

We will first examine the contrivances in the joints, of the vertebral column, which adapted it for flexure in every direction, and then proceed to consider the arrangement of other parts of the body.

These joints are piled on each other like the masonry of a slender Gothic shaft, but, as a certain degree of flexibility was requisite at every articulation, and the amount of this flexure varied in different parts of the column, being least at the base and greatest at the summit, we find proportionate variations both in the external and internal form and dimensions of each part.* The

* The body (Pl. 49, Fig. 1) is supported by a long vertebral column attached to the ground by an enlargement of its base (Pl. 49, Fig. 2). It is composed of many cylindrical thick joints, articulating firmly with each other, and having a central aperture, like the spinal canal in the vertebra of a quadruped, through which a small alimentary cavity descends from the stomach to the base of the column, Pl. 49, Fig. 4, 6, 8, 10. The form of the column nearest the base is the strongest possible, viz. cylindrical. This column is interrupted, at intervals, which become more frequent as it advances upwards, by joints of wider diameter and of a globular depressed form (Pl. 49, Fig. 1. and Figs. 3, 4, a, a, a, a.) Near the summit of the column, (Pl. 49, Figs. 3, 4,) a series of thin joints, c, c, c, is placed next above and below each largest joint, and between these two thin joints, there is introduced a third series, b, b, b, of an intermediate size. The use of these variations in the size of the interpolated joints was to give increased flexibility to that part of the column, which being nearest to its summit required the greatest power of flexion.

At Plate 49, Figs. 6, 8, 10, are vertical sections of the columnar joints 5, 7, 9, taken near the base; and show the internal cavity of the column, to be arranged in a series of double