two synchondroses, **neurocentral synchondroses,** traversing it along the planes of junction of the three centers (Fig. 102). In the thoracic region, the facets for the heads of the ribs lie behind the neurocentral synchondroses and are ossified from the centers for the vertebral arch. At birth the vertebra consists of three pieces, the body and the halves of the vertebral arch. During the first year the halves of the arch unite behind, union taking place first in the lumbar region and then extending upward through the thoracic and cervical regions. About the third year the bodies of the upper cervical vertebræ are joined to the arches on either side; in the lower lumbar vertebræ the union is not completed until the sixth year. Before puberty, no other

Fig. 101.—Ossification of a vertebra

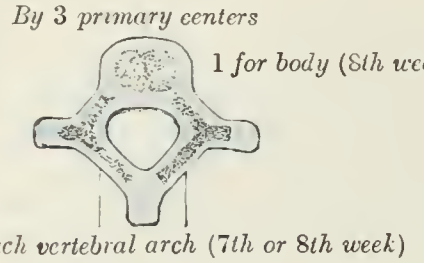


Fig. 102.

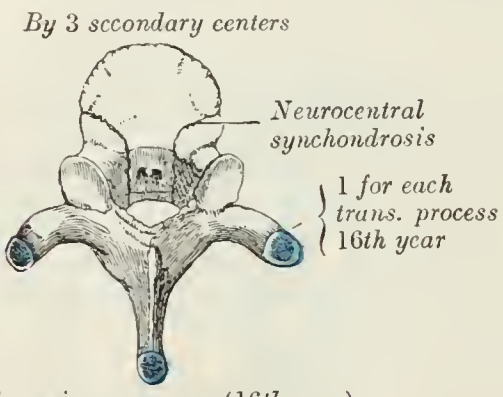


Fig. 103.

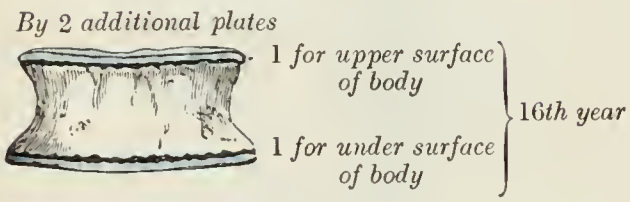


Fig. 104.—Atlas.

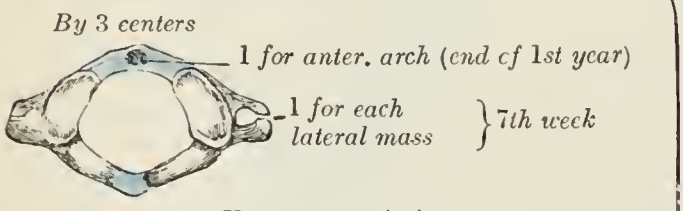


Fig. 105.—Axis.

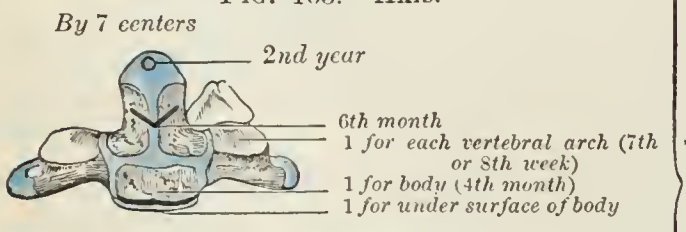
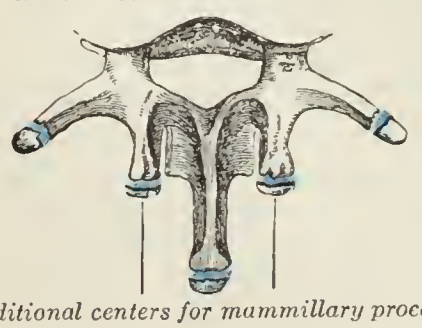


Fig. 106.—Lumbar vertebra.



Exceptional cases

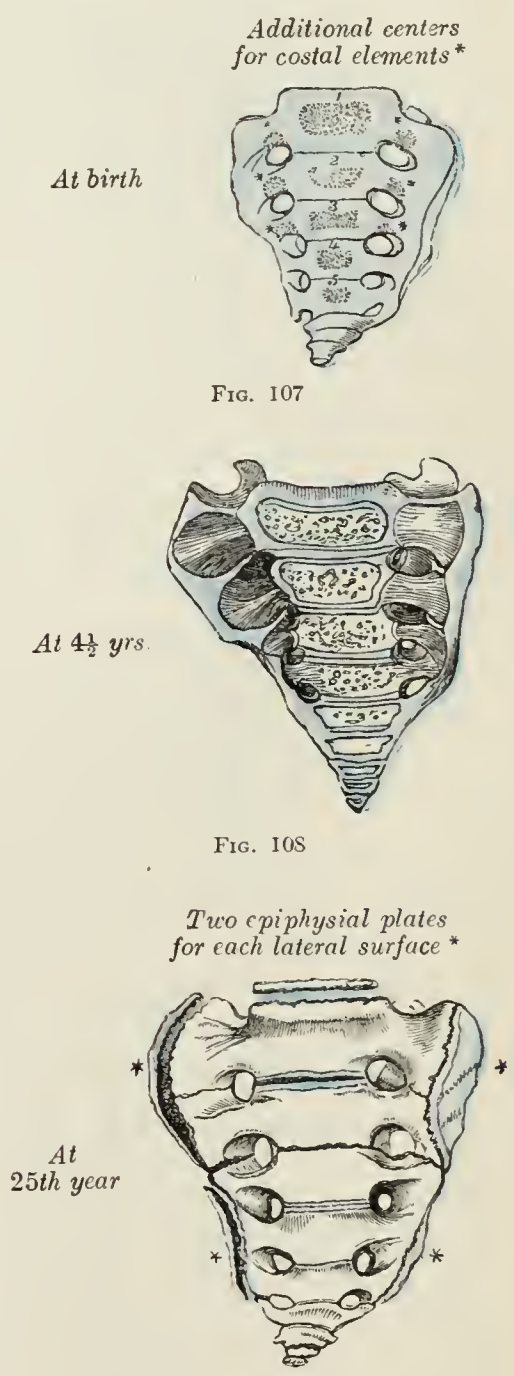


Fig. 107

Fig. 108

Fig. 107-109.—Ossification of the sacrum.

changes occur, excepting a gradual increase of these primary centers, the upper and under surfaces of the bodies and the ends of the transverse and spinous processes being cartilaginous.