sides of the wound will be found almoſt adhering together ; and if attention be paid to the ſubſequent treatment, the sore will be generally healed in two or three weeks. As ſoon as the wound is firmly cicatrized, a truſs ought to be properly fitted to the part, and ſhould never, on any future period of life, be laid aſide.

When the hernia is of long standing, and when there is reaſon to think adhesions have taken place between the ſac and bowels, or that mortification has already begun, or that ſome filaments run acroſs the ſac and prevent the reduction, or that there is water in the ſac, or that the gut is in dan­ger of being entangled from a part of the omentum being down, a different method of operating becomes necessary.

The patient is to be placed as already directed. The operator is to graſp the tumor with the one hand, ſo as to make the ſkin tenſe on the fore part of it, while with the ſcalpel in the other he divides the ſkin from one end of the tumor to the other. The cellular ſubſtance is by gentle strokes to be divided, till not only the ring, but the whole length of the ſac, is laid bare. An opening is now, in the moſt cautious manner, to be made into the ſac by slight ſcratches, to avoid hurting any of its contents.

In making this perforation, which is conſidered as the niceſt part of the operation, conſiderable aſſiſtance is obtain­ed from the uſe of the ſmall directory, upon the point of which the fibres of the ſac are to be ſucceſſively raised and divided till an opening is made. The opening is to be en­larged till it admit the fore-finger of the left hand, which ſerves as a directory for conducting the ſtraight probe- pointed ſcalpel with which the ſac is to be divided through its whole length.

The ſac being laid fully open, the parts contained in it ought to be examined with the niceſt attention, to diſcover whether they are all ſound or not ; and if, upon an atten­tive inspection, it is found that they are not evidently in a gangrenous ſtate, even although they ſeem conſiderably in­flamed, they ſhould be immediately returned into the abdo­men. When adhesions take place between different parts of the protruded gut, the greateſt caution is necessary in ſeparating them. When one part of a gut adheres ſo firmly to another as not to be ſeparated but with difficulty, it is much better to return the whole, even in that ſtate, into the abdomen, than to run the riſk of hurting the inteſtine mate­rially by uſing much force. When adhesions occur between the hernial sac and the gut, or between the gut and omen­tum, if the filaments producing the connection cannot be otherwiſe removed, as there is no great hazard in wounding the omentum, and ſtill leſs in hurting the ſac, a very ſmall portion of theſe may be dissected, and returned with the gut into the abdomen. When the bowels cannot be reduced with eaſe, the ring is to be dilated by the blunt-pointed ſcalpel in the manner already directed. After returning the contents of the ſac into the cavity of the abdomen, it has been propoſed by ſome authors to paſs a ligature round the neck of the ſac, with a view of procuring a reunion of its ſides, ſo as to prevent a future deſcent of the bowels ; and various other methods, even actual and potential cauteries, have been propoſed : but as none of them yet attempted have been found ſufficiently to anſwer the purpoſe, the only thing that can be recommended is a well made truſs.

When the bowels are actually in a ſtate of gangrene, as the returning of ſuch mortified parts might be attended with the very worſt conſequences, a great degree of caution is necessary. When the omentum is found in a mortified ſtate, as the exciſion of a portion of this ſubſtance is not attended with much riſk, it is the common practice to cut away the diſeaſed parts, and to obviate any inconvenience which might enſue from the hemorrhagy. We are adviſed to make a ligature on the sound parts previous to the removal of thoſe which are mortified ; whilſt the ends of the ligature being left hanging out of the wound, the ſurgeon has it in his power to remove them when circumſtances appear to render it proper. Theſe ligatures on the omentum, how­ever, are frequently productive of bad conſequences. No hemorrhagy of any importance ever occurs from a diviſion of this membrane, even in a ſound unmortified ſtate ; ſuch parts as have become gangrenous may therefore be freely cut off, and the remaining ſound parts be afterwards, with­out the intervention of ligatures, ſafely introduced into the abdomen. If a veſſel of any ſize in the omentum has been divided, a ligature may be passed above the veſſel itſelf, and the ends left hanging out of the wound ; the threads may be afterwards pulled away at pleaſure. When a rupture has been of long duration, it ſometimes happens, that from the pressure made by the truſs, and other circumſtances, portions of the omentum are collected together into hard lumps. If theſe be ſmall, they may be returned into the abdomen with­out producing any inconvenience ; but if from their bulk and hardneſs they are likely to do miſchief, they ought to be cut off. When part of the omentum is to be removed, it ought to be previouſly expanded and divided with ſcissars, which will be more convenient than any other instrument. When again a ſmall portion of gut is found mortified, we are to endeavour, by means of a needle-ligature, to connect the ſound part of the gut immediately above the mortified ſpot to the wound in the abdomen already made. By this means, when the mortified part ſeparates, or perhaps what is better, when it has been immediately cut out, the fæces are diſcharged by the wound ; and there are different inſtances where, after ſuch a diſcharge has continued for ſome time, the wound has entirely healed.

But when the mortified portion of gut is of conſiderable extent, and includes the whole circumference of the inteſtine, all that can be done is to remove it, and to draw, by means of a ligature, the upper end of the gut towards the under, and afterwards connect them to the inner edges of the wound. This at leaſt affords a chance of the ends of the gut being brought to reunite ; and if unfortunately that event ſhould not take place, a paſſage of the faeces will still be ſecured. All ſuch mortified parts as are to be removed ought to be cut off, and the remaining ſound intestine re­tained, before the opening in the ring can be dilated with ſafety, leſt the gangrenous portion slip in together with the ſound. The parts forming a hernia being all completely replaced, when the ſac in which they were contained is found thick, hard, and much enlarged, as in ſuch a ſtate no good ſuppuration can take place, and as its preſervation cannot be in any degree uſeful, ſuch parts of it as can be cut away with propriety ought to be removed. All the lateral and fore parts of the ſac may be cut off with ſafety ; but as it is commonly firmly connected with the ſpermatic vessels behind, this part of it ought not to be touched.

Sect. II. *Of Bubonocele, or Inguinal and Scrotal Hernia.*

This ſpecies of hernia is formed by a protruſion of ſome of the abdominal bowels through the rings of the external oblique muſcles. It is known by the general ſymptoms of hernia already enumerated, and by a ſoft and ſomewhat elaſtic ſwelling, beginning in the groin, and deſcending by degrees into the ſcrotum in men, and into the labia pudendi in women. When the hernia contains omentum only, the ſwelling is both more ſoft, compreſſible, and more unequal than when the gut alone is down ; the ſcrotum becomes more oblong than in the inteſtinal hernia ; and when the quantity of omentum is large, it is alſo much more weighty than a gut rupture of the ſame ſize ; but frequently the tu-