

in any of these cases. The two reported cases were left inguinal herniæ.

DR. HENRY R. WHARTON mentioned the case of a woman who was thought to have incarcerated omentum in a right inguinal hernia. She was then four or five months pregnant. Operation revealed the contents of the sac to be a pedunculated fibroid of the uterus. This was removed and the patient went to full term.

DR. JOPSON said that where a hernia of the Fallopian tube was present it was also possible to have hernia of the ovary. He had at first but little hope of curing this patient's hernia, but there were no signs of recurrence several weeks after the operation. There apparently never had been a hernia of the bowel. In answer to a question by Dr. Ross, Dr. Jopson stated that at the time of operation one could not say if the hernia was direct or indirect, but, judging from the history, it was probably congenital and indirect.

STATED MEETING, APRIL 4, 1904.

The President, HENRY R. WHARTON, M.D., in the Chair.

SEPARATION OF THE QUADRICEPS EXTENSOR FEMORIS TENDON FROM THE PATELLA.

DR. HENRY R. WHARTON presented a man, fifty-one years of age, who fell while walking and injured his right knee. He was unable to walk after the accident, and was treated for some weeks at his home; the nature of the treatment he received is not known. He applied for treatment at the Surgical Dispensary of the Presbyterian Hospital six weeks after the injury, and was referred to the Surgical ward.

Admitted to Surgical ward, May 29, 1903. Examination showed that he walked with difficulty, owing to weakness and loss of extension of the right knee-joint. It was found upon careful examination that there was complete loss of extension of the right knee, and a gap existed in the tissues just above the patella, due to a separation of the quadriceps extensor femoris tendon from the patella.

After the patient was anæsthetized, a longitudinal incision was made from the centre of the patella, which extended up the thigh for four inches. The upper portion of the patella and the lower portion of the quadriceps extensor tendon were exposed, and it was discovered that the injury was not merely a rupture of the tendon, but that the fibrous capsule of the patella over its upper surface had been torn off and drawn upward with the tendon, and that the lower portion of the capsule was separated from the bone by a layer of partially organized blood-clot and blood-stained synovial fluid. The knee-joint also contained a considerable amount of blood-clot.

All blood-clots were removed from the joint and from the surface of the patella; to accomplish the latter object, it was necessary to curette the upper surface of the patella. The lower portion of the capsule attached to the patella was sutured to the

bone by drilling the patella at the edges and in the centre, and passing chromicized catgut sutures through the capsule and drill-holes. The upper end of the patella was next drilled, and a heavy silver wire suture was passed through the lower portion of the tendon and through the drill-hole in the patella, and when this was secured the tendon was brought down in contact with the patella. It was considered wiser to drill the patella and use a heavy wire suture to secure the tendon to the bone, rather than to trust to sutures passed through the capsule, as the line of separation was irregular, and the edges of the capsular tissues were very much frayed. Portions of the capsule adherent to the tendon were next sutured to the lower portion of the capsule by a number of chromicized catgut sutures. The fascia was then brought together by a number of chromicized catgut sutures, and the skin and superficial tissues by a second layer of sutures. The wound was dressed with a sterilized gauze dressing, and the knee-joint fixed by a plaster-of-Paris bandage, including the foot and thigh.

The patient did well after the operation. The bandage was trapped on the twelfth day and the sutures removed, as the wound was found healed.

The fixation dressing was retained for six weeks, and after this time the patient was allowed to go about on crutches. He was discharged from the hospital, August 11, 1904, at which time the attachment of the tendon to the patella seemed to be firm, and he was regaining the motion of extension of the knee-joint.

At the present time he walks well and has fair extension of the knee-joint.

Dr. Wharton added that at a meeting of the Academy last year he reported a somewhat similar case, in which the patient had suffered from a simultaneous rupture of both quadriceps extensor tendons, in whom, six weeks after the injury, he exposed the seats of rupture of the tendons and sutured them, and the patient recovered with absolute restoration of function.

GALACTOCELE.

