

inches from the anus, forming a pouch in which are lodged some portions of the small intestines.

The *second*, or middle *portion*, varies from two and one half to three inches in length, and extends from the middle of the third bone of the sacrum to the prostate gland; it follows the curvature of the sacrum and coccyx, and has the least lateral deviation of any portion of the gut. Posteriorly, it is loosely connected to the bones by cellular tissue; the peritoneum only and partially invests its upper and anterior surfaces; anteriorly, it is in relation with the prostate gland, loose cellular tissue intervening, next we have the vesiculæ seminales and vasa deferentia, leaving a triangular space where the trigone of the bladder is only separated from the rectum by a layer of adipose tissue; in the female the vagina is directly in contact with it, forming the recto-vaginal septum.

The *third*, or inferior *portion*, the least in anatomical importance, is from one to one inch and a half in length, and extends from the prostate gland to the anal orifice; it is directed obliquely downwards and forwards, and has no connection whatever with the peritoneum; it is encircled successively by the internal sphincter, the levator ani, and the external sphincter; it is imbedded in the fatty deposit of the ischio-rectal fossa; and hence, when abscesses are formed in this region, their well known tendency to infringe on the caliber, and interfere with the action of this portion of the intestine; in the male it is separated by a small triangular space from the bulbous and membranous portions of the urethra, while in the female, the same space exists between the vagina and the rectum.

From the foregoing brief description it can now be clearly seen that the importance and extent of the peritoneum—the great dread in cutting operations upon the rectum—has been, to say the least, very much exaggerated; it only invests the upper and lateral surfaces of the first portion, but a small part of the anterior surface of the second, and is totally unconnected with the third portion. In fact, Velpeau* says that the last four or five inches of the rectum (the most usual seat of stricture,) have no immediate connection with this serous membrane.

A few words now concerning the mucous membrane of the intestine, which, from its looseness and numerous folds, has always been a fruitful source of error and doubt in explorations by the bougie. This membrane is thicker, more vascular, and more loosely connected to the muscular coat beneath than at any other portion of the large intestines; hence the resistance offered to, and the liability of stoppage of the bougie. In its contracted state, the lower portion of the rectum is thrown into a number of longitudinal folds, denominated the columns of the rectum; again the mucous membrane forms the three prominent valvular folds of Houston, all directed obliquely; one is found at the commencement of the rectum, this is the great *sticking* point, near the right sacro-iliac symphysis; a second extends inwards on the side opposite the middle portion, and the third projects backwards, from the front part of the rectum, opposite the prostate gland. The situation and direction of these folds should be care-

* Traité d'Anatomie Chirurgicale des Regions, t. II, p. 322. Paris, 1826.