

ry elements, and some ten or twenty substances, whose properties were known with an approach to distinctness, formed the narrow circle within which his ideas had to revolve? How many are the instances where a new substance, or a new property, introduced into familiar use, by being thus brought into relation with all our actual elements of knowledge, has become the means of developing properties and principles among the most common objects, which could never have otherwise been discovered? Had not platina (to take an instance) been an object of the most ordinary occurrence in a laboratory, would a suspicion have ever occurred that a lamp could be constructed to burn without flame? and should we have ever arrived at a knowledge of those curious phenomena and products of semi-combustion which this beautiful experiment discloses?

(391.) Finally, when we look back on what has been accomplished in science, and compare it with what remains to be done, it is hardly possible to avoid being strongly impressed with the idea that we have been and are still executing the labor by which succeeding generations are to profit.\* In a few instances only have we arrived at those general axiomatic laws which admit of direct deductive inference, and place the solutions of physical phenomena before us as so many problems, whose principles of solution we fully possess, and which require nothing but acuteness of reasoning to pursue even into their farthest recesses. In fewer still have we reached that command of abstract reasoning itself which is necessary for the accomplishment of so arduous a task. Science, therefore, in relation to our faculties, still remains boundless and unexplored, and, after the lapse of a century and a half from the era of Newton's discoveries, during which every department of it has been cultivated with a zeal and energy which have assuredly met their full return, we remain in the situation in which he figured himself,—standing on the shore of a wide

\* Jackson, *The Four Ages*, p. 52. London: Cadell and Davies, 1798. 8vo.