DR. W. W. KEEN presented a woman, aged twenty-one years, who was admitted to the Jefferson Medical College Hospital December 14, 1903. She had had a lump in her left breast almost as long as she can remember, and believes that it began about the

time that her menstruation was first established at twelve to thirteen years of age. At first it was only about the size of a lady apple. She was confined March 8, 1903. When she was about three months pregnant, the tumor began to grow. At the time of her confinement, it was about twice as large as at the present time. After her confinement the tumor began slowly to shrink. The breast contained milk after her confinement, but the nipple was flat and retracted, and she did not nurse the child from that side.

When admitted to the hospital, the tumor occupied more than one-half of the left breast, involving all of the inner lower quadrant and parts of the two adjacent quadrants. It was ten centimetres in diameter, was rather firm, markedly lobulated, elastic, not attached either to the chest-wall or the skin. Apparently, the skin, however, is attached to the septa dividing the lobules. The nipple is flat but not retracted; milk can be expressed from the nipple. There are no glands perceptible in the axilla or neck. The urine is normal.

December 16 an elliptical incision was made, through which the entire breast was removed, but nothing more. The skin over part of it was so thin that, in spite of the utmost care, two of the smaller cysts were opened and their rich, creamy semifluid contents was discharged. A culture was taken from it, and the breast also was sent to Professor Coplin for examination. After its removal, it was found by section that the major part of it was one large galactocoele with a number of subsidiary cysts.

She made a perfectly smooth recovery, her highest temperature being 99.4° F. She was discharged one week after the operation with the wound entirely healed.

Practically the entire mammary gland was involved in the cystic change, the largest cyst being about six centimetres in diameter; many others being one or two centimetres. Examination of the milky fluid, which in some of the cysts was quite thick and creamy, showed it to be made up almost wholly of globules of fat, which gave the characteristic reaction of that substance with Sudan iii.

Professor Coplin and Dr. Ellis, by whom the specimen was examined, report that the microscopical appearances of the tumor after embedding and staining the sections with hæmatoxylin and eosin, hæmatoxylin and Van Gieson, Mallory's reticulum stain,

toluidin blue and Weigert's elastic tissue stain, show some increase of the inter- and intra-lobular fibrous tissue, though this is not at all a prominent feature of the specimen. The most conspicuous change in the stroma is a marked periacinous infiltration of mononuclear cells, practically all of which are of the small, round variety. Similar, but less extensive accumulations are present around the ducts. Many of the acini and ducts show marked distention, several of the former having in certain instances coalesced to form cysts, some of which are of large size. These cysts are lined by one or several layers of cuboidal or slightly flattened cells and possess a fibrous wall which in many instances is quite thick. Some of the cysts are partially filled by large cells having a more or less deeply stained periphery, the interior of which is made up of granular material containing numerous small, transparent, circular areas that are apparently fat globules. In some of these cells the granules predominate, in others the fat globules are more numerous. Nuclei are present in some, being flattened and peripherally placed in those cells containing most fat. In addition to the distinct cells are large masses of debris evidently resulting from cell fragmentation. In some of the cysts there is distinct evidence that these large cells are in process of formation from the lining cells which increase in size, become globular, and finally show within them the presence of fat.

Sections stained for elastic tissue show no evident increase in that tissue, though there is possibly some splitting of the elastic laminae of the blood-vessels.

To the diagnosis of galactoceles, Dr. Ellis, who made the examination, added "acute non-suppurative interstitial mastitis; slight chronic productive mastitis."

Dr. Keen said that he had reported this case of galactocoele, because in his experience it was extremely rare. He had amputated the breast fully 500 times in addition to seeing a large number of cases, probably 300 to 500 more, in which no operation had been done. This, so far as he remembered, was the only case of galactocoele that he had ever seen among these 800 to 1000 cases.

Almost all writers declare it to be rare; indeed, it is so rare that in some cases he had found practically nothing beyond a bare mention of it.

As to the pathology, Ziegler ("Special Pathological Anat-

omy," American edition from the eighth German edition by MacAlister and Cattell, 1897, Section xiii, p. 1100) says, "When one of the ducts of a milk-secreting breast is occluded or partially obliterated by some previous disease, the part of the duct behind the obstruction occasionally but not very frequently dilates into a milk-containing cyst, known as a milk-cyst or galactocoele. It does not usually lead to inflammation of the surrounding tissue; but in some cases changes take place in the milk, and these excite inflammation and proliferation in the fibrous stroma. According to Küstner, the mammary tissue may even soften and break down into pulpy detritus from such inflammation."

