TRANSACTIONS OF THE PHILADELPHIA ACADEMY OF SURGERY.

Stated Meeting, March 4, 1895.

The President, THOMAS G. MORTON, M.D., in the Chair.

A JACK-STONE IN THE ŒSOPHAGUS NECESSITATING TRACHEOTOMY TO RELIEVE DYSPNŒA.

DR. WILLIAM J. TAYLOR related the history of a little colored boy, aged three years, who was admitted to St. Agnes's Hospital on April 3, 1894, with the history that he was playing with some iron jack-stones, when he suddenly began to cough and to struggle for breath. When first seen by the reporter, about two hours after the accident, there was such extreme respiratory distress that prompt relief was necessary. A careful search was made of the mouth and fauces with the finger, but without revealing the presence of a foreign body, and, as the dyspnœa was too great to permit of a prolonged examination, he opened the trachea without giving an anæsthetic. As soon as this was done the relief was instantaneous. Nothing could be found in the trachea or bronchial tubes, and a silk catheter could be passed into the mouth from below.

A catheter was passed down the œsophagus nearly to the stomach, and also a pair of long-curved forceps, but without meeting with any obstruction or evidence of a foreign body.

A small silver tube was introduced into the wound in the trachea, and the child put to bed in a room specially prepared for him.

At first the child was able to swallow fluids in small quantities with comparative ease. Then another and even more careful search of the gullet was made. Upon pushing the finger far down the throat he was just able to feel a smooth hard body, which proved to be the rounded point of an iron jack-stone. By external palpation of the neck nothing could be felt that would lead to the supposition that a foreign body was present. After some little difficulty the jack-stone

was grasped in the jaws of a pair of curved forceps and removed. The care necessary to do this, on account of the large size and irregular shape of the jack, made it a tedious process. The utmost gentleness was exercised in these manipulations, but the mucous membrane was somewhat torn, for quite an amount of bloody mucus was brought up.

The child died on the fifth day from exhaustion. No post-mortem examination was permitted.

At the time of his first examination, just prior to the tracheotomy, he could not feel the jack with his finger passed well down the gullet, neither could he feel any obstruction to the passage of the forceps nor to the catheter, which he thought had passed into the stomach. Both must have passed below the point at which the jack was subsequently found.

The interference to the respiration was due entirely to the jack-stone within the œsophagus which pressed upon the trachea without the trachea itself.

Dr. Taylor said that this case had been a severe lesson to him, and had taught him that in all cases of dyspnœa, supposed to be due to a foreign body within the trachea, a careful search of the gullet should first be made, and the probang should be passed into the stomach itself. Until this is done we must not open the trachea, providing this can be done without jeopardizing the life of the patient by too long and exhausting a search.

Dr. John B. Deaver said that he had recently operated upon a lady who had swallowed a fish-bone, which lodged temporarily in the œsophagus, but which, however, could not be found. Upon the day following the accident he found not only emphysema of the neck but also some fluid deep in the tissue of the neck. The effusion did not connect with the trachea. He cut down upon the swelling, evacuating a small amount of very fœtid pus. At the bottom of the wound, located behind the lateral lobe of the thyroid gland, was seen some slough and an opening which communicated with the œsophagus. The bone was not found. The wound was packed lightly with iodoform gauze. Owing to the age of the patient, the difficulty in feeding her, and the extensive sloughing, death occurred within a week following the opening made in the neck.

Dr. J. M. Barton said that some years ago he saw in Camden a child who had a jack-stone in its throat similar to the case reported. The size of the jack-stone precluded the idea of its being in the larynx, although there was impairment of voice. The foreign body

was discovered pressing against the back part of the œsophagus, where it caused ulceration, from which the child ultimately perished.

DR. DEAVER remarked that he had seen ulceration of the larynx result from the pressure of a foreign body in the œsophagus.

Some years ago he performed œsophagotomy for the removal of a partial plate of artificial teeth which had occupied the œsophagus for seven days. Death resulted from sepsis. Post-mortem showed ulcerative communication between the œsophagus and the larynx.

DR. R. H. HARTE said that at St. Mary's Hospital he saw a man who, in a fit of depression, had wounded his throat and œsophagus with a razor, and in addition had plunged a red-hot iron into his right side and penetrated the liver. When he attempted to swallow liquids they regurgitated through the wound in the neck. The physicians present suggested œsophagotomy, and he recommended the passing of a tube down the œsophagus into the stomach, through which he could be fed. This was done, and the patient recovered.

