SELECTIONS.

Review of 'Observations on Extraction of Diseased Ovaria; illustrated by Plates Coloured after Nature. By JOHN LIZARS, Surgeon, Author of the System of Anatomical Plates, &c. Edinburgh, Folio. Lizars. 1825.'

[From the Edinburgh Medical and Surgical Journal.]

THE surgery of the present age is characterized by its boldness. Operations which were not even dreamt of as practicable by our predecessors, are now daily performed, and what is of greater importance, successfully performed. The surgeons of the New World vie with those of the Old, and country practitioners do not yield in science or dexterity to those of the metropolis.

The subject of the present communication is already known to our readers, by the interesting communication inserted in our LXXXI Number, page 217, in which Mr Lizars gave a detailed account of his first operation for the removal of diseased ovaries by gastrotomy; and although from a singular circumstance to which we shall presently allude, the object of the operation was not attained, its practicability in proper cases was demonstrated, and the safety of laying open the abdominal cavity, and handling the viscera with freedom, made manifest, contrary to the doctrines of the schools.

We confess that we were among those who strongly dissuaded both the patient from submitting to, and the operator from undertaking the operation; and we can bear testimony to her fixed determination, that if no regular and scientific surgeon would venture upon it, she would have recourse to a country bone-setter, 'who,' she said, 'would make nae mains o't,' (not hesitate about it.) Our reasons for discouraging the operation were not only the danger of inducing peritoneal inflammation, but the possibility, or rather the probability, that after the cavity of the abdomen was laid open, it would be found impracticable to complete the operation, in consequence of adhesions, enlargement of vessels and unexpected occurrences; for we were fully aware of the difficulty of determining, by any external examination however skilful, the exact state of the internal parts. We confess, indeed, that we did not foresee the possibility of so great an error in diagnosis, as that into which we ourselves and many surgeons of great experience fell, of

supposing a diseased ovary to be the cause of a protruded abdomen, when in reality both ovaries were sound. Yet so it was; and it furnishes an additional reason against the undertaking of this operation, except under the most particular circumstances. Luckily, however, the patient is still alive, and does not repent of her urgency to have the operation performed, as it has satisfied her that every thing possible has been tried to relieve her from the inconvenience of a prominent belly.

Mr Lizars, however, has not been deterred by the want of success in his first attempt, from persevering in his endeavours to accomplish so great an object, as to remove a disease, rendering the remainder of life a burthen, and invariably terminating in a lingering death; and in the splendid publication before us, he gives an account of four cases, including that already published; in the second of which the operation was partially successful, in the third it proved fatal, and in the last, recovery has taken place, although it was found to be impracticable to remove the tumour.

As the first step towards overcoming the difficulties which embarrass an operator in his practice, is to be fully aware of their existence, and of the various forms and complications which they present, we shall extract the detail of those which occurred to Mr Lizars, reserving the successful case to the last.

CASE III.—J. C., a cookmaid, 25 years of age. Disease of one year standing, and health of late very bad.

‘On Tuesday the 22d March 1825, between one and two o’clock, the room having been previously heated to 75° of Fahrenheit, I commenced the operation, by making an incision through the skin and adipose substance, from the sternum to the symphysis pubis; then through the muscles and peritoneum, near the sternum, so as to get at once into the abdominal cavity; but the tumour approached so near the sternum, that I could not accomplish this, so that I cut through the tendons of the external oblique, internal oblique, and rectus muscles, imagining I had got to the surface of the tumour, and was proceeding to separate the parietes from the tumour, when I observed my mistake. I accordingly deepened the incision through the posterior tendinous layer of the internal oblique and transversalis muscles, and arrived at the sac of the tumour; I then began to insulate the tumour, which was found adhering so strongly to the parietes of the abdomen, to the colon, and to the brim of the pelvis, that I despaired of being able to detach it; however, by dissecting at one time, and tearing cautiously with the

fingers at another, I succeeded in insulating a large mass of a dark-brown colour, weighing upwards of seven pounds, and, to my delight, having a pedicle only the thickness of the little finger, and between one and two inches in length. I now gave this enormous mass to my assistant, Mr. Macrae, passed a ligature round the pedicle, and tied it firmly, and then cut close to the tumour; securing three open-mouthed vessels of the pedicle. During this period, which occupied, I understand, about ten minutes, my friend, Dr Poole, kept the omentum and intestines enveloped in a towel dipt in water at 96°. I now stitched up the wound, carefully avoiding the intestines and omentum, applied straps of adhesive plaster, compresses of lint and linen, and around the body a shawl like a binder after accouchement; and, lastly, carried my patient to bed.