Sometimes they are attributed to injury. Much more commonly they begin soon after confinement during lactation.

Dennis, in his "Text-Book of Surgery," quotes a case by Atlee which began sixteen months *before* the patient's confinement, and another from Bouchacourt, which began twenty-four years after her last confinement. Each of these cases clearly began independently of normal lactation. In the present case it seems probably to have had some connection with the tumor which developed at the time when menstruation first began, when she was twelve or thirteen years of age, and therefore about six or seven years before her present pregnancy. It is to be noted that a year after her marriage, she had a miscarriage at two and one-half months. She did not notice that that pregnancy had any effect upon the tumor, very probably because it was terminated by accident before the breasts became functionally active. She is an unusually intelligent colored woman and gave a very clear history.

The symptoms and diagnosis can be practically considered together. The appearance of the tumor is usually rather sudden, usually soon after parturition, or at least during lactation, without any inflammatory changes, and with only the pain and discomfort incident to the tension and weight. Some of these tumors become excessively large. Scarpa reports one in a patient just the same age as the one reported which occurred ten days after her confinement and from which ten pounds of milk were evacuated. Milk was demonstrated to be present in the breast of the present case by pressure upon the tumor, which caused the milk to escape from the nipple.

The tumor often varies in size, as was indicated in the present case. She stated that at the time of her confinement the tumor was

twice as large as when she was admitted to the hospital. It had slowly shrunk after her confinement, doubtless from the absorption of the watery part of the milk.

The contents of such tumors varies extremely: sometimes it is like simple human milk; sometimes, when the watery parts have been absorbed, it is changed, as in this case, to an extremely rich cream almost as thick as castor oil. Gross states that they may be filled with what appears to be pure oil which coagulated into a substance resembling lard, intermixed with crystals of margarine. In other cases the contents are like butter or cheese. In other words, all or any of the various products from milk may be present.

As to treatment, sometimes aspiration or drainage is recommended. No tumor so large as the present one, and with so many independent cysts, could by any possibility have been treated by either of these means successfully. Moreover, as was seen by the more minute microscopical examination of Dr. Ellis, the entire breast was permeated with these cysts even in those parts which were not visibly enlarged. The determination, therefore, to treat it by amputation of the entire breast seems to be amply justified. If a galactocoele is incised and drained, especially if this is done during lactation instead of waiting until lactation is terminated, it is very apt to result in a milky fistula, or, if by any possibility infection takes place, an abscess of the breast develops.

DR. WILLIAM L. RODMAN said he had seen but one case of lacteal cyst, which occurred in a married white woman of twenty-five years. This case differed from the one reported by Dr. Keen, inasmuch as the patient had never borne children, and, so far as known, had never been pregnant. Instead of there being a single cyst, there were multiple cysts; some very small, others as large as a small walnut. The upper and outer quadrant of the breast was chiefly involved. Microscopic examination by Dr. McFarland showed that the tissue surrounding the cysts was the site of a marked interstitial mastitis. Before operation, the masses were so hard that the diagnosis of multiple fibromata was made. Removal of the entire breast was insisted upon and performed. Incision of the breast after removal showed the presence of milk, and no surprise was occasioned by the pathologist's report of galactocoele. These cases are exceedingly rare, particularly in persons who have never been pregnant. They usually take the form of a single

globular swelling behind the areola, due to the dilatation of a duct. Dr. Rodman agreed with Dr. Keen that the removal of the entire breast is the proper treatment in such cases as he had. Aspiration or even partial removal is not at all satisfactory in multiple cysts.

GASTROPLICATION FOR DILATATION OF THE STOMACH.

DR. W. W. KEEN reported the history of a man, aged thirty-one years, who was admitted to the Jefferson Medical College Hospital at the instance of Dr. Dunn, of Clifton Heights, Pa., on April 6, 1900. His father died of pneumonia at fifty-three; his mother and one sister are living and well; two sisters are suffering from pulmonary tuberculosis; his paternal grandmother died of cancer of the breast. He has never had any serious illness since childhood. He has used alcohol and tobacco in moderation. He states that he has had a weak stomach all his life, and for over a year has had a burning pain in the stomach below the ensiform cartilage, somewhat to the left of the middle line. Soon after taking food, the stomach becomes very sore, and the contents are often regurgitated into the mouth. He only vomits when the acidity becomes very great, and this is usually three to four hours after taking food. He has never vomited any blood. The gastric pain is not affected either by the taking of food or the vomiting of the food. He never remembers vomiting any food eaten one or more days prior to vomiting. A year and a half ago he weighed 210 pounds, his present weight is 180 pounds. His appetite is good, his bowels are habitually constipated, so that very often he does not have a stool for nearly a week. He has at times noticed dark material in the fæces.

