

considers volcanoes either as isolated, or ranged in single or in double series, and extending their sphere of action to various distances, either by raising long and narrow lines of rocks, or by means of circles of commotion, which expand or diminish in diameter in the course of ages. This terrestrial portion of the science of the Cosmos describes the strife of the liquid element with the solid land; it indicates the features possessed in common by all great rivers in the upper and lower portion of their course, and in their mode of bifurcation when their basins are unclosed; and shows us rivers breaking through the highest mountain chains, or following for a long time a course parallel to them, either at their base, or at a considerable distance, where the elevation of the strata of the mountain system and the direction of their inclination correspond to the configuration of the table-land. It is only the general results of comparative orography and hydrography that belong to the science whose true limits I am desirous of determining, and not the special enumeration of the greatest elevations of our globe, of active volcanoes, of rivers, and the number of their tributaries, these details falling rather within the domain of geography, properly so called. We would here only consider phenomena in their mutual connection, and in their relations to different zones of our planet, and to its physical constitution generally. The specialities both of inorganic and organized matter, classed according to analogy of form and composition, undoubtedly constitute a most interesting branch of study, but they appertain to a sphere of ideas having no affinity with the subject of this work.

The description of different countries certainly furnishes us with the most important materials for the composition of a physical geography; but the combination of these different descriptions, ranged in series, would as little give us a true image of the general conformation of the irregular surface of our globe, as a succession of all the floras of different regions would constitute that which I designate as a *Geography of Plants*. It is by subjecting isolated observations to the process of thought, and by combining and comparing them, that we are enabled to discover the relations existing in common between the climatic distribution of beings and the individuality of organic forms (in the morphology or descriptive natural history of plants and animals); and it is by induction that we are led to comprehend numerical laws, the proportion of natural families to the whole number of species, and to designate the latitude or geographical position of the zones in whose