BOOK IV.

PHYSICAL SCIENCE IN THE MIDDLE AGES.

GENERAL REMARKS.

In the twelfth Book of the *Philosophy*, in which I have given a Review of Opinions on the Nature of Knowledge and the method of seeking it, I have given some account of several of the most important persons belonging to the ages now under consideration. I have there (vol. ii. b. xii. p. 146) spoken of the manner in which remarks made by Aristotle came to be accepted as fundamental maxims in the schools of the middle ages, and of the manner in which they were discussed by the greatest of the schoolmen, as Thomas Aquinas, Albertus Magnus, and the like. I have spoken also (p. 149) of a certain kind of recognition of the derivation of our knowledge from experience; as shown in Richard of St. Victor, in the twelfth century. I have considered (p. 152) the plea of the admirers of those ages, that religious authority was not claimed for physical science.

I have noticed that the rise of Experimental Philosophy exhibited two features (chap. vii. p. 155), the Insurrection against Authority, and the Appeal to Experience: and as exemplifying these features, I have spoken of Raymond Lully and of Roger Bacon. I have further noticed the opposition to the prevailing Aristotelian dogmatism manifested (chap. viii.) by Nicolas of Cus, Marsilius Ficinus, Francis Patricius, Picus of Mirandula, Cornelius Agrippa, Theophrastus Paracelsus, Robert Fludd. I have gone on to notice the Theoretical Reformers of Science (chap. ix.), Bernardinus Telesius, Thomas Campanella, Andreas Cæsalpinus, Peter Ramus; and the Protestant Reformers, as Melancthon. After these come the Practical Reformers of Science, who have their place in the subsequent history of Inductive Philosophy; Leo nardo da Vinci, and the Heralds of the dawning light of real science, whom Francis Bacon welcomes, as Heralds are accosted in Homer:

Xalpere Κήρυκες Διὸς ἄγγελοι ἡδὲ καὶ ἀνδρῶν. Hail, Heralds, messengers of Gods and men l