This patient died on Thursday 24th, at 7 p. m. of peritonitis, having survived the operation about 56 hours.

CASE IV.—M. B. age 34, cookmaid, disease of six years standing. Operation performed on the 24th April 1825.

'The day was remarkably cold for the season, for although a large fire had been put on by seven in the morning, the thermometer had arisen only to 66° by one o'clock. When the heat of the room had arisen to 70° of Fahrenheit, which was between one and two o'clock, a longitudinal incision was made through the integuments, from the sternum to the pubes: at the sternal extremity the peritoneum was wounded, and one finger of the left hand was here introduced, then another, and the peritoneum laid open to the pubes: the same was then done upwards to the sternum, when a multiplicity of convoluted vessels presented themselves of various magnitude, from the thickness of a finger to that of a crow's quill. At first I thought them the intestines, for they appeared extremely fleshy: then I imagined them the blood-vessels of a placenta, which they still more resembled; indeed such was their resemblance to the vessels of that organ, that the same idea struck one and all of the gentlemen present. On minute examination, however, they were found to be the blood-vessels of the omentum majus, enormously enlarged, running on the surface, and into the substance of the tumour, which appeared an enlarged ovarium. Finding that it was impracticable either to dissect these vessels from the surface of the tumour, or to secure them, in consequence of their great number, I abandoned the idea of extirpating the mass, in which decision I was supported by the gentlemen present; I therefore punctured with a large trocar and canula the centre of the tumour, but nothing flowed; I next made a small but deep incision with a scalpel, when the tumour appeared

solid and cartilaginous, and a vessel bled a little: I lastly punctured the lower part of the tumour, being anxious to reduce its bulk, but only pure blood flowed. The lips of the wound were now approximated and stitched; adhesive straps applied; compresses of lint and linen, with a shawl as a binder, and the patient carried to bed.'

The reports are continued to May 7th, when the patient was convalescent, and, we understand, she continues to recover.

CASE II. is that in which the operation was partially successful; we say partially, because although the one ovary was removed without any bad consequences to the patient from the operation, yet most unfortunately the other was diseased under such circumstances as to render its removal at the same time inadvisable. The patient was 36 years of age, and the case of six years standing.

The day before the operation, she had a smart dose of the compound powder of jalap, which operated briskly. This day, Sunday, the 27th of February 1825, at 1 o'clock *p. m.* I began the operation, the patient being placed on her back, on a table covered with blankets, and the temperature of the room heated to 75° of Fahrenheit. The external incision having extended through the skin and adipose substance, from the ensiform cartilage to the symphysis pubis, a little on the left of the linea alba, I cautiously cut through the muscles and the peritoneum, near the umbilicus, making a small aperture into the latter, when the serous fluid flowed freely out, which was also collected by means of saucers and sponges: as the fluid ceased to flow, the wound was enlarged downwards. The whole measured about a gallon and a half. The wound was then enlarged upwards to the sternum, making that in the peritoneum correspond with the wound in the integuments; when the tumour appeared occupying the greater portion of the abdomen, and resembled the uterus in the eighth or ninth month of gestation, as represented in Plate I. I now laid hold of the tumour, brought it beyond the parietes of the abdomen, and gave it into the hands of my assistant, Mr Macrae, as its weight threatened to drag the uterus; I then passed my fingers around the pedicle, which appeared the broad ligament of the uterus, soft, flaccid, and healthy, and about an inch and a half in length, the fundus uteri being elevated about an inch above, or atlantad to, the crista pubis. A ligature, composed of two strong threads waxed, was next passed round this pedicle, and tied intermediate between the fundus uteri and the tumour, transfixing the pedicle between the noose of the ligature and the tumour, to prevent the noose slipping off. Lastly, I cut across the pedi-

