

petual snow, and of the Polar regions. One of the first circumstances, therefore, which claim the attention of the Meteorologist, is the law of the distribution of sensible heat, or of temperature, through the atmosphere.

*The law of the distribution of temperature through the atmosphere* is tolerably uniform: though it is occasionally liable to variations and interruptions, depending upon local differences; and perhaps upon other circumstances not satisfactorily understood. The mean results of a great number of observations, made in different parts of the world, appear to show, that for every 100 yards of altitude, Fahrenheit's thermometer sinks one degree. This statement, probably, does not, within moderate limits, differ much from the truth; though some late researches have rendered it probable, that while at different heights the rate of the decrease of temperature is uniform, the rate of altitude increases constantly, and according to laws very similar all over the world; that is to say, supposing the first 252 feet are equal to one degree; the second degree will be equal to 255 feet; the third to 258; the fourth to 261; &c.

The causes upon which this great cold of the higher regions depends, are chiefly the two following; first, the perfect permeability of the atmosphere to the solar rays; on which account, they radiate through it almost without affecting