disturbance may lead to incomplete combustion and excretion of substances of the nature of aldehydes and ketones. Fifth, in the presence of fat necrosis, glycerin products, incompletely oxidized, may give the reaction. Sixth, impaired pancreatic digestion in the intestines may lead to absorption of certain substances that give the reaction.

Cambridge himself suggests that in the absence of pancreatitis, conditions accompanied by rapid tissue changes may produce substances giving the test.

CONCLUSIONS.

The conclusions that may be drawn at this stage of the investigation are limited. They are as follows:

1. It has been proved that inflammatory and destructive disease of the pancreas may give rise to the appearance of certain, as yet undefined, bodies in the urine, belonging possibly to the sugars or related compounds.

2. The reaction is not pathognomonic for disease of the pancreas, in the clinical sense.

Extensive clinical observations on the urine in pancreatic and other diseases must finally determine the value of the pancreatic reaction.

22 West Seventh Street.

Clinical Notes

A CASE OF EXTRAUTERINE PREGNANCY.

ROBERT L. GIBBON, M.D.

CHARLOTTE, N. C.

Patient.—Mrs. Q., aged 41, married seventeen years, had never been pregnant before unless a very indefinite history of miscarriage many years ago, be admitted as such.

History.—The last regular menstrual period occurred July 11, 1907. A few weeks later there was a flow from the uterus which was not very free, but persisted for one or two weeks, stopped, and then returned for a time. She was at home in Philadelphia at this time and was examined in the latter part of October by her family physician, who pronounced her pregnant. Returning to Lincolnton, N. C., she came under the care of Dr. Wise, who took her to the Presbyterian Hospital at Charlotte during the last week in November. At this time, about four months after the last menstruation, the patient had become very uneasy about her condition and feared an abdominal tumor.

Examination.—Examination disclosed an abdominal mass corresponding in size with the supposed stage of pregnancy. Bimanually ballottement was easily obtained, but the presenting part of the fetus was not readily made out. No fetal heart sounds were heard, but uterine souffle was pronounced. The diagnosis of pregnancy was confirmed and the patient returned home.

Subsequent History.—Nothing more was heard from the patient until May, 1908, when her physician told me that the patient had gone a month or more over her time, that fetal movements had entirely ceased for six weeks, although they had been vigorous and even annoying up to that time, and that the patient's general condition was not good.

May 6: She was brought to the hospital again, and the following history was obtained covering the period since the previous November: Abdomen continued to enlarge up to six weeks ago, when severe pains, of an intermittent character, came on and the patient, supposing she was in labor, summoned her medical attendant. Matters did not progress, however, and after a time the pains ceased. Fetal movements were not noted after this pseudolabor. From the fourth to the end of the ninth month the patient suffered continuously from abdominal pain and gastric disturbances. On several occa-

sions a membranous substance was discharged from the vagina, and on one of these occasions the membrane discharged resembled a cast of the uterine cavity.

Examination.—It was easy to make out by palpation the parts of a well-developed child. Vaginal examination disclosed the head presenting, it being felt apparently in the posterior cul-de-sac; the os was not patulous. In addition, two masses were felt through the abdominal wall which were supposed to be fibroids. Uterine souffle was absent.

Operation.—On May 9, the abdomen was opened in the median line. The omentum was found firmly adherent to two medium-sized fibroid tumors on the anterior surface of the uterus and completely prevented any view of the organs beneath. What was more surprising, however, was the condition of the omentum itself; it was almost perfectly black, as though on the point of becoming gangrenous. As a consequence, a large portion, about two-thirds, was ligated in sections and removed. The uterus was then seen to be enlarged to the size of a four-months' pregnancy, while behind and to the right was a dirty, brown colored mass, which on being opened disclosed a fully developed male child, in a somewhat macerated condition. In spite of the fact that the child had been dead at least a month, the placenta was found firmly attached and no effort was made to detach it, but instead it was found possible to remove about three-quarters of the sac, including that portion to which the placenta was fixed. The remaining portion of the sac was brought out at the lower angle of the wound, the edges clamped with forceps and the cavity packed. The abdominal incision was closed in the usual manner, except at the lower angle.

