

in the lower end; and at the fifth year, in the upper end. The upper epiphysis fuses with the body at the age of seventeen or eighteen years, the lower about the age of twenty. An additional center sometimes found in the radial tuberosity, appears about the fourteenth or fifteenth year.



FIG. 217.—Plan of ossification of the radius. From three centers.

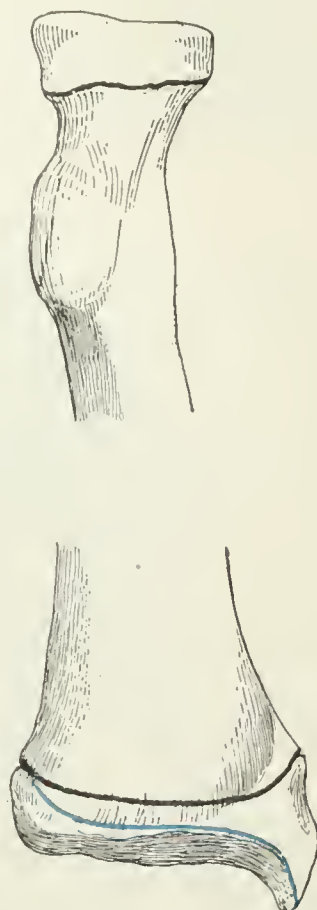


FIG. 218.—Epiphysial lines of radius in a young adult. Anterior aspect. The line of attachment of the articular capsule of the wrist-joint is in blue.

THE HAND.

The skeleton of the hand (Figs. 219, 220) is subdivided into three segments: the carpus or wrist bones; the metacarpus or bones of the palm; and the phalanges or bones of the digits.

The Carpus (Ossa Carpi).

The carpal bones, eight in number, are arranged in two rows. Those of the proximal row, from the radial to the ulnar side, are named the **navicular**, **lunate**, **triangular**, and **pisiform**; those of the distal row, in the same order, are named the **greater multangular**, **lesser multangular**, **capitate**, and **hamate**.

Common Characteristics of the Carpal Bones.—Each bone (excepting the pisiform) presents six surfaces. Of these the *volar* or *anterior* and the *dorsal* or *posterior* surfaces are rough, for ligamentous attachment; the dorsal surfaces being the broader, except in the navicular and lunate. The *superior* or *proximal*, and *inferior* or *distal* surfaces are articular, the superior generally convex, the inferior concave; the *medial* and *lateral* surfaces are also articular where they are in contact with contiguous bones, otherwise they are rough and tuberculated. The structure in all is similar, viz., cancellous tissue enclosed in a layer of compact bone.

Bones of the Proximal Row (upper row).—**The Navicular Bone** (*os naviculare manus*; *scaphoid bone*) (Fig. 221).—The navicular bone is the largest bone of the proximal row, and has received its name from its fancied resemblance to a boat. It is situated at the radial side of the carpus, its long axis being from above downward, lateralward, and forward. The **superior surface** is convex, smooth, of triangular shape, and artic-