

bone of birds extends the whole length of the body, so as to cover the great cavity common to the chest and abdomen, into which the air is admitted; and owing to this extension, a lesser degree of motion suffices to respiration. Thus a greater surface, necessary for the lodgement and attachment of the muscles of the wings, is obtained, whilst that surface is less disturbed by the action of breathing, and is more steady. Another peculiarity of the skeleton of the bird is the consolidation of the vertebræ of the back; a proof, if any were now necessary, that the whole system of bones conforms to that of the extremities, the firmer texture of the bones of the trunk being a part of the provision for the attachment of the muscles of the wings.*

The vertebræ of the back being fixed in birds, and the pelvis reaching high, there is no motion in the body; indeed, if there were, it would be interrupted by the sternum, or breast-bone. We cannot but admire, therefore, the structure of the neck and head, and how the length and pliability of the vertebræ of the neck, whilst they give to the bill the extent of motion and office of a hand, become a substitution for the loss of flexibility in the body, by enabling the bird to balance itself, as in standing, running, or flying. Is it not curious to

* The ostrich and cassowary, which are rather runners than fliers, have the spine loose.