

almost entirely the production of his friend, from the infinite pains which, ever after the first conception of their plan, and during their various excursions, he had bestowed upon the thorough investigation of all the objects of the inquiry, and in the preparation of the essay itself.<sup>1</sup> Brongniart's experience as a mining engineer would naturally make him fitter than Cuvier for the requirements of stratigraphical research.

It is not necessary for our present purpose to trace the development of view shown by these observers during the three years that elapsed between the appearance of their first sketch and that of their illustrated quarto memoir. It will be enough to note the general characters of their first essay, and to see how far in advance it was of anything that had preceded it.

After briefly describing the limits and general features of the Seine basin, the authors proceed to show that the formations which they have to consider were deposited in a vast bay or lake, of which the shores consisted of Chalk. They point out that the deposits took place in a certain definite order, and can be easily recognised by their lithological and palæontological characters throughout the district. They classify them first broadly into two great groups, which they afterwards proceed to subdivide into minor sections. The first of these groups, covering the Chalk of the lower grounds, consists partly of the plateau of limestone without shells, and partly of the abundantly shell-bearing Calcaire Grossier. The second group comprises the gypseo-marly series, not found uniformly distributed, but disposed in patches.

<sup>1</sup> *Discours sur les Révolutions de la Surface du Globe*, 6th edit. p. 294.