

gies. The statements of some of the diseases produced by bad air, is absolutely sickening; and presents the consequences of violating the physical laws in a point of view which will scarcely find a parallel."

Consumption is but another variety (if I may be allowed to use my own word) of scrofula and elephantiasis;—they are all produced by the same cause,—contamination of the blood; only the one class is by transpiration *outward*, toward the skin; the other *inward*, to the lungs.

I have now only to show the probability of the correctness of my "opinion," "that this gas is the immediate cause of cholera," by referring to the facts stated in my former communication, which, it will be recollected, indicated that carbonic acid was invariably found in precisely the same sort of atmosphere in which I have proved, by the "most eminent physicians examined before a Committee of the House of Commons," the other diseases mentioned, were produced.

If this controversy was upon any less important subject, it might be a matter of doubt, as to whether I should enter the list with any anonymous writer; but this matter is of too much consequence to the public to permit me for one moment to allow any consideration of a personal kind to have weight against the correction of erroneous views, come from what quarter they may; and, therefore, in the words of my antagonist, I feel bound to "assist in a small degree that most important object of periodical literature—the promulgation of correct knowledge." And especially is it necessary when we see hundreds and thousands of heads of families, who are daily doomed to disease and death, their immortal offspring, merely from want of this "correct knowledge." Not that it is not offered to them, but because it is too much trouble to think for themselves, and they allow such men as "Carbonic Acid" to lull them to sleep by such puerile advice as "kicking out stoves, stuffing up windows, placing American ventilators near the ceiling," &c.

The truth is, that books are too often taken for brains, and instead of using them for the purpose of fascinating the operations of the mind upon enquiries into the practical operations of every-day life, and maturing the judgment, by which alone errors are corrected and truth substituted, they are too often allowed to usurp and occupy the whole ground, whence alone originality of thought can be expected.

"Carbonic Acid" is no doubt a practical chemist, what we term a learned man; for so nicely does he weigh and define the constituents of the atmosphere, that his fractioned niceties are perfectly astounding,—6 2-100ths, 3 7-100ths, 4 15-100ths, 34-100ths, and so on, to the 1-10,100th part of a grain! Now, I advise my friend, when he comes to discuss any matter connected with the practical carrying out of the physical sciences to our every day purposes, to throw away his books, and manfully appeal to his own judgment and his every-day experience. And in order to help him out of the thralldom, in which I see he is held by his books, I must, Mr. Editor, crave your

further indulgence for a single extract, and then I have done. "It has been remarked that the salubrity and healthy state of the air depends, in a great measure upon the quantity of oxygen gas it contains, and the quantity appears to exist in all places exposed to a free atmosphere, and the influence of winds. But the same uniformity does not prevail in the confined air of dwelling-houses, crowded theatres and hospitals, that are badly ventilated." Mr. Tredgold, referring to these remarks, says:—"Yet the chemist who wrote this remark was not able to detect an appreciable difference between the air of an hospital and that of an open situation; and the same thing is avowed by other chemists. Seguin tried the air of an hospital, the odour of which was disagreeable, but it gave him the same result as the external air. The researches of Priestly, DeMarti, Gay Lussac and others, all tend to establish the same result; which is, that the composition of the atmosphere is essentially the same everywhere.—If you allow these experiments to be correct, they only prove that a deadly poison may be diffused through the atmosphere which the art of the chemist cannot detect, but of which we have better evidence"—(hear the practical man) "than is given by the nicest tests of the analytical chemist, in the pale visages and weakly constitution of the inhabitants of confined and crowded cities;—in the inhabitants of particular districts, and in the important alteration which a change of residence often produces in individuals unaccustomed to such changes."

Now, Sir, I think I have proved against this mere assertion of your correspondent, that there is deadly malaria and miasin of some kind, by whatever name called by chemists, (if indeed they know any thing more about it than I do,) which, from whatever cause, floats near the surface of the earth; and that it is the cause of disease, especially of cutaneous diseases and consumption; and, having in my former communication shewn that these diseases, as a general rule, prevail in precisely the same localities in which cholera has most prevailed, I submit that the inference is a perfectly logical and reasonable one, that this latter disease originates in the same cause. This, then, being the case, am I not correct in my conclusion, that the ventilating air should be taken from the higher strata, your correspondent's assertion to the contrary, notwithstanding?

In a farming population are, now that fuel is becoming scarce, even in country places, and very dear in our cities, building hundreds and thousands of new houses, and for economy's sake adopting the stove, and, what is infinitely worse, the hot-air systems; and if I can shew them that they can put up a dwelling without any additional expense, which will insure, at all times a healthy atmosphere within its walls; and this too with additional warmth in cold weather, and a great saving of fuel, I think I can fairly claim to have accomplished what no other man has.

In any thing I have said, I am unwilling to be understood as feeling opposed to the discussion of this subject; on the contrary I court it and feel