## THE PLANNING OF ABDOMINAL INCISIONS

insertions of the lateral muscles. It is not necessary for the weak spot to be a large one in the first instance, for the omentum seems to have the power of finding the most minute and of dilating it. We owe much to the omentum for the use of its defensive powers against intra-abdominal disease, and perhaps its pushing character and insinuating  $\langle \cdot \rangle$  differs in cases of a defective abdominal wall are only an effort of Nature to give the individual early notice of his danger, so that he may remedy the defect in his armour as soon as possible. Be that as it may, such warnings should not be so frequently neglected.

Not only, then, are incisions in the median line very liable to be followed by hernial protrusion possibly years later, but also those which have been placed in the linea semilunaris, and for a similar reason the lateral pull of the muscles, which is so difficult to regulate and control. In both these situations there are practically only three layers which prevent a protrusion from forming, and an incision through the middle layer places a weak line between peritoneum and skin, for in the prevention of abdominal hernia the resistance of the skin, and indeed of the peritoneum, may be regarded as nonexistent ; they are both of them too elastic and easily stretched, even when uninjured, to afford any permanent protection. The aponenrotic structures constitute our main reliance, their value after division again depending almost entirely on the accuracy of apposition secured by the method of suturing adopted. If the line of suture is not accurate but irregular, the edges not meeting well, then we must expect to have a weak sear-indeed the wonder is, not that we occasionally get one, but that we do not get one more often. The edges to be joined are commonly so narrow that they can rarely be in perfect apposition over the whole length of the incision. Both this layer and the peritoneum must be sutured with the greatest care, for although we may hold it as a fact that if the aponeurotic layer becomes perfectly united no hernia will develop, should there be any depression in the peritonear line of summe you may be sure that a piece of omentum will find and insinuate itself into it. By this means, and also as a possible result of the inclusion of a piece of omentum during the process of the insertion of sutures, a great pressure may be exerted on the aponeurotic union at one or more points, or ich may