DR. WM. W. KEEN recalled a number of cases of asserted swallowing of foreign bodies, especially fish-bones. The great difficulty in these cases is in determining whether the foreign body is really there. In the cases reported very careful examination failed to detect the presence of the jack-stone. He asked if any attempt was made to relieve the patient by feeding him with potatoes to facilitate the passage of the jack-stone. A few days before he saw a physician who, in swallowing a piece of toast, coughed a piece of the crust into his naso-pharynx. Acute pharyngitis followed, which extended up the tubes and caused mastoid disease. An abscess formed, which burrowed to the pharyngeal wall. He operated upon him and chiselled away most of the mastoid. This was mentioned to show how much injury might be done by such a simple body. The man was in good health at the time it occurred.

DR. TAYLOR rejoined, as to feeding the child upon potatoes, that the difficulty was that when he saw the child the respiratory distress was so great that tracheotomy had been done at once. Moreover, he had very little idea that there was a foreign body in the œsophagus at all, as he attributed the difficulty in swallowing to the pressure of the tracheotomy tube.

MALGAIGNE'S HOOKS FOR FRACTURED PATELLA.

DR. JOHN B. DEAVER presented two cases of fracture of the patella to show the result obtained by the use of Malgaigne's hooks. The hooks were introduced the same day in each case, one week fol-

lowing the fracture. The hooks were introduced under aseptic precautions and with the patient anæsthetized. It is now six weeks since the introduction of the hooks, and the result in each case is most satisfactory.

The degree of flexion and extension is almost normal. The apposition of the fragments is perfect. No claim for bony union is made, as he believed that this can be obtained only by opening the joint and wiring. The Barker operation, that of subcutaneous ligation, offers no advantage over the use of Malgaigne's hooks, the result obtained in both instances being practically the same, the risk being increased by the ligature method.

DR. R. H. HARTE thought that Dr. Deaver's testimony with regard to Malgaigne's hooks agreed with the testimony of most experienced surgeons. They have been objected to by persons who have never tried them. Their results are much more satisfactory than those from the starch bandage recommended by Agnew.

DR. J. M. BARTON would like very much to see a series of fractures of the patella about one or two years after the injury. It is very common immediately after any method of treatment to see close approximation, but in time they usually stretch some inches apart. It would be of great importance to determine if exposure of the patella by incision, removal of the interposed torn edges of the capsule, and wiring of the patella will not give better results than the use of Malgaigne's hooks. It is certainly quite unfair to the patient to expose him to the risks of the graver operation if the milder will give equally good results.

But the exhibition of patients immediately after getting out of bed proves nothing. If the fractured ends of the patella are equally close one or two years later, the efficiency of the treatment will be fully proved.

DR. J. EWING MEARS thought that the fracture of the patella is not the injury we are called upon to treat; but a rupture of a ligament,—the patella being only a sesamoid bone developed in the tendon of the quadriceps muscle, and fractures of this bone are incidental to ruptures of this ligament. When this is the result of force applied directly, there is little or no separation of the fragments. But in the cases caused by muscular contraction the ligament is much torn and the fragments are widely separated. This difference in the degree of separation of the fragments under the two causes, to his mind, proved conclusively that the ruptured ligament is the lesion present demanding treatment, and not the fractured sesamoid bones.

Whatever the plan of treatment adopted, it should have for its object the union of the ruptured fibres in the ligament as firmly as possible. He had kept patients in bed for three months in order to make these adhesions very firm. If the fibres of the ligament are greatly lacerated and stretched, it will be necessary to cut down and remove the portions of the torn ligament and approximate the ends by suture. In cases of direct force the ligament is not torn, separation of the fragments of the bone does not occur to any extent, and treatment is very much shortened.

NEUROMA OF THE BRACHIAL PLEXUS.

DR. JOHN B. DEAVER presented a man, aged forty years, who was operated upon by him for tumor of the neck, January 17, 1895.

Careful dissection, exposing all the tissues of the neck in relation with the three cervical cords of the brachial plexus, demonstrated the presence of an oblong tumor, smooth in contour, involving the upper of the three cords. The growth was so intimately associated with the nerve-trunk in question that it was necessary to divide the cord on either side to effect its removal. Strange to say, paralysis did not follow the division of the cord; there was but slight motor disturbance.

Doubt having been expressed that the cord that had been severed was really what it was supposed to be, he said that there was no doubt that the tumor, which when examined proved to be a neuroma, was so intimately connected with the upper cervical cord that to remove it required section of the cord above and below the growth.

An attempt was made to splice the divided ends of the nerve, but it could not be done. They were connected, however, with several strands of catgut.

The apparently puzzling part of this case is the absence of paralysis following removal of the tumor.

