

that Australia began to emerge from its former obscurity, and to assume a definite form in the eyes of geographers.* Now began the great epoch of Abel Tasman. We do not purpose here to give the history of individual geographical discoveries, but simply to refer to the principal events by which, in a short space of time and in continuous connection, two thirds of the earth's surface were opened to the apprehension of men, in consequence of the suddenly awakened desire to reach the wide, the unknown, and the remote regions of our globe.

An enlarged insight into the nature and the laws of physical forces, into the distribution of heat over the earth's surface, the abundance of vital organisms and the limits of their distribution, was developed simultaneously with this extended knowledge of land and sea. The advance which the different branches of science had made toward the close of the Middle Ages (a period which, in a scientific point of view, has not been sufficiently estimated), facilitated and furthered the sensuous apprehension and the comparison of an unbounded mass of physical phenomena now simultaneously presented to the observation of men. The impressions were so much the deeper and so much the more capable of leading to the establishment of cosmical laws, because the nations of Western Europe, even before the middle of the sixteenth century, had explored the New Continent, at least along its coasts, in the most different degrees of latitude in both hemispheres; and because it was here that they first became firmly settled in the region of the equator, and that, owing to the singular configuration of the earth's surface, the most striking contrasts of vegetable organizations and of climate were presented to them at different elevations within very circumscribed limits of space. If I again take occasion to allude to the advantages presented by the mountainous districts of the equinoctial zone, I would observe, in justification of my reiteration of the same sentiment, that to the inhabitants of these regions alone it is granted to behold all the stars of the heaven, and almost all families and forms of vegetation; but to behold is not to observe by a mental process of comparison and combination.

Although in Columbus, as I hope I have succeeded in showing in another work, a capacity for exact observation was developed in manifold directions, notwithstanding his entire deficiency of all previous knowledge of natural history, and solely by contact with great natural phenomena, we must by no

* See the excellent work of Professor Meinecke of Prenzlau, entitled *Das Festland Australien, eine Geogr. Monographie*, 1837, th. i., s. 2-10