

Most fluids, if not all of them, are susceptible of this gradual dissipation ; and, it may also be observed, in some solids, as, for example, in camphor. Some fluids more readily evaporate than others, and it is always found, that those liquids whose boiling points are lowest, pass off with the greatest rapidity. Thus, alcohol more quickly dissipates than water, and ether again, than alcohol.

The process of evaporation depends upon several circumstances, the principal of which are, 1st. temperature, whether of the fluid or surrounding air ; 2d. extent of surface ; 3d. state of air as to dryness or moisture ; 4th. stillness of the air ; and, 5th. density of the atmosphere.

Since vapour is no more than water elevated by, or dissolved in, heat, it must follow, that its power must depend upon this active principle, or upon the degree of temperature. The commonest experience proves this. Hot fluids evaporate more rapidly than when cold, and hence why heat is employed with this view in various processes of art. It is also equally well known, that if water be exposed to a warm and to a cold air, it dries up more quickly in the former than in the latter. In winter, the laundry-maid makes a large fire, before which she places her wet clothes, in order that they may soon dry in the warm apartment.

As evaporation only proceeds from the *surface* of fluids, it follows, that the process must depend upon the *extent exposed*, all other circumstances being the same. Thus, when we wish a speedy vaporization, we put the fluid into a shallow vessel, so as to have a large surface ; for the same purpose a maid spreads out and turns her drying linen.

The state of the air, as to dryness or moisture, also influences the degree of evaporation, for the plain reason, that a portion of air, the interstices of which are *already* filled with vapour, or that is what we call *moist*, cannot absorb more water as a portion of dry air would. In some dry, cold days of winter, vaporization goes on more quickly than when the air is warmer but already humid.

Because the air immediately in contact with water soon becomes charged with moisture, a check is put to further evapora-