ceras represents the rich cephalopodan fauna of the Carboniferous Limestone.

It is not, however, from the sites of the brackish inland seas of western and central Europe that we may obtain the best conception of the animal life of Permian time. If we pass southward into the Alps and the Mediterranean basin or eastward into the Uralian region and thence into India, we find that while some of the European forms extend into these areas, they are accompanied by many hundreds of other species. One of the most remarkable features in this richer and more varied fauna is the great number of cephalopods and the affinities which many of them present to the Ammonites

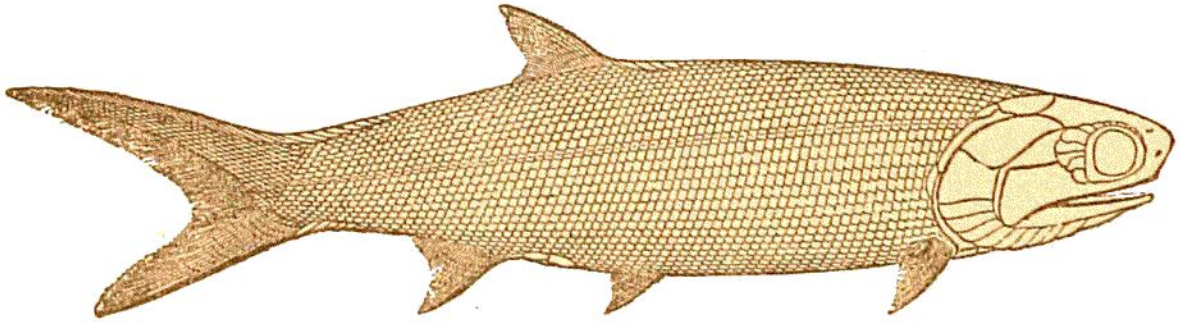

Fig. 375.—Palæoniscus macropomus, Ag. (½), Kupferschiefer. From a restoration by Dr. Traquair.

so characteristic of Mesozoic time. Among the Permian genera of this type are Adrianites, Arcestes, Medlicottia, Popanoceras, Stacheoceras, Thalassoceras, and Waagenoceras. They are associated with many forms of Orthoceras, Gyroceras, and Nautilus—a blending of Palæozoic and Mesozoic types which is much less clearly shown in central and western Europe.

Fishes, which are proportionately better represented in the Permian rocks than the invertebrates, chiefly occur in the marl-slate or Kupferschiefer, the most common genera being Palæoniscus (Fig. 375), which is specially characteris-