three months the axillary glands became involved, and skin over the breast became tense, reddened, and indurated. Death occurred in nine months, with a development of a similar growth in the right breast.

CASE XI (GROSS[6]).—A sterile, married woman of thirty-nine had a tumor which had acquired the volume of an egg in less than two months and contained an abscess as large as a filbert, filled with greenish pus. The abscess formed at the expense of the infiltrated connective tissue, the epithelial cells themselves not participating in the morbid process.

LITERATURE.

[1] Volkmann: Beit. z. Chir., 1875, p. 319.
[2] Williams, W. R.: Diseases of the Breast, p. 318.
[3] Billroth: Clir. klinik Wien., 1871, p. 258.
[4] Rodman, W. L.: Diseases of the Breast, p. 289.
[5] Fox, Herbert: Personal communication.
[6] Gross, S. D.: Tumors of the Mammary Gland, p. 142.
[7] McFarland, Joseph: Personal communication.
[8] Rodman, W. L.: ANNALS OF SURGERY, 1909, vol. xlix, p. 150.
[9] Bloodgood: American Journal Medical Sciences, 1908, vol. cxxxv, p. 157.
[10] Sheild, A. M.: Diseases of the Breast, p. 358.
[11] Morrant, Baker: St. Bartholomew's Hospital Reports, vol. xxxii.
[12] Bryant, T.: The Diseases of the Breast in Wood's Medical and Surgical Monographs, vol. x, p. 188.

STATED MEETING, HELD APRIL 3, 1911

PERFORATING ULCER OF THE SIGMOID FLEXURE OF THE COLON.

DR. GEORGE G. ROSS gave the history of a woman, thirty-five years of age, who was admitted to the Germantown Hospital in a condition of profound shock, with a rigid, tender, and distended abdomen. Symptoms had been developing but a few hours, patient having been awakened during the preceding night by pain in the lower abdomen and nausea.

An incision into the peritoneal cavity was made through the right rectus muscle. As soon as the peritoneum was incised, a gush of rather thick, yellowish fluid came forth, bringing with it lumps of hard fecal matter. There was marked redness over all peritoneal surfaces of the lower abdomen. At this point the etherizer gave notice that the patient's condition was critical. She was cyanosed, pulse uncountable, and respiration suddenly became irregular in both rate and rhythm. The operation was started under primary anæsthetic and had been under way for about five minutes. Ether had to be discontinued on account of the patient's condition. A glass drainage tube was inserted into the pelvis, and the wound closed with three through-and-through silkworm gut sutures. The patient was given an intravenous injection of normal salt solution while still on the operating table. She died about twelve hours later.

Immediately after she died, the stitches were cut, the tube removed, and a search made for perforation of the large intestine. This was considered as necessarily present, as the patient had solid fecal matter free in the peritoneal cavity. Eventually the perforation was found about the middle of the sigmoid flexure of the colon on the inner or the right side, about one inch from the mesosigmoid. The perforation was almost perfectly circular and large enough to admit the thumb of a medium sized hand up to the distal joint.

The entire colon from the ileocæcal valve to the site of the perforation was impacted with fecal matter of the consistency of hard putty. There was no evidence of active tuberculosis, although there was one calcified mesenteric gland found.

CARCINOMA OF THE APPENDIX.

Dr. George G. Ross reported the history of a man, aged thirty-five years, who was operated upon for chronic appendicitis. When the appendix was exposed, it was found to be bound down by adhesions, and about its middle there was found a small mass about the size of a small pea and in appearance not unlike a caseous tubercle, bulging from the serous surface. Adjacent to the appendix, in the mesentery of the small intestine, there was found a mass of lymph-nodes, hard, densely adherent, about one inch in diameter, and about three inches in length. Smaller nodes were palpable in different localities of the peritoneum. The appendix was removed, the stump buried with a few linen sutures, and the abdomen closed in layers without drainage. A small amount of serous fluid was noted in the peritoneal cavity.

