

## CHAPTER I.

### MODES OF FORMATION AND GENERAL CLASSIFICATION OF ROCKS, AQUEOUS AND IGNEOUS.

IN old days, those who thought upon the subject at all were content to accept the world as it is, believing that from the beginning to the present day it had always been much as we now find it, and that, till the end of all things shall arrive, it will, with but slight modifications, remain the same.

But, by and by, when Geology began to arrive at the dignity of a science, it was found that the world had passed through many changes; that the time was when the present continents and islands were not, for the strata and volcanic products of which both are formed were themselves sediments derived from the waste of yet older lands now partly lost to our knowledge, or of newer accretions of volcanic matter erupted from below. Thus it happens that what is now land has often been sea, and where the sea now rolls has often been land; and that there was a time before existing continents and islands had their places on the earth, before our present rivers began to flow, and before all the lakes of the world, as we now know them, had begun to be.

Geology may therefore be defined as the science which investigates the history of the earth, or the successive changes which have taken place in the in-