

fossa and the upper part of the infraspinatus fossa, but especially the former, are usually so thin as to be semitransparent; occasionally the bone is found wanting in this situation, and the adjacent muscles are separated only by fibrous tissue.

Ossification (Fig. 206).—The scapula is ossified from *seven* or more centers: one for the body, two for the coracoid process, two for the acromion, one for the vertebral border, and one for the inferior angle.

Ossification of the body begins about the second month of fetal life, by the formation of an irregular quadrilateral plate of bone, immediately behind the glenoid cavity. This plate extends so as to form the chief part of the bone, the spine growing up from its dorsal surface about the third month. At birth, a large part of the scapula is osseous, but the glenoid cavity, the coracoid process, the acromion, the vertebral border, and the inferior angle are cartilaginous. From the fifteenth to the eighteenth month after birth, ossification takes place in the middle of the coracoid process, which as a rule becomes joined with the rest of the bone about the fifteenth year. Between the fourteenth and twentieth years, ossification of the remaining parts takes place in quick succession, and usually in the following order; first, in the root of the coracoid process, in the form of a broad scale; secondly, near the base of the acromion; thirdly, in the inferior angle and contiguous part of the vertebral border; fourthly, near the extremity of the acromion; fifthly, in the vertebral border. The base of the acromion is formed by an extension from the spine; the two separate nuclei of the acromion unite, and then join with the extension from the spine. The upper third

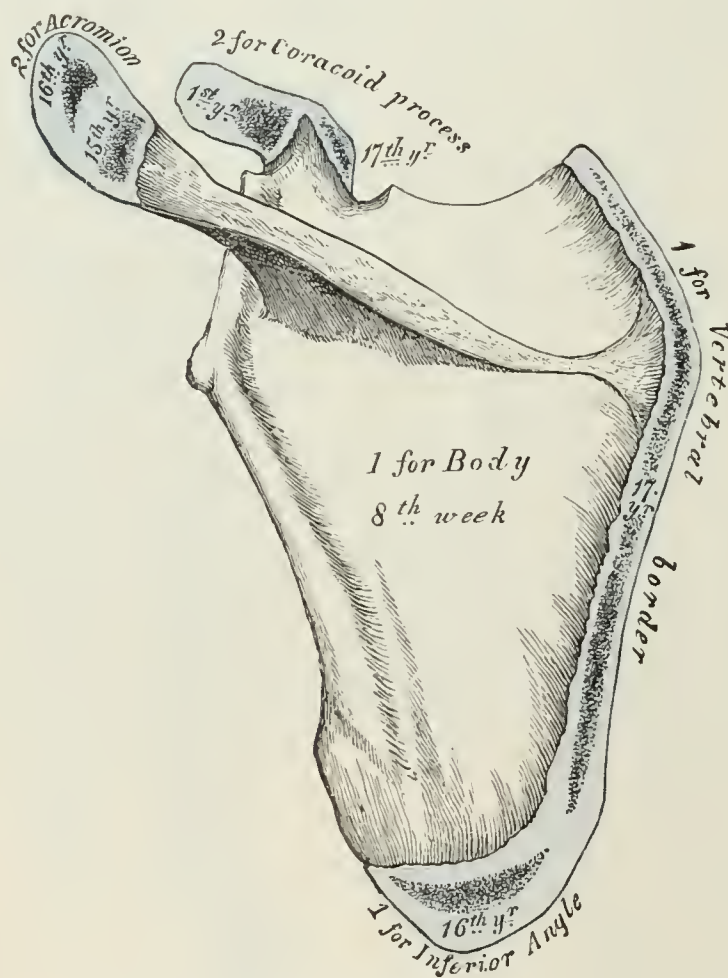


FIG. 206.—Plan of ossification of the scapula. From seven centers.

of the glenoid cavity is ossified from a separate center (subcoracoid), which makes its appearance between the tenth and eleventh years and joins between the sixteenth and the eighteenth. Further, an epiphysial plate appears for the lower part of the glenoid cavity, while the tip of the coracoid process frequently presents a separate nucleus. These various epiphyses are joined to the bone by the twenty-fifth year. Failure of bony union between the acromion and spine sometimes occurs, the junction being effected by fibrous tissue, or by an imperfect articulation; in some cases of supposed fracture of the acromion with ligamentous union, it is probable that the detached segment was never united to the rest of the bone.