Result.—The patient ran a moderate temperature during the separation of the remainder of the sac, and developed a mild phlebitis of the right leg, but in other respects the recovery was uneventful. I am unable to explain the condition of the omentum, which may have been due to an infarction, but at time of operation its appearance gave rise to the gravest apprehension.

HYPERSENSITIBILITY TO HORSE SERUM.

MAX DREYFOOS, M.D.

CINCINNATI.

As a contribution to the reports of cases of reactions following the injection of antitoxic sera, I wish to add the following report. It is, I believe, the first case reported in which this reaction has followed the injection of tetanus antitoxin.

Patient.—A young man of 24 years, on June 16, 1908, sustained a punctured wound of his left foot by stepping on a rusty nail at an iron-yard. He went to the Jewish Hospital, where he was placed on the service of Dr. Joseph Ransohoff. Under local cocaine anesthesia a triangular-shaped area of skin and subcutaneous tissue about one-half inch deep, and containing the wound, was excised from the plantar surface of the foot, and the resulting wound thoroughly cleansed. Throughout the operation the patient was perfectly composed and was not distressed in any way.

Administration of Serum.—A prophylactic injection of 10 c.c. (1,500 units) of tetanus antitoxin was then given under the left breast, and a moist bichlorid dressing was applied to the wound.

Effects.—About one-half to one minute after the injection of the serum the interne bandaging the foot noticed that the patient began turning this foot from side to side, and then flexing and extending the knee. When asked why he did not keep his foot quiet, the patient replied very brokenly: "Oh—I wish—you hadn't—given—me—that—injection; the—operation didn't—hurt—me—but—that injection—makes me—feel so—sick." By that time (about two minutes after the injection) the restlessness became more marked, rapidly extending to trunk and head; the patient rolled from side to side and had to be held, to prevent his falling from the operating-table. His face was very pale, not cyanotic, and presented a very anxious expression; there was no froth at the mouth, and

his pulse was but slightly accelerated. He was very dyspneic and wanted to sit up in order to "catch his breath"; he complained of a sense of great constriction of his chest, especially on the left side, and in back, and wanted to be left on the table for a few minutes. He was, however, placed on the stretcher and wheeled to his room, and in spite of restraint struggled to assume a sitting position on the stretcher. After being in his room (five or ten minutes after the injection) he complained still more of the constriction and oppression in his chest, the pain in his back and the dyspnea, and asked to have some one press on his chest and support his back. Propping up on pillows afforded no relief; he tossed about in bed very restlessly and felt as though he were going to die. Twenty to twenty-five minutes after the injection he began to feel more easy, but was still greatly distressed and very restless. Later he was given a hypodermic injection of one-fourth grain of morphin, but this did not seem to influence the symptoms. The symptoms gradually abated, but were not entirely gone four hours later. At this time (8 p. m.) his temperature was 100.1 F., pulse 80. He was somewhat restless that night, but slept a good part of the time. The next day he felt perfectly well, apparently none the worse for his experience.

In this case there was none of the itching or putting of the skin noted in most of the cases, also no froth pouring from the mouth, nor cyanosis.

It is perhaps fortunate for all concerned that the patient was not given a full dose of 20 or 30 c.c. of the serum, as this would in all probability have resulted much more seriously—perhaps in death.

19 West Seventh Street.

INTESTINAL OBSTRUCTION PRODUCED BY A GAUZE SPONGE.

R. C. COFFEY, M.D.

PORTLAND, ORE.

