

which are the pieces that project obliquely on each side, play upon each other. These processes, which are seen at *A, A*, in the preceding figures (177 and 178) are of great use in preventing the sudden displacement of the vertebræ; for this effect cannot be produced by any force short of that which would occasion fracture. Any one who will try to dislocate by sheer force, the spine of a hare or rabbit will find reason to admire the art with which its bones have been locked together, and the skill displayed in combining great flexibility with such powerful resistance to every effort that can be made to separate them.

For the purpose of allowing a passage to the spinal marrow, the bodies of the vertebræ (*B*, Figs. 177 and 178,) are hollowed out behind, into a groove, over which a broad plate of bone is thrown from the sides of the vertebræ, like the arch of a bridge. The succession of arches, when the vertebræ are joined together, forms a continuous canal, which is occupied by the spinal marrow. Notches, corresponding to each other, are left in the sides of each of the arches, forming apertures for the secure passage of the nerves as they issue from the spinal marrow. All these circumstances are visible in the figures, particularly in the section, Fig. 179, where *c, c*, is the canal for the spinal marrow, and in which the apertures just mentioned are distinctly seen, at *o, o*.

In order to give an advantageous purchase to the muscles which are attached to the spine, each vertebra has, besides the parts above described, a projecting piece of bone, extending upwards from the crown of the arch, and denominated the *spinous process* (*s, s*.) The sharp ridge that runs along the middle of the back of a quadruped, is formed by the continued series of these processes. There are also, on the sides of the vertebræ, two other projecting pieces, which are denominated the *transverse processes* (*τ*,) and which serve as levers for bending the column laterally, that is, either to the right or to the left. All these component parts of the spine are subject to considerable modifications, in different tribes of animals, according to the particular mechanical