

c.c. of starch solution; then 1 c.c. of undiluted filtrate would thus be able to digest 5,000 c.c. of starch solution, which would represent 5,000 units, a normal finding. The number of units usually ranges between 500 and 5,000, though cases may show 10,000 units and even higher, and 100 units may be considered the minimum. In my tests the non-pancreatic cases did not fall below 250 units, while the greatest interest attached to those giving a smaller number of units, which pointed to a deficiency of pancreatic secretion.

Wohlgemuth tied off the pancreatic ducts of a dog and found by his starch test that the stool contained a minimum quantity or practically no diastatic ferment. By means of a Thiry-Vella fistula, he found that the amylase of the *succus entericus* was very small in comparison with that of the pancreatic juice, and inferred that the amylolytic ferment present in the stool was in great part pancreatic.

Wynnhausen⁶ worked with the Wohlgemuth methods, and in four cases of pancreas disease his findings were confirmative in giving results under 50 units. In two cases he worked simultaneously with the Fuld-Gross method and found low values in both tests.

Hirschberg⁶ also found Wohlgemuth's method reliable in finding scanty diastatic ferment in the stool of pancreatic patients, at the same time finding by similar methods the increase of the ferment in the urine.

My clinical results with these methods may be given briefly as follows: My first attempts were with the Wohlgemuth methods of estimating the diastatic ferments in the stool. In the beginning the results were unsatisfactory and I soon detected the cause of this in the character of the cathartic used in order to obtain fluid stools. Rhubarb, cascara and the aperient waters frequently gave negative results, until calomel and phenolphthalein, as suggested by Muller, were used. In fifty non-pancreatic cases the stools showed ferment values ranging from 500 to 10,000 units. These cases included heart (compensated and uncompensated), diarrheas, stomach and intestinal neuroses, cardiospasm, organic nervous diseases, diabetes, and in nine cases of icterus, which were of special interest, the ordinary catarrhal icterus showed a normal range of value. A malignant icterus which was suspicious of a pancreas obstruction, with much fat and muscle fiber in the stool, showed a value of 500 units, and at autopsy showed the disease limited to the bile passages and no pancreatic lesion. In a second case, which appeared at first malignant, 10,000 units were found, and pancreas disease was correctly excluded by subsequent history. The pancreas diseases were as follows: 1. Acute pancreatitis with necrosis, which came to operation in the Klinik Hochenegg, showed a value of 25 units. 2. Malignant icterus (Klinik von Noorden), 20, 25 and 100 units. Autopsy disclosed carcinoma of the pancreas head and of the bile-passages. 3. Malignant icterus (Klinik von Noorden), the patient operated on in the Klinik von Eiselsberg, showed a value of 20 to 25. Exploratory operation revealed the entire region of the bile-passages, duodenum and pancreas head entirely matted together. No further exploration was attempted and the patient was taken home shortly after operation. 4. Acute pancreatitis (Klinik von Eiselsberg), patient operated on four weeks previously, healed, with no disturbance of digestion or gross changes in stool, showed 5,000 units. 5. Pancreatic cyst operated on by Dr. Joseph Ransohoff (Cincinnati Hospital) gave 25 units.

5. Berl. klin. Wchnschr., 190, No. 300; 1910, No. 11.
6. Deutsch. med. Wchnschr., 1910, No. 4.

These results would tend to show that considerable reliance may be placed on these methods.

Low unit values with both the Wohlgemuth and Fuld-Gross methods alike seem to point to a pancreatic obstruction or insufficiency.

The two tests mentioned have a rational basis and commend themselves also on account of their simplicity.

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DEATH OF FETUS DUE TO TWISTING OF CORD IN UTERO

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The following case is reported with the idea that it may be of interest to some medical men who have had similar cases.

The patient was 18 years old, of Finnish nationality, pregnant for the first time, in good health and had always felt well. When six months pregnant, she noticed that there seemed to be no life. On examination no fetal movements could be detected. Rest was advised, and two days afterward labor pains came on. No effort was made to check them and in four hours the fetus, which apparently had been dead three or four days, was born. The cord was about 18 inches long. About 6 inches from the placental attachment, the cord had been twisted into a hard knot. From the placenta to the knot, the cord was normal. Beyond the knot to the fetus, the cord was beginning to shrink away and had been dead for a number of days. No other abnormal conditions were observed and to my mind it was merely a case in which the twist had shut off the blood-supply and killed the fetus. This patient lived in a second story and thus had to climb the stairs very often, also having to carry her own wood and water. This may have had something to do with the twisting of the cord.

New and Nonofficial Remedies

THE FOLLOWING ADDITIONAL ARTICLES HAVE BEEN ACCEPTED BY THE COUNCIL ON PHARMACY AND CHEMISTRY OF THE AMERICAN MEDICAL ASSOCIATION. THEIR ACCEPTANCE HAS BEEN BASED LARGELY ON EVIDENCE SUPPLIED BY THE MANUFACTURER OR HIS AGENT AND IN PART ON INVESTIGATION MADE BY OR UNDER THE DIRECTION OF THE COUNCIL. CRITICISMS AND CORRECTIONS ARE ASKED FOR TO AID IN THE REVISION OF THE MATTER BEFORE PUBLICATION IN THE BOOK "NEW AND NONOFFICIAL REMEDIES."

THE COUNCIL DESIRES PHYSICIANS TO UNDERSTAND THAT THE ACCEPTANCE OF AN ARTICLE DOES NOT NECESSARILY MEAN A RECOMMENDATION, BUT THAT, SO FAR AS KNOWN, IT COMPLIES WITH THE RULES ADOPTED BY THE COUNCIL.

W. A. PUCKNER, SECRETARY.

LIQUID NITROUS OXIDE—Nitrosium oxidum liquefactum. —Liquid nitrous oxide is dinitrogen monoxide, N_2O , in the liquid state.

Liquid Nitrous Oxide is a colorless mobile liquid, boiling at -89.8 degrees C. and solidifying at -102 degrees C., and having a sp. gr. of 0.937 at 0 degrees C. Liquid nitrous oxide returns to the gaseous state when the pressure is reduced and the temperature raised. The gas obtained from liquid nitrous oxide should have the properties of and respond to the following tests: It should be colorless, have a faint odor and a slightly sweet taste; it should not be inflammable, but should support combustion; it should be soluble in one volume of water at ordinary temperatures. No reaction should occur when 4 liters of the gas to be tested is passed slowly through each of the following: barium hydroxide solution, neutral litmus solution, silver nitrate solution, potassium iodide solution containing starch solution and alkaline mercuric potassium iodide solution.

If nitrous oxide gas be shaken in a gas burette with an alkaline solution of pyrogallol, the contraction in volume should indicate not more than 2 per cent. oxygen.

If nitrous oxide gas, after removal of the free oxygen be exploded with hydrogen gas in a Hempel gas apparatus, the reduction in volume should be at least 94.0 per cent. of this