

chapter, become more or less expanded, when they undergo an increase of temperature. Hence, the relative degrees of expansion of any body, may be viewed as a sort of measure of the degree of heat; and most of the thermometers employed, act upon this principle. Thus the common thermometer, as is well known, consists of a portion of some fluid, generally of mercury, enclosed in a small glass ball; the cavity of which ball communicates with a tube of narrow bore. We shall suppose the quantity of the mercury, and the size of the ball, to be so adjusted to each other; that when the instrument is placed in ice on the one hand, and in boiling water on the other; the whole expansion of the mercury between these two fixed temperatures, shall fall within the range of the tube. The points at which the mercury stands in the tube, at the freezing, and boiling temperatures, are to be accurately noted; and the intermediate space upon the scale attached to the tube, is to be divided into 180 equal parts or degrees; the freezing point is to be marked 32° , and of course, the boiling point 180° above, or 212° . Such is *Fahrenheit's* scale, the one employed in this country, and to which, the numbers hereafter mentioned refer. In other countries different scales are made use of; thus in Sweden, France, and elsewhere, what is termed the *centigrade* thermometer is generally adopted. In this ther-