

on account of the greater breadth of the pelvis. The femur, like other long bones, is divisible into a **body** and **two extremities**.

**The Upper Extremity** (*proximal extremity*, Fig. 243).—The upper extremity presents for examination a **head**, a **neck**, a **greater** and a **lesser trochanter**.

**The Head** (*caput femoris*).—The head which is globular and forms rather more than a hemisphere, is directed upward, medialward, and a little forward, the greater part of its convexity being above and in front. Its surface is smooth, coated with cartilage in the fresh state, except over an ovoid depression, the **fovea capitis femoris**, which is situated a little below and behind the center of the head, and gives attachment to the ligamentum teres.

**The Neck** (*collum femoris*).—The neck is a flattened pyramidal process of bone, connecting the head with the body, and forming with the latter a wide angle opening medialward. The angle is widest in infancy, and becomes lessened during growth, so that at puberty it forms a gentle curve from the axis of the body of the bone. In the adult, the neck forms an angle of about  $125^{\circ}$  with the body, but this varies in inverse proportion to the development of the pelvis and the stature. In

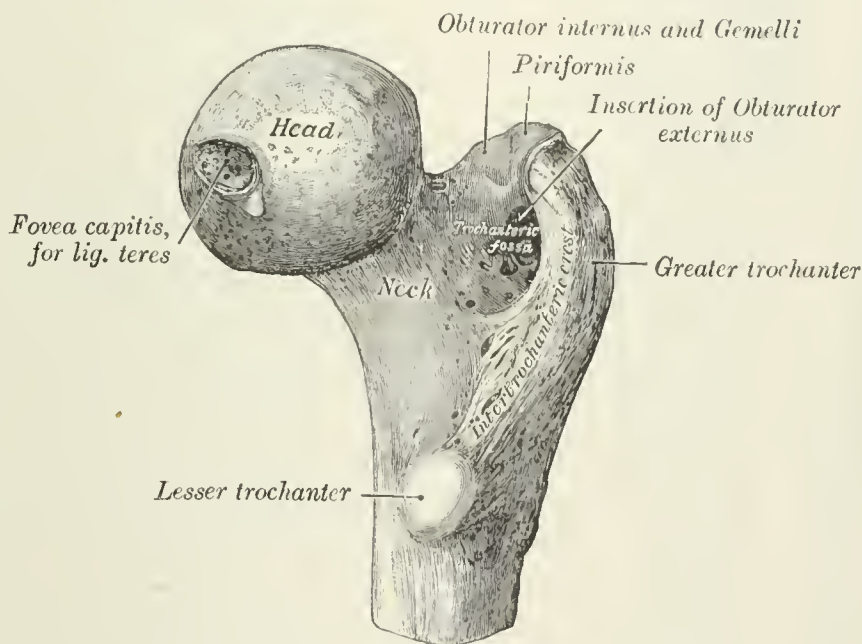


FIG. 243.—Upper extremity of right femur viewed from behind and above.

the female, in consequence of the increased width of the pelvis, the neck of the femur forms more nearly a right angle with the body than it does in the male. The angle decreases during the period of growth, but after full growth has been attained it does not usually undergo any change, even in old age; it varies considerably in different persons of the same age. It is smaller in short than in long bones, and when the pelvis is wide. In addition to projecting upward and medialward from the body of the femur, the neck also projects somewhat forward; the amount of this forward projection is extremely variable, but on an average is from  $12^{\circ}$  to  $14^{\circ}$ .

The neck is flattened from before backward, contracted in the middle, and broader laterally than medially. The vertical diameter of the lateral half is increased by the obliquity of the lower edge, which slopes downward to join the body at the level of the lesser trochanter, so that it measures one-third more than the antero-posterior diameter. The medial half is smaller and of a more circular shape. The **anterior surface** of the neck is perforated by numerous vascular foramina. Along the upper part of the line of junction of the anterior surface with the head is a shallow groove, best marked in elderly subjects; this