

and dancing, and lights, and sweet flowers; and I saw young, happy faces, and beautiful women, richly dressed, and sparkling with jewels; but none that I knew; until one passed me, whose dress was of simple white, with only a rosebud on her bosom, and whose voice was like the sweet sound of a silver lute. No spangled slipper glittered upon her foot: but she moved as one that treadeth upon the air, and the divine beauty of holiness had so glorified her face, that I felt, as I gazed upon her, that she was indeed as an angel of God.

DEW.

The form of moisture known as dew arises from the deposition of water previously existing in the atmosphere as aqueous vapour which is deprived of its vapourous shape by contact with colder bodies. Grass and leaves arrive at a lower temperature than the circumjacent air in the following manner. All bodies are constantly radiating heat, and their temperatures can only remain constant by their receiving from other objects as many rays of heat as they emit. The temperature of a substance situated so as to radiate a greater number of calorific rays than it receives, must fall; such is the condition of grass, leaves, and substances of this sort, on the surface of the earth; on a clear evening, their rays of heat are emitted into the air, and lost in space, as nothing is present in the atmosphere to exchange rays with them. If a thermometer be placed upon a grass-plot, on a clear balmy evening, it will frequently indicate a temperature from ten to fifteen degrees lower than that of the surrounding air; but the thinnest cambric handkerchief held stretched above it will, by exchanging rays of heat with the adjacent grass, cause the thermometer to mark an increase of temperature. The passage of a thick cloud over the spot will be followed by the same result. But on a clear evening, as the calorific rays of grass and leaves become dissipated, their temperature necessarily diminishes, and falls below that of the surrounding air, and some of the aqueous vapour therein is converted into water by contact with the grass or other bodies whose heat is dissipated.

Grass, wood, leaves, and filamentous substances are good radiators, and con-

sequently dew is usually deposited upon them, but rarely upon smooth stones or sand, for two reasons—firstly, because they are not good radiators; and secondly, because some of the heat lost by radiation is restored by their contact with the earth. Thin clothes are also good radiators; and Campbell correctly says;

The dew on his robe was heavy and chill;

For his country he sighed when at twilight repairing

To wander alone by the wind-beaten hill.

As the most copious deposit of dew takes place when the weather is clear and serene, the poet, when using the epithet "wind-beaten," refers, no doubt, to the general character of the hill, and not to the state of the evening.

At the time aqueous vapour is being condensed or converted into dew, it communicates to the body effecting the conversion the whole of its *latent heat*, which is so very considerable, that it would be sufficient to raise nine hundred and fifty times the weight of water condensed into dew one degree of Fahrenheit, or more than five times the weight of water from the freezing-point to the boiling-point. Incredible as this may seem, it must actually happen, and the whole of this vast amount must be dissipated by the substances upon which any dew is deposited ere the deposition can proceed. This enables us to form some conception of the prodigious powers of radiation possessed by dew-condensing plants. It also presents water to us as a sort of what may be termed a heat or caloric regulator, for when water is converted into vapour or