

occasional occurrence of those happy accidents which have had so powerful an influence on the past; occasions, where a fortunate combination, opportunely noticed, may admit us in an instant to the knowledge of principles of which no suspicion might occur but for some such casual notice. Boyle has entitled one of his essays thus remarkably,—“*Of Man’s great Ignorance of the Uses of natural Things; or that there is no one Thing in Nature whereof the Uses to human Life are yet thoroughly understood.*”\* The whole history of the arts since Boyle’s time has been one continued comment on this text; and if we regard among the uses of the works of nature, *that*, assuredly the noblest of all, which leads us to a knowledge of the Author of nature through the contemplation of the wonderful means by which he has wrought out his purposes in his works, the sciences have not been behindhand in affording their testimony to its truth. Nor are we to suppose that the field is in the slightest degree narrowed, or the chances in favor of such fortunate discoveries at all decreased, by those which have already taken place; on the contrary, they have been incalculably extended. It is true that the ordinary phenomena which pass before our eyes have been minutely examined, and those more striking and obvious principles which occur to superficial observation have been noticed and embodied in our systems of science; but, not to mention that by far the greater part of natural phenomena remain yet unexplained, every new discovery in science brings into view whole classes of facts which would never otherwise have fallen under our notice at all, and establishes relations which afford to the philosophic mind a constantly extending field of speculation, in ranging over which it is next to impossible that he should not encounter new and unexpected principles. How infinitely greater, for instance, are the mere chances of discovery in chemistry among the innumerable combinations with which the modern chemist is familiar, than at a period when two or three imagina-

\* Boyle’s Works, folio, vol. iii. Essay x. p. 185.