

lar discoveries or general processes of the Arabians, which is important in the history of the Inductive Sciences.²

The credit due to the Arabians for improvements in the general methods of philosophizing, is a more difficult question ; and cannot be discussed at length by us, till we examine the history of such methods in the abstract, which, in the present work, it is not our intention to do. But we may observe, that we cannot agree with those who rank their merits high in this respect. We have already seen, that their minds were completely devoured by the worst habits of the stationary period,—Mysticism and Commentation. They followed their Greek leaders, for the most part, with abject servility, and with only that kind of acuteness and independent speculation which the Commentator's vocation implies. And in their choice of the standard subjects of their studies, they fixed upon those works, the Physical Books of Aristotle, which have never promoted the progress of science, except in so far as they incited men to refute them ; an effect which they never produced on the Arabians. That the Arabian astronomers made some advances beyond the Greeks, we have already stated : the two great instances are, the discovery of the Motion of the Sun's Apogee by Albategnius, and the discovery (recently brought to light) of the existence of the Moon's Second Inequality, by Aboul Wefa. But we cannot but observe in how different a manner they treated these discoveries, from that with which Hipparchus or Ptolemy would have done. The Variation of the Moon, in particular, instead of being incorporated into the system by means of an Epicycle, as Ptolemy had done with the Evection, was allowed, almost immediately, so far as we can judge, to fall into neglect and oblivion : so little were the learned Arabians prepared to take their lessons from observation as well as from books. That in many subjects they made experiments, may easily be allowed : there never was a period of the earth's history, and least of all a period of commerce

² If I might take the liberty of criticising an author who has given a very interesting view of the period in question (*Mahometanism Unveiled*, by the Rev. Charles Forster, 1829), I would remark, that in his work this caution is perhaps too little observed. Thus, he says, in speaking of Alhazen (vol. ii. p. 270), "the theory of the telescope may be found in the work of this astronomer ;" and of another, "the uses of magnifying glasses and telescopes, and the principle of their construction, are explained in the Great Work of (Roger) Bacon, with a truth and clearness which have commanded universal admiration." Such phrases would be much too strong, even if used respecting the optical doctrines of Kepler, which were yet incomparably more true and clear than those of Bacon. To employ such language, in such cases, is to deprive such terms as *theory* and *principle* of all meaning.