

learned men, seems not yet to be perfectly known.
I am, with all possible consideration and esteem,

S I R,

Your much obliged,

and most obedient servant,

Christ-Church, Oxon.
Aug. 22, 1764.

John Swinton.

LIV. *Extract of a Letter from Mr. John Horsley, Fourth Mate on board the Glatton East-India Ship, to the Rev. Mr. Nevil Maskelyne, F. R. S. dated Batavia, Nov. 16, 1763, giving an Account of his Observations, at Sea, for finding out the Longitude by the Moon.*

Dear Sir ;

Read Dec. 13, 1764. **Y**OU was so good as to express a desire of hearing from me, by every opportunity, during the time of my voyage ; a request that I shall always comply with, with a great deal of pleasure.

I have the misfortune to inform you of our having lost our passage to China, the original occasion of which was our late departure from England. We

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arrived

arrived at Bencoolen July 29, where we were detained till the 13th of September. We found the winds strong set against us in the China seas, which obliged us to bear away for this place.

I shall now give you an account of the observations I have made, since I have been out, and the success attending them.

We sailed from Spithead March the 8th, 1763; the 19th I had four observations of the distance of the Moon from the Sun; by taking the medium the longitude agreed exactly with that by account. The 21st I had another observation, and, the same day, saw the island of Madeira, the body of which, according to this and the former observations (they agreeing exactly) I made to lie $17^{\circ} 18'$ west of London, which differs only 18 minutes from what it is laid down in the chart. The success I met with in this first attempt gave me great satisfaction, and made me continue my observations regularly to the island of St. Paul's, which we made July 5. The day before I had three observations of the distance of the Moon from the Sun. July the 5th, the body of the island bearing by the azimuth compass S. 27° W. distance six leagues, the sky remarkably clear and fine, and the ship having hardly any motion, circumstances all in my favour, I took nine observations of the distance of the Moon from the Sun, the captain and chief mate assisting me in taking the altitudes. I divided them into three sets, and worked from the medium of every three; by which I made the longitude of the ship as follows, $75^{\circ} 15'$, $75^{\circ} 25'$, $74^{\circ} 40'$. The three observations, I took the day before, made the longitude of the ship $74^{\circ} 38'$ and $73^{\circ} 32'$ which brought

brought forward to the noon of July the 5th made $75^{\circ} 45'$ and $74^{\circ} 39'$. Taking the medium of the whole five sets I made the longitude of the ship at noon $75^{\circ} 8' 48''$ east of London. Subtracting from thence the difference of longitude, the bearings and distance of the island gave $= 8' 37''$ west, I made the longitude of St. Paul's $75^{\circ} 0' 11''$ east of London, and $58^{\circ} 0' 11''$ from the Cape of Good Hope. By my account kept from an observation taken June the 18th, I made it $73^{\circ} 35'$ east of London, and $56^{\circ} 35'$ from the Cape, which differs $1^{\circ} 25'$ from what I make the true longitude: most of the accounts on board were between two and three degrees to the westward of mine. The longitude of this island having never been determined by any other method than the runs of ships to the Cape, there are hardly any two charts or books that lay it down alike, they differing from 71° to 74° in their accounts, which made me put little dependance upon any of them.

On our arrival at Bencoolen I took three observations of the distance of the Moon from the Sun, in the road, by which I made Fort Marlborough to lie in $103^{\circ} 50' 45''$ east of London.

I was on shore five or six days in hopes of getting some observations of Jupiter's Satellites, but was disappointed by the cloudiness of the nights; so that I got nothing for my pains but a fever, which had nigh cost me my life, terminating at last in an intermitting one, which has continued with me ever since, neither does it seem to have any inclination to leave me at present.

I have saved all the observations I have made, and the work of them, which I should have sent you a complete copy of, if I had been well enough to have transcribed them.

I am,

Yours, &c.

John Horsley.

“ Mr, Horsley, whose skill and diligence are better evinced by his own account than by any encomiums I can give them, made use of a quadrant made by Mr. Bird, and my British Mariner’s Guide, for determining the longitude of the ship at sea.

N. Maskelyne.

LV. *An Account of a remarkable Meteor seen at Oxford, April 23, 1764. In a Letter to the Rev. Thomas Birch, D. D. Secretary to the Royal Society, from the Rev. John Swinton, B. D. F. R. S. Member of the Academy degli Apatisti at Florence, and of the Etruscan Academy of Cortona in Tuscany.*

Good Sir ;

Read Dec. 13, 1764. **H**AVING taken a turn on the Parks, or Public University-walk here, on Monday April 23, 1764, towards the decline of the afternoon ; I made a visit to a friend in town, with whom