The stitches were removed on the sixth day. The incision healed nicely. The patient was discharged on the tenth day. One week later he was readmitted complaining of severe abdominal pain and diarrhœa. Examination revealed that the mass in his abdomen had increased rapidly in size, and that a mass in about a corresponding position under the left rectus was palpable. There was felt also a small mass in the abdominal wall, precisely under the left half of the umbilicus and extending to the left for about one inch. This mass was apparently about one inch in diameter. A section of it was removed for study. The abdomen on this admission was very tense and contained free fluid. Pain was very severe, requiring morphine.

Pathological Report on Appendix.—Dr. Bradbury reported as follows: Small nodule about two mm. in diameter, bulging from about the middle of appendix on serous surface. Microscopic examination revealed this to be a carcinoma simplex, not involving the mucous coat.

The nodule removed from abdominal wall was also reported to be a carcinoma simplex.

COMPOUND COMMINUTED FRACTURE OF THE FOREARM.

Dr. George G. Ross presented also a man who had sustained a compound comminuted fracture of both bones of the forearm, the result of an accident in a gymnasium. When seen by Dr. Ross two weeks after the accident, there was absolutely no union, both bones were badly involved. After waiting another week in order to give the fragments time to harden up, he then cut down

on the radius and wired it with heavy silver wire. Nothing at all was done to the ulna. In six weeks the patient was playing the pipe organ.

TUBERCULOUS ARTHRITIS OF THE ELBOW.

Dr. Ross presented a man, saying that he was operated on originally by Dr. Deaver, who took out a portion of the elbow-joint. Some time after that there were persisting sinuses, with extensive necrosis of the heads of the radius and ulna and end of the humerus. Dr. Ross resected the ends of all three bones, and interposed superficial fascia between them. Patient now has a very good joint; all ankylosis has disappeared.

POSTERIOR GASTROJEJUNOSTOMY DONE TWO YEARS AFTER OPERATION FOR PERFORATING GASTRIC ULCER.

Dr. Morris Booth Miller presented the man whose case was detailed by him at the meeting of February 1, 1909. Operation was done nine hours after perforation, and after a stormy convalescence there was apparently a perfect recovery. He was well for some weeks, but then commenced to develop gastric symptoms again, which, continuing, made it necessary last January to do a formal gastrojejunostomy. He illustrates the point which Dr. Deaver made at the meeting referred to, namely, that in these cases a gastrojejunostomy should have been done at the primary operation. However, Elliot has called attention to the fact that certain cases get well and stay well without that operation. This patient from the secondary operation made an easy recovery, and has had no subsequent trouble.

Dr. Henry R. Wharton said that he thought that in the majority of cases the patients are in poor condition for any prolonged operation, and as to the fact that doing a gastro-enterostomy at this time does not always prevent a second perforation, he recalled a case of perforated gastric ulcer occurring in this city upon which Dr. Deaver operated and at the same time did a gastro-enterostomy; a year later the patient had a second perforation, which Dr. Wharton closed; a little over a year after the second perforation, the patient had a third perforation, for which he has recently been operated upon. As regards the question of doing a gastro-enterostomy at the time the perforation is closed, this is a matter upon which there is some difference of opinion among surgeons; one of the first cases

he operated upon for ruptured gastric ulcer, which was closed six hours after the perforation, has remained well up to the present time, simple closing of the perforation in this case being followed by a permanent cure.

With regard to the liability to second perforation, this is always a possibility. He operated about a month ago upon a case of perforated gastric ulcer, who at the time, about sixteen hours after the perforation, was in very desperate condition. He found the perforation, closed it, and the man did well for nineteen days, then he had a vomiting spell and a second perforation occurred which was closed twelve hours after the first symptoms. The patient only lived eight hours after this second operation.

Dr. George G. Ross reported the case of a man about fifty years of age who had a perforated duodenal ulcer, who was operated upon in an hour and a half after the onset of pain. In this case he would have certainly done a gastro-enterostomy had the patient's condition warranted, but by the time the perforation had been located and was closed the etherizer reported the man as about dead. He therefore did not think he was warranted in doing a gastro-enterostomy, but all his efforts were given to resuscitate the man, who finally recovered, and the wound was closed with pelvic drainage. A week later patient had a recurrence of symptoms, and from these he finally died. A postmortem showed an ulcer, horse-shoe shaped, an inch and a half long. The primary perforation which Dr. Ross had closed was in the stomach end and the second perforation was in the duodenal end. There were four other ulcers on the posterior wall of the duodenum. Had a posterior gastro-enterostomy been done the man's life might have been saved, but under the circumstances he did not feel warranted in prolonging the operation.

