through the pyloric orifice. This and a portion of the wall of the stomach were occupied in their whole circumference by a firm, pinkish-yellow, infiltrating mass of new growth. The exposed surface of this was irregularly nodular, and showed in places a distinct loss of substance. On section it involved all the coats of the stomach, was firm and resisting, and of a yellowish-white colour. The opening between the stomach and jejunum measured 1¼ x 1 inch, and was perfectly patent. Around the edges, in the stomach, and in the jejunum were the remains of the plates used at the operation; the plate in the stomach was still firm and scarcely altered in three-fourths of its periphery, while the plate in the jejunum was disintegrated and soft. The duodenum, from the pylorus to the point of constriction above mentioned, was moderately dilated, and contained fluid material of a greyish-yellow colour. The lymphatic glands nearest the tumour were slightly enlarged and infiltrated, and were somewhat firm and of a yellowish-grey colour. There were no metastases in the liver, kidneys, spleen, lungs or peritoneum. The spleen was enlarged and soft. Cover-slip preparations from the small abscess cavity showed a variety of bacteria, chiefly short, thick bacilli in pairs, longer, thick bacilli, and a few cocci. There were no chain-cocci observed. The absence of stitch abscesses and the healthy condition of the anastomotic wound, the appearance and diversity of the bacteria found in the pus, the late development of peritonitis, and the occurrence of an abscess in proximity to a necrotic portion of the intestine, point to infection from the intestinal tract. The microscopic examination of a portion of the tumour shows it to be scirrhus."

The peritonitis, which was the direct cause of death, was not due to any failure in the technique, nor to any yielding of parts and escape of contents. In fact the union is particularly good, as the specimen shows. According to Dr. Lafleur's explanation, it was due to kinking of the first part of the jejunum from having been doubled up too acutely upon itself. This is an interesting observation, as the rules laid down are to unite the jejunum as high as it can be attached without dragging. Ten or twelve inches are mentioned in several reports of successful cases as the point of attachment. In others where the jejunum could not be easily found, any convenient loop of small intestine has been attached. In one such case, mentioned by Lauenstein of Hamburg, the patient died of inanition, and at the autopsy the loop of bowel attached was found to be the lower part of the ileum. In the case which I have just reported, I judged that the incision was made about eight or ten inches from the end of the duodenum. There was no dragging, and the loop seemed quite long enough and showed no tendency to acute bending or kinking. Probably if I had continued my line of suture along this loop, as I did along the distal end to form a spur, the fatal result might have been averted. I cannot help thinking, however, that the acute bending of the bowel may have been due to some special cause—possibly, for instance, the regurgitation of part of the fluids taken into the stomach backwards into the duodenum, and the dragging of this weight especially during the paroxysms of coughing which began on the third day. The dilated condition of the duodenum shows that such regurgitation occurred, and, in fact, it cannot fail to occur in this operation. Again, it is, I believe, a recognized fact that patients in advanced malignant disease are more prone to inflammatory attacks of this kind.

There was in this case no room for any choice of operation. Had the growth been cicatricial and non-malignant—a condition which before operation we felt that there were some reasons for hoping that we might discover—Loreta's operation of dilating the pylorus or the operation of incision and transverse suture would have claimed consideration in selecting the best method of re-establishing communication between the stomach and the intestines. As it was, however, having decided not to remove the growth, it only remained to establish the connection by lateral anastomosis, and for this purpose I used Abbé's catgut rings, which seemed to me to be the best of the various devices of the last few years for approximation purposes.

The operation recommended by Dr. Bernays of St. Louis, of curetting the pylorus in malignant disease, would have been quite impossible in this case owing to the great density and firmness of the growth, even if it could, under any circumstances, be considered a scientific or justifiable operation. This method of approximating the hollow viscera by means of plates or rings, which was introduced by Senn and adopted, until quite recently at least, by most American surgeons to the almost entire exclusion of other methods, has, since writing the above, been discussed in the New York Academy of Medicine. The reports of the discussion show that a number of objections were urged against the use of plates and rings and the method generally, while the tendency seemed to be towards a return to the older method of direct union, or, in suitable cases, lateral anastomosis by suture alone.

DR. SHEPHERD thought that this was the first operation of the kind performed in Canada, and regretted that the result had not been more successful, for the technique was without fault. He had been interested to note that the American surgeons are discarding rings