## PART I.

## CHAPTER 1.

## GENERAL CONSIDERATIONS AND CLASSIFICATION.

A hernia or rupture is the protrusion of any viscus from the cavity in which it is normally contained. The term is usually applied to protrusions of abdominal and pelvic viscera, although organs situated in other cavities may become herniated. The author will limit his discussion of hernia entirely to the abdominal variety.

The hernia may be a congenital or an acquired one. Its protrusion may occur through openings in the abdominal wall, which were present in fetal life and failed to close at birth, as, for instance, the umbilicus and the funicular process of the peritoneum. These are congenital hernias.

The protrusion also may occur at points where the abdominal wall is weaker than elsewhere, such as the inguinal region, where the spermatic cord passes through the inguinal canal; at the umbilicus, where the muscle tissue is naturally deficient; in the femoral region, where the large vessels and nerves pass out of the pelvis; and at other points where there is a normal diastasis of muscle fibers, the space being bridged over by connective tissue only, as in Petit's triangle, between the latissimus dorsi and the external oblique muscles, and in the diaphragm. Hernias occurring at these points are of the acquired variety.

The traumatic hernias or ruptures occur at points in the abdominal wall that have been weakened as the result of operation or trauma. Hernias following abdominal sections and appendectomies are well-known examples of this variety of hernia. When a viscus protrudes through one of these weak spots in the abdominal wall, it pushes before itself the parietal peritoneum and the various layers of tissue constituting the abdominal wall at that particular point; but the innermost layer invariably consists of a pouch of thin parietal peritoneum which is known as the sac of the hernia.

The sac is usually pear-shaped or pyriform, although it may be multilocular, or constricted, the so-called hourglass sac (en bissac). Irregularshaped sacs, double sacs, invaginated sacs and sacs having diverticula are also met with occasionally. The form of the sac depends in part on its contents and in part on the duration of the hernia, its location and the presence and extent of adhesions. On the other hand the sac may be absent, although this occurs only in the rarer forms of hernia, such as the diaphragmatic, the foraminal, in hepatocele, nephrocele, etc., where the viscus has only a partial investment of peritoneum, and is either partly or wholly