

Vegetables, and most insects, instead of lungs, have only aspiratory tubes, by which they pump up the air that is necessary for them; it passes in very sensible balls into the pith of the vine. This air is not only pumped up by the roots but often even by the leaves, and forms a very essential part of the food of the vegetable which assimilates, fixes, and preserves it. Experience fully confirms all we have advanced on this subject, and that all combustible matters contain a considerable quantity of fixed air, as do also all animals and vegetables, and all their parts, and the waste which proceeds therefrom; and that the greatest number likewise include a certain quantity of elastic air. And, notwithstanding the chimerical ideas of some chemists, respecting phlogiston, there does not remain the smallest doubt but that fire or light produces, with the assistance of air, all the effects thereof.

Minerals, which like sulphur and pyrites, contain in their substance a quantity of the ulterior waste of animals and vegetables, contain thence combustible matters, which, like all other, contain more or less fixed air, but always much less than the purely animal or vegetable substances. This fixed air can be equally removed by combustion. In animal and vegetable matters it is disengaged by