Urine clear, amber, 1022, acid, no albumen or sugar, urea 2.3 per cent. Heart, lungs, and the abdominal viscera were normal, excepting the stomach, which is markedly dilated.

Three days after he entered the hospital his stomach was washed out with sterile water; the contents were not offensive. A test meal was then given and free HCl found, but no lactic acid. On the next day, four pints of sterile water were introduced into the stomach before he complained of discomfort. After the stomach was emptied of the water, eighty-four ounces of air were introduced through the stomach-tube before he complained of discomfort.

The greater curvature of the stomach lies a handbreadth below the umbilicus.

Operation, April 11, 1900. A vertical incision was made three centimetres to the left of the middle line; the stomach was drawn out and found greatly dilated. A forefinger was easily passed through the pylorus by invaginating the wall of the stomach. The stomach was then folded on itself by three rows of continuous Lembert sutures of silk, the last row of sutures bringing the greater curvature nearly up to the lesser curvature. The abdomen was then closed.

His highest temperature after the operation was 99.6° F. He was discharged from the hospital, May 3, in excellent condition. He could then eat food without regurgitating it, and the pain which he had noticed before the operation had entirely disappeared.

On account of an accident, he reported at the hospital again on February 25, 1904, nearly four years after the operation. His stomach has never given him the least trouble since the operation.

Dr. Keen remarked that the operation of gastroplication was of very recent origin. The first paper was by Bircher (*Correspondenzblatt für Schweizer Aerzte*, 1891, p. 713), and in this country independently by Weir (*Transactions of the American Surgical Association*, 1892, p. 149). This makes it desirable that we should know definitely the remote rather than the recent results of operation. Recovery, of course, by modern surgical methods is practically assured; but whether the operation will benefit the patient is quite another matter; hence he was glad, after the lapse of four years in this case, to report the final success of the operation in relieving the patient from all his discomfort.

DR. WILLIAM L. RODMAN believes that the so-called cases of atonic or myasthenic dilatation of the stomach are rare; very generally, mechanical obstruction at or near the pylorus is the etiologic factor. The operation of gastroplication has a distinct field, but modern research has made this a more restricted field than even five years ago. The case reported by Dr. Keen indicates that the operation was not only indicated, but completely successful in every way. Dr. Rodman believes that Moynihan's is perhaps the best method for performing gastroplication.

DR. LE CONTE said that on purely theoretic grounds the operation of gastroplication did not appeal to him as a reasonable me-

chanical procedure. When dilatation of the stomach exists without pyloric obstruction, it is due to gastroptosis with accompanying atony of the stomach wall; in other words, the gastroptosis preventing the complete emptying of the stomach, the food retained produced the atony of the stomach wall. Under such circumstances the dilatation would affect equally the anterior and posterior walls of the viscus. By gastroplication the anterior wall of the stomach is alone reefed up, lessening, to be sure, the size of its cavity, and at the same time bringing the greater curvature nearer to the lesser; but the posterior wall is not dealt with, and the dependent portion of the stomach is simply changed from the greater curvature to some point on the posterior wall. The case which Dr. Keen has reported shows that such an operation is sometimes followed by most excellent results; but it would seem to the speaker that the dilated and thin posterior wall would remain as a constant menace for the reproduction of the symptoms. To the speaker's mind, the ideal mechanical procedure would be to drain the most dependent portion of the stomach by a posterior gastro-enterostomy, in this way placing the organ at rest and permitting the muscular fibres of the wall to regain their tone. Gastroplication only in part overcomes the mechanical condition present. It decreases to a certain degree the size of the stomach, and at the same time elevates it slightly, but it does not place it at rest or increase the opportunity for development of its muscular fibres.