When we consider that this growth first showed itself seven years ago, and that it has been as large as at the time of its removal for some months, and that it involved the entire upper cervical cord of the plexus, as proven by examination of the specimen, he asked whether paralysis would be expected to follow the removal of that which had already destroyed the conducting power of the affected cord?

CONTRACTED BLADDER.

DR. DEAVER presented a case illustrating a very marked form of congenitally contracted bladder. The trouble, that of frequent micturition, dated back to three years of age. The capacity of bladder when he came under his notice was about one and one-half ounces. Examination of the urethra with urethroscope and of bladder with cystoscope was negative other than demonstrating the small size of the bladder. Perineal cystotomy gave relief while drainage-tube was *in situ* and for two months after the wound had healed. He now returns six months since the operation with the symptoms quite as bad as when he saw him for the first time.

EXCISION OF THE ELBOW-JOINT FOR ANKYLOSIS FOLLOWING FRACTURE.

DR. H. R. WHARTON presented a woman, aged thirty-five years, who received a fall April 29, 1894, sustaining an injury of the right elbow. In October, 1894, he found marked deformity in the region of the internal condyle of the humerus and a posterior dislocation of both bones of the forearm, the arm being rigidly fixed at a right angle, and the patient complained of constant pain in the elbow.

On November 8, 1894, he excised the right elbow-joint, finding that there had been a fracture involving the internal condyle of the humerus, and that the ulna and radius were dislocated backward, a large amount of callus had been thrown out, which made the operation a difficult and tedious one.

The patient did well after the operation; the wound healed promptly, and at the end of four weeks the patient had a fair range of motion in the new joint. The patient has remarkably free flexion and extension of the arm, also good supination and pronation, and as the result of operation has attained a very useful arm.

LOOSE CARTILAGE IN KNEE-JOINT.

DR. H. R. WHARTON presented a body removed from the knee-joint of a man aged twenty-four years, who for some years had suffered from a movable body in the left knee-joint which at times interfered with the motion of the joint.

Four years before he had wrenched his left knee by stepping upon

a stone which rolled under his foot. After the accident the knee was bent, and could not be straightened. This condition existed for four months; at the end of this time he regained use of the knee-joint, but noticed the presence of a body which moved about in motions of the joint, and at times entirely disappeared. At times its presence caused him more or less disability.

There was no difficulty in locating the position of the body and removing it.

The case is of interest in that it points to the possible traumatic origin of some cases of loose cartilages in the joints.

UNUSUAL SYMPTOMS ACCOMPANYING A SMALL OVARIAN CYST.

DR. JAMES M. BARTON presented a small ovarian cyst removed from a woman, aged twenty years, and weighing 257 pounds, who had been taken ill with vomiting and purging October 14, 1894. Previous to that date she was in perfect health, but during the five months since that date she had been seriously ill. She had had a very heavily-coated tongue, a foul breath, and constant nausea. Her temperature varied from 99° to 100° F., and occasionally rose to 101° and 102° F. She had lost exactly fifty pounds in weight. There was great pain and marked tenderness in the right iliac fossa. She kept the right leg constantly flexed. She could straighten it; but, as it greatly increased the pain in the right iliac fossa, she would soon again flex it. The loss of appetite was so marked that frequently for several days in succession she took no food whatever. During a period of ten days in November she and her mother both assure me that she did not take a mouthful of food. Since then there were two other periods of eight days each in which she also took no food whatever. Some days she even took no water. She slept but little, owing to the constant pain.

The large amount of fat on the abdominal walls prevented anything being felt through them, though the patient complained greatly of tenderness when pressure was made in the right iliac fossa.

On vaginal examination a fluctuating, sensitive tumor was found low down in the right iliac fossa. It was some inches from the uterus, and, apparently, not connected with it.

At different vaginal examinations made during a few weeks the tumor occupied different positions; usually it was found low down in the right iliac fossa, twice it was in the median line, once to the left

of the median line, and twice it could not be felt at all through the vagina. The maximum tenderness was always over the tumor when it could be found.

The patient was regular in her menstruation, her periods occurring every twenty-one days. Her bowels were slightly constipated, but were otherwise normal.

At the operation, March 3, 1895, the growth was found to be a kidney-shaped multilocular cyst of the right ovary, a little larger than an adult fist. There were two points of strong omental adhesion, and the pedicle was nearly four inches in length.

The parietal peritoneum at the lower part of the incision, which was a median one, was greatly thickened, though not roughened or discolored. There were a few ounces of fluid in the peritoneal cavity. The appendix and its surroundings appeared to be in a normal condition.

There was no twist of the pedicle, and the strong omental adhesions, which evidently had existed for some time, would have prevented any great rotation of the tumor and pedicle.

