

ous times. Hence there can be no doubt as to the true place of the Carboniferous system in the geological record. In some places, however, the higher members of this system are found resting unconformably upon Devonian or older rocks, so that local disturbances of considerable magnitude occurred before or at the commencement of the Carboniferous period. It is deserving of notice that Carboniferous rocks are very generally arranged in basin-shaped areas, many of which have been wholly or partially overspread unconformably by later formations. This disposition, so well seen in Europe, and particularly in the central and western half of the Continent, has in some cases been caused merely by the plication and subsequent extensive denudation of what were originally wide continuous sheets of rock, as may be observed in the British Isles. But the remarkable small scattered coal-basins of France and central Germany were probably from the first isolated areas of deposit, though they have suffered, in some cases very greatly, from subsequent plication and denudation. In Russia, and still more in China and western North America, Carboniferous rocks cover thousands of square miles in horizontal or only very gently undulating sheets.

**ROCKS.**—The materials of which the Carboniferous system is built up differ considerably in different regions; but two facies of sedimentation have a wide development. In one of these, the marine type, limestones form the prevailing rocks, and are often visibly made up of organic remains, chiefly encrinites, corals, foraminifera, and mollusks. According to Dupont's researches in the Carboniferous Limestone of Belgium there are two main types of limestone: (1) the massive limestones formed by reef-building corals and coralloid animals, and disposed in fringing reefs or dis-