

laid dry by some revolution that took place without producing any disturbance of the strata. Rouelle recognised a constant order in the arrangement of the shells. Thus, immediately around Paris, he found certain strata to be full of screw shells (*Turritella*, *Cerithium*, etc.), and to extend to Chaumont, on the one side, and to Courtagnon near Rheims, on the other. He pointed to a second deposit, or "mass" as he called it, full of belemnites, ammonites, gryphites, etc. (Jurassic), forming a long and broad band outside the eastern border of the Chalk, and stretching north and south beyond that formation up to the old rocks of the Morvan. Desmarest's account of his teacher's opinions was published in the third year of the Republic.<sup>1</sup> It is thus evident that Rouelle had formed remarkably correct views of the general stratigraphy of the Paris basin probably long before 1794.

Desmarest himself published many valuable observations regarding the rocks of the Paris basin in separate articles in his great *Géographie Physique*. Lamanon had written on the gypsum deposits of the region, which he regarded as marking the sites of former lakes, and from which he described and figured the remains of mammals, birds and fishes. Noting the alternations of gypsum and marls, he traced what he believed to be the limits of the sheets of freshwater in which they were successively deposited. Still more precise was the grouping adopted by Lavoisier (1743-1794). This great man, who, if he had not given himself up to chemistry, might have become one of

<sup>1</sup> *Géographie Physique (Encyclopédie Méthodique)*, tome i. (1794), pp. 409-431.