

of two laws, in two nearly similar gaseous fluids, producing effects alike in kind, but different in degree, and by the *play* of their difference giving rise to a new set of results, peculiar in their nature and beneficial in their tendency. The *form* of the laws of air and of steam with regard to heat might, so far as we can see, have been more similar, or more dissimilar, than it now is: the rate of each law might have had a different amount from its present one, so as quite to alter the relation of the two. By the laws having such forms and such rates as they have, effects are produced, some of which we can distinctly perceive to be beneficial. Perhaps most persons will feel a strong persuasion, that if we understood the operation of these laws more distinctly, we should see still more clearly the beneficial tendency of these effects, and should probably discover others, at present concealed in the apparent perplexity of the subject.

3. From what has been said, we may see, in a general way, both the causes and the effects of *winds*. They arise from any disturbance by temperature, motion, pressure, &c. of the equilibrium of the atmosphere, and are the efforts of nature to restore the balance. Their office in the economy of nature is to carry heat and moisture from one tract to another, and they are the great agents in the distribution of temperature and the changes of weather. Other purposes might easily be ascribed to them in the business of the vegetable and animal kingdoms, and in the arts of human life, of which we shall not here treat. That character in which we now consider them, that of the machinery of atmospheric changes, and thus, immediately or remotely, the instruments of atmospheric influences, cannot well be refused them by any person.

4. There is still one reflexion which ought not to be omitted. All the changes of the weather, even the most violent tempests and torrents of rain, may be considered as oscillations about the mean or