SECTION VI.

Other Properties of Heat. Of Heat in Motion.

HEAT appears to be in a constant state of motion and of interchange between different bodies, among which it finally settles into a state of equilibrium. If accumulated in any body, this accumulation cannot be preserved; but the excess will fly off, in spite of all we can do to the contrary, and sooner or later, the equilibrium will be restored. This motion of heat apparently takes place in three ways, which a common fire-place very well illustrates. If, for instance, we place a thermometer directly before a fire, it soon begins to rise, indicating an increase of temperature. In this case, the heat has made its way through the space between the fire and the thermometer, by the process termed *radiation*. If we place a second thermometer in contact with any part of the grate, and away from the direct influence of the fire, we shall find that this thermometer also denotes an increase of temperature; but here the heat must have travelled through the metal of the grate, by what is termed *conduction*. Lastly, a third thermometer placed in the chimney, away from