

ridges, breaking atop into angular-shaped dots, scooped out internally like the letter V; and were evidently intermediate in their character between the scales which cover the *Glyptolepis* and those of the *Holoptychius*. And the stellate markings, which M. Eichwald graphically describes as minute paps rising out of the middle of star-like wreaths of little leaflets, were restricted to the dermal plates of the head.

Agassiz ultimately succeeded in classing the bones which had at first so puzzled him, into two divisions — interior and dermal; and the latter he divided yet further, though not without first lodging a precautionary protest, founded on the extreme obscurity of the subject, into cranial and opercular. Of the interior bones he specified two, — a super-scapular bone, (*supra-scapulaire*,) — that bone which in osseous fishes completes the scapular arch or belt, by uniting the scapula to the cranium; and a maxillary or upper jaw-bone. But his world-wide acquaintance with existing fishes could lend him no assistance in determining the places of the dermal bones: they formed the mere fragments of a broken puzzle, of which the key was lost. Even in their detached and irreducible state, however, he succeeded in basing upon them several shrewd deductions. He inferred, in the first place, that the *Asterolepis* was not, as had been at first supposed, a cuirassed fish, which took its place among the Cephalaspian, but a strongly helmed fish of that Cœlacanth family to which the *Holoptychius* and *Glyptolepis* belong; in the second, that, like several of its bulkier cogeners, it was in all probability a broad, flat-headed animal; and, in the third, that as its remains are found associated in the Russian beds with numerous detached teeth of large size, — the boar tusks of Kuorga, — which present internally that peculiar microscopic