joint of the rachis has no protecting cover, except in so far as the attenuated posterior lobe (basal lobes) of the glabella may assume that office, an unusual condition with trilobites. *A. regulus* is the only species known to me that has an occipital ring.

Agnostus is the sole genus among the early Cambrian trilobites, except Microdiscus, in which the pleural groove runs forward in going outward toward the extremity of the pleura, and in association with this we find the point of the pleura in most Agnosti turned forward,* this is especially plain in Longifrontes. In Fallaces the pleural groove on the posterior segment lies along the front of the pleura, but on the anterior segment at the back; hence the pleura in this group is inflated in the middle and tubercle-like; on the anterior segment there are really two grooves, of which the anterior affords an interlocking edge with the marginal fold of the head shield when the body if folded together.

The long pygidium of an Agnostus assures us that this part has undergone very considerable changes from the early larval moults, but the proof is not often apparent; an examination of the tests of two species (*A. Acadicus* var. *declivis* and *A. Nathorsti*) give an inkling of the way in which the changes have come about—those which resulted in the three-lobed rachis of the early Agnosti.

In *A. Nathorsti* and other Longifrontes the attenuated and depressed end of the rachis is the original pygidium, the front of this part is marked by a minute tubercle (to be found only in well preserved tests); in a rare example of the pygidium of *declivis* three pairs of scars behind this tubercle point out the existence of three somites here; two pairs of scars in front of this little tubercle indicate the presence of two more somites, which complete the posterior lobe of the rachis; these two somites swell out to greater width and height than those behind; the anterior of these two somites is also sometimes further marked off by a pair of furrows, one on each side of the rachis corresponding to the oblique furrow on each side of the anterior lobe of the adult rachis; in Regii these furrows are so strongly developed that this somite was counted by Barrande as a part of the middle lobe of the rachis. The middle lobe and the anterior lobe of the rachis form another enlarged pair of somites with a tubercle or spine at the back, and correspond to the two front somites of the posterior lobe.

We thus see that by its pygidium Agnostus shows three stages

*An exception to this almost universal rule is *A. granulatus* Barr., but it is one of the few Agnosti that have genal spines.

NOTE—204 of last line p. 208, should be 210.
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