

THE *ASTEROLEPIS*, ITS STRUCTURE, BULK, AND ASPECT.

WITH the reader, if he has accompanied me thus far, I shall now pass on to the consideration of the remains of the *Asterolepis*. Our preliminary acquaintance with the cerebral peculiarities of a few of its less gigantic contemporaries will be found of use in enabling us to determine regarding a class of somewhat resembling peculiarities which characterized this hugest Ganoid of the Old Red Sandstone.

The head of the *Asterolepis*, like the heads of all the other Cœlacanth, and of all the Dipterians, was covered with osseous plates,—its body with osseous scales; and, as I have already had occasion to mention, it is from the star-like tubercles by which the cerebral plates were fretted that M. Eichwald bestowed on the creature its generic name. Agassiz has even erected species on certain varieties in the pattern of the stars, as exhibited on detached fragments; but I am far from being satisfied that we are to seek in their peculiarities of style the characters by which the several species were distinguished. The stellar form of the tubercle seems to have been its normal or most perfect form, as it was also, with certain modifications, that of the tubercle of the *Coccosteus* and *Pterichthys*; but its development as a complete star was comparatively rare: in most cases the tubercles existed without the rays,—frequently in the insu-