

P R E F A C E .

THE subject of the following Lectures, although a matter of the utmost concern to the whole world, appears to have engaged little of the attention of mankind. One reason for this may be, that the importance of breathing a pure atmosphere has never been, until within the last few years, either properly understood or its necessity enforced. Another reason may be found in the diffidence with which every person, who might be really capable of rightly thinking upon the subject, would approach a matter so purely scientific, in the face of the great names which are connected with it either directly or indirectly, in various countries. But the principal reason, it appears to me, is that those scientific men, whose attention may have been attracted by, and who have been capable of investigating the subject, have, for the most part, been inhabitants of such climates as stand in less need of the ventilation of their dwellings. Necessity, it is commonly said, is the mother of invention, and it is therefore natural to suppose that any improvement, especially in domestic economy, which more or less influences *all*, should emanate from those who are likely to be most affected by its operation.

I have myself, for many years, been anxiously looking for, and expecting some discovery by which the enormous consumption of fuel, to which under our present system of heating our dwellings we are obliged to submit, might be prevented. But what was every body's business, in this as in all other matters, appears to have been no body's business, and not even an attempt has until now been made.

It was in the course of my experiments for the economising of fuel, which, for the last few years, has engaged my attention, that I happened to stumble upon the important fact *that the principle involved in the saving of fuel was that by which alone a proper system of ventilation could be carried out!* So that, after all, it appears in this as in all other instances where the true principles of philosophical enquiry have been pursued,—Nature proves herself the most scientific agent!

It is because we interfere with, and constantly contravene, the laws of Nature, that the necessity of scientific enquiry has arisen; and this is especially the case in the science of medicine. If we would from our infancy allow Nature to *prevent* disease there could be no necessity for all that labour and toil which is now undergone in the *cure*.

The Almighty has ordained that all creation must perish, and that the process of decay shall begin with the life of every thing—animate and