Dr. John H. Jopson recalled the case previously reported by him before the Academy, of perforated pyloric ulcer, operated upon two years ago last November, it being one of five cases upon which he had operated. This patient entered the hospital just two years after the original operation for perforation, and he did a gastro-enterostomy for a recurrence of symptoms of ulcer and pyloric stenosis. Since then patient has remained well.

EVISCERATION THROUGH STAB WOUND IN ABDOMEN.

Dr. Morris Booth Miller reported the history of a man, aged twenty-five years, who was admitted to the Polyclinic Hospital on October 8, 1909, soon after having received a stab wound of the abdomen. In the right lower quadrant was a clean-cut wound six inches or more in length, which extended through the entire parietes. It commenced about two inches above the anterior superior iliac spine, and went downward and inward toward a point midway between the umbilicus and the pubes. From it protruded enough coils of small intestine to more than fill the crown of a Derby hat. This mass had not only been contaminated by contact with the clothing, but it was also covered with intestinal contents exuding from coincidental perforations of the gut.

He was immediately taken to the operating room and etherized, his clothing was removed, and the character and extent of the wound was examined. Absolutely no attempt was made to cleanse the abdomen, as to have done so would have involved the replacement of the infected viscera within the abdomen. Instead of the usual scrubbing, the adjacent skin, including the edges of the wound, was covered with several layers of wet towels. The bleeding was traced to the deep circumflex iliac, a vessel in this patient of unusual size and capacity. It was controlled by ligature. There were three intestinal perforations, the largest of which was three-fourths of an inch long; two were about an inch apart, and the other some distance away. These were turned in and closed with Lembert sutures of silk. In addition there was a two-inch slash in the mesentery close to the intestinal border, which was also closed with silk. The toilet was completed by a very thorough and copious flushing with warm normal salt solution, care being taken to remove without insult to the peritoneum all unclean particles as far as possible. The mass of intestine was then returned to the abdomen, and the wound closed with tier sutures of catgut. Drainage was accomplished by the means of two split rubber tubes, one going through a median stab wound down to the rectovesical space, the other passing into the right flank, while close to these were placed two or three superficial wicks of gauze.

The patient was put in bed in the semisitting position of Fowler, and continuous enteroclysis was instituted. He reacted well, but during the night was restless and vomited a considerable quantity of semidigested food. During the night two coils of intestine again escaped outside of the abdomen. He was again etherized, placed in the Trendelenburg position and the loops of

gut returned. This time the abdomen was closed with through-and-through sutures of silkworm gut, suturing the peritoneum with a separate catgut stitch.

The subsequent history was uneventful. There was some infection in the superficial layers of the wound which delayed complete healing, but there was no general peritonitis and no localized peritoneal reaction of any moment. He was discharged cured on the thirtieth day.

STAB WOUND OF CHEST.

DR. MILLER related the history of a man, aged thirty-nine years, who was admitted to the Polyclinic Hospital on January 20, 1911, suffering from a stab wound of the left chest. He was not appreciably shocked, but complained of intense pain in the thorax; temperature was 98°, pulse 42, respirations 18. He stated that immediately after being wounded he had some difficulty in breathing, but this was not appreciable when first examined. Within an hour after admission he expectorated a small quantity of bloody mucus, and soon after there commenced a hacking, spasmodic cough which persisted more or less until his death, fifteen days later. Between the seventh and eighth ribs and just in front of the posterior axillary line there was a transverse knife wound about half an inch long; in this neighborhood there was an area three or four inches in diameter, which was slightly emphysematous. As the wound entered the thorax after passing through an unusually thick cushion of muscles, it seemed hardly likely that penetration had been very deep. However, the patient told us that he had been stabbed with a dirk having a six-inch blade, and he thought it went in up to the hilt.

