again troubled by quite severe nausea and vomiting, which became steadily worse until I saw her, at which time she was a little more than three months advanced. She had then been confined to her bed for nearly a fortnight, had failed to retain any considerable amount of food for more than ten days, and had been vomiting excessively for five or six days, during which time she had retained upon her stomach no food whatsoever, and had been nourished solely by enemata. The rectum was becoming intolerant. She was already very weak; the pulse was about 110 or 112. Any attempt to move in bed, any noise or jar in the room, in fact, any external stimulus, caused attacks of vomiting, which were seldom fifteen minutes apart. No local examination had been made. I found the uterus retroflexed and retroverted, the fundus upon a level with the cervix, and not readily to be raised. Under ether, it proved to be impacted between the utero sacral ligaments, but it was not adherent and was readily raised into position by taxis.

The uterus seemed to me to be slightly irregular in shape, the right side being much more prominent than the left, and the right cornu seeming to extend into the broad ligament, in a way which at once suggested the possibility of an interstitial pregnancy, or of pregnancy in one horn of an asymmetrically developed uterus. I am bound to say, however, that although this possibility was suggested to me at the time, I felt that the results of examination were not sufficient for the formation of the diagnosis.

The uterus was easily retained in position by the insertion of a pessary, and after the recovery from ether there was no vomiting for several hours. It then recurred, though in a somewhat less severe form than before. I could detect no erosions upon the cervix uteri.

The patient was removed from an extremely noisy room in the hotel to one in which comparative quiet could be obtained, and the next day was spent in the administration of enemata. The vomiting was still

distressing, though decidedly less than when I first saw her.

During the next night, she was attacked by sharp, colicky pains in the right iliac and inguinal regions, of a character which she described as closely similar to labor. The attack subsided spontaneously after a few hours, and was not followed by any relief of the nausea. On the following morning, her pulse ranged from 120

A, Site of Placenta.
B, Median Line of Uterus.

to 130 beats per minute, and her exhaustion was extreme.

In the belief that any further attempt to preserve the existence of the foetus would almost certainly result in the loss of both patients, I decided upon the immediate induction of an abortion. The os was found, as upon the preceding day, soft and slightly patulous, and was easily dilated with branching steel dilators to a size which admitted the index finger. The intact membranes presented at a level slightly above that of the internal os, with which they were not in contact; and behind them could be felt the head of the foetus.

Feeling anxious, on account of the uncertain condi-

tion of the right broad ligament, to avoid all unnecessary manipulations, I passed into the uterus the blades of a pair of ovum forceps, and was fortunate enough to succeed in extracting by their use a complete, though badly lacerated ovum. The placenta was fully formed, the size and appearance of the foetus corresponded to a pregnancy of a little more than three months. On again passing the finger into the uterus, I found a condition which I have endeavored to represent in the diagram which I pass around. The evacuation of the uterus was followed by immediate relief of vomiting; the recovery was prompt and uneventful.

The history and results of the intra-uterine examination seemed to me to render it probable that the case was originally one of interstitial pregnancy, which was converted into an approximately normal form by the efforts of nature, during the night which preceded the delivery; and, although I do not consider the diagnosis as by any means established, I think that the rarity of such a condition renders the case worth reporting, and especially in connection with the very interesting and well established instance which Dr. Washburn has detailed to us.

A CASE OF TUBAL PREGNANCY.¹

BY F. B. HARRINGTON, M.D.

Mrs. M. J., thirty-three years old, widow, never before pregnant, passed the time of her period by two weeks, when flowing came on with considerable pelvic pain unlike any previous menstrual distress. The discharge was slight but continuous. The pain was at the right side of the pelvis. The flow continued with increasing pain for three weeks when I first saw her. The abdomen was tender and slightly distended. Vaginal examination showed a mass on the right side of the pelvis resembling a dilated tube. There was tenderness and thickening about the mass. The patient was put to bed, and was given opiates and douches. The bloody discharge ceased in about a week, but soon returned again in slight amount. The pain gradually diminished. The bloody discharge ceased entirely in about six weeks from its first appearance. The tumor at the right side of the uterus had increased in size until it was nearly as large as a large lemon. It was still tender to the touch and gave the patient a feeling of discomfort. After a two months rest the patient was much improved in general health, but the tumor remained a source of great discomfort to her.

Removal was advised. The mass was found to be the dilated right Fallopian tube which appeared to contain foetal remains with a considerable amount of bloody fluid. The foetus had probably died at from five to six weeks.

The following is Dr. Whitney's report of the specimen:

"*Tube and Ovary.*—The portion of tube measured about twelve centimetres, and walls were thickened. About eight centimetres from fimbriated end was a nodular enlargement chiefly opposite the side of the ligament. This measured about nine centimetres in circumference. The surface of the tube was covered with rough fibrous adhesions. The cavity was dilated and shaggy, and the enlargement filled with a villous-looking mass, and from this a thin membranous sac was continued to the fimbriated end, and projected

¹ Read before the Obstetrical Society of Boston, November 14, 1891.

slightly beyond. In this part was a hard reddish nodule the size of a pea which on section showed a small differentiated mass recalling the outline of a very young embryo. Microscopic examination showed round cells with an embryonic arrangement, and at one end was an accumulation of pigment. Microscopic examination of the villous mass showed small finger-like projections similar to those of the chorion.

