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Correspondence.

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the seventh volume of the *Observatory*, p. 198, under the heading "The Eclipse of Pericles," because Plutarch mentions that that general noticed it and comforted his pilot on the occurrence whilst embarking on his voyage to the Peloponnesus. The historian then deserves credit for the accuracy of his statement; and, as Mr. Cowell observes, his record stands on a different level to that of the eclipse stated by Herodotus to have taken place at a date (B.C. 480) when he could only have been about four years old.

Yours faithfully,

Blackheath, 1906, Jan. 15.

W. T. LYNN.

P.S.—The above method of speaking of B.C. dates is indeed generally followed by Prof. Newcomb; but surely it is better, to avoid confusion, to express such dates in the way uniformly done in history, which, as it recognizes no year 0, places B.C. 1 immediately before A.D. 1, so that B.C. 2 becomes mathematically A.D. — 1, &c.

Bradley and Pond.

GENTLEMEN,—

The sixth Astronomer Royal was born five years after the death of the third; and the only reason for coupling them here is that I am about to offer a few discursive remarks about the work of each at the Royal Observatory.

It is well known that Bradley's observations were not published until long after his death: the two volumes in which they are contained appeared in 1790 and 1805 respectively, the first edited by T. Hornsby, and the second by A. Robertson. It was reserved for Airy to reduce the lunar and planetary work from the date (1750) when Bradley obtained and brought into use the greatly improved instruments constructed by Bird. But every astronomer is acquainted with the great debt due to Bessel for the reduction of Bradley's stellar observations, and the formation of the results into a catalogue, which appeared in 1818 in the work bearing the appropriate title 'Fundamenta Astronomiæ.' It is probably not so well known that Maskelyne published, in 1771, as an appendix to the *Nautical Almanac* for 1773, a catalogue of the places of 387 stars, reduced from some of Bradley's observations by Charles Mason, who had been his assistant from 1756 to 1760, afterwards going to America, where he took part in the measurement of the famous Mason and Dixon line between Maryland and Pennsylvania, returning to England in 1768. The epoch of this catalogue is 1760, and it is reprinted by Hornsby in the Introduction to the first volume of Bradley's observations. Maskelyne tells us that the right ascensions of 15 of these stars (13 of the first, and two of the second magnitude) were settled by comparison with the Sun about the equinoxes by the mean of 1175 observations*, and these

* Aldebaran 21, Capella 56, Rigel 88, α Orionis 129, Sirius 136, Castor 19, Procyon 119, Pollux 34, Regulus 63, Spica 74, Arcturus 70, Antares 36, α Lyræ 129, α Aquilæ 154, and α Cygni 47.

were the racial points by which the right ascensions of all the other stars were reduced. Of the rest of the 372 stars, he only tells us that they include all stars down to the fifth magnitude that can ever be eclipsed (*i. e.* occulted) by the Moon in any part of the globe; and these stars are marked by an asterisk.

I have now something to say about Pond's observations, some of which led to a good deal of controversy. Bessel, in the 'Fundamenta,' speaks of him as "*Pondius, dignus Bradleyi successor.*" Olbers, however, writing to Bessel under date 1822, August 4, remarks:—"Auf Pond's Genauigkeit baue ich, unter uns gesagt, nicht sehr, und halte Greenwich durch ihn nur schlecht besetzt." An attack was made upon the accuracy of part of them in the *Philosophical Magazine*, to which Bessel replied in *Ast. Nach.*, No. 84. But it seems to me that he only points out that the author of the attack was not aware of the number of casual errors and errata that are inevitable in reducing and printing so large a mass of observations, adding his own belief that they were on the whole as accurate as could well be made, regretting only that sufficient attention had not been paid to the meteorological instruments and their position.

May we reconcile the different views about Pond's observations by remembering (what is dwelt upon in Mr. Maunder's interesting book on the Royal Observatory) that, after his early years, his absences from the Observatory were long and frequent, the consequences of which may well have been serious.

Yours faithfully,

Blackheath, 1906, Feb. 6.

W. T. LYNN.

P.S.—Some of the copies of the early volumes of the *Nautical Almanac* do not contain the Appendixes, of which one is referred to above. That in the British Museum for 1773 has not the table of some of Bradley's stars reduced by Mason. Neither has the volume for 1774 the table of Moon's places reduced from Bradley's observations after 1760, of which, as well as the other, Maskelyne speaks in the Preface to the *N. A.* for 1773. The copy of those Almanacs in the R. A. S. Library contains the latter (the Moon's places), but not the former (the star-places). That in the library of the Royal Observatory contains both. Hornsby gives the star-places as Table IX. in his Introduction to the first volume of Bradley's observations, without any explanation or reference to Mason.

OBSERVATORIES.

HARVARD.—Prof. Pickering's annual reports bear a great likeness to one another. They all record a great deal of work, mainly on Variable Stars and kindred research; and because there is so much it seems inexpedient to attempt a summary in limited