

in a fan-like radiation to the opposite side of the bone; the other, having origin in the lateral (outer) portion of the shaft and arching upward and medially to end in the upper surface of the greater trochanter, neck and head. These two systems intersect each other at right angles.

"A. *Medial (Compressive) System of Trabeculae*.—As the compact bone of the medial (inner) part of the shaft nears the head of the femur it gradually becomes thinner and finally reaches the articular surface of the head as a very thin layer. From a point at about the lower level of the



FIG. 247.—Frontal longitudinal midsection of upper femur.

lesser trochanter,  $2\frac{1}{2}$  to 3 inches from the lower limit of the articular surface of the head, the trabeculae branch off from the shaft in smooth curves, spreading radially to cross to the opposite side in two well-defined groups: a lower, or secondary group, and an upper, or principal group.

"a. *The Secondary Compressive Group*.—This group of trabeculae leaves the inner border of the shaft beginning at about the level of the lesser trochanter, and for a distance of almost 2 inches along the curving shaft, with which the separate trabeculae make an angle of about 45 degrees.