## REASON WHY THESE PRELIMINARIES HAVE BEEN NEGLECTED.

It may be assigned as a cause of this peculiar neglect, that geologists have all been either naturalists of the closet, who had themselves but very superficially examined the structure of mountains, or mineralogists who had not studied in sufficient detail the innumerable varieties of animals, and the infinite complication of their different component parts. The former have only framed systems; the latter have made admirable observations; they have in fact laid down the foundations of the science, but were inadequate to the task of elevating the superstructure.

## PROGRESS OF MINERAL GEOLOGY.

In truth, the mineral portion of the great problem of the theory of the earth has been studied with admirable care by Saussure, and brought to a wonderful development by Werner, and by the numerous and talented disciples of his school.

The former of these celebrated men, scrutinizing with indefatigable toil for twenty years the most inaccessible mountainous districts, in a manner attacking the Alps themselves in every direction, in every defile, has laid open to us all the confusion of the primitive formations, and has clearly traced the secondary formations. The latter, availing himself of the numerous excavations made in countries containing the oldest mines, has fixed the laws relating to the succession of layers; he has pointed out their relative antiquity, and traced each through its respective