

Gymnosperms (p. 111). Twelve of the twenty-seven sub-orders, given on the accompanying table, and four of the eight orders, belong exclusively to the secondary period. These mesolithic groups are marked by an asterisk. All the orders, with the exception of Serpents, are found fossil even in the Jura and Trias periods.

In the first order, that of *Primary Reptiles*, or *Primary Creepers* (Tocosauria), we class the extinct *Thecodontia* of the Trias, together with those Reptiles which we may look upon as the common primary form of the whole class. To the latter, which we may call *Primæval Reptiles* (Proreptilia), the Proterosaurus of the Permian system very probably belongs. The seven remaining orders must be considered as diverging branches, which have developed in different directions out of that common primary form. The *Thecodontia* of the Trias, the only positively known fossil forms of Tocosauria, were Lizards which seem to have been like the still living monitor lizards (Monitor, Varanus).

Of the four orders of reptiles now existing, and which, moreover, have alone represented the class since the beginning of the tertiary epoch, that of *Lizards* (Lacertilia) is probably most closely allied to the extinct Primary Reptiles, and especially through the monitors already named. The class of *Serpents* (Ophidia) developed out of a branch of the order of lizards, and this probably not until the beginning of the tertiary epoch. At least we at present only know of fossil remains of serpents from the tertiary strata. *Crocodiles* (Crocodilia) existed much earlier; the Teleosauria and Steneosauria belonging to the class are found fossil in large quantities even in the Jura; but the