

chanter, and ends about 5 cm. below this eminence in the *linea aspera*. Its upper half is rough, and affords attachment to the iliofemoral ligament of the hip-joint; its lower half is less prominent, and gives origin to the upper part of the *Vastus medialis*. Running obliquely downward and medialward from the summit of the greater trochanter on the posterior surface of the neck is a prominent ridge, the **intertrochanteric crest**. Its upper half forms the posterior border of the greater trochanter, and its lower half runs downward and medialward to the lesser trochanter. A slight ridge is sometimes seen commencing about the middle of the intertrochanteric crest, and reaching vertically downward for about 5 cm. along the back part of the body: it is called the **linea quadrata**, and gives attachment to the *Quadratus femoris* and a few fibers of the *Adductor magnus*. Generally there is merely a slight thickening about the middle of the intertrochanteric crest, marking the attachment of the upper part of the *Quadratus femoris*.

The Body or Shaft (*corpus femoris*).—The body, almost cylindrical in form, is a little broader above than in the center, broadest and somewhat flattened from before backward below. It is slightly arched, so as to be convex in front, and concave behind, where it is strengthened by a prominent longitudinal ridge, the **linea aspera**. It presents for examination three borders, separating three surfaces. Of the borders, one, the *linea aspera*, is posterior, one is medial, and the other, lateral.

The **linea aspera** (Fig. 245) is a prominent longitudinal ridge or crest, on the middle third of the bone, presenting a medial and a lateral lip, and a narrow rough, intermediate line. Above, the *linea aspera* is prolonged by three ridges. The lateral ridge is very rough, and runs almost vertically upward to the base of the greater trochanter. It is termed the **gluteal tuberosity**, and gives attachment to part of the *Glutæus maximus*: its upper part is often elongated into a roughened crest, on which a more or less well-marked, rounded tubercle, the **third trochanter**, is occasionally developed. The intermediate ridge or **pectineal line** is continued to the base of the lesser trochanter and gives attachment to the *Pectineus*; the medial ridge is lost in the intertrochanteric line; between these two a portion of the *Iliacus* is inserted. Below, the *linea aspera* is prolonged into two ridges, enclosing between them a triangular area, the **popliteal surface**, upon which the popliteal artery rests. Of these two ridges, the lateral is the more prominent, and descends to the summit of the lateral condyle. The medial is less marked, especially at its upper part, where it is crossed by the femoral artery. It ends below at the summit of the medial condyle, in a small tubercle, the **adductor tubercle**, which affords insertion to the tendon of the *Adductor magnus*.

From the **medial lip** of the *linea aspera* and its prolongations above and below, the *Vastus medialis* arises; and from the **lateral lip** and its upward prolongation, the *Vastus lateralis* takes origin. The *Adductor magnus* is inserted into the *linea aspera*, and to its lateral prolongation above, and its medial prolongation below. Between the *Vastus lateralis* and the *Adductor magnus* two muscles are attached—viz., the *Glutæus maximus* inserted above, and the short head of the *Biceps femoris* arising below. Between the *Adductor magnus* and the *Vastus medialis* four muscles are inserted: the *Iliacus* and *Pectineus* above; the *Adductor brevis* and *Adductor longus* below. The *linea aspera* is perforated a little below its center by the nutrient canal, which is directed obliquely upward.

The other two *borders* of the femur are only slightly marked: the **lateral border** extends from the antero-inferior angle of the greater trochanter to the anterior extremity of the lateral condyle; the **medial border** from the intertrochanteric line, at a point opposite the lesser trochanter, to the anterior extremity of the medial condyle.

The **anterior surface** includes that portion of the shaft which is situated between the lateral and medial borders. It is smooth, convex, broader above and below than in the center. From the upper three-fourths of this surface the *Vastus intermedius* arises; the lower fourth is separated from the muscle by the intervention