

in temperate climates, the same thing has been supposed occasionally to take place in the higher regions of the atmosphere, and thus to produce certain optical phenomena, to which we shall hereafter refer.

The above are comparatively rare phenomena. Most generally, the quantity of water separated, is so large, that the crystallized particles are agglutinated together into masses or *flakes*, and thus fall to the earth in the form of snow. When the quantity deposited is very great, as is often the case; there can be no doubt, that the causes operating to produce such large deposition, are precisely similar to those which produce rain in warmer climates; and which will be considered in a subsequent paragraph.

Such, in few words, are the principles upon which snow is formed; and from these, the reason is at once apparent, why during the winter in temperate climates, and throughout the whole year in the Polar climates, most of the water that falls to the earth assumes the form of snow.

We formerly mentioned how much we owe to the *whiteness* of snow; and we may now remark that we owe still more, to its *low conducting properties*, and to its *lightness*. Thus, by its low conducting properties, snow shields vegetation from the rigorous cold of the higher latitudes; where every thing herbaceous would be destroyed during the winter, were it not for the protecting