

ing men to a clearer insight into the connection of phenomena. On entering into a serious consideration of the original works of the earliest writers of the history of the Conquista, we are surprised so frequently to discover the germ of important physical truths in the Spanish writers of the sixteenth century. At the sight of a continent in the vast waste of waters which appeared separated from all other regions in creation, there presented themselves to the excited curiosity, both of the earliest travelers themselves and of those who collected their narratives, many of the most important questions which occupy us in the present day. Among these were questions regarding the unity of the human race, and its varieties from one common original type; the migrations of nations, and the affinity of languages, which frequently manifest greater differences in their radical words than in their inflections or grammatical forms; the possibility of the migration of certain species of plants and animals; the cause of the trade winds, and of the constant oceanic currents; the regular decrease of temperature on the declivities of the Cordilleras, and in the superimposed strata of water in the depths of the ocean; and the reciprocal action of the volcanoes occurring in chains, and their influence on the frequency of earthquakes, and on the extent of circles of commotion. The ground-work of what we at present term physical geography, independently of mathematical considerations, is contained in the Jesuit Joseph Acosta's work, entitled *Historia natural y moral de las Indias*, and in the work by Gonzalo Hernandez de Oviedo, which appeared hardly twenty years after the death of Columbus. At no other period since the origin of society had the sphere of ideas been so suddenly and so wonderfully enlarged in reference to the external world and geographical relations; never had the desire of observing nature at different latitudes and at different elevations above the sea's level, and of multiplying the means by which its phenomena might be investigated, been more powerfully felt.

We might, perhaps, as I have already elsewhere remarked,* be led to adopt the erroneous idea that the value of these great discoveries, each one of which reciprocally led to others, and the importance of these two-fold conquests in the physical and the intellectual world, would not have been duly appreciated before our own age, in which the history of civilization has happily been subjected to a philosophical mode of treatment. Such an assumption is, however, refuted by the cotem-

* *Examen Crit.*, t. i., p. 3-6 and 290.