

still have a cartilaginous union, are imperfectly ossified, consequently they have more vascularity than the full formed bone; hence may be one of the reasons of the greater tendency to disease at this period of life, while this formation admits the possibility, that these divisions may now be burst asunder by the forcible driving into the acetabulum of the head of the thigh-bone. Near this line of junction of these bones, we may see the deep and circular pit, which lodges a mass of fat, and gives attachment to the round ligament. The free edges of the acetabulum are edged out with cartilage, so as greatly to deepen its cavity; the upper part formed by the ilium, is the deepest and strongest, here the head of the thigh-bone lies deep covered by the broad and strong lips: here, too, rests the whole weight of the body when in the erect position; and we can easily understand that when a person falls from a height, and falls upon his feet, the greatest resistance is offered at this point, which being transferred to the neck of the thigh-bone, it not unfrequently yields to the impulse. Not so with the lower part, for not having to bear the weight of the body, the head of the thigh-bone is much more superficially lodged. Its margin is but partially formed of bone, and is filled in with ligament to complete the cup. Here, too, there being least pressure from the head of the bone, is situated that mass of fat, which serves greatly to amplify the lubricating apparatus of the joint; it used to be called the *ligamentum mucosum*. So large a joint requires to be constantly moistened with fluid to facilitate the movements, and the lining membrane of this apparatus has to be largely supplied with blood, and here, in a notch in the bone, we find the spot where the bloodvessels enter safe from pressure during the varied movements of the head of the thigh-bone. This deficiency of bone in the margin of the acetabulum, which is filled up with ligament, may be one of the reasons why luxation downwards into the thyroid hole may be more easy, although it is not more frequent, than upwards upon the dorsum of the ilium.

The head of the thigh bone differs in character from any other bone in the body. It is beautifully round, almost a perfect ball, except where it joins the neck. It is covered with a beautiful smooth and elastic cartilage wherever its surface touches the spheroid cavity—this is also lined with a similar structure, and permits movement, with the greatest ease and facility. The head of the humerus, though of a somewhat similar character, and perhaps admitting of equal latitude of movement, has not the depth and strength or perfect form of the head of the thigh bone; for while the head of the shoulder bone is the smaller segment of a larger circle, and is, as it were, just laid against the glenoid cavity: this the larger segment of a lesser circle, is so entirely buried within the deep and firm cavity of the hip-joint, that even in the dead subject it requires considerable force to remove it from the socket,