

CHAPTER XIII

PROGRESS of Stratigraphical Geology—The Transition or Greywacke formation resolved by Sedgwick and Murchison into the Cambrian, Silurian and Devonian systems. The Primordial Fauna of Barrande. The pre-Cambrian rocks first begun to be set in order by Logan.

THE determination of the value of fossils as chronological documents has done more than any other discovery to change the character and accelerate the progress of geological inquiry. No contrast can be more striking than the difference between the condition of the science before and after that discovery was made. Before that time, while the Wernerian classification of the rocks of the earth's crust prevailed, there was really little stimulus to investigate these rocks in their chronological relations to each other. They were grouped, indeed, in a certain order, which was believed to express their succession in time, but their identification from one country to another proceeded on no minute study of their internal structure, their fossil contents, or their tectonic relations. It was thought enough if their mineral characters were determined so that they could be placed in one or other of the divisions of the Freiberg system. Hence,