"The Ovary was small and contained a few retention cysts, but no evident corpus luteum. It was situated opposite the tube about eight centimetres from the fimbriated end."

The patient made a good recovery.

Medical Progress.

RECENT PROGRESS IN DISEASES OF CHILDREN.

BY T. M. ROTCH, M.D.

GASTRIC DIGESTION IN SMALL CHILDREN, AND IRRIGATION OF THE STOMACH.¹

THE following propositions include the substance of the author's paper:

(1) The presence of completely coagulated casein in the stomach does not warrant one in speaking of the excessively acid contents of the stomach, for a precipitation of the casein from the solution can only happen in consequence of the influence of labferment and this acts in the presence of an alkaline reaction.

(2) The change of the casein, which has begun to coagulate, to the state of solution with subsequent peptonization is due to the simultaneous action of acid and pepsin, and the stomach takes up the albumen the more successfully and completely the more the quantity and composition of the digestive secretions approach the normal.

(3) Lactic acid must be regarded as a normal constituent of the gastric juice, at least in very young children and in those with whom the diet is exclusively one of milk, and its formation is encouraged by the milk-sugar which is abundant in the milk. This constant presence of lactic acid has its effect alike upon the digestive process and upon the action of microbes.

(4) Hydrochloric acid plays the principal part in digestion, but its determination is not always easy, because the casein of the milk has the property of holding it until digestion begins. Hydrochloric acid may usually be found in small quantities in the stomachs of very small children. As digestion increases in activity, the quantity of hydrochloric acid also increases.

(5) The quantity of acid in the gastric juice of children is relatively very much smaller than in adults, and is conversely as to the quantity of food taken into the stomach.

(6) The average time during which food stays in the stomach of small children is two hours.

(7) Slight mechanical, thermic or chemical irritation of the gastric mucous membrane will increase the acidity of the secreted juice and favor a rapid emptying of the stomach. Alcohol stays digestion, but counteracts fermentation.

(8) The part in digestion which is played by the stomach of the child is an important one, even though

it does not appropriate all the albumen which comes into it.

(9) The anti-microbic properties of the gastric juice are undoubted, and due to the presence of free acid, especially hydrochloric acid. In consequence of the slight acidity of the gastric juice in the stomach of children, it cannot act as forcibly to retard fermentation as the same secretion in the adult.

(10) It has not yet been determined what significance certain micro-organisms have upon digestion.

(11) Functional disturbances in the stomach of children are due to changes in the quality and quantity of the gastric juice, the regular exchange in its ingredients being disturbed, or the parts being subjected to physical or chemical changes which are not yet understood.

(12) The quantity of gastric juice in the stomach of children may be lessened without necessarily causing an increase of lactic acid, or the appearance of acetic or butyric acids.

(13) When the normal secretion of the stomach is deficient, acids are developed which are not suitable for normal digestion.

(14) The presence of too much mucus in the stomach may paralyze the digestive activity of the gastric juice, though the latter may be normal as to quantity and as to composition.

(15) If too much food enters the stomach, or if it remains there too long, an insufficient quantity of gastric juice will be secreted for its digestion.

(16) The majority of gastric dyspepsias in children are caused by the deficiency of hydrochloric acid in the gastric juice. Functional disturbance is rarely caused by excessive secretion of gastric juice.

(17) Diseases of the stomach with definite anatomical peculiarities, manifest themselves by the presence of an abundance of mucus, serum and inflammatory elements. The severer the disease and the longer it lasts, the more conspicuous will be these elements.

(18) With inflammation of the gastric mucous membrane, digestion is reduced to a minimum, even if the gastric juice remains normal in quantity and quality.

(19) Disturbed digestion is accompanied by the appearance of an increased number of fermentation-phenomena, with the formation of acids foreign to the stomach and its work, as well as the breaking up of albumen and the formation of decomposition-products. The substances which are submitted to fermentation are the fats and the excess of mucus, which ordinarily do not undergo such changes.

(20) A diminution or failure in the presence of hydrochloric acid in the stomach, signifies the formation of pathogenic elements in the soil favorable to such development, the anti-microbic power of a sufficient quantity of hydrochloric acid being wanting.

(21) It is quite possible that certain forms of micro-organisms or their products, are responsible for the different diseases in the stomachs of children. The means for treating the abnormal condition of the stomach, which has been found extremely efficient in numberless cases, is irrigation.

THE ETIOLOGY OF ACUTE DIGESTIVE DISORDERS IN INFANTS.²

Investigation in Germany was first directed to the great mortality of infants during the summer months

¹ Troitzky: *Jahrb. f. Kinderh.*, xxxii, 4, *Archiv. Pediat.*, vol. viii, November, 1891.

² Seiffert: (*Jahrb. f. Kinderh.*, xxxii, 4); *Arch. Pediat.*, vol. viii, November, 1891.