

Euler to Wettstein
Berlin, 4 March 1747
Letter 252 (2753)

Since my last letter which I had the honor to write to you, I have received on three separate occasions your generous 9 pounds of tobacco that I can neither express the excellence of the taste nor the obligation that I owe to you. If I may flatter myself by believing that you would wish to continue this type of good deed, then I think that the surest and least inconvenient way will be to send them to Mr. Fasch, our agent in Amsterdam who will not delay their prompt delivery. I have not yet had the opportunity to ask the king's gardener who might be in Potsdam; as for the Swiss officer St. Leger, I doubt whether he has arrived here since one of the merchants arriving from Brunswick had given me two books which seem to be from the officer. However these little incidents have given me more than enough to know how much you have given to me and to satisfy my unbridled desires, and I am all in a state of confusion I am relieved to know that the almanacs arrived early. If I am not mistaken I had already marked the prices as:

The 6 dozen French almanacs cost 1 florin each which is 48 ecus

The 2 Electoral almanacs at 20 gros...	1.16 gros
The 2 German almanacs at 12 gros...	1-
The 12 pocket almanacs at 3 gros...	1-12 gros
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	52 ecus 4 gros.

In the future I have no doubt that the price can be reduced by at least the 12th part since that is what we offer to our agents as commissions who are responsible for the sales and I will do everything to obtain this same discount on this amount which will come to 4 ecus and 8 gros 4 deniers. Besides the price of the tobacco that you sent to me, please do not forget the 10 ecus that I have yet to give to you from last year. As to the rest I am grateful to you concerning your suggestions concerning the almanacs, and we will not hesitate to use them as much as possible in the future.

The lunar table that I took the liberty to send you is yet in need of corrections but it is only layout and the title of the inequalities on which I wish to reflect principally. Since it is the only theory of the late Mr. Newton that after a number of years of work had finally leads me to this form so different from the others which have been constructed along the same lines. It only requires the precise determining of the exact quantity of every inequality and to do that I need to wait to have the observations done with the utmost accuracy. With this in mind I take the liberty to contact Dr. Bradley, to whom I would appreciate you proffering my humble respects, and if he would be so kind to provide me with a number of his observations made concerning the passage of the moon through the meridian. From where he concluded that after having taken into account the aberration of the fixed stars which he used by the ascending lines and having no reason to correct the parallax, will allow me to the adjustments which my tables still need. It will be something that will be easily dispensed with because as for the syzygies, I have already found that the necessary correction for a number of the lunar eclipses of the moon. I now arrive at the point of this letter which has deeply touched my heart and one for which I cannot express my gratitude. It is the honor of membership of the Royal Society of London which you obtained for me. To the fact that I am infinitely obligated, I am embarrassed to ask the favor of presenting my letters of thanks to President Folkes and to Dr. Mortimer seeing that this affair has already caused too much trouble and expenses especially since you presented Mr. Folkes my small works on my behalf. Despite all of these things to which I am beholden to you, give me the courage to ask you to do one more favor in regards to M. Count Kayserling, the Russian ambassador of the Empress here in Berlin. This lord, having been the president in Petersburg, I still find myself close to him and that I wish to fulfill some requests that he has made. As he is extremely interested by the sciences, he wishes to have a complete collection of the geographical maps which he has requested from everywhere. It is therefore for him that I beg you to favor me by finding in London a collection of the best maps made in England by the best cartographers and to tell me what the cost would be. Based on this information, the Count would not hesitate to forward the monies to make

this purchase, as this is nothing more than a request; I have not promised him anything without first relying on your kindness.

I do not expect anything important to come from Mr. Struijck research into comets, due to the fact that to be assured that a comet which has re-appeared a number of times, one must have made very exact observations to conclude on its orbit. , as should it find itself to be about the same , one would be in a state to declare that it might be the same comet: similarly to Mr. Halley who proved that the 1682 comet had already appeared two previous times. Since by this reason the booklets only account generally concerning these appearances then it appears that they will hardly shed any light on the subject, even less so since the same comet approaching its perihelion can be seen from the earth and sometimes not following the situation of the earth's orbit. Besides this I am nearly convinced that a comet's periodicity is not always the same but that it diminishes considerably after each revolution, because the comet of 1682 took nearly a year more time from the first appearance until the second, than that of the third, and I am convinced of the resistance in the medium as the reason for this dysfunction which is also something that I have found with the earth. That is why even though the chronicles will say that from one century to another we have seen a comet, we surely would be mistaken if we were to believe that this was the same one.

Concerning the effect of electricity that you noted is without doubt of the greatest importance and certainly healthier than the one which we have just discovered here; and that is to have instantly killed a bird with a jolt of electricity.

After having written this, I went to see Baron Vernezobre even though I had not met him before and brought him the news that you requested. I cannot begin to tell you the joy that the Baron, and in particular the Baroness had in learning of the state of your health. I was obliged to stay for diner to testify to the many toasts that were offered to your health, they requested that I provide you with the kindest compliments besides which an infinite number of gestures that I am not in a state to express, greater than you could ever imagine since they approach the real truth. Thank God my family is entirely well and offers their good wishes, and I have the honor of being with all possible affection [...]

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