

inferior border, but just in front of the angle, where it is deepest and broadest, it is on the internal surface. The superior edge of the groove is rounded and serves for the attachment of an *Intercostalis internus*; the inferior edge corresponds to the lower margin of the rib, and gives attachment to an *Intercostalis externus*. Within the groove are seen the orifices of numerous small foramina for nutrient vessels which traverse the shaft obliquely from before backward. The **superior border**, thick and rounded, is marked by an external and an internal lip, more distinct behind than in front, which serve for the attachment of *Intercostales externus* and *internus*. The **inferior border** is thin, and has attached to it an *Intercostalis externus*.

Anterior Extremity.—The anterior or sternal extremity is flattened, and presents a porous, oval, concave depression, into which the costal cartilage is received.

Peculiar Ribs.—The first, second, tenth, eleventh, and twelfth ribs present certain variations from the common characteristics described above, and require special consideration.

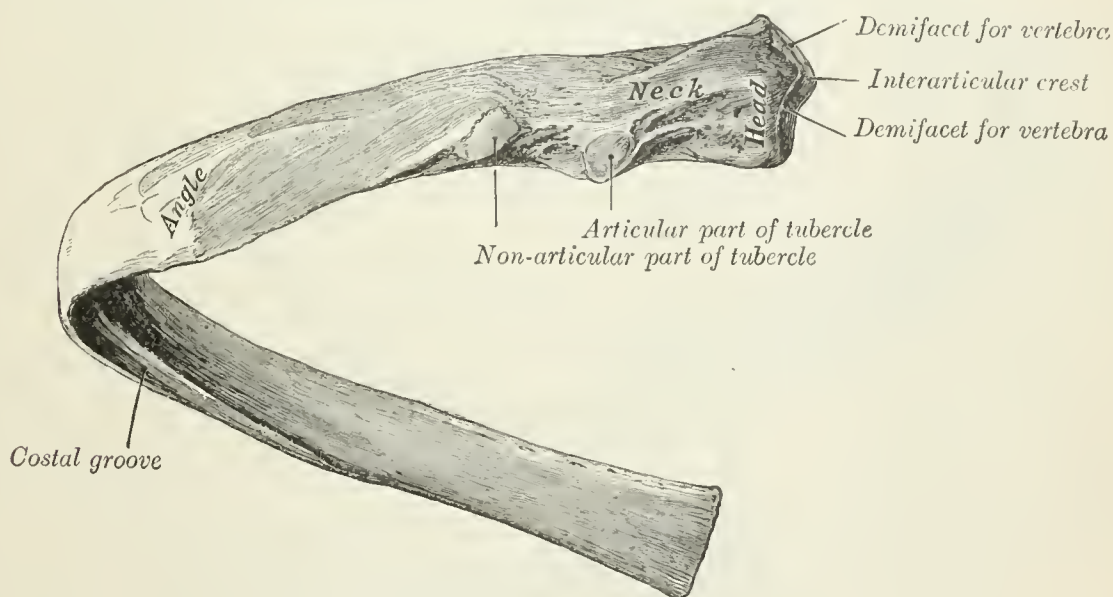


FIG. 123.—A central rib of the left side, viewed from behind.

First Rib.—The first rib (Fig. 124) is the most curved and usually the shortest of all the ribs; it is broad and flat, its surfaces looking upward and downward, and its borders inward and outward. The **head** is small, rounded, and possesses only a single articular facet, for articulation with the body of the first thoracic vertebra. The **neck** is narrow and rounded. The **tubercle**, thick and prominent, is placed on the outer border. There is *no angle*, but at the tubercle the rib is slightly bent, with the convexity upward, so that the head of the bone is directed downward. The **upper surface** of the body is marked by two shallow grooves, separated from each other by a slight ridge prolonged internally into a tubercle, the **scalene tubercle**, for the attachment of the *Scalenus anterior*; the anterior groove transmits the subclavian vein, the posterior the subclavian artery and the lowest trunk of the brachial plexus.¹ Behind the posterior groove is a rough area for the attachment of the *Scalenus medius*. The **under surface** is smooth, and destitute of a costal groove. The **outer border** is convex, thick, and rounded, and at its posterior part gives attachment to the first digitation of the *Serratus anterior*; the **inner border** is concave, thin, and sharp, and marked about its center by the scalene tubercle. The **anterior extremity** is larger and thicker than that of any of the other ribs.

Second Rib.—The second rib (Fig. 125) is much longer than the first, but has a very similar curvature. The non-articular portion of the **tubercle** is occasionally

¹ Anat. Anzeiger, 1910, Band xxxvi.