

CANADA

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On the Pathology and Treatment of Ileus. BY GEORGE PATON, M.D.:
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I. The vermicular movement of the intestines consists of a series of contractions and relaxations, extending from the stomach to the rectum. In contraction an active force is exerted by the muscular fibre, but in relaxation, this power ceases, and the fibres return to their previous condition. There are no facts, says Muller, to justify the supposition, that muscles possess the power of actual expansion. Bichat thought that this power was possessed by the heart in the act of dilatation, and Cruveilhier appears to entertain the same opinion, considering that the force and rapidity with which the heart dilates, entitle it to the character of an active movement.

It must however be considered a general law in the animal economy, that when we witness over-distention of muscular fibre, the muscle has existed in a passive state, and been acted on by an exterior agency. This is particularly seen in over-distension of the bladder from the retention of urine—the accumulated fluid exerting a pressure against the parietes of the viscus, and stretching the muscular fibre. The same effect is observed in the great dilatation of the stomach or intestines of cattle, which have taken food, that generates a large amount of gas; for this gas, confined within the cavity, distends its walls and greatly enlarges its dimensions. The paunch of ruminants is so constructed, that the food which has been swallowed, must be returned to the mouth from the first and second stomachs, to undergo the process of mastication; which being completed and the morsel again swallowed, it enters the third, but not the first and second stomachs. When the paunch then becomes distended with food or air, its longitudinal fibres are stretched, and the walls or sides of the œsophageal canal brought into close apposition, rendering the cavity a shut sac; in consequence of