between the Vulcanist and Neptunist schools in Europe is to be found in the appeal that was necessitated to Nature herself for a solution of the disputed problems. The days of mere theorizing in the cabinet or the study had now passed away. Everywhere there was aroused a spirit of inquiry into the evidence furnished by the earth itself as to its history. The main theoretical principles of the science had been established, so far as related to geological processes and their influence in the structure of the terrestrial crust. But the palæontological side of geology had still to be opened up. The fruitful doctrine of stratigraphy remained to be developed and applied to the elucidation of the grand record of geological history. How this doctrine, which has done more than any other for the progress of geological investigation, was worked out will be the subject of the next four chapters.