

pour must always precede the formation of hoar-frost. From what has been stated in relation to the cause of dew, it will not appear singular that hoar-frost may be produced when the temperature of the air is above that which is necessary for freezing water. The temperature of bodies is lowered by radiation, or dew could not be formed; and it may be reduced so low as to freeze the water which has been condensed upon the radiating bodies. Nor is it impossible that there should be a frequent change, during a few hours, from one state to the other, according to atmospheric circumstances. But, in general, hoar-frost is formed when the temperature of the atmosphere is below the freezing point; and in the ever-varying climate of England, this is not uncommon even in the summer months, though it is but seldom that the temperature remains below zero for many hours.

The formation of hoar-frost, its abundance or scantiness, must be regulated by the same conditions as regulate the formation of dew. The wide-spreading uninterrupted plain, fully exposed to the sky, may be covered with a hoary vesture of whiteness, when the little patch of verdure beneath the shadow of a shrub or a tree has not a leaf with so much as a single crystal on its surface. This must have been frequently seen, though it may not have been observed, by all who have walked abroad, when

“The gray-eyed morn smiles on the frost’ning night,  
 Checkering the eastern clouds with streaks of light;  
 And flecked darkness, like a drunkard, reels  
 From forth day’s pathway, made by Titan’s wheels:”

who have seen

“The sun advance his burning eye,  
 The day to cheer, and night’s dank dew to dry.”

*Shakspeare*

#### MISTS.

The term mist is very erroneously applied to all those accumulations of vapour which are visible upon or immediately over the surface of the earth. It is a generic designation, and as such may be appropriately employed; but, at the same time, it is desirable to remember that all mists are not produced under the same circumstances, and do not present the same appearances.