

Table IV. — SUBGENERA OF AMMONITES ACCORDING TO VON BUCH AND MUNSTER.

	Clymenia.	Goniatites.	Ceratites.	Arictes.	Falciferi.	Amalthei.	Capricorni.	Planulati.	Dorsati.	Coronati.	Macrocephali.	Armati.	Dentati.	Ornati.	Flexuosi.
Living species															
In tertiary strata															
In cretaceous system					9	4					9	14	13	2	3
In oolitic system				12	22	27	12	26	5	11	11	11	4	5	3
In saliferous system			3												
In carboniferous system		33													
In primary strata	14	26													

These are all extinct forms, and while the greater number of species and subgenera abound in oolitic, and many in cretaceous rocks, none occur in tertiary rocks; one group occurs in saliferous, and different types in carboniferous and primary strata.

Thus general and particular results all agree in demonstrating that the physical conditions of the ancient ocean must have been very different in some respects from what obtain at present; and that these conditions were subject to great variation during the long periods which elapsed in the formation of the crust of the earth. In the course of these changes whole groups of animals perished; others were created, to perish in their turn; and these operations were many times repeated, not only before the present races of animals were formed, but even before the relative numbers in the leading groups approximated to the proportions which appear in the actual sea.

Articulated Animals.

The annulose animals form two great series; those without jointed feet, viz., vermes, annulosa, cirripeda; and those with jointed feet, viz., insecta, myriapoda, arachnida, crustacea. Many of the vermes being wholly