DR. JOHN H. GIBBON said he had assisted Dr. Keen in the case of gastroplication reported, and, though they expected to find obstruction at the pylorus, careful search revealed none. In cases of atonic dilatation the stomach increases in size because it is unable to empty itself; gastroplication relieves the condition by securing drainage. Such a large percentage of cases, however, are due to irritation, if not actual ulceration and obstruction, at the pylorus, that gastro-enterostomy is the operation of choice in most cases. For performing this operation, Dr. Gibbon has in three cases used the Doyen clamps with very satisfactory results. With these appliances, posterior gastro-enterostomy can be performed very rapidly; in his first case the entire operation occupied but thirty-five minutes.

DR. KEEN, in closing, said that absolutely no obstruction was present in the case reported, the dilatation apparently being due to weakness of the muscular coat of the stomach. He did not under-

stand the objection of Dr. Le Conte to gastroplication; that operation reduces the size of the stomach, shortening both walls of the organ. In some reported instances only one row of sutures has been applied at the junction of the greater and the lesser curvatures. He believes that the employment of three rows, the upper (and last) one at the lesser curvature, is better technique. The whole question regarding the value of the operation in the case reported is one of fact; the result, so far as relief of the patient is concerned, could not be better. This is the only instance in which Dr. Keen has employed gastroplication. In reply to a question by Dr. Roberts, Dr. Keen said that he did not know what change occurred in the mucous membrane of the part of the stomach that was turned up. Replying to Dr. Taylor's question as to whether he would at the present time perform gastroplication or gastro-enterostomy for dilatation of the stomach, Dr. Keen stated that he would employ the former method in case of dilatation not due to pyloric obstruction (Keen: Cartwright Lectures on the Surgery of the Stomach, *Philadelphia Medical Journal*, 1898, Vol. i). His attitude towards gastroplication is largely due to the success of the operation in the case reported, as the entire number of cases on record is not large. In the Cartwright Lectures in 1898 he had collected fifteen cases with one death. In cases of dilatation of the stomach due to obstruction he would not use gastroplication, but would employ either Finney's method of gastro-duodenostomy or posterior gastro-enterostomy.

A NEW METAL ANASTOMOSIS BUTTON BY JABOULAY, OF LYONS.

DR. W. W. KEEN exhibited specimens of Jaboulay's modification of the Murphy button. Dr. Keen believes that in two respects it is an improvement on the original: 1. The weight is considerably diminished; 2. Of equal or even greater importance is the fact that the caliber is decidedly increased. In buttons of the same external dimensions the Murphy pattern has a caliber of one centimetre, the Jaboulay of one and one-half centimetres. This, of course, greatly increases the carrying capacity of the appliance.

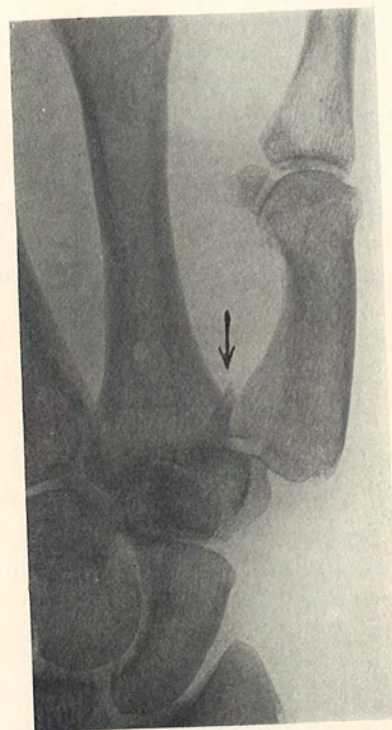


FIG. 1.—Fracture of metacarpal and subluxation. From boxing. Right.

SUBLUXATION AND FRACTURE AFFECTING CARPOMETACARPAL JOINT.

