little combustion, and all combustion with a little calcination. Cinders and other residue of the most combustible matters, demonstrate that fire has calcined all the parts it has not burned, and consequently, a little calcination is found here with combustion. The small flame which rises from most matters, that are calcined, demonstrates also that a slight combustion is made. Thus, we must not seperate these two effects, if we would find out the results of the action of fire on the differcnt sub-tances to which it is applied.

But it may be said, that combu-tion always diminishes the volume or mass, on account of the quantity of matter it consumes; and that, on the contrary, calcination increases the weight of many substances. Ought we then to consider these two effects whose results are so contrary, as effects of the same nature? Such an objection appears well-founded, and deserves an answer, especially as this is the most difficult point of the question. For that purpose let us consider a matter in which we shall suppose one half to be fixed parts, and the other volatile or combustible. By the application of fire to this, all the volatile or combustible parts will be raised up or burnt, and consequently separated from the whole mass; from hence this mass or quantity