

CHAPTER XI

THE Rise of Stratigraphical Geology and of Palæontology—Giraud-Soulavie, Lamarck, Cuvier, Brongniart, and Omalius d'Halloy in France.

THAT the rocks around and beneath us contain the record of terrestrial revolutions before the establishment of the present dry land, was an idea clearly present to the minds of the early Italian geologists, and, having been so eloquently enforced by Buffon, was generally admitted, before the end of the eighteenth century, by all who interested themselves in minerals and rocks. The Neptunists and Vulcanists might dispute vigorously over their respective creeds, but they all agreed in maintaining the doctrine of a geological succession. Werner made this doctrine a cardinal part of his system, and brought it into greater prominence than it had ever held before his time. His sequence of formations from granite, at the base, to the youngest river-gravel or sea-formed silt, betokened, in his view, a gradual development of deposits, which began with the chemical precipitates of a universal ocean, and ended with the modern mechanical and other accumulations of terrestrial surfaces, as well as of the sea-floor. But, as we have