

John Herschel at the end of his 'Outlines of Astronomy,' and he explicitly states that these three minutes odd are purely imaginary. As a matter of fact, the change actually made was a 365th part of the three minutes odd; similarly with Stone's result.

Both Drayson and Admiral de Horsey offer no physical explanations of the two hypotheses they adopt, and neither seems to have grasped the underlying principles of the astronomical theory; but they are both quick to pick up little inconsistencies in astronomers' statements, much in the way that our flat-earth friends do.

Yours, &c.,

Johannesburg, 1912, Mar. 28.

R. T. A. INNES.

Lord Macclesfield and the Great Comet of 1744.*

GENTLEMEN,—

In the catalogue of comets in Mr. Chambers's valuable 'Handbook,' the discoveries of four are attributed to Klinkenberg, of Haarlem, viz. 1743 II., 1744 I., 1748 II. (which was only seen for a few days), and 1762 I. Parabolic orbits were computed for all these, and though the second (which was probably the first comet of the eighteenth century) had an elliptic orbit calculated for it by Euler, the eccentricity of the ellipse is so great that it is undistinguishable from a parabola.

Klinkenberg first saw the comet on the 9th of December, 1743. According to Carl's 'Repertorium der Cometen-Astronomie,' Celsius† commenced his observations at Upsala on the 4th of that month. But the late Dr. Oudemans unearthed about seventeen years ago‡, in the Library at Utrecht, a paper containing observations of the comet by Jan de Munck, Town Architect of Middelburg, in Zeeland, who discovered it on the 29th of November, 1743—that is, ten days before Klinkenberg, as both used the new style of the calendar. De Munck obtained a series of telescopic observations extending from the 3rd of January to the 6th of February, 1744.

There does not appear to be any record of its having been seen in England until that obtained at the observatory erected by Lord Macclesfield§ at Shirburn Castle, in Oxfordshire, in the year 1739. He was much aided in its arrangements by his friend the Rev. James Bradley, for whom he a few years afterwards greatly interested himself in obtaining the appointment of Astronomer Royal on the death of Halley. Phelps, who was originally a stableman on the estate, but whom he had trained to assist him in making astronomical observations, first obtained one of the

* [The proof of this letter was mislaid at the time of Mr. Lynn's death, and has since been recovered.—Eds.]

† He died less than five months afterwards, on the 25th of April, 1744.

‡ *Astronomische Nachrichten*, vol. cxxxvii. col. 35, No. 3267. The letter is dated 1894, July 10.

§ George Parker succeeded his father, the first Earl of Macclesfield, who had been Lord Chancellor, in 1732.

comet on the 23rd of December, 1743; but as old style was then still kept in England, this would only correspond to the 3rd of January, 1744, the day on which De Munck recommenced his observations after a batch of cloudy weather. It seems, therefore, incontestable that De Munck was the first discoverer of this splendid comet, afterwards so remarkable for the number of its tails. The perihelion passage occurred on the 1st of March, 1744.

Lord Macclesfield died in 1764 at the age of 67. Observations were continued at Shirburn for some years after his death; the records are now preserved in the Savilian Library, Oxford. Amongst his instruments during the latter part of his life was a $3\frac{1}{2}$ -foot achromatic by Dollond, who invented the art of making glasses of that character, and took out a patent for their construction in 1758, though it is now known that some had been made by Chester More Hall, of Sutton, Essex, in 1733. This, however, was unknown to Dollond, and More Hall took no part in the opposition raised against his son on account of the patent, which was successfully defended.

Probably Macclesfield is best remembered for the prominent part he took in carrying through the legislature the adoption of the Gregorian style in England. The tables formed for the determination of Easter in accordance with it were arranged by Bradley.

Blackheath, 1911, Nov. 4.

Yours faithfully,
(the late) W. T. LYNN.

OBSERVATORIES.

NATIONAL OBSERVATORY, PARIS.—From M. Baillaud's Report for the year 1911 it appears that the meridian work has been reorganized, and the output with the *Grand Instrument méridien* shows a considerable increase over that for 1910. Madame Chandon appears to be the principal "day" observer with this instrument, and there are six regular night observers, MM. Viennet, Mascart, Faton, Lancelin, Nordmann, and Salet, who are helped by several juniors who read the circle and sometimes make observations of Right Ascension. Besides the Sun, Moon, and planets, the objects observed are the reference stars for Zones 16° to 19° of the Astrographic Catalogues, and of these 8578 observations were made during the year, compared with 7347 in 1910.

The *Cercle méridien du Jardin*, under the direction of M. Renan, is devoted to observations for the new catalogue of fundamental stars. The arrangement of work with this instrument has been reorganized, and arrangements have been made that the instrument is in use for a watch between two hours before sunrise until an hour after, to have a better control over the clock-rate and for the study of atmospheric refraction. Several changes in the staff