

served between the fossils of the limestones and the shales even in the same quarry. The limestones, for example, may be crowded with the joints of crinoids, corals of various kinds, producti and other brachiopods, while the shales above them may contain



Fig. 361.—Carboniferous Ichthyodonta, or Dorsal Fish-spine, *Sphenacanthus* (*Otenacanthus*) *hybodontoides*, Egerton.

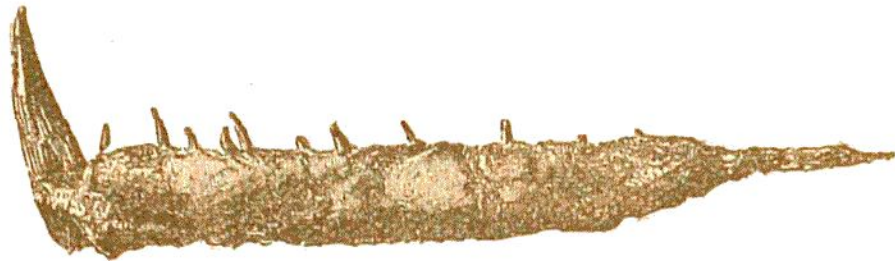


Fig. 362.—Carboniferous Fish.
Jaw of *Rhizodus Hibberti*, Ag. sp., one-third nat. size.

few of these organisms, but afford polyzoa, *Conularia*, horny brachiopods (*Lingula*, *Dis-*

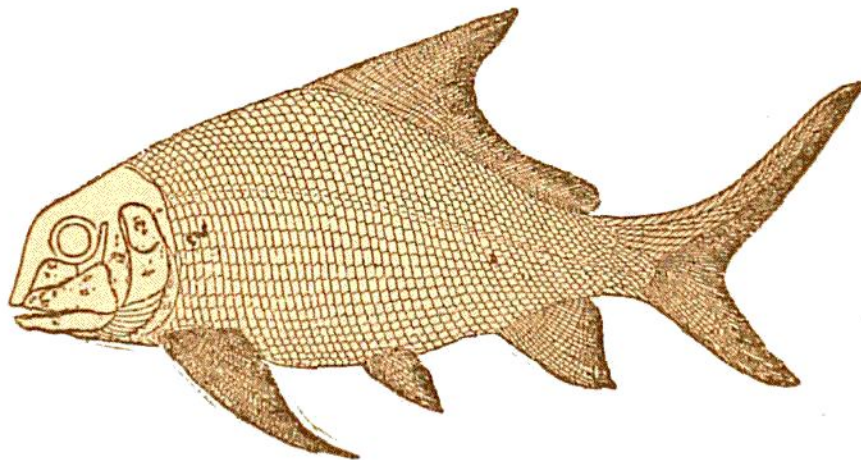


Fig. 363.—Carboniferous Fish.
Eurynotus crenatus, Ag., "Cement-stones" of Scotland
(after Traquair).

cina), many lamellibranchs, especially pectens, aviculopectens, nuculas, ledas, and gastropods (*Pleurotomaria*, *Loxonema*, *Bellerophon*, etc.). It is evident that while some organisms flourished only in clear water, such as that in which the limestones accumulated, others abounded on a muddy bottom, although some seem to have lived in either situation, if we may judge from