Boyle, about the same period, seems to have inclined to the Cartesian hypothesis. Thus, in order to show the advantage of the natural theology which contemplates organic contrivances, over that which refers to astronomy, he remarks: "It may be said, that in bodies inanimate, so the contrivance is very rarely so exquisite but that the various motions and occurrences of their parts may, without much improbability, be suspected capable, after many essays, to cast one another into several of those circumvolutions called by Epicurus συστροφάς, and by Descartes, vortices; which being once made, may continue a long time after the manner explained by the latter." Neither Milton nor Boyle, however, can be supposed to have had an exact knowledge of the laws of mechanics; and therefore they do not fully represent the views of their mathematical contemporaries. But there arose about this time a group of philosophers, who began to knock at the door where Truth was to be found, although it was left for Newton to force it open. These were the founders of the Royal Society, Wilkins, Wallis, Seth Ward, Wren, Hooke, and others. The time of the beginning of the speculations and association of these men corresponds to the time of the civil wars between the king and parliament in England; and it does not appear a fanciful account of their scientific zeal and activity, to say, that while they shared the common mental ferment of the times, they sought in the calm and peaceful pursuit of knowledge a contrast to the vexatious and angry struggles which at that time disturbed the repose of society. It was well if these dissensions produced any good to science to balance the obvious evils which flowed from them. Gascoigne, the inventor of the micrometer, a friend of Horrox, was killed in the battle of Marston Moor. Milburne, another friend of Horrox, who like him detected the errors of Lansberg's astronomical tables, left papers on this subject, which were lost by the coming of the Scotch army into England in 1639; in the civil war which ensued, the anatomical collections of Harvey were plundered and destroyed. Most of these persons of whom I have lately had to speak, were involved in the changes of fortune of the Commonwealth, some on one side, and some on the other. Wilkins was made Warden of Wadham by the committee of parliament appointed for reforming the University of Oxford; and was, in 1659, made Master of Trinity College, Cambridge, by Richard Cromwell, but ejected thence the year following, upon the restoration of the

<sup>22</sup> Shaw's Boyle's Works, ii. 160.