large. The general phenomena are as stated; and the principles advanced, appear to offer the following explanation of these phenomena:

In the temperate regions of the earth, the winds seem to obey no certain laws; at least, no laws so determinate as those of the trade winds. But about the tropics, both in the northern and in the southern hemispheres, the operation of the double currents and motions before described, becomes distinctly perceptible. Thus about the tropics, the surface of the earth begins to move faster than the incumbent atmosphere; and hence in these regions, the prevailing currents are from the east. Indeed near the tropics, the currents are nearly due east; principally on account of the great and somewhat sudden change of temperature produced by the vertical sun of the tropical regions; which may be supposed to interfere with, and perhaps to check momentarily, the regular progress of the great northern and southern currents. As we proceed, however, towards the equator; the atmosphere, in both hemispheres, gradually acquires the velocity of the earth; while the intensity of the eastern current, diminishes in the same proportion, and at length entirely disappears. At the same time, the currents from the north and the south continuing, slowly deflect the currents, from the east towards the north, in the northern hemisphere; and from the east towards