cle close to the tumour. During the progress of the operation, she complained of pain in the lumbar and sacral regions, which appeared to arise from the dragging of the tumour—a circumstance scarcely possible to be avoided, with all our care. My next object was to ascertain the condition of the uterus, as I was prepared to remove it had it been diseased; the uterus, however, was perfectly soft, and only a little enlarged. The other ovary was increased to nearly the size of the fourth part of the one removed, and was adhering on the right side to the parietes of the pelvis, and to the uterus, but comparatively free on the left side. While examining this, the gentlemen around me begged me to desist, in which I concurred, conceiving, that as the uterus was elevated above the brim of the pelvis, and the ovary not tied down by adhesions to the bottom of the pelvis, there might be hopes of its rising after the other had been detached, and that it might be extirpated afterwards. I now proceeded to bring the edges of the wound in apposition, by the employment of ligatures and adhesive straps; of the former there were seven, and of the latter nine, the wound itself being twelve inches. I regret that I employed so few ligatures, for in wounds of the abdomen they are particularly useful, to prevent any protrusion of the viscera, and to give support in all the motions of the abdomen during the cure. When the ligatures and adhesive straps had been applied, and the ligature encircling the pedicle carefully left out, compresses of lint and linen were put on, and the abdomen encircled with a shawl, as a hinder employed after accouchement. This I found in the former case much more serviceable than a nine or twenty-tailed bandage, or stays, or any other fashionable dress.

The only untoward circumstance which occurred was some hæmorrhagy in the evening, but it was checked by judicious treatment, and the case proceeded favourably. The last report is on the 9th of May, when the patient is convalescent.

In drawing a general result from the event in Mr Lizars's cases, we must remember, that the ovarian dropsy, if left to itself, is a mortal disease, of very slow progress, rendering the life of the sufferer for a great length of time miserable, both from actual distress and from dreadful anticipations, and that therefore any thing which presents even a chance of relief, is preferable to abandoning the individual to despair. Keeping this consideration in view, the result is rather favourable. Of four cases, one may be said to have proved successful, one died, and in two the operation was useless. We find from the records of surgery, that in general capital operations, on their

first introduction, have been much less successful, even in the hands of the great and skilful surgeons, by whom they have been conceived and performed,* than they have afterwards become in the hands of the profession generally; and it would not be difficult to give the explanation.

But if we consider the operation of gastrotomy, independently of the single object of removing diseased ovaria, the result of Mr Lizars's operations is more favourable; for we here find, that of four cases, three succeeded, although in all the abdomen was freely laid open, and the viscera very freely examined; a success so great as to encourage us to believe that gastrotomy may be resorted to in many other cases of abdominal disease, as volvulus, intussusceptio, internal hernia, even external strangulated hernia—intestinal calculus, and in very obscure diseases of the abdominal and pelvic viscera, when no other hope presents itself.

We have now only to speak of the plates with which Mr Lizars's work is adorned; we say adorned, for they reflect the highest credit on Mr Lizars's brother, by whom they were designed, engraved and tinted. They are five in number, and all belong to the second or successful case. The first represents a view of the abdomen when fully laid open, exposing the tumour, intestines, and uterus, in their relative situations. The second is a lateral view of the tumour in its natural size; the third is a view of the basis of the tumour, showing the pedicle by which it was attached, and the Fallopian tube connected with it; the fourth is a section of the tumour, displaying its texture and structure; and the fifth and last is a view of the abdomen after the wound had healed, showing the cicatrix of the incision, and of the stitches, and the ligature still hanging out.

* See observations in page 127, vol. I, of Mr Harrison's *Surgical Anatomy of the Arteries*, a work replete with information and devoid of pretension, and which ought to be in the hands of every student engaged in dissection.