In the August *American Journal of Obstetrics* is an article by Palmer Findley on "Foreign Bodies Left in the Abdominal Cavity." He discusses various results following the leaving of sponges in the abdominal cavity and the method by which they are eventually extruded. After relating many cases he closes with an admonition to the surgeon by all means to avoid publicity to the laity concerning these things. In this connection I report the following interesting case:

On August 8, 1908, I was called to Albany, Ore., in consultation with Dr. Booth of Lebanon, Ore., and Dr. Davis of Albany, to see a case of intestinal obstruction. The patient had had a hysterectomy performed thirteen months before. There was a palpable enlargement in the right inguinal region. We all agreed that the probable condition was strangulation of a knuckle of intestine, due to postoperative adhesions. In the abdomen we found practically no adhesions in the neighborhood of the former operation, but a lump the size of a man's wrist, five or six inches long, in the lumen of the small intestine, which was entirely free. The intestine above the tumor was much distended and ecchymotic spots were numerous. The intestine below the enlargement was collapsed. An incision was made into the bowel and the lump was discovered to be cloth of some kind. Owing to the fact that it was four or five feet from the stomach and in the jejunum, and as the only adhesions in the abdominal cavity were just back of the transverse colon around the stomach, the conclusion which we all reached was that the patient was probably hysterical and had swallowed a variety of things, including this piece of cloth. A thorough search, therefore, was made of the stomach, with the idea that it possibly contained a variety of foreign bodies. Nothing was found.

As soon as the operation was completed a thorough investigation was made, and it was soon found to be a sponge which had apparently been left there thirteen months before. During this time the patient had gained twenty pounds in

weight and had noticed no disturbance prior to the immediate attack, except pain in the region of the stomach and this "lump." This sponge had evidently made its way through the walls of the stomach, and thus down the intestine or through the upper part of the jejunum back of the colon. This had been well done, for while the incision was so located that we were unable to make a thorough exploration in the neighborhood of the stomach, there was scarcely anything visible aside from adhesions in front of the stomach proper and in the neighborhood of the jejunum just back of the transverse colon. These adhesions back of the colon were not strong.

Several cases have been reported in which a sponge, or other foreign body, sloughed into the large intestine, but very few, I think, in which a sponge penetrated the extreme upper part of the alimentary canal, except Ries's case referred to by Findley, in which a woman pulled a sponge from her mouth after an abdominal section. Ries was called before the state's attorney to explain and so impressed the attorney with the impossibility of the occurrence that the case was dismissed.

Notwithstanding this, the fact that our patient had had pain and a lump in the neighborhood of the stomach much of the time since the first operation, that there were no adhesions in the abdomen, except in the region of the stomach, that the cloth was beyond question a surgical sponge, makes this case authentic with scarcely a doubt that the sponge passed through the wall of the stomach and down the small intestine about four or five feet where it rolled up and produced the obstruction.

Special Article

FOURTH OF JULY INJURIES AND TETANUS.

For the sixth consecutive year we are presenting statistics regarding injuries received during the celebration of the Fourth of July, with particular reference to tetanus resulting from these injuries. Considerable effort has been made to secure reliable data, and all serious cases have been carefully investigated, so that dependence may be placed on the figures here given. We have received thousands of letters from physicians in all parts of the country, reporting cases which otherwise could not have been included in these statistics, and there are doubtless many other cases not reported, although this would refer more to the minor injuries. Our thanks are due for the many careful reports which have made these statistics more complete and the figures more reliable. The data are presented in the same manner as heretofore, in order that comparison may be made.

CASES OF TETANUS.

There were 76 tetanus cases this year, or three more than last year, but 13 less than in 1906. Since 1903, when THE JOURNAL began publishing these statistics, there has been a constant decrease until this year. It is interesting if not significant to note how the injuries from blank cartridges correspondingly decreased until the slight increase this year (see Table 5).

The most common cause of the wound is the blank cartridge, and the usual site is the hand. The duration given is the number of days between inoculation and death or recovery. Following the injury it required from 5 to 9 days before the symptoms of tetanus appear,