Examination of the chest showed restricted movements on the left side, slight dulness on percussion over an area the size of the palm, many fine and coarse râles, but it was clear that no lung collapse or extensive intrathoracic hemorrhage had occurred. The breath sounds toward the base were unimpaired. The slow pulse was noted, and the question of heart injury was considered. The cardiac area of dulness was not increased, both the sounds were clear, and aside from somewhat labored action there was nothing abnormal discovered. Despite the history, which pointed to a deep wound, it was thought that only the superficial portions of the lung were involved. The chest was immobilized with adhesive plaster, and quieting doses of opium were administered.

For twenty-four hours his condition seemed satisfactory and he made no complaint except of the hacking cough. On the twenty-second the temperature suddenly shot up to 104.8. Even with this fever there was no marked or, indeed, proportionate increase in the pulse or respiratory rates, the pulse being about 100 and respirations 24. Examination of the chest showed a widened area of dulness, five or six inches in diameter, over which distant bronchial breathing was heard. It was apparent that there was some pneumonic consolidation. Expectoration was profuse and rusty brown in color. Leucocytes numbered 16,300.

In long remissions which gradually decreased, his temperature fell to about normal on the twenty-ninth. By this time the external wound had completely healed and all the emphysema had disappeared, but the area of pulmonary dulness remained the same in size, and physical signs were unchanged. Expectoration was still free, but its brownish, blood-tinged character had entirely cleared up. The patient looked well, slept well, and made no complaint of pain or discomfort.

On February 1 he was transferred to the service of Dr. John B. Roberts, who has supplied the subsequent data. On that day his temperature rose in the afternoon to 103°, to fall to normal the next morning, and thereafter to run slightly subnormal until the end. For the first time he commenced to show signs of respiratory distress and wanted to sit up in bed. With a quickened respiratory rate the pulse remained relatively slow and gradually grew weaker. It was soon realized that his condition was rapidly becoming critical, but the explanation was not so clear.

The patient continued to grow worse and died early on the morning of February 4.

At autopsy the pericardium was found to be greatly distended and incision into it was followed by the escape of fluid under great tension, this fluid being cloudy, yellowish brown in color, purulent, containing a large amount of fibrin, and probably measuring from one to two litres in amount. The pericardium and epicardium were covered with a thick deposit made up of fibrin and detritus. It was impossible to determine the presence of a wound extending into the pericardium from the lung.

Examination of the left pleural cavity revealed a general adhesion of the parietal and visceral pleuræ everywhere, so that it was necessary to remove the pleuræ with the lung in exposing

the latter. At the position of the external scar the course of the punctured wound could be followed through the chest wall, pleuræ, and lung to a point possibly about 3 cm. from the external surface of the latter. Corresponding to the position of the punctured wound the pleuræ were separated from each other by an organized blood-clot, over an area of about 15 cm. in diameter and about 1.5 cm. to 2 cm. in thickness. There was no sign of suppuration to be found in the pleural cavity or the lung.

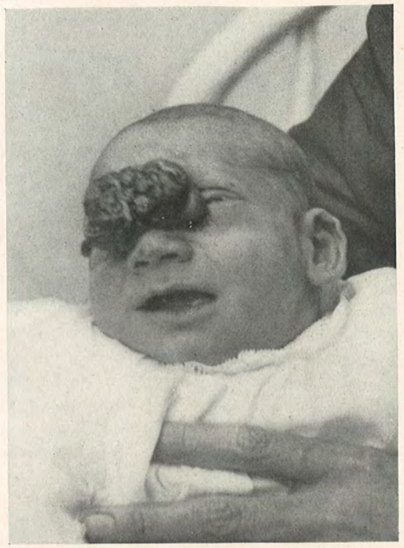
FRONTAL ENCEPHALOCELE.

