

and still lower, the temperature increases a little. During the months of May, June, and July, the temperature being at its maximum, at the surface, decreases downwards, but less rapidly and to a greater depth ; it then begins to increase a little, till it attains the temperature of the invariable stratum. The rapidity and degree, however, with which these changes take place, as well as the changes themselves, appear to fluctuate very considerably, not only in different places under the same Isothermal line, but in the same place in different seasons.

Since heat is propagated through the soil by conduction, of course it is propagated in all directions. Hence, it may be supposed to move laterally as well as downwards ; and, generally speaking, the temperatures of contiguous spots probably tend to equalize each other. But upon the whole, the influence of the lateral propagation of heat through the solid parts of the earth must be very limited.

*7. Of the Propagation of Heat and Light below the Earth's Surface in Water.* Water is a very imperfect conductor of heat, in the usual acceptation of the term. Thus, almost any degree of heat may be applied, for a considerable time, to the upper surface of a mass of water, without materially influencing the temperature below ; so imperfectly and slowly is heat