The first, ninth, tenth, eleventh, and twelfth thoracic vertebræ present certain

peculiarities, and must be specially considered (Fig. 91).

The First Thoracic Vertebra has, on either side of the body, an entire articular facet for the head of the first rib, and a demi-facet for the upper half of the head of the second rib. The body is like that of a cervical vertebra, being broad transversely; its upper surface is concave, and lipped on either side. The superior articular surfaces are directed upward and backward; the spinous process is thick, long, and almost horizontal. The transverse processes are long, and the upper vertebral notches are deeper than those of the other thoracic vertebræ.

The Ninth Thoracic Vertebra may have no demi-facets below. In some subjects however, it has two demi-facets on either side; when this occurs the tenth

has only demi-facets at the upper part.

The **Tenth Thoracic Vertebra** has (except in the cases just mentioned) an entire articular facet on either side, which is placed partly on the lateral surface of the pedicle.

In the **Eleventh Thoracic Vertebra** the **body** approaches in its form and size to that of the lumbar vertebræ. The articular facets for the heads of the ribs are of large size, and placed chiefly on the pedicles, which are thicker and stronger in this and the next vertebra than in any other part of the thoracic region. The spinous process is short, and nearly horizontal in direction. The transverse processes are very short, tuberculated at their extremities, and have on articular facets.

The Twelfth Thoracic Vertebra has the same general characteristics as the eleventh, but may be distinguished from it by its inferior articular surfaces being convex and directed lateralward, like those of the lumbar vertebræ; by the general form of the body, laminæ, and spinous process, in which it resembles the lumbar vertebræ; and by each transverse process being subdivided into three elevations, the superior, inferior, and lateral tubercles: the superior and inferior correspond to the mammillary and accessory processes of the lumbar vertebræ. Traces of similar elevations are found on the transverse processes of the tenth and eleventh thoracic vertebræ.

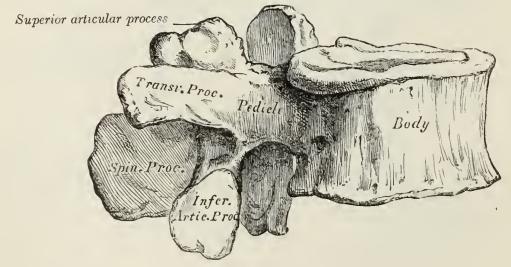


Fig. 92.—A lumbar vertebra seen from the side.

## The Lumbar Vertebræ (Vertebræ Lumbales).

The lumbar vertebræ (Figs. 92 and 93) are the largest segments of the movable part of the vertebral column, and can be distinguished by the absence of a foramen in the transverse process, and by the absence of facets on the sides of the body.

The body is large, wider from side to side than from before backward, and a little thicker in front than behind. It is flattened or slightly concave above and