

Euler to Wettstein  
Berlin, 10 December 1746  
Letter 251 (2752)

[...] A few days before I received your last letter, I had sent the package of genealogical almanacs that you had requested and I hope that you have received them by now, having addressed them to M. Fred. Henry Wettstein in Amsterdam. Presently I have the pleasure to send you a dozen almanac folders, even though you have not requested but half that many since the package would have been too small and the postage would have remained the same. And that the piece only costs three gros and all of it only comes to an ecu and a half. The cost of the first package with the wrapping only comes to one ecu.

I have become very sensitive to the care that you have given in trying to obtain some good tobacco, even though I have not received any yet. One part of it should have been delivered by a Dutch agent, I have asked a friend to look into the matter with M. le general de Genckel, a Dutch minister, and for the other amount which should arrive through M. Wettstein of Amsterdam which I hope to received very shortly. However these delays have made me consider only too clearly to which point I have troubled you by making such requests for which I ask a thousand pardons as well as for the current bad handwriting which I am obliged to do in bed having had a touch of fever, which seems inconsequential.

I am delighted if my suggestions are able to provide some enlightenment to Mr. Dobbs in his important undertaking of finding a route through Hudson Bay. However, I will be upset if our deceased Mr. Bering believed that the new land he discovered was connected to California since it would cause disservice to the great success of this glorious undertaking.

I hope, however that Mr. Dobbs will not be upset to learn that the reasons for the suspicions of Mr. Bering were found, despite the objections that you have wished to note. Firstly this new land that he had discovered 50 miles to the east of Kamtschatka he had found by navigating up the coast for quite a distance, even though I am not sure of the amount that they should have decreased the amount by at least 30 degrees, that Mr. Dobbs places between the last known reading known from the west of California and the last bit discovered from this new land from the East.

As a second point Captain Bering having had the opportunity to witness an eclipse of the moon on Kamtschatka, it was assumed that this land was much more towards the east than was indicated on any map and that to be well placed it should be in the opposite hemisphere, its longitude being well above 180 degrees. By this reason alone Captain Bering's new land would be a great deal closer to the other end of California and that there would only be few degrees of difference. In such a way one would hope that somewhere in the vicinity there would be a passage by which the Pacific Ocean would have an open line to Hudson Bay. Or in the absence of such a passage that any way that one would create through Hudson Bay, that one would only arrive at a frozen sea after which one would pass by Kamtschatka to the Pacific Ocean. However this route would prove too long and dangerous to travel through by the end of a summer. I have serious doubts whether Russia will ever publish the details of the discoveries that were made as much about Kamtschatka towards America as to the northern coast of Asia. As to what concerns this last expedition, I have only received the cursory picture which was told to me by the Admiralty College by order of the court so as to use the information in Russian geography for which I had been charged.

Smaller ships were used to navigate up the coast between Nova Zemla and firm land at different in the middle of summer when the waters were open. The first expedition was made of the River Obi and as winter approached the ships made their way up the Yangtze, where in the following year they made their way back to the sea by traveling further east to the mouth of the Lena where they stayed for the winter. The third expedition made its way from this river to the final point in north-east Asia. But a number of the ships and crew members were lost, and the entire return trip to Kamtschatka was not possible. It was believed that this last trip was not necessary because Captain Bering had already made this trip by way of this cape around Nova Zemla towards the north. The Russians did not attempt the passage around Nova Zemla by as they had penetrated between this land and Asia and furthermore since the Dutch had discovered the southern coasts, it was now possible to know that Nova Zemla was an island.

I will be infinitely grateful to receive Halley's lunar tables, even though I have Ledbetter's which appear to me to be very imperfect or rather defective Perhaps he has not gotten a hold of a copy of Halley. However I have just seen in a French translation of Keill's Astronomy which was published this year in Paris some lunar tables that I believe to be the same as those of Halley since I have found them to be much more in line with no other observations except his. , even though the incidence of error can approach 5' and I have noted. Since then I have added some small equations after having adjusted them after a great number of eclipses, and I can now be able to assert that they will never have more than 2' from the truth and I am counting on publishing these new tables with the theory, where one will note that they are in perfect accordance with Newton's Great theory.

And it must be that they are perfectly conforming to those who must also bear the name. The calculus upon which the theory is founded had given me clearly to know that one must not suppose the exocentric variable, nor the movement of the unequal apogee, but that but it must be represented with other titles, the inequalities that we through came from the variability of the eccentricity of the apogee, which is what these tables that I have taken the liberty to send you have you will be able to notice immediately upon receipt.

You will of course be aware of the chronology of the Bible of our recently edited Mr. de Vignoles by the Haude Press which has been authorized for its publication and who expected to extract a good profit. Unfortunately, this work has fallen into obscurity and practically no one asks for it. I would be particularly interested to find whether that This book has actually found a market in England, or if the publishers are withholding the sale. . If it is this last case then he is offerings to ship as many copies at a very good price to England and should you feel that this work is good enough, and then I would appreciate it if you would suggest it all around.

I am much obliged to Mr. le Professeur Wettstein as yourself of the great memories with which you have honored me, and I am upset that there are so many impediments to the wonderful trip that you proposed. My family presents their very humble respects, and I am with the most perfect veneration [...]

1<sup>st</sup> Edit 11/30/03