

the pancreas. An examination of the urine, however, showed an entire absence of pancreatic crystals, proving the absence of cancer and of inflammation of the pancreas. An operation was performed on November 24th, 1903, when a gall-stone the size of a filbert was discovered in the supra-duodenal portion of the common duct and removed through an incision, which was afterwards sutured. The pancreas was normal. The gall-bladder was drained. Recovery was uninterrupted, and the patient is now well.

2. In some cases the bile ducts and pancreatic ducts open by separate orifices, as shown in the illustration, and any gall-stone passing down the common duct will then not necessarily compress or occlude the pancreatic duct.

3. In exceptional cases the duct of Santorini is the principal outlet for the pancreatic fluid, it being of such a size as to afford a safe outlet to the secretion, even when the duct of Wirsung is obstructed.

In order to make the relationship between gall-stones and inflammation of the pancreas quite clear, I shall give the classification of pancreatitis that I recently proposed in the Hunterian lectures, which, I believe, includes all the varieties. Pancreatic inflammation may be catarrhal, in which the inflammatory trouble is in the ducts, or parenchymatous, in which the substance of the pancreas is involved. The former resemble the different forms of cholangitis, with which, indeed, they are frequently associated; the latter bear more resemblance to inflammatory affections of the appendix, "suppurative and gangrenous appendicitis." The following show the classification at a glance:

*Catarrhal Inflammations.*—(a) Simple catarrh, acute and chronic, (b) suppurative catarrh, (c) pancreo-lithic catarrh.

*Parenchymatous Inflammations.*—Acute: (a) Hemorrhagic pancreatitis—(1) Ultra-acute, in which the hemorrhage precedes the inflammation, the bleeding being profuse, and both within and outside the gland; (2) acute, in which inflammation precedes the hemorrhage, which is less profuse and is distributed in patches through the gland. (b) Gangrenous pancreatitis; (c) suppurative pancreatitis (diffuse suppuration). Subacute: Abscess of the pancreas (not diffuse suppuration). Chronic: (a) Interstitial pancreatitis—(1) Interlobular, (2) interacinar; (b) cirrhosis of the pancreas.

Although in my address to-day I am only dealing with one cause of pancreatic trouble, yet it is the chief one, and in a very large percentage of cases the only cause of pancreatitis in its