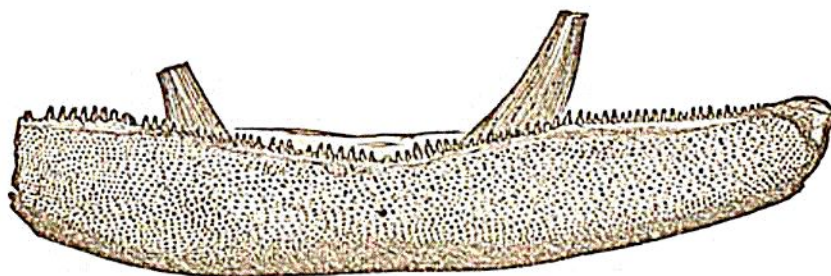


describe laterally and posteriorly about one half the eye orbits, have their area on the exterior surface greatly reduced by the overriding squamose sutures of the plates to which they join; and lastly, two of these overlying plates, E, E,—which, occurring in the line of the lateral bar or beam, are of great strength and thickness, and lie for two thirds of their length along the parietals, and for the remaining third along the superior frontals,—represent the mastoid bones. Such, so far as I have been yet able to read the cranial buckler of the *Asterolepis*, seem to be the homologues of its component plates.

There were no parts of the animal more remarkable than its jaws. The under jaws,—for the nether maxillary consisted, in this fish, as in the placoid fishes, and in the quadrupeds generally, of two pieces joined in the middle,—were, like those of the *Holoptychius*, boxes of bone, which enclosed central masses of cartilage. The outer and under sides were thickly covered with the characteristic star-like tubercles; and along the upper margin or lip there ran a thickly-set row of small broadly-based teeth, planted as directly on the edge of the exterior plate as iron spikes on the upper edge of a gate, (fig. 30.) Mr. Parkinson expresses some wonder, in

Fig. 30.



PORTION OF UNDER JAW OF ASTEROLEPIS, (OUTER SIDE.)

(One half nat. size.)