To the President of the Philosophical Society, I take the liberty of laying before you a method of ascertaining the longitude with the same precision that at present obtains in fixing the latitude, which is simply this: on reflecting upon what happens to all navigators who sail round the world in one direction they lose a day, or the others they gain one, it occurred to me, that it might be, that this circumstance had something to do with the perplexing their calculations, and by following a line around the globe, there are no points further distant from each other than 180 degrees, and yet we find they have treated the globe as they would treat a level plane, in carrying the longitude all round, which I believe to be an error, and therefore conceive the idea of stopping at mid-way and fixing two points distant from each other 180 degrees. For instance, I will call Philadelphia my first meridian, and this meridian cuts the Equator at 16° 20' west from London, I count 90 degrees on the Equator westward which brings me to the western ocean, and here I set my western pole, I return and count 90 degrees eastward, and this brings me to the western part of the continent of Africa, here I set my eastern pole. I then draw a line which is to cross the Equator at right angles, on my first meridian, and pass through the center of the north and south poles—and so divide the earth into an eastern and western hemisphere, the 24 meridians I reduce to 12, a thing like to one hemisphere, each of these 12 meridians contain 15° degrees.
parcell in with the horizon into eastern and western hemispheres and in receding from this line toward the eastern or western poles the latitude decreased in the same ratios as we find the longitude does in approaching the northern or southern poles a globe will give a day of twelve hours without being involved with the diurnal revolution of the Earth and the quadrant will determine longitude and latitude equally.

Your humble servant

Hannah Lowe

Harley near Bristol

Bucks county Pennsylvania October 10 1805