

occurs in conjunction with a large accumulation of vegetable remains. (C.)

(c) *Organic remains.*† Few formations claim a greater interest from the organic remains preserved in them than this. In the higher order of animals, it presents us with the crocodile and turtle among the amphibious class; a proof that the shores of some dry land where these animals might have deposited their eggs, must have existed at the period of its formation within a distance easily accessible. Of Vertebral fish, several species are found beautifully preserved, to which it is much to be regretted that the attention of the comparative anatomist has not yet been sufficiently directed; of crustaceous fish, many species of the lobster and crab occur.

The testaceous molluscæ are also very numerous and beautifully preserved, often retaining nearly the appearance of recent shells. There are very few genera of recent shells which have not some representation imbedded in this formation, but the specific character is usually different, that difference being often however so minute as to escape an unpractised eye; on the other hand but few of the extinct genera, so common in the older formations, occur in this, so that it seems to hold a middle character in this respect between the earlier and more recent beds. Thus though nautilites resembling those of the Indian seas are common, specimens of the *cornu ammonis* and the belemnite are so rare, that it is in a very high degree doubtful whether they ever have really been found.* The nummulite, so common in the contemporaneous strata of France, is in England found only in a few places in this formation, but it is by no means ascertained that this should be considered as an extinct genus. Echinites, so common in the chalk, are very rare in this formation.

Zoophytes are likewise extremely rare; perhaps none have yet been found in England (with the exception of a few minute corallines investing the surface of the shells); in France, however, a few species of madrepora have been discovered: few if any of the numerous fossil family of the Encrinites have yet

† This article is by the Rev. W. D. Conybeare.

* The *Cornua ammonis* figured in Mr. Sowerby's work from Norfolk, are beyond a doubt alluvial or diluvial, having been drifted from the inferior colite. The specimens called belemnites in Mr. Jacob's catalogue are likewise doubtful: no belemnites are mentioned among the fossils of the contemporaneous formations in France or Italy; a few genera of minute multilocular shells, supposed to be extinct, discorbites, rotalites, lenticulinites, as well as the nummulites, are enumerated, but such small shells, though still existing, may well have escaped observation. Ammonites are however found in the beds immediately reposing on the chalk at Maestricht, but these are probably older than the London clay.