

by Saussure's experiment, that this intensity increases with the rarity of the air, and that the same instrument marked at the same period  $39^{\circ}$  at the priory of Chamouni, and  $40^{\circ}$  at the top of Mont Blanc. This last mountain is 540 toises higher than the volcano of Teneriffe; and if, notwithstanding this difference, the sky is observed there to be of a less deep blue, we must attribute this phenomenon to the dryness of the African air, and the proximity of the torrid zone.

We collected on the brink of the crater, some air which we meant to analyse on our voyage to America. The phial remained so well corked, that on opening it ten days after, the water rushed in with impetuosity. Several experiments, made by means of nitrous gas in the narrow tube of Fontana's eudiometer, seemed to prove that the air of the crater contained  $0.09^{\circ}$  less oxygen than the air of the sea; but I have little confidence in this result obtained by means which we now consider as very inexact. The crater of the Peak has so little depth, and the air is renewed with so much facility, that it is scarcely probable the quantity of azote is greater there than on the coasts. We know also, from the experiments of MM. Gay-Lussac and Theodore de Saussure, that in the highest as well as in the lowest regions of the atmosphere, the air equally contains  $0.21$  of oxygen.\*

We saw on the summit of the Peak no trace of psora, leciea, or other cryptogamous plants; no insect fluttered in the air. We found however a few hymenoptera adhering to masses of sulphur moistened with sulphurous acid, and lining the mouths of the funnels. These are bees, which appear to have been attracted by the flowers of the *Spartium nubigenum*, and which oblique currents of air had carried up to these high regions, like the butterflies found by M. Ramond at the top of Mont Perdu. The butterflies perished from cold, while the bees on the Peak were scorched on imprudently approaching the crevices where they came in search of warmth.

\* During the stay of M. Gay-Lussac and myself at the hospice of Mont Cenis, in March 1805, we collected air in the midst of a cloud loaded with electricity. This air, analysed in Volta's eudiometer, contained no hydrogen, and its purity did not differ  $0.002$  of oxygen from the air of Paris, which we had carried with us in phials hermetically sealed.