ART. XI.—Ovarian Tumour of twelve years' standing, weighing forty-one pounds, and containing a large bony substance—successfully operated on. By J. TAYLOR BRADFORD, M. D., of Augusta, Kentucky, and A. Dunlap, M. D., of Ripley, Ohio.

My first visit to Miss H., of Mayslick, Ky., the subject of the present operation, was about the 25th of May. She had just returned from Lexington, Ky., where she and her family physician, Dr. Basil C. Duke, of Mayslick, had been for medical advice. Dr. Duke says, in a publication made by him: "When I became satisfied that it was a case of ovarian tumour, I insisted on Miss H's visiting some of the most distinguished surgeons; and I visited Lexington, Kentucky, in company with her, for the purpose. She was advised by all those to whom she applied, not to submit to the operation, as they looked upon it as hopeless."

Miss H. is twenty-one years of age, of medium stature, light hair, blue eyes, fair complexion, sprightly and intelligent. She had been a prey to the disease for twelve years, during which time she had subjected herself to varied and almost continued medical treatment, from different physicians. She stated to me that, whilst under a course of dieting, and such medicines as

kept her system in "tolerable condition," the tumour increased but slowly, but never diminished under any course of medical treatment.

The tumour made its appearance, at nine years of age, in the left groin, and she described it as being then about the size of a hen's egg. Prior to its appearance, however, she suffered from a severe attack of scarlet fever. The menstrual flux did not make its appearance until about three years after the appearance of the tumour, after which it occurred with remarkable regularity during the twelve years' existence of the tumour. She was occasionally subject to attacks of what some of her physicians called peritonitis, which rendered her helpless and bed-fast at times. Notwithstanding the long standing of the case, the steady, and at times rapid increase of the tumour, she never was tapped, and resisted it with wonderful determination to the last.

From the history of the case, and the unfavourable opinion of the medical men who had examined it, it is natural to suppose I commenced the examination with but little hope; so great, indeed, was my confidence and veneration for one of the distinguished men who had passed his opinion upon the case, that, after my examination was over, I stifled, as it were, my better conviction, and quoted and requoted in my own mind a precept in that "Book of books:"

"Let him that thinketh he standeth, take heed lest he fall."

The examination was commenced by placing the patient upon the back with the hips a little elevated. The distension of the abdomen, upon first sight, seemed enormous, reaching the ensiform cartilage, distending enormously the false ribs, hanging in folds laterally over the spine, pressing up the spleen, pancreas, liver, and stomach, so as to elevate the diaphragm, and contract very considerably the thoracic space. The tumour had so completely filled up the abdomen that it was difficult to tell upon which side the preponderance lay. The cyst seemed round and smooth on feeling it through the parietes of the abdomen, and unilocular in its character. Upon the anterior superior part of the tumour above the umbilicus there was a hard bony substance, evidently imbedded in the sac, and seemingly about the size of the bottom of a saucer.

The walls of the abdomen were so completely filled up by the distension of the tumour, that very little movement of the tumour could be effected in any position. I had the under dress removed, through which I had commenced the examination (pardon me for it), and the thighs flexed upon the abdomen in order to relax the abdominal parietes. I then gathered up the parietes of the abdomen, with both thumbs, and the fingers, in a fold, and glided them over the bony substance to and fro, now and then pushing the bony substance with one thumb from me, whilst I held the gathered up parietes of the abdomen firm. The bony substance could be moved slightly to either side, and upwards, but imperfectly downwards. When I became satisfied that the hard substance was within the sac, and but slightly, if at all, adherent to the peritoneum, I continued the examination in a similar manner over the abdomen, holding up the integuments with both hands, and pushing the sac from me with the thumbs, then allowing the folded parietes to contract to their place, and observing whether there would be a line of adhesion showing itself The sounds of percussion were dull over the entire abdoin the contraction. men, except upon the right side near the spine, and but feeble, then, except when lying upon the left side.

On examination per vaginam, fluctuation was distinct, and the same smooth, elastic sensation of the sac responded to the finger, which was perceptible over the abdomen. The vagina was slightly drawn up, and the womb thrown back upon the rectum. The examination by the rectum presented the same characteristic as that by the vagina. The patient was placed upon her feet, and an assistant behind her, with both of his hands applied over the lower part of the tumour immediately over the pubis. I directed the assistant to raise the tumour as high as possible, whilst I retained my finger as high up in the vagina as would enable me to determine whether there were any adhesions to the womb. The tumour could be raised in this way nearly out of the reach of the finger without producing any pain or unpleasant sensation in the region of the womb, but excited much difficulty of breathing from the pressure against the diaphragm.

