

erates, are to a large extent glauconitic (greensand). The marked diffusion of glauconite, both in the sandstones and marls, is one of the distinctive characters of this series of rocks. Another feature is the abundance of soluble silica (sponge-spicules), more particularly in the formation called the Upper Greensand, and in the Lower Chalk of many parts of the south and southeast of England and the north of France. In Saxony and Bohemia, the Cretaceous system consists chiefly of massive sandstones, which appear to have accumulated in a gulf along the southern margin of the northern basin. Considerable bands of clay, occurring on different platforms among the European Cretaceous rocks, are often charged with fossils, sometimes so well preserved that the pearly nacre of the shells remains, in other cases incrustated or replaced by marcasite. Alternations of soft sands, clays, and shales, usually more or less glauconitic, are of frequent occurrence in the lower parts of the system (Neocomian and older Cenomanian). The calcareous strata assume sometimes the form of soft marls, which pass into glauconitic clays, on the one hand, and into white chalk, on the other. The white chalk itself is a pulverulent limestone, mainly composed of fragmentary shells and foraminifera. Its upper part shows layers of flints, which are irregular lumps of dark-colored, somewhat impure chalcedony, disposed for the most part along the planes of bedding, but sometimes in strings and veins across them. The flints frequently inclose silicified fossils, especially sponges, urchins, brachiopods, etc. (see pp. 247, 289). The chalk, in some places, becomes a hard dull limestone, breaking with a splintery fracture. Nodular phosphate of lime or phosphatic chalk, occurring on different horizons in the system, is extensively worked as a source of artificial manure in the