

Euler to Wettstein
Berlin, 16 November 1754
Letter 285 (2786)

[...] I have received the two letters of 23 October and 1 November, which you honor me, and from which I joyfully learned that you have happily returned to London after having made such a beautiful trip through France to Basel. We flatter ourselves about what parts that you would chose to spend the summer with your wife, where all the compatriots and in particular all of the Academy will do whatever is necessary to ensure that your stay is as pleasant that you would have had in Basel or Paris. Mr. de Maupertuis is very upset that he missed you while you were in Paris, but he will be all the more pleased when he greets you here. Since it was during your absence that the London Society provided you your associate membership, a distinction which you refused as long as you were present, so that it was necessary to take advantage of your absence to confer such a distinction, and I am very well aware of the knotting of our new connection. Our Academy is very much in your debt, Sir, for the trouble that you have given in attempting to obtain the volumes of the Transactions which we are still lacking. The last volume which you sent to us in *duplo* is apparently a present from the President, whereas for the other I fail to we the charge for the book on your account request that you do not forget to mention it in the accounting of the almanacs next year which you will receive with this letter, due to the fact that I gave the copy to a friend who wishes to know how much it cost.

In the last volume I saw with great pleasure that my argument with Mr. Dolland has been inserted, and he appeared that he seems satisfied with my last explanation. Furthermore, having

thoughtfully perused this question, I have intended to send a paper to you where I have shown by incontestable proofs that the law suggested by Mr. Dolland on refraction of the rays of different colors cannot take place in nature due to an embedded contradiction. Also it is clear through Mr. Newton's work that he never regarded it as conforming to nature, but it approached nature and as such one might use this without overt error until one would find the true law. . However, I have proved in the same paper through an incontestable experiment that it my law is the correct one which Mr. Dolland attacked and that all others are contradictory. However, after having read this paper at our Academy, the President found the proofs of such great importance that he ordered me to have it inserted in the volume of work which is currently being printed. My proofs have appeared all the more interesting, even though it originally appeared that these questions could only be decided by experimentation, but I found the way to resolve this issue exclusively by theory and that my proofs are beyond reproach. I will even go so far as to say that after Mr. Dolland has read my paper, he will no longer be in doubt about abandoning his assumed law and to recognize that mine is the true law.

I feel very much at ease that you appreciate Mr. Mayer's prize for the lunar tables, after that Mr. d'Alembert had neglected to think about it and that I would have provided tables in 1744 taken from my calculations and that if they are defective they are due to less accurate observations based on which I constructed them. Mr. Mayer frankly admits that he has followed exactly my method for the construction of his tables. Mr. Bradley's verdict is perfectly well founded and should flatter Mr. Mayer, after he himself recognized that a few small equations were still missing from his tables, with which he has brought his tables to such a state of perfection that he is assured of never being wrong by more than a half/minute. Mr. Mayer deserves that the Royal Society of London bestow a brilliant verdict on his work against the French insults.

All of my family and our compatriots present their very best regards to you and you wife, I have yet to present your to Baron

de Gorgier who, for the past three months, has been with Margrave Heinrich on his lands. I remain with the most perfect affections, [...]

PS. To the 82 almanacs, I have added an astronomical one which contains a list of our academicians. I have also added a new geographic map of Germany that we have just published on the best papers; I am hoping that we can sell them in England. The parents of the late Professor Wettstein have honored me with the gift of the funeral eulogy which will probably shame some of our Basellers theologians. Mr. Bruckner is complaining loudly about his visions on the longitude. Mr. Dieterich's artificial magnets are the talk of the town.

In the event that you have not yet sent the Transactions and should you see Mr. Collinson, it would make us very happy to ask him to provide some seeds of the Mays Praecox from Virginia, from which the only things we have been able to grow are the mature seedlings and nothing more. . Last year we planted too late and the season was not kind.

I had hoped to send this letter with the almanacs which were sent yesterday, but I prefer to send it by ordinary mail since it will get to you sooner.

1st Edit 12/2/03