

that a thin mat or any such flimsy substance could prevent them from attaining the temperature of the atmosphere, by which alone I thought them liable to be injured. But when I had learned that bodies on the surface of the earth become, during a still and serene night, colder than the atmosphere, by radiating their heat to the heavens, I perceived immediately a just reason for the practice which I had before deemed useless. Being desirous, however, of acquiring some precise information on this subject, I fixed, perpendicularly, in the earth of a grassplot, four small sticks, and over their upper extremities, which were six inches above the grass, and formed the corners of a square, the sides of which were two feet long, drew tightly a very thin cambric handkerchief. In this disposition of things, therefore, nothing existed to prevent the free passage of air from the exposed grass to that which was sheltered, except a cambric handkerchief. The temperature of the grass which was thus shielded from the sky was upon many nights afterward examined by me, and was always found higher than that of the neighbouring grass which was uncovered, if this was colder than the air."

A house or a tree will vitiate the result of an experiment as much as a cloud, or a substance stretched immediately over the body that would be under an open sky bedewed. It must have been frequently observed by those who have been accustomed to examine nature under circumstances uninfluenced by the interference of the works of man, that dew is much less abundantly deposited over that spot protected from the atmosphere by the spreading branches of the forest-tree, than in the open space beyond them; and, in the days of boyhood, they may have frequently solicited their shelter, as though they could escape the effects which a long wandering through the high and bedewed grass had already produced. Milton, the English poet and patriot, acknowledges and adopts this fact, when he says—

" Full forty days he passed, whether on hill
Sometimes, anon on shady vale, each night
Under the covert of some ancient oak,
Or cedar, to defend him from the dew."

HOAR-FROST.

Hoar-frost is produced by the congelation of the dew which has been deposited upon bodies. The condensation of va-