434 INFLAMMABLE SUBSTANCES. Sect. 228.

It is difficult to determine, what constitutes the difference between the purer sorts of this class;

lybdena however, that has been reputed formerly as a species of plumbago, later experiments have shewn to be of a metal-lic nature: and of course, it will be ranged in the last Class, after the Semi-metals.

The Noble Author says, that phlogistic substances are electric (perse). It has not, however, that I know, been decided, that all inflamable minerals are electric, or non-conductors of electricity; on the contrary Mr. Kirwan affirms, that sossil coal is not an electric.

But, what is the constituent principle by which the minerals, belonging to this Class, become inflamable? or rather, what is the nature of these combustible substances? what is combustion, this common phenomenon so repeatedly beheld, and so little understood, from whence these substances take their denomination? Chemists and Philosophers have givenvarious, and so seemingly opposite theories on this very interesting subject, that it would be impardonable not to give a short account of their ideas, chiefly those of the modernones, in this edition of a work, whose matter is so intimately

connected with these chemical disquisitions.

It was taught by former chemists, that the integrant parts of combustible bodies were only heated, burned, and reduced into flame, by the action of fire, according to the quantity and condition of the phlogiston they contained. This last is what they called the inflammable principle, by means of which combustion is performed. But Becher, Boyle, Rey, and several other Chemists, admitted that the concourse of air is absolutely necessary for the effect of combustion. As soon as the various kinds of aeriform-fubstances began to be known by Modern Philosophers, they soon found, that it is that kind of air, discovered by the Father of this new and valuable branch of Natural Philosophy, Dr. Priestley, which he calls dephlogisticated, and to which some new Nomenclators give the epithets of pure, vital, air of fire and empyreal air, without the interference of which no combustion can take place. It is computed,