but graphically described its effects. The unlimited expanse seemed to be filled with particles of sand, and the eye of the traveller could only penetrate the space of a few yards around him; the sun and the clouds were obscured, and a suffocating and oppressive weight rested upon all; the horses refused to face the sandy clouds which threatened to overwhelm them, and both man and beast suffered under an oppressive thirst which could not be alleviated.

It is not necessary to compare the amount of evil produced by the atmosphere under certain conditions, with its beneficial influence upon the human species. Every phenomenon may be considered in two ways; there are a light and a shady side, and we may be perfectly satisfied that no agent is active for the mere purpose of destruction. The traveller may be sometimes overwhelmed by the vast masses of sand that the disturbed atmosphere bears on its wings as it hurries over the desert, and the pleasant country may be sometimes overturned in its fury, but the same agent still ministers to our wants and pleasures; it carries over the swelling bosom of oceans the riches and intellect of foreign climes, aids man in his heaviest toils, and bears life and health upon its balmy wings

## CHAPTER IV.

ATMGSPHERICAL PHENOMENA DEPENDANT ON THE DISTRIBU-TION OF HEAT.

ALTHOUGH the chymist has appropriated to himself an individual right to the science of heat, it is intimately connected with all the inquiries of the natural philosopher. The composition and decomposition of bodies are, it is true, chiefly effected by the agency of that principle called caloric, but its effects are not less evident in those phenomena which do not result from chymical action. All substances possess it; the varieties of form and structure are its result; life and motion are its dependants; and all nature is animated and beautified by its influence.