

royal sway. Seth Ward, who was a Fellow of Sidney College, Cambridge, was deprived of his Fellowship by the parliamentary committee; but at a later period (1649) he took the engagement to be faithful to the Commonwealth, and became Savilian Professor of Astronomy at Oxford. Wallis held a Fellowship of Queen's College, Cambridge, but vacated it by marriage. He was afterwards much employed by the royal party in deciphering secret writings, in which art he had peculiar skill. Yet he was appointed by the parliamentary commissioners Savilian Professor of Geometry at Oxford, in which situation he was continued by Charles II. after his restoration. Christopher Wren was somewhat later, and escaped these changes. He was chosen Fellow of All-Souls in 1652, and succeeded Ward as Savilian Professor of Astronomy. These men, along with Boyle and several others, formed themselves into a club, which they called the Philosophical, or the Invisible College; and met, from about the year 1645, sometimes in London, and sometimes in Oxford, according to the changes of fortune and residence of the members. Hooke went to Christ Church, Oxford, in 1653, where he was patronized by Boyle, Ward, and Wallis; and when the Philosophical College resumed its meetings in London, after the Restoration, as the Royal Society, Hooke was made "curator of experiments." Halley was of the next generation, and comes after Newton; he studied at Queen's College, Oxford, in 1673; but was at first a man of some fortune, and not engaged in any official situation. His talents and zeal, however, made him an active and effective ally in the promotion of science.

The connection of the persons of whom we have been speaking has a bearing on our subject, for it led, historically speaking, to the publication of Newton's discoveries in physical astronomy. Rightly to propose a problem is no inconsiderable step to its solution; and it was undoubtedly a great advance towards the true theory of the universe to consider the motion of the planets round the sun as a mechanical question, to be solved by a reference to the laws of motion, and by the use of mathematics. So far the English philosophers appear to have gone, before the time of Newton. Hooke, indeed, when the doctrine of gravitation was published, asserted that he had discovered it previously to Newton; and though this pretension could not be maintained, he certainly had perceived that the thing to be done was, to determine the effect of a central force in producing curvilinear motion; which effect, as we have already seen, he illustrated by experiment as early as 1666. Hooke had also spoken more clearly on this subject