After concluding my examination, I remarked to the patient that there was hope from an operation; put her upon a course of diet; directed her to take, every other night, a blue pill; and to keep her bowels open with carbonate of soda and rhubarb. On my second visit to her, which was ten days after, Dr. Dunlap accompanied me, and, after a careful examination, he ex-

pressed his convictions in favour of an operation.

The patient's health for some time had been rapidly declining, the difficulty of breathing consequent upon the infringement of the lungs by the enormous tumour, together with a general debility, rendered her condition very unhappy, and it was evident that sooner or later she must fall a prey to its progress. We told her of the difficulties and danger of the operation, the ratio of mortality in the hands of operators; her mind, however, was unrelentingly made up to be operated on, notwithstanding the dissuasion of many of her friends; some of them, however—her father and mother—did not oppose, but were afraid, because of their doubts, to advise. And perhaps but one amidst a large circle

of friends encouraged her to the operation.

On the 14th of June last, Dr. Dunlap and myself, assisted by Dr. Basil C. Duke, commenced the operation. The patient was placed upon a table, with the shoulders slightly elevated, the feet resting on a chair, and when sufficiently under the influence of chloroform, an incision through the linea alba, below the umbilicus, of about five inches, was made; the integuments, layer by layer, were carefully divided, until the ovarian cyst was exposed to view, which may be readily known by its remarkably bright glossy appearance; then by the use of the fingers and the probe-pointed bistoury, the incision was carried upward two inches above the umbilicus, and downwards to the pubis. The hand being now introduced and carefully glided round over the cyst, it was found that a strong adhesion to the omentum existed at the upper part of the tumour; and believing it to be safer to divide all adhesions except at the base of the tumour, before puncturing the sac, I was compelled to extend the incision four or five inches higher, which made an incision in the aggregate over the tumour of from eighteen to twenty inches in length. The bands connecting the tumour to the omentum proved to be large and very firm, and were inserted by several points into the bony substance, which had been recognized before the operation. It required considerable force to break up the adhesions, which was done by Dr. Dunlap, my assistant, with the fingers and handle of the scalpel. Very little hemorrhage occurred from so large an adhesion, so little, indeed, that no ligature was applied. The most pendent part of the sac between the umbilicus and pubis was now punctured; whilst an assistant placed the palms of his hands along the edges of the wound, immediately opposite to the puncture, to prevent the escape of fluid into the abdominal cavity, and with the extremities of the fingers gradually compressed the walls of the tumour, to expedite the escape of the liquid contents. After drawing off a considerable quantity of the straw-coloured liquid, we attempted to raise the tumour out

of the abdomen, but finding it yet too heavy to handle, we determined to draw off what fluid still remained. This being done, Dr. Duke placed his forefinger in the orifice punctured, which enabled us readily to get to the base of the tumour, where, fortunately, there were no serious adhesions. Lifting the tumour from its cavity, the pedicle was transfixed with a needle armed with four strands of saddler's silk; the ligature was then divided at the eye of the needle, and each segment of the pedicle securely tied. The neck of the pedicle being very short, it was divided close to the sac, which is probably the safest, be it long or short.

On the removal of the tumour, the liver, the stomach, the spleen, and intestines were all in full view, apparently healthy but flattened, exciting our wonder, how they could perform their functions under such encroachments. The intestines were not disturbed further than was requisite for sponging out

the blood and little liquid which had insinuated itself among them.

The wound was brought together, and secured by seven needles with twisted sutures, assisted by numerous strips of adhesive plaster sixteen inches in length, and applied about one inch apart; then a strip applied up and down each side of the incision, the better to secure passiveness in the abdominal muscles, and to increase the efficacy of the cross straps. Two napkins were then folded in such a manner as to fill up the vacuum and irregularities of the abdomen, and a broad roller pinned tightly over it, to serve as a support to the abdomen, and keep in check the spasmodic action of the abdominal muscles, which is sometimes a source of much suffering.

The patient was kept under the influence of chloroform during the entire operation, but not so fully as to render her at times insensible to the progress of the operation. The pulse kept up remarkably well; but a little brandy and water was given, to support her during the change of her dress, after which she was put to bed, and expressed herself as being quite comfortable.

