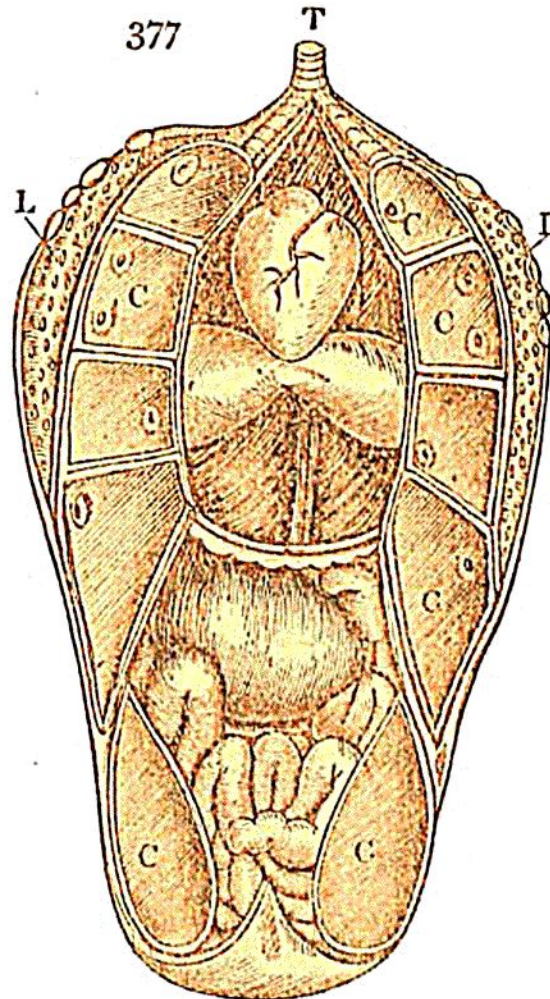


the action of the intercostal muscles, which produces an approximation of the ribs, tends to raise them, and to bring them more at right angles with the spine; the sternum, also, to which the other extremities of the ribs are articulated, is elevated by this motion, and, consequently, removed to a greater distance from the spine; the general result of all these actions is to increase the capacity of the chest.

Thus, there are two ways in which the cavity of the thorax may be dilated; namely, by the action of the diaphragm, and by the action of the intercostal muscles. It is only in peculiar exigencies that the whole power of this apparatus is called into action; for in ordinary respiration the



diaphragm is the chief agent employed, and the principal effect of the action of the intercostal muscles is simply to fix the ribs, and thus give greater purchase to the diaphragm. The muscles of the ribs are employed chiefly to assist the