VII. On a point connected with the dispute between Keil and Leibnitz about the invention of Fluxions. By A. De Morgan, Esq., F.R.A.S., &c. Communicated by S. Hunter Christie, Esq., Sec. R.S., &c.

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THOSE who have consulted the records of the Society for purposes of history, have omitted to find, or at least to notice, an addition made to the Committee appointed to decide between Keil and Leibnitz, between the commencement of its labours and the presentation of its report. Singularly enough this omission makes Newton appear to assert a positive falsehood, in a matter of which he must have had accurate knowledge, and as to which the position of President gave him every opportunity of refreshing his memory.

The real facts are, that on the 6th of March 1711-12, a Committee was appointed to inspect the Archives, consisting of Arbuthnot, Hill, Halley, Jones, Machin, and Burnet: and that further, Robarts, a contributor to the Transactions, was added on the 20th, Bonet, the Prussian minister, on the 27th, and De Moivre, Aston, and Brook Taylor on the 17th of April. Of these newly-added members, Bonet and De Moivre were aliens. All the historical writers who enumerate the Members of the Committee, say nothing about the additions, but confine their list to the six gentlemen first named, that is, to the original Committee.

Now Newton, in his letter to Conti of February 26, 1715–16, first published at the end of the English edition of Raphson's History of Fluxions, asserts that the materials of the Commercium Epistolicum were "collected and published by a numerous Committee of gentlemen of different nations, appointed by the Royal Society for that purpose."

Whether a Committee of six is properly called numerous may be a question; but there can be no doubt that knowingly to have styled Arbuthnot, Hill, Halley, Jones, Machin, and Burnet, a committee of gentlemen of different nations, would have been, if not a direct falsehood, at least the pitiful evasion of treating the four races of the United Kingdom as four different nations with reference to a dispute between an Englishman and a German. As to this, it is material to remember that the names of the Committee had never been published, nor does Newton give them in the place cited. If any one should say that Machin's name might have looked rather French to an Englishman, it might be answered that Newton must have known John Machin of Gresham College, whom he was constantly in the habit of seeing, to have been as much a Briton as himself. And in fact, Machin looks so little like a French

name, that Laplace once spells it Mechain, meaning Bradley's friend, not his own contemporary. In this state, owing to the accidental omission of the additions made to the Committee, the evidence of Newton's veracity was left: and considering the number of insinuations made by the partizans of the English side of the dispute against the moral character of Leibnitz, there can be little doubt that continental writers on the other side would have hit this apparent blot, if they had been able to see it. An accidental passage in a memoir of DE Moivre led me to suspect the omission above described: and the Assistant Secretary, on my application, was good enough to examine the records of the time and to supply it. The biography to which I allude is the "Mémoire sur la vie et sur les écrits de Mr. Abraham De Moivre.... par Mr. Maty. A la Haye, de l'imprimerie de H. Scheurleer, F. Z." (12mo, no date). This Mr. Maty must have been Dr. Matthew Maty, who, as well as his son, was a secretary of the Society. He was the intimate friend of DE MOIVRE, and he mentions Dr. Birch as having consulted the registers of the Society for him on different points. He states that DE Moivre was appointed on this committee on the 17th of April (the true date), and gives all the names. He also states that this transaction drew DE Moivre out of the neutrality which till then he had observed. It is remarkable that Mary thus intimates that the mere fact of joining the Committee was destruction to the character of a neutral. And Burner himself, a member of the Committee, is stated by John Bernoulli (in his correspondence with LEIBNITZ) to have written a letter to him, giving him the information that the Royal Society was engaged in proving that Leibnitz might have seen certain letters of NEWTON, &c. These slight things tend to show that the Committee in question was thought at the time not to be a judicial body, but one of avowed partizans: and it is, I think, necessary for the character both of the Committee and the Society, that this truth, as I believe it to be, should be acknowledged. On any other supposition than that the Committee was meant to be Newtonian, for the defence (through Keil) of Newton, and not for the decision of the question, it would be difficult to explain with credit to the parties concerned, the selection of Arbuthnot, Burnet, and Aston, friends of Newton, but not known as mathematicians; or of Brook Taylor, a Fellow of a few days standing, who had then published nothing, and was only known to the Society, or chiefly known, by his private correspondence with Keil, the nominal defendant. There may have been, and I often suspect there was, something of truth in the surmise of Leibnitz, who thought that the near prospect of the Hanoverian succession created some dislike against the subject and servant of the obnoxious Elector in the minds of the Jacobite portion of English science. "Amicus Anglus ad me scribit," says Leibnitz, "videri [eos qui parum Domui Hanoveranæ favent] aliquibus non tam ut mathematicos et Societatis Regiæ Socios in Socium, sed ut Toryos in Whigium quosdam egisse." I am unfortunate enough to differ from the general opinion in England as to the manner in which Leibnitz was treated, and this after much examination: I am therefore the better qualified to call the attention of the Society to the groundlessness of the charge which might, from an accidental omission, have been made against Newton's veracity; and I am glad it has fallen to me to do so.

I can hardly find any notice of this little tract of Dr. Maty. Had it been much known I cannot but suppose that the following phrase of Newton would have obtained some currency: the English parenthesis, and the italics, are Maty's, not mine. "Comme tout ce qui regarde les grands hommes peut être intéressant, on sera peut-être bien aise de savoir que Newton a souvent dit à Mr. de Moivre que s'il avoit été moins vieux il auroit été tenté de revoir sur les dernières observations sa théorie de la Lune, ou comme il s'exprimoit de l'attaquer de nouveau (to have another pull at the moon). Je tiens ceci de Mr. de Moivre lui-même."

There is also an interesting fact concerning De Moivre, which is little, if at all, cited. Happening one day to have to call on the Earl of Devonshire, he met a man whom he did not know coming out of the house. This man was Newton, who had come to present a copy of the *Principia*, and had left it in the antechamber in which De Moivre had to wait till the Earl was ready to see him. He opened the book, and found to his surprise, that, strong as he knew himself to be, he could only just manage to follow the reasoning. He immediately procured a copy; but as he was employed all day in walking about London from one pupil to another, the only way in which he could read it was by tearing leaf after leaf, and carrying a few at a time in his pocket to look at in his walks and in other intervals.

It cannot be necessary to remind the Society that the subject of this paper may possibly not be the only case in which their records would furnish information on points of history which have hitherto been overlooked. These records are a most important part of the progress of science in England: and I have often regretted that the example set by Dr. Birch has found no follower among those who can appreciate the value of minute information.