

We might easily trace in our literature indications of the gradual progress of the Newtonian doctrines. For instance, in the earlier editions of Pope's *Dunciad*, this couplet occurred, in the description of the effects of the reign of Dulness :

Philosophy, that reached the heavens before,
Shrinks to her hidden cause, and is no more.

“And this,” says his editor, Warburton, “was intended as a censure on the Newtonian philosophy. For the poet had been misled by the prejudices of foreigners, as if that philosophy had recurred to the occult qualities of Aristotle. This was the idea he received of it from a man educated much abroad, who had read every thing, but every thing superficially.⁶ When I hinted to him how he had been imposed upon, he changed the lines with great pleasure into a compliment (as they now stand) on that divine genius, and a satire on that very folly by which he himself had been misled.” In 1743 it was printed,

Philosophy, that leaned on heaven before,
Shrinks to her second cause, and is no more.

The Newtonians repelled the charge of dealing in occult causes;⁷ and, referring gravity to the will of the Deity, as the First Cause, assumed a superiority over those whose philosophy rested in second causes.

To the cordial reception of the Newtonian theory by the English astronomers, there is only one conspicuous exception; which is, however, one of some note, being no other than Flamsteed, the Astronomer Royal, a most laborious and exact observer. Flamsteed at first listened with complacency to the promises of improvements in the Lunar Tables, which the new doctrines held forth, and was willing to assist Newton, and to receive assistance from him. But after a time, he lost his respect for Newton's theory, and ceased to take any interest in it. He then declared to one of his correspondents,⁸ “I have determined to lay these crotchets of Sir Isaac Newton's wholly aside.” We need not, however, find any difficulty in this, if we recollect that Flamsteed, though a good observer, was no philosopher;—never understood by a Theory any thing more than a Formula which should predict results;—and was incapable of comprehending the object of Newton's theory, which was to assign causes as well as rules, and to satisfy the conditions of Mechanics as well as of Geometry.

⁶ I presume Bolingbroke is here meant. ⁷ See Cotes's Pref. to the *Principia*.

⁸ Baily's *Account of Flamsteed, &c.*, p. 309.