

steam, it absorbs precisely the same amount of heat as is liberated on the condensation of steam or vapour into water; thus, when the weather is very hot, large quantities of water are converted into vapour, thereby withdrawing or rendering latent a vast amount of heat, which must otherwise prove injurious to animal or vegetable life. On the other hand, by being condensed into dew, it restores to vegetables that heat which they had dissipated by radiation, and which, but for such restoration, might possibly operate to impair or destroy their vital functions. This is one reason why places near the sea are always more temperate;* that is enjoy a more equable climate than those remote from it.

The reason why water distilled from aqueous vapour on the leaves of plants takes the form known as dew, depends upon the combined and contemporaneous action of three several and distinct forces, all operating during its formation. The three forces are—the mutual attraction between the dew and surface of the leaf or substance upon which it is deposited, called *adhesion*; the mutual attraction of particles of water for each other, termed *cohesion*; and the force of *gravity*, or its own weight. During the earliest period of the deposition of dew, the first force or that of adhesion predominates, and a thin film of moisture is spread over the whole radiating surface or perhaps it would be more correct to say, is spread over the whole surface proportionably to the radiating power of its several parts. As the deposition progresses and more water is distilled, the second force or that of cohesion, asserts its influence, and this thin film of water is broken up into a number of minute globules; these gradually increase in size as more water is condensed, and the third force, the force of gravity, or the weight of the dew, begins to be felt, which at last overcoming the force of cohesion, the poor little globules are ruthlessly torn from the leaf or radiating surface, and roll dishonoured on the ground. Some few however glide to a point in the leaf or blade of grass, where the force of adhesion, favoured by some accidents of surface, successfully renews its struggle with the force gravity, and the fortunate little

globules are sustained aloft. The three forces are now in stable equilibrium, the second, or that of cohesion, being locally predominant, which results in a bright little pearly sphere clear as a diamond; and thus, in our morning walks, our eyes are dazzled by Nights jewelled gifts to Nature.—*Chamber's Journal*.

LIFE AND CONSCIENCE.

I ask what Life is? The reply That Conscience gives is, "What am I?" Truth tells me facts, and Conscience seals them,

Faith rests in these, as God reveals them. Or, Unbelief denies, despising All Wisdom, Truth, of God's devising. Then ask what Life is? Conscience seared, Forbears the answer—"God not feared, Is awful death! Truth disesteemed, Is man unpitied, unredeemed!"

DON'T WASTE.—Waste nothing! A crumb of bread may keep life in a starving bird, a large and useful volume may be written with one quill, from the wing of a goose; and an inch or two of writing paper has served for a dispatch to save an army from falling into the enemy's power. Waste nothing—"Gather up the fragments that nothing be lost."

PRESIDENT HARRISON taught for several years in an humble Sabbath school on the banks of the Ohio. The Sabbath before he left home for Washington, to assume the duties of Chief Magistrate of the nation, he met his Bible class as usual. And his last counsel on the subject to his gardener, at Washington, it may be hoped, will never be forgotten by the nation. When advised to keep a dog to protect his fruit, he replied, "rather set a Sunday school teacher to take care of the boys."

Mirth is the medicine of life,
It cures its ills, it calms its strife.
It softly smooths the brow of care,
And writes a thousand graces there.

Delicacy of sentiment and refined manners are a great ornament and ought always to be cultivated; all odd notions or attitudes and awkward gestures should be watched and prevented from becoming habitual.

* It may be mentioned that the three elements which determine the climate of any place, omitting that of aspect, are the coast-line, the altitude, and the latitude.