

Comparing the Fishes of the Chalk with those of the elder Tertiary formation of Monte Bolca, we find not one species, and but few genera, that are common to both.*

Fishes of the Tertiary Formations.

As soon as we enter on the Tertiary strata, another change takes place in the character of fossil Fishes, not less striking than that in fossil Shells.

The fishes of Monte Bolca are of the Eocene period, and are well known by the figures engraved in the *Ittiolitologia Veronese*, of Volta; and in Knorr. About one-half of these fishes

* It has been already stated, that the remarkable deposit of fossil Fishes at Engi, in the Canton of Glaris, are referred by M. Agassiz to the lower portion of the Cretaceous system.

Many genera of these are identical with, and others closely approximate to, the fishes of the Inferior chalk (Pläner kalk) of Bohemia, and of the Chalk of Westphalia (see Leonhard and Bronn. *Neues Jahrbuch*, 1834). Although the mineral character of the slate of Glaris presents, as we have before stated, an appearance of high antiquity, its age is probably the same as that of the Gault, or Speeton clay of England. This alteration of character is consistent with the changes that have given an air of higher antiquity than belongs to them, to most of the Secondary and Tertiary formations in the Alps.

The Fishes of the Upper chalk are best known by the numerous and splendid examples discovered at Lewes by Mr. Mantell, and figured in his works. These Fishes are in an unexampled state of perfection; in the abdominal cavities of one species (*Macropoma*) the stomach, and coprolites are preserved entire, in their natural place.