

Comet a, 1892, Swift.

GENTLEMEN,—

There has been remarkably little notice of this comet in English periodicals—nothing to give a proper idea of its brightness, or even as to whether it was visible in this country. But through a communication on the subject kindly sent me by Dr. Copeland, I was enabled to have pretty good views of it at the end of last month. I saw it best on the 29th, when at $14^h 5^m$ G.M.T. its narrow, straight tail, though faint, was visible to the naked eye to a length of about 11° ; the sky there was slightly affected by twilight. On the 30th, at $13^h 55^m$, the head was about of the 4th mag., being midway between μ and λ Pegasi in brightness. On the 26th, at $15^h 15^m$, the spectrum, as seen with a “miniature” spectroscope on my $4\frac{1}{4}$ -inch refractor, showed the three carbon bands very bright, while there was little, if any, continuous spectrum.

Faithfully yours,

Sunderland, 1892, May 6.

T. W. BACKHOUSE.

The Total Solar Eclipse of 1724.

GENTLEMEN,—

It is somewhat remarkable that there is no record, so far as I am aware, of this eclipse, the last which was total in England, having been seen by anyone in this country except Dr. Stukeley, who saw it at Haradon Hill (which, since it was selected as a point in the trigonometrical survey, has been called Beacon Hill), about two miles to the north-east of Amesbury, near Salisbury. His account, which is almost confined to general terrestrial appearances, is given, in the form of a letter to Halley, under Iter VII. of his ‘*Itinerarium Curiosum*.’ The date given is May 10, which is an error, for the eclipse took place on May 11 old style (then still observed in England), corresponding to May 22 new style. There was much cloud about, but Stukeley says he did not regret this because “it added so much to the solemnity of the sight.” Venus was seen very plainly, but no other star. Dr. Stukeley remarks that he had observed the total eclipse of 1715 from the steeple of Boston Church, Lincolnshire.

We must suppose that the sky was completely cloudy over London (which was just outside the line of totality) and over a great part of England; but I have not met with any statement of this. The map which Halley prepared of the shadow-path is familiar to all Fellows of the R. A. S. Bradley had observed the comet of 1723 in the preceding autumn at Wanstead, but had to go to Oxford in November; he speaks of the deficiency of means of making astronomical observations there, which he hopes will at some future time be provided “in hac illustrissima scientiarum sede,” but unquestionably he would have made such observations of the eclipse as were possible had the weather been fine. Shortly after this time “the ingenious George Lynn” commenced his astronomical observations in Northamptonshire; Southwick, where

he was located, was out of the line of totality, but unless prevented by clouds, he would surely have recorded something of the phenomenon.

At Paris the eclipse was observed by Maraldi, Cassini, and the brothers Delisle. The duration of totality was 2 minutes 17 seconds, from 6^h 48^m to 6^h 50^m in the evening. Notwithstanding scattered clouds, Mercury was distinctly seen between the Sun and Venus, besides several fixed stars, including Capella. Maraldi remarks:—"Durant l'obscurité totale, nous n'avons pû distinguer avec la Lunette aucune lumière sur le disque visible de la Lune, mais on voyoit tout autour cette lumière qu'on a remarqué autrefois dans de semblables Eclipses. Elle paroissoit non seulement à la vue, mais encore avec la Lunette, quoiqu'il y eut autour du Soleil des nuages rares. Au commencement de l'obscurité totale, la lumière nous a paru plus grande du côté de l'Orient que du côté d'Occident: au contraire, vers le fin de l'obscurité totale, elle a paru plus grande vers l'Occident qu'elle n'étoit vers l'Orient." Similar changes, as I remarked in Vol. ix. p. 354, of the 'Observatory,' first led Halley, in the case of the total eclipse of 1715, to suspect that the appendages seen on those occasions round the Sun appertained to him and not to the Moon.

Yours faithfully,

W. T. LYNN.

Blackheath, 1892, April 4.

The alleged Red Colour of Sirius in Ancient Times.

GENTLEMEN,—

I have read with much interest the papers in 'Astronomy and Astro-Physics' in which Mr. See has elaborately and with great care examined this question. Though I scarcely think it admits of so positive a settlement as he seems to do, yet he has certainly shown the untenability of the objections which Schjellerup (as I pointed out in the tenth volume of the 'Observatory') brought forward against the alleged change of colour in Sirius.

For it appears probable that the Arabian astronomers spoke of five (Ptolemy's own enumeration) *nebulous*, not *reddish*, stars in the 'Almagest,' and this renders it very doubtful (to say the least) whether the epithet *ὑπόκιρρος* was wanting in their copies of that work as applied to Sirius. My remark on the peculiarity of the expression in Ptolemy was founded on this, that after *καλούμενος Κύων καί* . . . , one would have expected a substantive rather than an adjective to follow. But I was quoting from Halma's edition of the 'Almagest,' and I find in older editions that the *καί* is non-existent, and that *ὑπόκιρρος* stands on the same ground applied to Sirius as to the other stars to which that epithet is affixed by Ptolemy.

But of course the surpassing brightness of Sirius may have led to its being called "fiery," and this may have given the impression of a reddish colour to those who did not examine the star particularly themselves; I say *reddish*, because Festus, speaking of the