http://geology.19thcenturyscience.org/books/1906-Merz-HistEurThot/README.htm

modern times by any single mind,[1] the penetrating and far-seeing genius of Colbert had already recognised the important part which science would one day play in the government of the world, and had secured the approval of his royal master to the constitution of an Aca-

Philos. Transactions in 1675), by applying which he determined that "the moon appeared to be kept in her orbit purely by the power of gravity." See Brewster's 'Life of Newton,' vol. i. p. 290, &c.; Todhunter's 'History of the Theories of Attraction,' vol. i. p. 38, &c. This account is, however, now discredited (see *infra*, chap. iv.) For the part which Dr Hooke and Halley took in the discovery of the "reciprocal duplicate" ratio, see also Brewster, *loc. cit.*, vol. i. p. 291, &c. During the writing of the 'Principia' Newton carried on a useful correspondence with Flamsteed, who was then Astronomer-Royal. How this happy co-operation ceased ten years later can be read at length in Brewster (*loc. cit.*, vol. i. p. 312; vol. ii. p. 164, &c.) The greatest material assistance which Newton received was from Halley, who defrayed the expenses of publishing the 'Principia,' after the Royal Society, to which it was dedicated, had reversed its resolution to defray them (Brewster, vol. i. p. 305, &c.) Nevertheless Weld, in his 'History of the Royal Society,' says: "Fortunate indeed was it for science that such a body as the Royal Society existed, to whom Newton could make his scientific communications; otherwise it is very possible that the 'Principia' would never have seen the light." Though one must lament the differences between Flamsteed and Newton, which prevented the latter from bringing his investigations of the lunar and planetary theories to a close (Brewster, vol. i. p. 312), a word of deep gratitude is due to Flamsteed's own exertions in the cause of astronomy. After Charles II. had built the Observatory in order to have the places of the fixed stars "anew observed, examined, and corrected for the use of his seamen" (Flamsteed, History of his own Life), and after he had appointed Flamsteed Astronomer-Royal at a salary of £100 per annum, the Observatory, "hurriedly established, was left for a period of nearly fifteen years without a single instrument being furnished by the Government" (Weld, vol. i. p. 255). The instruments were mostly supplied by Flamsteed himself or lent by others, and besides, "the king had ordered that Flamsteed should instruct monthly two boys from Christ Church Hospital, which was a great annoyance to him, and interfered with his proper avocations" (Baily, 'Account of the Rev. J. Flamsteed'). "Any other man would probably have succumbed under the amount of drudgery appertaining to the office (earning his salary by labour *harder than thrashing*), if indeed, in the absence of encouragement, he would have continued in it at all, and particularly when the reward was so insignificant" (Weld, vol. i. p. 256).

[1] "And it may be justly said, that so many and so valuable Philosophical Truths, as are herein discovered and put past dispute, were never yet owing to the Capacity and Industry of any one Man" (Words of Halley, Philos. Transactions, vol. xvi., 1687).