existence of man, from the moment of his birth to that of his death. Of all other external aids we may be deprived for a comparatively long time without danger, or even without much inconvenience; of light and heat for instance, and of food and sleep: but we cannot be deprived of the air which we breathe even for a very few minutes, without dreadful distress; or, if for more than a very few minutes, without the extinction of life.

This vital importance of the air depends, principally, on its capability of assisting to withdraw from the body, chiefly through the agency of the lungs, portions of that peculiar principle called *carbon;* the permanent retention of which would be incompatible with the continuance of life. And the union of this principle with one of the constituent parts of atmospherical air is probably effected in the lungs during the process of respiration; the compound passing off in the act of expiration, in the state of an aeriform fluid, called *carbonic acid gas.*

But, in order to give a clear idea of the nature of the process of respiration, it will be necessary to explain more particularly not only the constitution of that portion of the atmosphere which supports this process, but some of its chemical relations to other substances. Atmospherical air then, considering it in its adaptation to the process of respiration, consists of a mixture or com-