

There were in especial two lines of investigation along which progress could be made. On one of these, the various masses of rock that are visible over the surface of the globe had to be studied with a view to the determination of their origin and sequence. On the other line, the details of these rock-masses, and more particularly of the sedimentary series, had to be worked out, and their organic contents to be noted, in order to ascertain how far the living creatures of older times differed from those of the present. The former of these two branches of research naturally came to be pursued first. It is by far the more obvious of the two, and considerable progress had to be made in it before the very possibility of the second line of enquiry could be recognised and pursued.

We have seen that with all his sagacity and insight, Guettard gave no indication that he had any ideas as to the chronological relations of the various groups of strata which he included in his "bands." Neither he nor his contemporaries ventured to draw geological sections. We have found that even De Saussure and Pallas, though they saw that the rocks of the central part of the mountain-chains are older than those of their flanks, did not definitely express their ideas on this subject in graphic form. Desmarest had clearly perceived the evidence for a long sequence of volcanic eruptions in Central France, but he never applied this evidence towards an elucidation of the general history of the globe as a whole. Buffon too had vividly realised the pregnant idea that the earth has passed through a long evolutionary history whereof the monuments are to be gathered from the structure of the