DR. MILLER presented photographs (see Fig. 1) of a five-days' old baby who was referred to him from Dr. Hamill's clinic at the Polyclinic Hospital on March 15, 1911, suffering from frontal cephalocele. According to the nurse the mass had been the size of a small tomato at birth, and not unlike that vegetable in color and shape, but it quickly commenced to shrink and dry on its surface so that when seen it was a brownish, ulcerated, somewhat fœtid mass 2 x 1½ inches in area with an elevation of about an inch. It was located over the glabella and spread broadly over the nose; while the eyes were partially covered by the mass they were not affected. The base was broad and appeared to be more on the left side, so that it was diagnosed as of the naso-orbital type in contradistinction to the nasofrontal or naso-ethmoidal forms of frontal cephalocele. There was no pulsation, no fluctuation, and no difference in size was noted when the child cried.

According to Von Bergmann, whose classification is now generally accepted, any congenital protrusion of intracerebral contents through a defect in the skull may be termed as cephalocele. The defects through which these protrusions take place are either frontal or occipital, except very rarely a defect between the sphenoid and ethmoid may give rise to one which appears in the pharynx. These defects are at or close to the median line, though the visible protrusion may be slightly to one side.

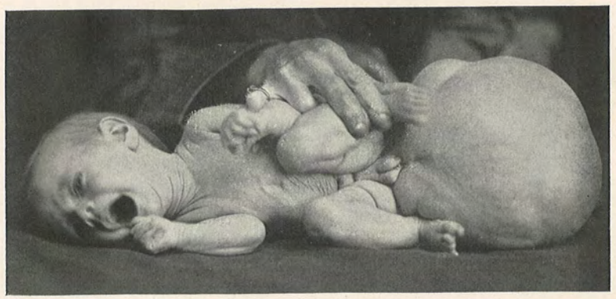
Frontal cephaloceles are divided as follows: nasofrontal, those in the region of the glabella; naso-orbital, those at the inner angle of the orbit; naso-ethmoidal, those below the nasal bones. Occipital cephaloceles are divided as follows: superior, where the defect is above the external occipital protuberance and where it may join the posterior fontanelle; inferior, where the defect is below the external occipital protuberance and where it may join the foramen magnum.

FIG. 1.



Frontal encephalocele.

FIG. 2.



Sacrococcygeal cyst.

Cephaloceles occur in three forms, of which hydrencephalocele is the parent type, and encephalocele and meningocele represent retrograde changes from it. Hydrencephalocele consists of arachnoid, a layer of brain tissue, and a cavity containing cerebrospinal fluid derived from the lateral ventricle with which it communicates. It is really a hernia of the lateral ventricle. Covering it are fascia and skin, the latter sometimes natural and sometimes so altered as to be scarcely recognizable. The dura and pericardium do not extend beyond the margins of the bony defect. Encephalocele is a protrusion of brain substance covered by arachnoid. There is no fluid in this form, save, rarely, where there may be a superficial cyst of the arachnoid. It only occurs in the nasofrontal region. In meningocele all brain tissue is absent. Beneath the arachnoid is a layer of cells of the same type as those lining the ventricles, but the communication with the ventricles is almost or completely cut off. In other words, a cyst forms in the subarachnoid tissue, and thickened pia surrounds the cyst. In no form of cephalocele does the dura play any part.

CONGENITAL SACROCOCCYGEAL TUMOR.

DR. ALFRED C. WOOD made some remarks upon the classification and pathology of congenital sacrococcygeal tumors as a preface to a report of a recent case, as follows:

A female child, two months and ten days old, was seen by him at the Charity Hospital, Norristown, Pa., in consultation with Dr. Charles H. Mann, and the family physician, Dr. George F. Hartman of Port Kennedy. Dr. Hartman furnished the following data: The child's father is twenty-three and the mother twenty years of age; both are healthy. The patient was the second child, the first being entirely normal. The labor began at 2 P.M., July 12, 1910. The head and shoulders were delivered at 3 A.M., July 13. Dr. Hartman was called at 10.15 A.M., and the delivery completed with great difficulty. A tumor was then observed attached to the sacrococcygeal region, measuring 19½ inches in circumference, and 18¼ inches from the base anteriorly to the base posteriorly (Fig. 2); this subsequent to the birth gradually increased in size and the child became more emaciated.

