

VII. *Account of a Nebula in Coma Berenices. By Edward Pigott, Esq. In a Letter to Nevil Maskelyne, D. D. F. R. S. and Astronomer Royal.*

Read January 11, 1781.

REV. SIR,

Frampton-house, Glamorganshire,
September 3, 1779.

AS my father generally addresses to you such papers as he communicates to the Royal Society, I beg the favour of you to acquaint that learned body, that, on the 23d of March, I discovered a nebula in the constellation of Coma Berenices, hitherto, I presume, unnoticed; at least not mentioned in M. DE LA LANDE's Astronomy, nor in M. MESSIER's ample Catalogue of nebulous Stars. I have observed it in an achromatic transit instrument, three feet long, and deduced its mean R. A. by comparing it to the following stars, having made the necessary corrections for aberration and nutation, the results are:

By δ Gemini	-	-	-	-	191	28	35
By γ Canis Majoris	-	-	-	-	191	28	41
By ϵ Virginis	-	-	-	-	191	28	45
By ν Virginis	-	-	-	-	191	28	36
By δ Leonis	-	-	-	-	191	28	34
Mean R. A. of the nebula for April 20, 1779,					191	28	38

Its

Its light being exceedingly weak, I could not see it in the two-foot telescope of our quadrant, so was obliged to determine its declination likewise by the transit instrument. This determination, however, I believe, may be depended upon to two minutes: hence its declination north is $22^{\circ} 53' \frac{1}{4}$. The diameter of this nebula I judged to be about two minutes of a degree.

I am, &c.

E. PIGOTT.



VIII. *Double Stars discovered in 1779, at Frampton-house, Glamorganshire. By Nathanael Pigott, Esq. F. R. S. Foreign Member of the Academies of Brussels and Caen, and Correspondent of the Royal Academy of Sciences at Paris; communicated by Nevil Maskelyne, D. D. F. R. S. and Astronomer Royal.*

Read January 11, 1781.

TO THE REV. NEVIL MASKELYNE.

REV. SIR,

October 27, 1779.

INCLOSED are the determinations of the places of three double stars, which I discovered this summer; at least, I presume, they have not been observed before, because I do not find them inserted in Dr. BRADLEY's catalogue, published in the Nautical Almanac 1773, or in the *Connoissance des Temps*, no more than in other catalogues in my possession. γ Delphini, indeed, is in M. DE LA CAILLE's catalogue; but not as a double star. The instrument he used was not, probably, powerful enough for that purpose. In the two-foot telescope of my quadrant it appears only as a single star. These stars were observed by me in a three-foot achromatic telescope of a transit instrument, with an object-glass near two inches diameter. The R. A. are nicely determined by several observations, which always agree with each to a fraction of a second in time. The declinations