On examination of the tumour, which weighed forty-one pounds, the hard substance spoken of as felt through the walls of the abdomen, proved to be perfectly-formed bone, as large as the bottom of a saucer. The surface of the sac, on the inner and front part, was rugous and uneven, studded over with innumerable small particles of bone, varying in size and shape from that of the thumb-nail, down to that of a pin's head; whilst that part lying next to the back was smooth, without any appearance of osseous degeneration. At the bottom of the tumour, that part lying in the pelvis, there were several small fleshy tumours of various sizes, from that of a cocoa-nut to that of a hen's egg. On cutting into these tumours, a little jelly-like fluid escaped, and within each one there were found to be a series of still smaller sacs of various shapes. Extending the examination still further, and cutting into these tumours, each one had its little group of tumours still smaller and smaller, each one, however small, containing its group; and when opened, manifesting the same curious variety of shapes.

Two hours after the operation, the patient complained of considerable pain in the region of the womb; half a grain of morphia, in a little brandy and water, was given, and in a short time she expressed herself as feeling better than she had for many months. Six hours after she suffered very much from pains, similar to after-pains, during the interval between which she was comparatively easy. The morphia was repeated, and the bandage, which had become more lax, was pinned tighter, which enabled her to rest well during

For several days the catheter had to be introduced, and the urine drawn off. The bowels were not disturbed for forty-eight hours, when an injection

of gruel and lard was given, which acted kindly. On the fourth night after the operation, I was aroused from my sleep by the nurse, who stated that my patient was much worse, that inflammation was taking place—that she could not bear the bedclothes upon her bowels; fever high; pain great, &c. &c. I hastened to the apartment, and found her suffering very much. The pulse was over 100 in the minute; hot, dry skin; some pain in the bowels; had had two slimy griping operations from the bowels, and was much alarmed. Gave a teaspoonful of camph. tinct. opii; had the skin sponged with cold water, into which a little salæratus was thrown; adjusted the bandage; and in two hours the skin became soft and moist, and she rested well during the night. Nothing of interest occurred until the ninth day, when a hacking cough occurred, which threw her into most violent paroxysms of pain in the abdomen at each effort of coughing. I gave equal portions of hive syrup and camph. tinct. opii, teaspoonful portions, every two hours; applied tartar emetic plaster to the top of the chest, which gradually reduced the cough, and she again improved.

On the morning of the sixteenth day after the operation, on entering her room, I found her standing at the window. I accosted her with my usual salutation: "How do you feel this morning, Miss Nannie?" She replied, with a smile, placing her hand over her bowels: "I feel exactly like I couldn't find myself." The wound healed kindly. During the fifth week after the operation she returned home; but not until the sixth week did the ligature come away. She is now in good health, having gained some forty pounds

since the operation.

As both in Europe and in this country so much contrariety of opinion exists as to the operation of ovariotomy, each case, whether successful or not, is a matter of deep interest to the profession. Our own observation enables us to realize that many, very many cases, owe their failure to gross errors in diagnosis—a lack of discrimination between that class of cases which would warrant an operation, and those which would be fatal, with or without it. Out of some ten cases examined by Dr. Dunlap and myself, we have operated upon but four, all of which have been successful; one of them, a patient of Dr. Dunlap's, has, since the operation, given birth to a healthy child.

It is true that Lizars, distinguished as he is, in the first operation for ovariotomy performed in Europe, operated on a case which proved to be obesity, and the most distinguished medical men of Edinburgh, in their examination of the case, pronounced it ovarian. Still, I may be safe in predicting that any reputable operator, "posted up" in the present diagnosis, imperfect as it is,

will not commit a like blunder in the present generation.

If an operator has any doubt about the disease being ovarian, he ought not to operate; and if it is ovarian, and the indications are, that the adhesions are numerous and dangerous, and the tumour of such a character as to embarrass materially his diagnosis, he should, as Willis advises a literary friend, "Sit quietly down and look at the probabilities;" he should wait further develop-

ments, or not operate at all.

P. S. Shortly after the present operation, I received a letter from Dr. Lightfoot, stating that it had excited considerable interest among the medical men in the city of Louisville, and that Prof. Yandell desired me to communicate to him the particulars of the operation. In compliance, I wrote Prof. Yandell a letter, giving some of the leading features of the case, which he was kind enough to publish in his journal. Since that time until the present, I have not had leisure to write out the case for your journal in detail.

AUGUSTA, KY., January 24, 1854.