

tion in the Oolitic series; and sub-divided the Oolitic formation above the Lias into three groups—the *Lower Oolites*, beginning with the marly sandstone and concluding with the Cornbrash; the *Middle Oolites*, embracing the rocks from the Kellaways sandstone to the Coralrag; the *Upper Oolites*, embracing the rocks from the Kimmeridge Clay to the Purbeck marls and limestones.

A local monograph on the geology of the Yorkshire coast, published in 1822 by Young and Bird, contributed many valuable observations and good illustrations of the characteristic fossils in this area. But a much more important work on the geology of Yorkshire was published by John Phillips in 1829. This excellent observer, who had been trained by his uncle, W. Smith, demonstrated the presence in Yorkshire of many of the strata known in the south-west of England. By means of geological sections, he established their exact succession, enumerated the fossils characteristic of each group, and gave drawings of the leading types. Various memoirs by De la Beche, Buckland, and Sedgwick appeared between 1822 and 1835, and supplied accurate information regarding the Oolitic and Liassic deposits on the south coast of England. Lonsdale in 1829 investigated the vicinity of Bath. In 1836, an admirable monograph was published by Fitton on the Upper Oolites and the layers immediately succeeding them in the Isle of Wight and the south coast of England. Fitton separated the Purbeck beds from the Upper Oolites and combined them with the Weald Clay and Hastings sandstone as an independent *Wealden Formation* between the Oolitic and the Cretaceous deposits.

De la Beche had pointed out in 1822 that the Oolitic and Liassic formations of the south coast of England reappeared again in Normandy, and Roger and Fitton subsequently demonstrated that the whole succession was present in the neighbourhood of Boulogne-sur-Mer, with a lithological development almost identical with the English. In 1825 and 1829 De Caumont wrote valuable memoirs on the Normandy Oolites. He described and showed in geological sections the Normandy succession of the Kimmeridge group, the Coralrag, Lower Calcareous Grit, Oxford Clay, Cornbrash, Forest Marble, Great Oolite, Fullers' Earth (*Argîle de Port en Bessin*), Lower Oolite, and Lias. He also drew attention to the occurrence of a complex of strata then unknown (cal-