summit and the honours as the recompense of scientific exertion, none have better deserved them than Baron Humboldt.

This eminent philosopher was led to investigate the laws of surface temperature in consequence of the phenomena which he observed during his residence on the elevated plains of South America. "Having inhabited," he says, "for a long time, the most elevated plains of the new continent, I availed myself of the advantages which they present for examining the temperature of the superincumbent strata of air, not from insulated data, the results of a few excursions to the crater of a volcano, but from the collection of a great number of observations made day after day, and month after month, in inhabited districts. In Europe, and in all the old world, the highest points of which the mean temperatures have been determined, are the convent of Peissenberg, in Bavaria, and the hospice of St. Gothard. The first of these is placed at 3264, and the second at 6808 feet above the level of the sea. In America a great number of good observations have been made at Santa Fé de Bogota, and at Quito, at altitudes of 8727 and 9544 feet. The town of Huancavelica, containing 10,000 inhabitants, and possessing all the resources of modern civilization, is situated in the Cordilleras of the southern hemisphere, at 12,310 feet of absolute elevation; and the mine of Santa Barbara, encircled with fine edifices, and placed a league to the south of Huancavelica, is a place fit for making regular observations at the height of 14,509 feet, which is double that of the hospice of St. Gothard."

The surface of the earth was once considered, in relation to its temperature, as though divided into five portions or zones,—one torrid, two frigid, and two temperate ; but these are now never referred to in scientific inquiries, being superseded by a more precise arrangement. Places having the same mean temperature, have been connected by lines which are called isothermal, and by this arrangement all the places on the globe, having the same annual mean temperature, are classed together. These lines are not parallel with the equator, and their direction is by no means regular. The space included between two isothermal lines is called an isothermal zone ; but it must not be supposed that two places situated upon the same line, that is, having the same mean