

already known and described cannot be estimated at less than 100,000; and every day is adding to the catalogue.* Of the comparatively large animals which live on land, how splendid is the field of observation that lies open to the naturalist! What variety is conspicuous in the tribes of Quadrupeds and of Reptiles; and what endless diversity exists in their habits, pursuits, and characters! How extensive is the study of Birds alone; and how ingeniously, if we may so express it, has nature interwoven in their construction every possible variation compatible with an adherence to the same general model of design, and the same ultimate reference to the capacity for motion through the light element of air. What profusion of being is displayed in the wide expanse of the ocean, through which are scattered such various and such unknown multitudes of animals! Of Fishes alone the varieties, as to conformation and endowments are endless. Still more curious and anomalous, both in their external form, and their internal economy, are the numerous orders of living beings that occupy the lower divisions of the animal scale; some swimming in countless myriads near the surface; some dwelling in the inaccessible depths of the ocean: some attached to shells, or other solid structures, the productions of their own bodies, and which, in process of time, form, by their accumulation, enormous submarine mountains, rising often from unfathomable depths to the surface. What sublime views of the magnificence of creation have been disclosed by the microscope in the world of infinite minuteness, peopled by countless multitudes of atomic beings which animate almost every fluid in nature? Of these, a vast variety of species has been discovered, each animalcule being provided with appropriate organs, endowed with spontaneous powers of motion, and giving unequivocal signs of individual vitality. The recent observations of Profes-

* Four-fifths of the insects at present known have been discovered within the last ninety years: for in 1743, Ray estimated the total number of species at 20,000 only. See his work on "The Wisdom of God as manifested in the Creation," p. 24.