pleasure ; but it cost both time and labour to kindle a fire, without which we could not have any.

" I remained, however, on the summit for four hours and a half ; and although I did not lose a single moment, I could not perform in that period all the experiments which I have frequently completed in less than three hours on the sea-shore. But I performed with great care those which were the more important."

We shall now offer a summary of the scientific results obtained by De Saussure on the loftiest observatory which, up to that time, had ever served for the experiments and investigations of a philosopher.

De Saussure calculated by his barometer, simultaneously with his son's computations at Chamounix, the height of Mont Blanc. He found it, according to his corrected calculations, to be 2450 toises (15,756 feet) ; whence it claims the rank of the monarch of European mountains.

The thermometer marked at noon in the shade—1° C., and in the sun, 2° [that is, 33° 48′ and 35° 36′ F.].

To ascertain the relative humidity or dryness of the atmosphere, De Saussure experimented with an instrument of his own invention—the hair hygrometer, which he first placed in the sun, then in the shade. At noon, the hygrometer in the sun marked 44°, and in the shade 51°, a difference far greater than is generally observed in the plains, because the solar heat much more considerably increases evaporation in a rarefied than in a condensed air.

Simultaneous observations with the hygrometer at Chamounix and Geneva showed, at noon, 73° 4′, and 76° 7′. On consulting the hygrometrical tables which identify the degrees of the instrument with the *hygrometrical condition* of the air, and the absolute quantities of watery vapour contained in a given volume of it, we find that the air at noon, on the summit of Mont Blanc, contained six times less humidity than the air at Geneva. This extreme dryness was undoubtedly the cause of the burning thirst which De Saussure and his companions experienced during their sojourn on the Alpine heights.*

The atmospheric electricity was very weak ; the balls of the electrometer did not diverge more than an inch and a quarter, a fact which was assuredly due to the dryness of the air ; rendered a bad conductor by the absence of the aqueous vapour, the atmosphere did not establish a communication with the electric fluid contained in the upper regions.

One of the most curious spectacles which awakened the admiration of our travellers, on the crest of Mont Blanc, was the extreme intensity of the colour of the sky.

Every person who has ascended a lofty mountain knows that from its summit the sky appears of a deeper, darker blue than in the plain, which is owing to the greater purity and transparency of the air. To obtain an accurate indication of the colour of the sky of Mont Blanc, De Saussure had taken the precaution of preparing a series of strips of paper, tinted with six graduated shades, from the palest azure

* We must add that there are exceptions to this rule ; for Boussingault found the air of Chimborazo more humid than the air of the plain.