

numerous, and comprise 18 genera and 160 species, the most strikingly characteristic of which are *Productus*, *Spirifera*, *Rhynchonella*, and *Terebratula*. The genus *Orthis* only yields 12 species, a great decrease when compared with its development in Silurian seas. There are 334 species belonging to 49 genera of Lamellibranchiata, which, unlike their comparative development in Silurian rocks, far exceed the Brachiopoda, both specifically and generically, indicating a remarkable approach to the types of Secondary times, in which Lamellibranchiate molluscs by far predominate. The most common of these are *Aviculopecten*, *Posidonomya*, *Arca*, *Conocardium*, *Edmondia*, *Modiola*, *Nucula*, and *Sanguinolites*. Of Gasteropoda, there are 29 genera and 206 species, among which are many species of *Euomphalus* and *Pleurotomaria*. Of the Nucleobranchiata, 23 species of *Bellerophon* are known, and 148 species of Céphalopoda, the chief of which are *Goniatites*, *Nautilus*, and *Orthoceras*. Ninety-nine genera and 221 species of fish have been described, some of which probably lived alike in the sea and in fresh and brackish water.

In the Carboniferous rocks, chiefly in the Coal-measures, more than 500 species of fossil plants have been named, a large proportion of which are ferns, some of great size. The most common genera are *Sphenopteris*, *Pecopteris*, *Neuropteris*, *Cyclopteris*, *Odonopteris*, *Caulopteris* (tree-fern), &c. The remaining plants belong chiefly to genera of *Calamites* (Equisitæ of large size), *Lepidodendron* (tree Lycopodiums), and *Sigillaria*, Fig. 29. Coniferous trees, the fruit of which is *Trigonocarpum*, also occur. In the Coal-measure strata of Britain there have also been found many fresh-water Crustacea of the genus *Cypris*, fresh-water bivalves, *Anthracomya*, *Anthracosia*, &c., wings