and symptom, and even after the utmost caution a correct knowledge may only be obtained by submitting the patient to a cœliotomy, which, under the circumstances, is not without its dangers.

Where the jaundiced condition is due to a new growth, obstructing the flow of bile through the common duct, we may expect to find that the jaundice is persistent, coupled with emaciation, dyspeptic symptoms, flatulence, an absence of bile in the feces though it is present in the urine. If vomiting takes place, bile is not found in the vomited matter. There may be dilatation of gall bladder. The spleen is not hypertrophied. Death usually occurs inside of a year from the commencement of the attack.

Where impacted gall stones are the cause of obstruction to the common duct, or where stricture is present, the symptoms are not so constant. We find a history of repeated attacks of colic, with extreme pain, chills, fever, vomiting and jaundice, which is persistent or not according to whether or not the obstruction is complete. In the same way bile may or may not be present in the feces. It is found in the urine at times. Pruritis of a very annoying character is usually present.

The gall bladder is usually atrophied, though it may be distended. Enlargement and tenderness over the region of the gall bladder may or may not be present.

Death may not take place for years. Though gall stones occur with great frequency towards the after part of life, and though it is known that they are found in about 25 per cent. of all women who die aged over sixty, and in a smaller proportion of men, we are at a loss for a satisfactory way of accounting for their presence. Some of the causes assigned are sedentary habits, constipation, eating too much starchy food, tight lacing and pregnancy. The amount of bile secreted in each 24 hours is about 40 ounces. It is most actively secreted during digestion—the extra amount being retained in the gall bladder, mixing with its mucous secretion. It has a moderate emulsifying power, and though it soon undergoes putrefaction on exposure, it is said to retard the process of putrefaction in the intestine and plays an important part in the progress of digestion. Though that part is not well understood, it is quite evident that it is *important*, as has often been proved by experiment.

"When the total amount of bile secreted escapes by external fistula, the patients die. When even a large (though not the total) quantity escapes, the patients become sick. Therefore a safe way of allowing the bile to re-enter the intestine should be welcomed by the surgeon and the patient."—J. B. MURPHY.

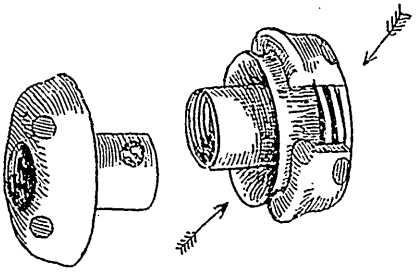

FIG. 1.—Appearance of button with spring-cup attachment.

An ingenious method of accomplishing this has been devised and put successfully into practice by Dr. J. B. Murphy, of Chicago, from whose writing I have quoted the last two or three paragraphs, and to whose masterful way of dealing with the subject I