NOTE.—March 28, 1895. The above described case made an uninterrupted and complete recovery, and is now sitting up daily for some hours. All of her symptoms have left. Her appetite is good, there is no nausea, she sleeps well, and there is no tenderness in any portion of the abdomen. She is able to extend the leg fully and keep it extended indefinitely without discomfort.

DISLOCATION OF THE HEAD OF THE HUMERUS COMPLICATED WITH IMPACTED FRACTURE OF ITS ANATOMICAL NECK.

DR. JOHN B. ROBERTS related the case of a boy, aged nine years, who had fallen and struck his shoulder against a wall ten days before he was brought to his clinic at the Woman's Hospital. Two days before Dr. Roberts saw him he had been brought to the hospital, and Dr. Anna M. Fullerton, with Dr. Marie K. Formad, had examined him under ether and reduced what seemed to be a subcoracoid dislocation of the head of the humerus. Both of these physicians were struck by the flattened appearance of the deltoid region, and say that the bone distinctly snapped into place during the manipulations which they made. They could subsequently put the boy's hand on his head and on the opposite shoulder. These positions could not

be given the bone before etherization and reduction of the dislocation. When seen by Dr. Roberts the acromion was unduly prominent. The left humerus was apparently half an inch shorter than the right, and the width of the upper end was markedly increased. The greater tuberosity, which could be easily felt, for the boy was not very fat, rotated when the lower end of the humerus was grasped and given a rotary motion. The head of the bone, in its normal position, also moved during this manipulation. At times a grating like that of a crepitus could be felt, but this did not seem to pertain to the humerus so much as to the scapula. It seemed to be in the posterior portion of the joint; but he could make out no fracture of the neck of the scapula, as was suggested by the situation of the grating.

The boy could voluntarily move his arm upward and outward without pain, though these movements were made in a guarded and careful manner, as though he feared suffering. The movements were very extensive, but showed that the continuity of the humerus was maintained.

Under ether, rotation of the lower end of the humerus caused similar motion of the head of the bone, but if he held the head still with his left hand, he could, by means of his right hand holding the shaft of the humerus, cause a bending or rocking motion between the head and the shaft. This movement was between the greater tuberosity and the head. It was apparent that there existed a connection between the shaft and the tuberosity, and also between these portions of the bone and the head; but an antero-posterior rocking motion could be made between the shaft and tuberosity on the one hand and the head on the other. There was no fracture of the neck of the scapula and no dislocation of the head of the humerus.

Three conditions were suggested by these symptoms: (1) A firmly impacted fracture at or near the anatomical neck, which allowed the whole bone to move when rotary motions were given to the shaft of the humerus, but which permitted bending between the head and greater tuberosity. (2) A partial or green-stick fracture at or near the anatomical neck. (3) An epiphyseal separation of the head with impaction. The fracture, whether impacted or of the green-stick variety, had permitted the dislocation, which also existed originally, to be reduced under ether by Dr. Fullerton and Dr. Formad. The rigidity maintained at the seat of fracture had been sufficient to permit the head of the bone to be put in place by leverage obtained from the shaft of the bone. The manipulations needed to reduce the

luxation were not forcibly made, and the replacement was easily accomplished. Hence, the fracture could not have been produced by these efforts.

The widening of the upper end of the humerus, which was very conspicuous, and the apparent shortening of the humerus, inclined Dr. Roberts to the theory of impacted fracture. The age of the child suggested, however, a green-stick fracture as a possibility. By forcible manipulation he obtained complete separation of the fragments. The sensation imparted to his hands was that caused by disentangling or breaking apart two pieces of bone. Subsequently the arm assumed the usual appearance of a fracture of the humerus close to the shoulder-joint. The crepitus originally felt in the vicinity of the scapula was probably due to the rough edges of the firmly impacted fracture rubbing against the border of the glenoid cavity. Having become convinced of the diagnosis, and having restored the proper conformation of the shoulder, he dressed the injury in the usual way,—with a small pad in the axilla and a bandage to hold the arm to the thorax, which acted as an internal splint. . . . Union took place promptly. When last seen the boy, about eight weeks after the first examination, had a little unnatural prominence of the acromion, and the head of the humerus seemed to project forward a little more than usual. These appearances may have been due to atrophy of the deltoid. The movements of the joint were perfect.

DR. BARTON said that a case of epiphyseal fracture would present many of the points which are reported in this case. The fracture need not have been complete; but the prominence of the shoulder and other features are alike. Of course, Dr. Roberts did not see the case at this point, and could not positively determine whether there was complete separation or not.