

and in Gulbrand Valley; and wherever he travelled he gave attention to the climatic conditions, and to the habits and cultivation of the people. Near the town of Drontheim, Buch saw a coarse-grained diallage rock, which he afterwards recognised again in the Alps of Valais, in Tuscany, the Riviera, and other places; he described it under the name of "gabbro." He observed the diallage rock together with slate at the North Cape. His numerous observations on upraised beach deposits round the northern coast-line of Norway led him to conclude that the uprise in Sweden had been greater than in Norway, and had been altogether greater in the north than in the south of the peninsula.

In Russia, the numerous remains of land mammals, especially the mammoth and rhinoceros, had long attracted attention. One of the chief aims of Johan Georg Gmelin's expedition to Siberia was to look for complete remains of these animals and bring them to St. Petersburg (*Reise durch Siberien*, 1752). Pallas was, however, the scientist who most successfully carried out this purpose, and his works were the means of opening up to science the geological structure of the vast Russian empire. The collective works of Georgi and Razumowsky, as well as the first geological map of Russia by Strangways, are largely based upon the rescarches of Pallas, and partially upon the independent investigations of these geologists.

G. *America, Asia, Australia, Africa.*—Although no country outside Europe bore any appreciable part in the construction of the early framework of the science, it was a matter of keen interest to geologists to compare the structures ascertained in Europe with those in other regions of the globe. All observations of the mineral constituents and structural forms in other parts of the world were much valued at home, and in many cases were employed as corroborative evidence in favour of one theory or another. In the beginning of the nineteenth century but little was known in Europe of the geology of foreign parts, yet what was known sufficed to show that the results obtained in Europe were in harmony with geological phenomena elsewhere, and might therefore be regarded as a sure scientific basis for future progress.

The errors, the false hypotheses, and bitter disputes which had retarded the growth of the science during many centuries