DR. GEORGE ERETY SHOEMAKER said that, five weeks after injury, a young man applied on account of a painful condition of the right thumb, due to an injury which had been produced in boxing with gloves by catching the point of the thumb. The carpometacarpal joint was partly dislocated, and on being reduced by pressure immediately assumed its faulty condition. There was a mild arthritis present with swelling and redness. Treatment had been neglected, and the joint had become exquisitely painful as a result. There was obscure joint crepitus on manipulation, but no bone crepitus. Use of the part in writing had become very painful and was followed by prolonged aching. The presence of fracture could only be proven by the X-ray, which demonstrated chipping off of a sharp longitudinal fragment five-sixteenths of an inch long from the inner edge of the condyle of the metacarpal bone. (Fig. 1.) The fragment was evidently within the capsule, and probably could have been adjusted by manipulation, or held in place by a dressing, if it had been seen soon after the injury. Treatment was directed to relief of the arthritis present and slow recovery ensued, though, owing to the interval before beginning treatment, splinting and strapping did not hold the fragment. For several months the joint was likely to become painful if used much. An X-ray photograph was taken eight months later, which showed the fragment still separated. Absorption no doubt would be the ultimate result. The condition of subluxation of this joint is one which is familiar to boxers. When, as in this case, chipping of the side of the bone has occurred, the joint is likely to be permanently weakened, as far as liability to repetition of luxation or subluxation is concerned.

In this case the same joint had been twice before injured slightly, but complete recovery from symptoms had taken place. The element of fracture was evidently a new one, as the angles of the fragment were very sharp. Though obscure bony crepitus might have been obtained soon after the injury, this is an instance in which the true condition would be impossible of demonstration without the X-ray.

FRACTURE OF THE LOWER END OF THE RADIUS.

Thin plate split from posterior surface into radiocarpal joint.

DR. SHOEMAKER presented an X-ray photograph, saying that it represented the left carpus of a woman aged forty-two. The injury resulted from a fall upon the hand. (Fig. 2.) There was severe pain at the wrist-joint, but no deformity and no crepitus. According to the photograph, a rectangular thin plate of bone in size approximately a half-inch by one inch has been chipped or split from the posterior surface of the lower end of the radius, and displaced by sliding about two lines towards the ulna, and the same distance upward. The fracture extends into the joint.

There was no transverse fracture, no silver-fork deformity; and firmly grasping the lower end of the radius while an attempt was made to move the upper fragment gave no crepitus and no preternatural mobility.

This fracture appears to differ from the rare Barton's fracture in that the smaller fragment consists of a thin layer of bone only, having the same width as the head of the radius. The thin character of the fragment is demonstrated not only by its translucent appearance in the photograph here shown, but by a second photograph taken three months later (Fig. 3), which showed no trace of the fragment where it had slid over towards the ulna. Absorption had apparently taken place. Recovery was accomplished with good motion, though pain was persistently present during the earlier weeks, probably due to the joint injury.

DR. GEORGE G. ROSS said that systematic X-ray examination of all injuries involving the joints is made at the German Hospital. Upward of 2500 are now on record, 1500 of which have been reported. Dr. Ross believes that the older ideas regarding the nature of sprains should be revised, as in the great majority of instances spicules of bone are torn off, converting the injury into a sprain-fracture. For this reason sprains should be treated as fractures. This method is employed at the German Hospital, and results in recovery without excessive callus formation and persistent pain, which are sequels of many cases treated only as ordinary sprains. A second point emphasized by Dr. Ross was that among the 1500 cases previously reported there were fifty-two of primary fracture of the carpal bones and a number of the tarsal bones. In his recent work, Scudder states that the scaphoid and semilunar bones have each two centres of ossification. Dr. Ross



FIG. 2.—Fracture of left radius.



FIG. 3.—Three months after injury.

does not agree with this statement, as special efforts have been made to determine that point; skiagraphs from both sides have been made in all cases of injury, and also in healthy children, and double points of ossification have not been found. Dr. Ross, in conclusion, urged the importance of systematically X-raying all cases of sprain.

DR. W. W. KEEN said there was a great deal of truth in the remarks of Dr. Ross, though he had not observed that fractures accompanied sprains so frequently as was stated. He mentioned a case of sprain-fracture of the inner malleolus of the tibia that could not have been diagnosticated by palpation (*Philadelphia Medical Times*, April, 1871); the fracture was discovered after the leg had been amputated because of other wounds. Dr. Keen believed that Mr. Callender first used the term "sprain-fracture."

DISLOCATION OF SEMILUNAR CARTILAGE.

