



BOOK IV.

THE TEMPERATURE OF THE GLOBE.

CHAPTER I.

TEMPERATURE OF THE TERRESTRIAL GLOBE—SUPERFICIAL AND INTERNAL TEMPERATURE—THE CLIMATE—ISOTHERMAL LINES—MEAN TEMPERATURE OF DIFFERENT REGIONS OF THE GLOBE—EXTREME TEMPERATURES OBSERVED IN DIFFERENT PLACES.



LET us now proceed to the general study of the temperature of the globe.

We shall premise here a great distinction, which will enable us to divide into two groups the various subjects we are called upon to investigate.

The heat of our globe has two very different origins: on the one hand, it proceeds from the sun; it comes, on the other, from the liquid incandescent nucleus hidden in its depths, and whose caloric transmits itself partially to its very surface. This latter cause of its heat, which operated exclusively in the early ages of our planet, is to-day scarcely perceptible, on account of the density which the consolidated crust of the earth has acquired. So that in our own time the solar heat is almost the sole source which warms the surface of our planet. Nevertheless, the furnace which burns in its womb reveals its existence by the most terrible and most imposing phenomena of nature;