

consequently the surface to which it is attached on the lower face posteriorly of the preceding rib, is at some distance from that rib's inner termination on the side of the midline to which the rib belongs. Therefore, each rib has two separate rugose surfaces of attachment, one on the upper face near the front border, the other on the lower face near the hinder border (Figures 25, 26, and 27).

The rugose areas of attachment generally have the form of an irregular, elongated oval which is at times broken up into two or three minor surfaces of variable size.

It is probable that there was considerable play between the ribs, obviating a rigidity in the cuirass and securing an amount of flexibility of service probably in connexion with the animal's breathing, and suggestive also of the creature's frequent assumption of positions which brought the abdomen in contact with hard objects such as the ground when resting, or vegetation through which a passage had to be forced.

The ribs are quadrangular in cross section at their midlength, curve evenly backward, and taper gradually to a blunt point. There is a gradual diminution in the breadth (antero-posterior) of the ribs in passing backward in the series. Near their inner ends they become flattened and here reach their maximum breadth with a thin, protrudent posterior edge. The rib heads themselves bend slightly backward, are flat and narrow, and terminate abruptly. As already mentioned, each rib at the median overlap is twisted downward in front so as to bring its anterior border beneath the posterior border of the rib in front and effect an intercostal union.

At the distal end the ribs are grooved infero-anteriorly for the reception of the slender rod shaped bones which lie against them. These latter are more attenuated proximally than distally where they are rather bluntly pointed. Their length is greatest at the midlength of the series where they are about half the length of the ribs to which they are applied and beyond which they project for a short distance.

Whereas in *Gorgosaurus* and some allied Cretaceous genera a limited number of ventral ribs are co-ossified to form a single median piece supporting a shorter, slender piece at each end, in *Sphenodon* the majority of these ribs have united in the midline and consist of a central transverse length and two slender outer bones (Figure 28). The ribs of the Cretaceous rhynchocephaloid reptile *Champsosaurus* have a median and two lateral pieces.