

the inner side, instead of forming a strong posterior wall to the lower part of the inguinal canal. The external ring also enlarges by gradual stretching of the intercolumnar ligament, so that there tends to be some separation of the pillars, and the aponeurosis itself becomes thinned and weakened. Thus, in cases where a hernia has been present for many years, especially if it is of large size, the valvular character of the canal may disappear, so that the enlarged external ring may be nearly opposite the greatly increased weak portion of the posterior wall. There may then be a direct gap in the muscular structures of the abdominal wall through which two, or even three, fingers can be introduced. Under these circumstances, when the most active period of adult life has passed, and the muscular system anywhere is more likely to degenerate than to improve, recovery of the normal strength and mechanism of the inguinal canal must be regarded as impossible; hence, owing to the secondary or acquired weakness, an operation for the cure of the hernia is liable to be followed by a recurrence. Simple removal of the sac alone is unlikely to be successful, and it would appear to be desirable to adopt, in addition, some method of strengthening the inguinal canal.

The presence of secondary weakness is naturally of great importance in the operative treatment of hernia, and the indications for treating it, as well as the methods to be adopted, will have to be further considered later on. Before operating upon a case of hernia it is always desirable to examine the affected side for the presence of any secondary weakness, and to gain some knowledge of its character and extent. This may be done by a digital examination of the external ring and the inguinal canal, the patient lying down upon a couch. The apparently sound side should also be examined, and the structures here compared with those on the side where a hernia is known to be present. The lower part of the scrotum is invaginated by the forefinger, which is passed upwards until the crest of the pubis is felt. The external ring will be felt immediately above the pubic crest. The size of the ring is then estimated by sweeping the finger round its margin, when the rounded upper border formed by the intercolumnar ligament is also noticed. The