around the portal spaces, and numerous leucocytes in the capillaries. Swelling and fatty degeneration of liver cells.

The spleen is intensely hyperemic; the follicles enlarged. In one of the large follicles there is a pale centre, many of the large cells in which are necrotic, the whole resembling a tubercle. In the necrotic tissue there are polynuclear leucocytes.

Examination of the stomach shows a sharply circumscribed loss of substance, with deeply undermined necrotic edges on one side; and at the other the loss of substance gradually fades out to the surface of the mucous membrane. In the submucosa there is considerable cellular infiltration and accumulation of cells in the vessels. The base of the ulcer is necrotic, and in places it extends down through the sub-mucosa to the muscular coat; there is a small amount of fibrin in the tissue beneath. There is no granular tissue and no chronic inflammatory reaction. Where the ulcer is most undermined, fibrin is seen in the sub-mucous tissue, due to fibrinoid metamorphosis of the connective tissue. At various places beneath the mucous membrane and adjoining the ulcer there are distinct hyaline thrombi in the walls of the blood-vessels, and hyaline masses completely occluding them.

It is possible that the ulcer is not to be regarded as a typical chronic gastric ulcer, but as a more acute process due to a disturbance in the circulation in the stomach produced by the hyaline thrombi, and the necrotic mucous membrane has been afterwards completely digested away by the action of the gastric juice. It is also possible that the ulcer started as a distinct diphtheritic lesion of the mucous membrane. The fibrinoid metamorphosis of the connective tissue and the hyaline thrombi in the vessels are not opposed to this view, for similar changes are not uncommon at the base of the diphtheritic ulcers in the pharynx.

In the few cases of diphtheritic lesions of the stomach which have come to observation the process was more diffuse and would not have led to circumscribed ulceration.

GASTRIC ULCER IN THE NEW-BORN.

ETIOLOGY, MATERNAL IMPRESSIONS.

BY J. R. LINCOLN, M.D., MILLBURY, MASS.

ON November 4, 1896, Mrs. —, of Lowell, while visiting Mrs. C., her sister, of this town, was taken suddenly ill, and vomited a large quantity of bright-red blood, which spattered over her clothing and made quite a pool on the floor. She was found in a faint by Mrs. C., who got her into the house, washed off the blood, changed her clothing, and took the whole care of her for two days, until a particular nurse who was desired could arrive. During these two days the patient vomited blood several times. Blood was also noted in the stools.

Mrs. C. understood perfectly the nature of the case; but beyond being anxious for her sister and shocked by the spectacle of blood, did not show any nervousness, asked about the case and wondered if it would make her have a miscarriage.

For four weeks the patient remained at her house, at the end of which time she was able to return to Lowell, where she was referred to her physician, Dr. W. T. Carolin, for convalescence.

At the time of this illness, November 4th, Mrs. C. was almost exactly five months pregnant, and, as we have seen, did not appear to be unduly alarmed or nervous over her sister's hemorrhage or following illness.

On March 3, 1897, at 6 o'clock P. M., a girl was born naturally, weighing eight and one-half pounds, and to all appearances absolutely perfect. On the next day the baby was very uneasy, cried all the time, and at 4

o'clock P. M. vomited one or two teaspoonfuls of bright-red blood. This was followed by several vomiting spells on the succeeding day; this time the blood was darker colored.

For three or four weeks the baby cried about all the time, seldom sleeping an hour continuously. The mother did not wish to nurse the child, and I was able only after much experiment to obtain a satisfactory food and method of feeding. Notwithstanding all this, it finally did well. At two weeks it weighed but six pounds; at four months thirteen pounds, with no digestive disturbance after the second month.

In face of such facts as the above, are we justified in excluding as "happenings" all cases of maternal impressions?

Medical Progress.

RECENT PROGRESS IN SURGERY.

BY H. L. BURRELL, M.D., AND H. W. CUSHING, M.D.

(Continued from No. 7, p. 156.)

RADICAL CURE OF HERNIA WITHOUT THE USE OF BURIED SUTURES.

Duplay and Cazin,¹² having seen late abscess-formation as the result of the use of buried sutures, believe that they form a *locus minoris resistentiæ*, and that however aseptic they may be, a systematic septic infection is liable to show itself at that point. They therefore advise the performance of an operation without the use of buried sutures, and accomplish this by tying the sac upon itself, after having drawn it well down; and to prevent this knot from slipping, they tie a series of knots in the sac, or divide it and tie the two portions together, one knot upon another.

The parietal sutures and those employed to occlude the external ring are of silver wire, and are removed after union has taken place.

A series of twenty operations performed in this manner have yielded results as perfect as could be desired, with no recurrences and no abscess-formation.

SURGERY OF THE NON-CARCINOMATOUS DISEASES OF THE STOMACH.

Doyen¹³ has come to the conclusion that the painful symptoms in dyspepsia, hyperacidity and ulcer rotundum are due to reflux spasm of the pylorus. He assumes that the cicatrization of gastric ulcers is hindered mostly because of the spastic contraction of the pylorus, which keeps the edges of the ulcer constantly irritated.

For this reason, Doyen performed the operation of gastro-enterostomy in a case of gastric ulcer, with the result that the pain and vomiting at once ceased; and at the end of three years the patient still remains well. Doyen has entirely abandoned pyloroplasty. He has performed gastro-enterostomy 48 times with a total mortality of 30 per cent.; 16 cases were for carcinoma, 11 for cicatricial stenosis of the pylorus and duodenum, and 21 for spasm of the pylorus due to gastric ulcer and hyperacidity. All of these latter cases recovered completely. In one case the function of the stomach was not well performed after the operation, though the pain was entirely cured and the patient gained in weight.

¹² La Semaine Médicale, November 11, 1896; American Journal of Medical Science, March, 1897, p. 364.

¹³ Annals of Surgery, February, 1897, p. 212.