full analysis of those parts which appear for the first time in the present edition.

In the Introduction, Dr. Budd describes the structure of the liver, the cause of the variations in its form, size, and colour; the physical qualities

* British and Foreign Medical Review, vol. xxi.