

of palms and ferns in the Himalaya Mountains—p. 29. European vegetable forms in the Indian Mountains—p. 30. Northern and southern limits of perpetual snow on the Himalaya; influence of the elevated plateau of Thibet—p. 30-33. Fishes of an earlier world—p. 46.

Limits and Method of Exposition of the Physical Description of the Universe. Page 56-78

Subjects embraced by the study of the Cosmos or of physical cosmography. Separation of other kindred studies—p. 56-62. The uranological portion of the Cosmos is more simple than the telluric; the impossibility of ascertaining the diversity of matter simplifies the study of the mechanism of the heavens. Origin of the word *Cosmos*, its signification of adornment and order of the universe. The *existing* can not be absolutely separated in our contemplation of nature from the *future*. History of the world and description of the world—p. 62-73. Attempts to embrace the multiplicity of the phenomena of the Cosmos in the unity of thought and under the form of a purely rational combination. Natural philosophy, which preceded all exact observation in antiquity, is a natural, but not unfrequently ill-directed, effort of reason. Two forms of abstraction rule the whole mass of knowledge, viz.: the *quantitative*, relative determinations according to number and magnitude, and *qualitative*, material characters. Means of submitting phenomena to calculation. Atoms, mechanical methods of construction. Figurative representations; mythical conception of imponderable matters, and the peculiar vital forces in every organism. That which is attained by observation and experiment (calling forth phenomena) leads, by analogy and induction, to a knowledge of *empirical laws*; their gradual simplification and generalization. Arrangement of the facts discovered in accordance with leading ideas. The treasure of empirical contemplation, collected through ages, is in no danger of experiencing any hostile agency from philosophy—p. 73-78.

[In the notes appended to p. 66-70 are considerations of the general and comparative geography of Varenus. Philological investigation into the meaning of the words *κοσμος* and *mundus*.]

Delineation of Nature. General Review of Natural Phenomena

p. 79-359

Introduction—p. 79-83. A descriptive delineation of the world embraces the whole universe (*τὸ πᾶν*) in the celestial and terrestrial spheres. Form and course of the representation. It begins with the depths of space, of which we know little beyond the existence of laws of gravitation, and with the region of the remotest nebulous spots and double stars, and then, gradually descending through the starry stratum to which our solar system belongs, it contemplates this terrestrial spheroid, surrounded by air and water, and, finally, proceeds to the consideration of the form of our planet, its temperature and magnetic tension, and the fullness of organic vitality which is unfolded on its surface under the action of light. Partial insight into the relative dependence existing among all phenomena. Amid all the mobile and unstable elements in space, *mean numerical values* are the ultimate aim of investigation, being the expression of the physical laws, or forces of the Cosmos. The delineation of the universe does not begin with the earth, from which a merely subjective point of view might have led us to start, but rather with the objects comprised in the regions of space. Distribution of matter, which is partially conglomerated into rotating