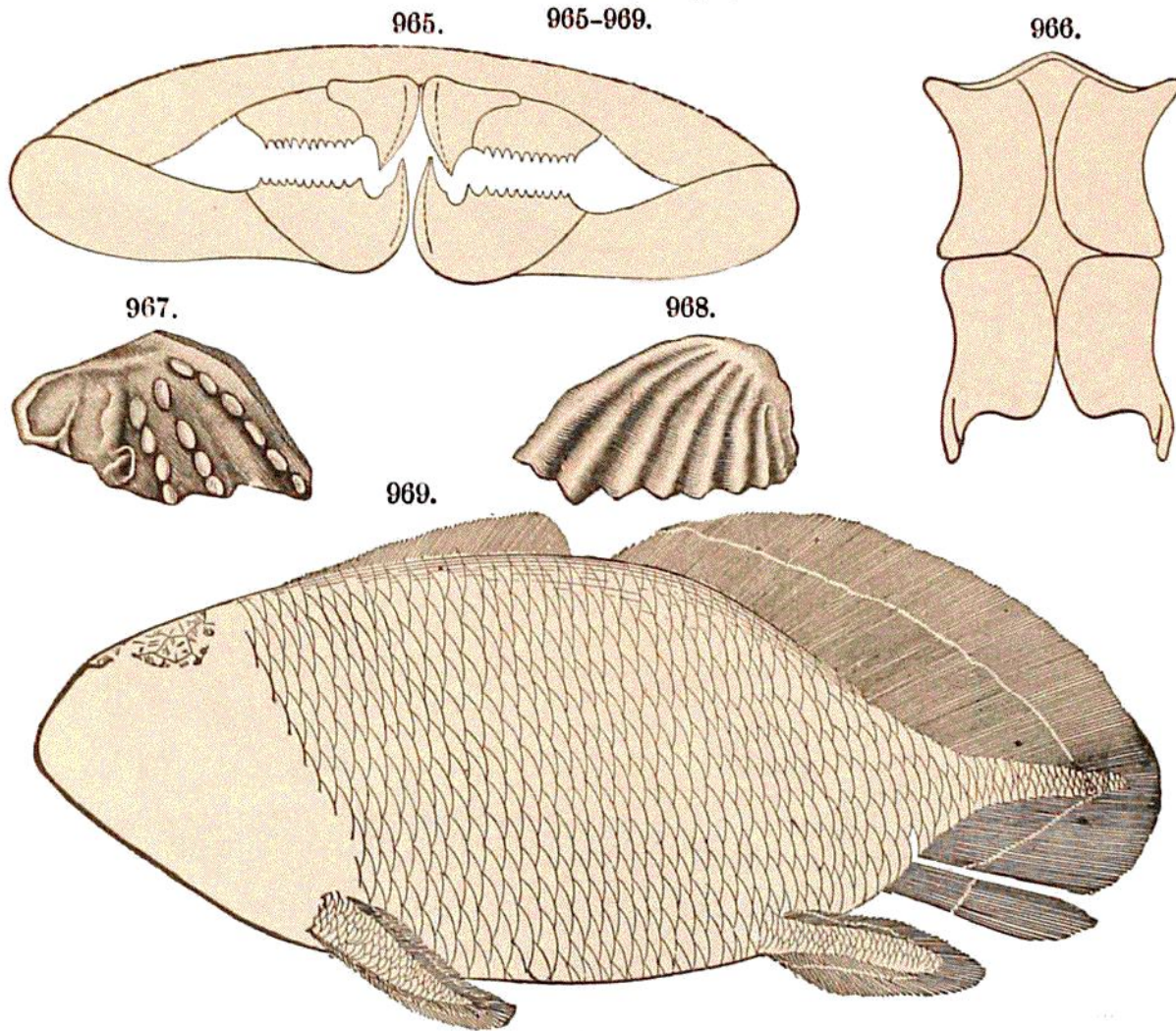


Chemung of Erie County, Pa. It is the *Protolimulus Eriensis* of H. S. Williams.

7. **Vertebrates.** — Remains of Placoderms, of the brachiate type, or related to *Pterichthys*, have been found in Ohio and in the Catskill sandstone of New York and Pennsylvania, and nearly perfect specimens (Figs. 960, 960 *a*) of one species, *Bothriolepis Canadensis* of Whiteaves, at Scaumenac Bay (in Baie de Chaleurs), New Brunswick. Fig. 960 is a view of the dorsal shield, and 960 *a*, the ventral, both reduced to a third of the natural size; and 960 shows also the probable outline of the posterior extremity, which has been added to Whiteaves's figures from the form in *Pterichthys*. Fig. 961 represents, natural size, the finger-like termination of a fore limb of possibly the same species, described by Cope, which was found at Mansfield,



DIPNOAN FISHES. — Fig. 965, *Dinichthys Hertzleri*, front view of jaws ($\times \frac{1}{16}$); 966, ventral plates ($\times \frac{1}{16}$); 967, palate tooth of *Dipterus Sherwoodi*; 968, id. of *Ctenodus Nelsoni*: all from Newberry. Fig. 969, *Phaneropleuron curtum* ($\times \frac{1}{2}$), from Whiteaves.

Tioga County, Pa., with remains of *Holonema*. Fig. 962 represents a plate of *Bothriolepis* from the Catskill beds.

No remains of the posterior scaly part of the body have been observed in connection with specimens of the American species of *Bothriolepis*, though occurring in Scotland with those of *Pterichthys*.