

ble and real limits to which we might relate it. But even if the solar heat be greater or smaller than we have supposed, relative to the terrestrial heat, our theory would only alter the proportion of the results.

For example, if we include the whole extent of our sensations of the greatest heat to the greatest cold, within the limits given by the observations of M. Amontons, that is, between seven and eight, and at the same time suppose that the heat of the sun can alone produce this difference of our sensations, we shall from thence have the proportion of 8 to 1 of the innate heat of the terrestrial globe to that which proceeds from the sun; and consequently the compensation which this heat of the sun actually makes on the earth, would be  $\frac{1}{8}$  and the compensation which it made in the time of incandescence will have been  $\frac{1}{260}$ : adding together these two terms, we have  $\frac{26}{2080}$  which multiplied by  $12\frac{1}{2}$ , the half of the sum of all the terms of the diminution of heat, gives  $\frac{325}{400}$  or  $\frac{5}{8}$  for the total compensation made by the sun's heat during the the period of 74047 years of the refrigeration of the earth to actual temperature. And as the total loss of the innate heat is to the total compensation in the same ratio as the time of the period of refrigeration,