

is necessary in dealing with it. The bowel may be friable for some distance from the ulcerated spot, and if sutures are placed in these structures they are quite likely to yield after the return of the intestine to the abdomen. Small spots may be turned into the lumen of the bowel and closed with the Lembert suture, as in the case of lacerations, but in the larger ones, or where the whole loop is under suspicion, the question becomes a very serious one. We have then to select between one of three methods: 1. Artificial anus. 2. Fæcal fistula. 3. Resection.

If we accept the conclusions drawn from the tables of Zeidler, Frank, Grant and others as final, we should resort to immediate resection in all cases where the intestine is seriously damaged, but the average practitioner is slow to adopt so radical a measure.

Owing to the eventually fatal character of artificial anus, aside from its disgusting features, many English surgeons favor the deliberate establishment of a fæcal fistula. Bennett strongly recommends (*Wm. H. Bennett, Clinical Lectures on Abdominal Hernia, 108*), where the damage is not too extensive, the returning of the bowel to the abdomen, and placing a drainage tube of large calibre through the canal in contact with it, thus establishing a fæcal fistula. His experience in some apparently desperate and hopeless cases appears to justify the measure. I can scarcely bring myself to look upon it as good surgery, and should prefer to keep bowel already perforated or of uncertain character, outside the abdomen, if, for any reason, it was not deemed desirable to make an immediate resection. It is true that bowel left protruding through the abdominal wall is not as favorably placed for prompt recovery as when in its natural cavity, but it is certainly much less liable to cause general septic peritonitis in this position, and can be very favorably placed if freed from all constrictions and suitably protected by antiseptic dressings.

If resection is advisable, what method can the average practitioner, with little experience in abdominal surgery, with limited resources, with few instruments, and sometimes no assistance, use. These cases cannot be sent to the expert, nor can the expert, in many instances, be brought to them. Resection is certainly brought to the extreme of simplicity by the use of the Murphy button, now

so well known as to only need mention here. (*New York Medical Record, Dec. 10, 1892.*) It is only just to admit that although there are several very strong theoretical objections, it has had, perhaps, a better practical record up to this time than any other one method. Certainly, one of its greatest faults for use in the cases under consideration, is that it is quite liable *not* to be at hand when needed the most. I feel that we have one other method of resection which is fully as effectual, almost as easily done, and requiring only knife, scissors, and a needle and thread that could be found in any house, for its performance. I refer to the method of Maunsell, of New Zealand (*Am. Journal of Medical Science, March, 1892*), by which the bowel is joined end to end with serous surfaces in contact, all of its coats held firmly together with the stitches mostly inside the bowel. The damaged bowel having been cut away far enough back to insure healthy tissue, the ends are brought together by two temporary sutures, the first being at the mesentery and the second at the opposite or convex side of the bowel. The ends of these sutures are left long, and are tucked through a longitudinal slit previously made in one end of the bowel back about one inch and a half from its cut end. By traction upon these threads which form the two sutures, and which pass out of the slit in the bowel, one end is inverted, turned mucous side out, and the other end is invaginated into it, thus presenting both cut ends at the temporary slit with their serous surfaces in opposition. Traction upon the threads by an assistant will bring them in convenient position for stitching. This should be done with a long, slender, round needle armed with silk. The needle should pass through both walls of the two cut ends of intestine, cross its lumen, and transfix both walls on the opposite side. The thread can then be caught at the point crossing the lumen of the bowel, drawn out to a sufficient length and cut, thus forming two stitches with one passage of the needle. In this manner, the time required to stitch the ends together is reduced nearly, if not quite, one-half. Maunsell directs that the united edges of the bowel be painted with Wolfier's mixtures and dusted with iodoform, but while this may be advisable, it is shown that it is not a necessity by the very interesting case reported by Dr. Wiggin in the *New York Medical*