phlegm, took nourishment fairly well. Neither temperature or pulse evinced any marked rise. On the fourth day after the operation, as little bile was exuded, I endeavored to make an impression on the calculi in the cystic duct, which could be easily felt, with a probe, and commenced flushing with strong pressure, warm, sterilized chloroform water, and morning of the seventh day I used Durand's solution, three of ether and two of turpentine, to try and dissolve the calculi, also adding some soda carb. to the warm water flushing. While I was thus engaged, the patient was seized with a sudden violent fit of coughing, and raised himself up in bed, when suddenly he exclaimed, "Something has given way," and, to my horror, upon examination I found the lowest stitch in the wound had loosened, and a small piece of omentum protruded, which I immediately returned and kept in place with warm sterilized gauze and towels until I could get assistance. Assisted by Drs. McDiarmid and Todd, with chloroform carefully administered by Dr. Hutton subsequent to another hypodermic of strych. nit., I again opened up the whole wound with the idea of making another attempt to extract the calculi impacted in cystic duct, at least, but I was only able to gouge out portions, and pass eventually a probe, as I thought, into the ductus communicus cholochicus. As the patient was very feeble, I desisted, thinking the same efforts could be nearly as well made from without. I united more closely from below up the peritoneum with a continuous suture, and closed up the outisde wound as before.

Though the patient recovered from the chloroform, the difficulty in breathing and bronchial complication became much worse. Little or no nourishment could be taken or retained, and, though much more bile exuded externally, he gradually sank and passed easily away thirty hours after the second operation, or eight days and six hours after the completion of the first operation.

Autopsy in presence of Drs. Howden, Higginson, Macdonnel and Todd. No traces of peritonitis extending beyond the actual seat of operation. The liver, though turgid and apparently congested, was otherwise fairly normal in appearance, except in the neighborhood of the gall-bladder and cystic duct. The gall-bladder was adherent to the liver, and its walls thickened to an inch with fibrous exudation, and this exudation of fibrous tissue seemed to extend therefrom, forming a hard nodule to right of gall-bladder at lower margin of liver, which, when cut into, had much the appearance of scirrhus, but subsequent microscopic examination proved it to be only fibrous tissue. The pocket in which the large gall-stone was imbedded was enormously thickened, especially to its liver side, as was also the walls of the cystic duct, in which was found three other calculi, from the size of a large bean to a pea, each in its bed or pocket, and one imbedded in the opening of cystic duct at its junction with hepatic, which effectually closed the latter so that little or no bile could escape either into common duct or gall-bladder.

Another smaller calculus was found in the common duct about the size of an apple pippin, about midway to the duodenum. The walls of both hepatic duct and common duct were found quite healthy. Could anything further possibly have been done with a greater chance of saving life? Well, I think if he had been a younger man, and free from other complications, that possibly by removing the calculi from the cystic duct, and, indeed, even the duct itself, with the gall-bladder up to near its union with the hepatic duct, and then, including portions of peritoneum, suturing the orifice so as to leave the hepatic duct alone continuous with the common duct, after having ascertained that the latter was pervious into duodenum, the whole wound might have been closed with a fair prospect of success, but under the conditions actually existant, and the difficulty in forming an exact diagnosis even after the parts were exposed, I feel that even with the more accurate knowledge gained by the *post mortem*, one might find it very difficult to pursue any other course than the one adopted.

In conclusion, had the gall-bladder been in a healthy condition and full of bile, I was struck with the ease and simplicity with which the anastomosis could have been effected between the gall-bladder and duodenum by the aid of Murphy's button, and I cannot help expressing my admiration of this ingenious device. Some years ago a brother of mine, Dr. H. Orton, of Ancaster, Ont., died, seven weeks after an accident by which his leg was badly fractured and internal injury received. At the autopsy made by Dr. Henwood, of Hamilton, and other medical men, it was found that the only internal injury was telescoping of