cable kind, which demand no intense concentration of thought, and lead to no profound mathematical researches. The simple process of inductive generalization, grounded on the examination of numerous facts, all of them presenting considerable intrinsic interest, has sufficed, in most instances, to lead, by a clear and direct road, to its highest laws yet known. But, on the other hand, these laws, when stated, are not yet fully sufficient to lead us, except in very limited cases, to a deductive knowledge of particulars never before examined, at least, not without great caution, and constant appeal to experiment as a check on our reasoning; so that we are justified in regarding the *axioms* of chemistry, the true handles of deductive reasoning, as still unknown, and, perhaps, likely long to remain so. This is no fault of its cultivators, who have comprised in their list the highest and most varied talents and industry, but of the inherent complexity of the subject, and the infinite multitude of causes which are concerned in the production of every, even the simplest, chemical phenomenon.

(336.) The history of chemistry (on which, however, we are not about to enlarge,) is one of great interest to those who delight to trace the steps by which mankind advance to the discovery of truth through a series of mistakes and failures. It may be divided, 1st, into the period of the alchemists, a lamentable epoch in the annals of intellectual wandering; 2dly, that of the phlogistic doctrines of Beccher and Stahl, in which, as if to prove the perversity of the human mind, of two possible roads, the wrong was chosen; and a theory obtained universal credence on the credit of great names, ingenious views, and loose experiments, which is negatived, *in every instance*, by an appeal to the balance. This, too, happened, not by reason of unlucky coincidences, or individual oversights, but of necessity, and from an inherent defect of the theory itself, which thus impeded the progress of the science, as far as a science of experiment can be impeded by a false theory, by perplexing its cultivators with the appearance of contradictions in their experiments where none really subsisted,