

deposition of dew, are obviated, not only by the slightest covering or shelter, as by thin matting, or even muslin; by the neighbourhood of buildings, and innumerable other impediments, near the earth's surface: but matters interposed at a great distance from the earth's surface have precisely the same effect. Thus clouds effectually prevent the radiation of heat from the earth's surface; so that cloudy nights are always warmer than those which are clear, and in consequence, there is usually on such nights little or no deposition of dew.

From dew there is an insensible transition to *Hoar Frost*; hoar frost being in fact only frozen dew, and indicative of greater cold. We observe, therefore, that frosty nights, like simply dewy nights, are generally still and clear.

The influence of radiation in producing cold at the earth's surface, would scarcely be believed by inattentive observers. Often on a calm night, the temperature of a grass plot is  $10^{\circ}$  or  $15^{\circ}$  less than that of the air a few feet above it. Hence, as Mr. Daniell has remarked, vegetables, in our climate, are, during ten months of the year, liable to be exposed at night to a freezing temperature; and even in July and August to a temperature only two or three degrees warmer. Yet, notwithstanding these vicissitudes, in the words of the same gentleman,—“ To vegetables growing in climates for which they are originally