DR. W. W. KEEN made a verbal report of this case. The patient was a young man of twenty, who, while playing basket-ball two and one-half weeks previously, had wrenched his left knee; since that time he could not straighten his leg beyond an angle of 135 degrees. Examination revealed marked tenderness over the internal interarticular fibrocartilage, and the joint was hot and painful. There was no effusion into the joint and no irregularity of the bones. The patient was anæsthetized with chloride of ethyl and attempts made to straighten the leg. Twice this was unsuccessful, but each time adhesions gave way. On the third attempt, reposition of the cartilage and the femur was felt, and the "snap" was distinctly heard. The leg could then be flexed and extended in a perfectly normal manner. This case is interesting because of the readiness with which the dislocation was reduced two and one-half weeks after injury. In this respect it was a rather unusual experience. [A week later the patient was seen and the knee was entirely well.]

GASTRO-ENTEROSTOMY FOR CARCINOMA INVOLVING THE STOMACH, OBSTRUCTING THE PYLORUS.

DR. ALFRED C. WOOD exhibited a specimen showing the result of a gastro-enterostomy sixty-eight days after the operation.

The patient was a man, aged forty-nine years, widower, white, blacksmith, born in Ireland. (University Hospital, No. 2377.)

His father, mother, one sister, and four brothers are living and well.

The patient's medical history was as follows: He had had measles, chicken-pox, and typhoid fever. For the past ten years he had suffered from dyspepsia and flatulence, which were frequently so bad that he could not sleep at night. About eight months ago his dyspepsia was distinctly worse and marked tympanites developed. He vomited his food frequently. About this time blood was frequently observed in the matter vomited and also in the stools. The abdominal distress became a severe pain, which was always aggravated by taking food. The symptoms gradually became more pronounced until about two weeks ago, when he began to vomit everything he ate. He has slept but little at night and is much reduced in weight. About twelve weeks ago he had hæmorrhages from both the stomach and bowel which lasted over a period of two weeks; during this time there were three profuse hæmorrhages. He had been six weeks and four days in another hospital in this city, having entered about the middle of May.

The man was exhausted to the last degree from the repeated hæmorrhages and his inability to retain any food. He was so feeble when he entered the University Hospital that walking required a distinct effort.

Examination of the heart, lungs, and kidneys did not show any gross lesions. The abdomen was scaphoid except in the epigastrium and upper part of the umbilical region, where there was a large mass that could be seen even from a distance. The long axis of the mass was transverse, the breadth being three or four inches and the length nearly twice as much. It was moderately tender on pressure.

August 8, posterior gastro-enterostomy after the method of von Hacker was performed, a medium size Murphy button being employed to economize time. A few Lembert sutures were added to make the union more secure. An entero-anastomosis was not performed. The wound was closed by through-and-through sutures.

The progress of the case after operation was all that could have been desired. Peptonized milk was allowed on the second day on account of the exhausted condition of the patient. On the eighth day solid food was given, and a few days later the full ward diet was permitted, the appetite being very good. There was but a

single attack of vomiting from the time of operation until the end; this was on September 24, forty-seven days after the operation, and was probably due, as the patient suggested, to over-indulgence in food.

The button was passed without difficulty on the twenty-seventh day. There was some increase of strength and vigor at first, but the improvement was not progressive. About October 10 the abdominal pains from which the man had been quite free returned. On the 12th he was quite weak, and vomited a little blood. On the 14th there was a moderate hæmorrhage from the stomach, and a very large amount of blood was passed by the bowel; the patient being severely shocked in consequence. The hæmorrhages recurred on the 15th, from which the patient died.

An autopsy was performed and the stomach and attached bowel secured. Owing to the large tumor mass and the universal adhesions, the specimen could not be removed satisfactorily, but was considerably mutilated. The stomach was distended with clotted blood. The carcinoma had eroded the wall of the stomach and had caused the fatal hæmorrhage. Numerous metastatic deposits were seen on making sections of the liver.

The specimen is of especial interest on account of the size of the opening between the stomach and intestine, which is quite twice the diameter of the button employed. The union is in every way all that could be wished for.

The question is frequently raised as to whether it is worth while to perform an operation on patients suffering from a malady that must end fatally in a short time. In the present instance the result fully justified the course taken. The patient was asked some days after the operation if he felt satisfied up to that time. He replied that the relief from hunger and the absence of pain and vomiting experienced during any one day fully compensated him for all the risk and inconvenience he had incurred.