The tumor was globular in shape; the overlying skin was very thin, but otherwise normal in appearance. The surface was somewhat irregular in contour, the larger portion having the characteristics of a cyst on palpation, but here and there small areas were felt that were firmer, and apparently solid. The

coccyx could be felt on the posterior surface. It was curved backward instead of forward in the normal manner, and a firm, narrow body like cartilage could be traced for some distance from its tip. The anal orifice presented on the anterior surface and was directed forward. The tumor evidently had its origin within the pelvis; it had no connection with the spinal canal.

As the tumor was enlarging and the child failing, it was decided to operate at once. Ether was administered, transverse elliptical incisions made, and the cyst enucleated. The cyst wall was closely adherent to the rectum from the anus to the level of the promontory of the sacrum, and some time was consumed in effecting its separation, which was finally accomplished without wounding the bowel or opening the peritoneal cavity.

When the incision was sutured, the anal orifice was drawn back into approximately its normal situation, and the general appearance was nearly natural. The operation was not accompanied by any severe hemorrhage, but the amount of oozing from the innumerable points of the large wound was probably greater than appreciated. The child appeared to be in satisfactory condition when it left the table, but death occurred a few hours afterward. Before the operation the child weighed 15 pounds and some ounces; after operation it weighed less than 7 pounds.

The tumor was composed of one large cyst, with thick walls; here and there areas of increased thickness were noted, some of which were small cysts, others were solid. Th fluid was practically clear. Unfortunately, no minute study of the specimen was made.

Dr. John H. Jopson reported the case of a girl about fifteen years of age, who had grown up with this condition, had attended school, had her clothing modified to make it as inconspicuous as possible, and had even ridden a bicycle. The reason her parents sought surgical advice was because one of the cysts had become infected. He aspirated one cyst and drew off considerable fluid. The growth was almost as broad as the buttocks, and rested on the thighs as far down as the knees. Excision was indicated and was suggested, although the operative risks would have been great.

Dr. William J. Taylor said that in consultation with Dr. Mary Griscom he recently saw a child a little over two months of age with a tumor very similar to that described by Dr. Wood. It measured 2½ inches in diameter. As the child was apparently in perfectly good condition, and the mother very anxious to have something done, the child was etherized and he assisted Dr. Griscom in the operation. The tumor was removed with little or no difficulty. On examining the tumor after its excision he found that there were portions of the coccyx and little cartilaginous masses through it. It was partly cystic, partly fat and fibrous tissue, and partly, he believed, sarcomatous. He did not dissect it carefully as he wished to hand it over to the pathologist, who now has it for examination.

Although directly next to the anus, the wound has healed by primary union. (Since the meeting Dr. Taylor has learned the growth was a teratoma.)

PARAFFIN INJECTION AS A CURE FOR INGUINAL HERNIA.

Dr. Alfred C. Wood presented a specimen which had been removed from the inguinal region of a man aged fifty-five years. The patient was seen in consultation with Dr. S. H. Scott and Dr. Jackson Taylor of Coatesville, Pa.

The man stated that two years ago he had been induced to submit to an injection for the cure of a right inguinal hernia from which he had been suffering. Immediately after the injection, he noticed a large swelling in the neighborhood of the external ring, which has since persisted. The hernia was partially controlled, as it did not descend beyond the upper part of the scrotum afterward. The mass was about the size of a hen's egg, was freely movable, and could be pushed through the external ring into the canal with ease. The overlying skin was normal in appearance. One of the most annoying features according to the patient was the extreme mobility of the lump, which he said caused much more inconvenience than the hernia ever did. During certain muscular efforts, such as coughing, etc., the mass would be drawn up into the canal and forcibly projected downward. This action was plainly shown during the stage of etherization when the patient was breathing deeply; the lump moved upward into the canal and down like a shuttle with each respiratory cycle. The mass was excised. It was found to be in the loose connective-tissue layers of the cord and outside of the sac of the hernia. A capsule had formed by condensation of the connective-tissue layers about it. The sac of the hernia was removed, and the operation concluded according to the Bassini method for radical cure. Recovery was uneventful.

The specimen measured 5.5 x 4 x 3.5 cm., and on section was found to consist entirely of paraffin.