- 5. Palæontological Geology.—This branch of the subject deals with the organic forms which are found preserved in the rocks of the crust of the earth. It includes such questions as the manner in which the remains of plants and animals are entombed in sedimentary accumulations, the relations between extinct and living types, the laws which appear to have governed the distribution of life in time and in space, the nature and use of the evidence from organic remains regarding former conditions of physical geography, and the relative importance of different genera of animals and plants in geological inquiry.
- 6. Stratigraphical Geology.—This section might be called Geological History, or Historical Geology. It works out the chronological succession of the great formations of the earth's crust, and endeavors to trace the sequence of events of which they contain the record. More particularly, it determines the order of succession of the various plants and animals which in past time have peopled the earth, and thus, by ascertaining what has been the grand march of life upon the planet, seeks to unravel the story of the earth as made known by the rocks of the crust. Further, by comparing the sequence of rocks in one country with that of those in another, it furnishes materials for enabling us to picture the successive stages in the geographical evolution of the various portions of the earth's surface.
- 7. Physiographical Geology, starting from the basis of fact laid down by stratigraphical geology regarding former geographical changes, embraces an inquiry into the history of the present features of the earth's surface—continental ridges and ocean basins, plains, valleys, and mountains. It investigates the structure of mountains and valleys, compares the mountains of different countries, and ascertains