to an almost blackish blue. At noon, on Mont Blanc, the sky appeared of the second shade—that is, of nearly the darkest blue; the observers who simultaneously made the same comparison at Chamounix and Geneva, found that the colour of the sky at Chamounix appeared of the fifth, and at Geneva of the sixth shade.

Lime water and caustic potash [Hydrate of potash, KO,HO], exposed to the air, infallibly demonstrated the presence of carbonic acid. This experiment, which now-a-days would be considered of little importance, was intended to verify a conjecture hazarded by the great chemist, Lavoisier, who had supposed it possible that the upper regions of the atmosphere contained gases unknown to us, their specific lightness holding them suspended at an extreme altitude.

One of the most important experiments, in verification of an important theory of physics, was the determination of the degree at which water boiled upon these lofty heights. The physician De Luc had formerly ascended, not without serious difficulties, the Mont du Buet, with the sole purpose of performing this experiment, which, up to that time, had never been attempted at any great elevation. The height of Mont Blanc being double that of the Buet, this experiment was one of great interest.

De Luc had found it a matter of no little difficulty to kindle charcoal on the Buet, owing to the extreme rarefaction of the air. To get rid of this obstacle, De Saussure had constructed a spirit of wine lamp provided with a wick for a double current of air and a single *cheminée de tôle*, according to Argand's invention, then quite novel. The spirit of wine burned very well. The water nevertheless took half an hour to boil; while in the same apparatus, on the sea level, it would not have occupied more than 12 or 13 minutes. The heat of the boiling water on Mont Blanc was only 85° C. [185° F.]

He had taken the precaution to provide himself with charcoal, in case the lamp had not worked properly. He had no occasion to make use of it for the boiling water experiment, but found it exceedingly useful in melting the snow to obtain drinking water, which the extreme thirst of the travellers called every moment into requisition.

The declination of the magnetic needle did not present any remarkable feature. The same may be said of the observations made by De Saussure on the thickness of the snowy mantle which enshrouds Mont Blanc, and on the disposition of the strata of snow along the flanks of the remainder of the mountain.

No sign of animal life was apparent near the frozen peak of the Alpine giant. Two butterflies which fluttered across the last incline of the mountain, about 650 feet beneath its summit, were the only living creatures which our explorers encountered in those silent and lonely deserts. It is probable that a gust of wind from the plain had carried them to this unwonted elevation.

The slight intensity of sound on lofty mountains is easily explained by the rarefaction of the air; this rarefaction, diminishing the mass of the air, necessarily diminishes the intensity of its vibrations. On an isolated peak, the absence of echoes is another cause which reduces the force of the sound. The human voice consequently seems very feeble on Mont Blanc; the discharge of a pistol makes no greater report than a small cracker.