

tutes part of the anterior boundary of the lesser pelvis. It is smooth, convex from above downward, and affords origin to some fibers of the Obturator internus.

**The Inferior Ramus** (*ramus inferior oss. pubis; descending ramus*).—The inferior ramus is thin and flattened. It passes lateralward and downward from the medial end of the superior ramus; it becomes narrower as it descends and joins with the inferior ramus of the ischium below the obturator foramen. Its **anterior surface** is rough, for the origin of muscles—the Gracilis along its medial border, a portion of the Obturator externus where it enters into the formation of the obturator foramen, and between these two, the Adductores brevis and magnus, the former being the more medial. The **posterior surface** is smooth, and gives origin to the Obturator internus, and, close to the medial margin, to the Constrictor urethrae. The **medial border** is thick, rough, and everted, especially in females. It presents two ridges, separated by an intervening space. The ridges extend downward, and are continuous with similar ridges on the inferior ramus of the ischium; to the external is attached the fascia of Colles, and to the internal the inferior fascia of the urogenital diaphragm. The **lateral border** is thin and sharp, forms part of the circumference of the obturator foramen, and gives attachment to the obturator membrane.

**The Acetabulum** (*cotyloid cavity*).—The acetabulum is a deep, cup-shaped, hemispherical depression, directed downward, lateralward, and forward. It is formed medially by the pubis, above by the ilium, laterally and below by the ischium; a little less than two-fifths is contributed by the ilium, a little more than two-fifths by the ischium, and the remaining fifth by the pubis. It is bounded by a prominent uneven rim, which is thick and strong above, and serves for the attachment of the **glenoidal labrum** (*cotyloid ligament*), which contracts its orifice, and deepens the surface for articulation. It presents below a deep notch, the **acetabular notch**, which is continuous with a circular non-articular depression, the **acetabular fossa**, at the bottom of the cavity: this depression is perforated by numerous apertures, and lodges a mass of fat. The notch is converted into a foramen by the transverse ligament; through the foramen nutrient vessels and nerves enter the joint; the margins of the notch serve for the attachment of the ligamentum teres. The rest of the acetabulum is formed by a curved articular surface, the **lunate surface**, for articulation with the head of the femur.

**The Obturator Foramen** (*foramen obturatum; thyroid foramen*).—The obturator foramen is a large aperture, situated between the ischium and pubis. In the male it is large and of an oval form, its longest diameter slanting obliquely from before backward; in the female it is smaller, and more triangular. It is bounded by a thin, uneven margin, to which a strong membrane is attached, and presents, superiorly, a deep groove, the **obturator groove**, which runs from the pelvis obliquely medialward and downward. This groove is converted into a canal by a ligamentous band, a specialized part of the obturator membrane, attached to two tubercles: one, the **posterior obturator tubercle**, on the medial border of the ischium, just in front of the acetabular notch; the other, the **anterior obturator tubercle**, on the obturator crest of the superior ramus of the pubis. Through the canal the obturator vessels and nerve pass out of the pelvis.

**Structure.**—The thicker parts of the bone consist of cancellous tissue, enclosed between two layers of compact tissue; the thinner parts, as at the bottom of the acetabulum and center of the iliac fossa, are usually semitransparent, and composed entirely of compact tissue.

**Ossification** (Fig. 237).—The hip bone is ossified from *eight* centers: *three* primary—one each for the ilium, ischium, and pubis; and *five* secondary—one each for the crest of the ilium, the anterior inferior spine (said to occur more frequently in the male than in the female), the tuberosity of the ischium, the pubic symphysis (more frequent in the female than in the male), and one or more for the Y-shaped piece at the bottom of the acetabulum. The centers appear in the following order: in the lower part of the ilium, immediately above the greater sciatic notch, about the eighth or ninth week of fetal life; in the superior ramus of the ischium, about the third month;