

Apr. 1902.]

Correspondence.

167

may not be Sirius. Horace's "rubra Canicula" should not carry much weight, for he probably took his astronomy at second-hand from Aratus; but Seneca's statement, "sed acrior sit Caniculæ rubor, Martis remissior," is categorical and appears to be made from personal observation. Moreover, since he is speaking of colour, it would seem impossible to adopt Mr. Lynn's conjectural emendation of "fulgor" for "rubor," as the sentence would then be pointless. That by Canicula is intended Procyon may well be; but in that case we still have the evidence of change of colour, for Procyon is no more red than is Sirius at the present time.

Yours faithfully,

FRANCIS GARE.

Staines, 1902 March 13.

GENTLEMEN,—

Since Mr. Lynn did me the honour of mentioning my name in his last letter to *The Observatory*, I wish to emphasize the fact that Prof. Schiaparelli, in his *Rubra Canicula* papers, though giving unquestionable proof that, at first, among the Romans of the Augustine times, the word *Canicula* meant Procyon, as in Hyginus, Horace, Pliny, Cicero, &c., does not consider that all the Latin writers use the word in the same sense\*, especially Seneca, who most probably means Sirius in his celebrated "acrior sit Caniculæ rubor, Martis remissior." Schiaparelli agrees entirely, as to the explanation of those words, with Mr. Lynn's opinion (*Observatory*, vol. x. p. 105) that "he [Seneca] may be speaking of certain occasions when atmospheric conditions would certainly give Sirius a reddish appearance."

But the fact that Procyon was sometimes spoken of as red by some authors, though giving no proof about the main point of the controversy, viz. the change of colour of Sirius, seems to diminish its probability, since we should then admit *two* of these strange occurrences instead of one; it is much easier to admit that *rubor*, *rubra*, &c. were used rather carelessly by the ancient writers in question, without a definite meaning about colour or an accurate personal observation.

The exhaustive discussion of so eminent a scholar and astronomer as Prof. Schiaparelli seems indeed to settle definitely the question in this sense.

I remain, Gentlemen,

Royal Observatory, Lisbon, Tapada,  
1902, March 16.

Yours truly,  
F. OOM.

### *Confirmed or New Variable Stars.*

GENTLEMEN,—

Since my last communication on the above in your issue of May 1901, I can report the following orange stars as certainly

\* "Tuttavia é indubitabile che presso molti scrittori latini la parola Canicula rappresenta il Gran Cane o la sua maggior stella, Sirio" ('*Rubra Canicula*,' first paper, p. 23).

variable, though they do not appear in Chandler's 'Third Catalogue of Variable Stars.' The list includes Birmingham 211 Cancri, announced in that letter as being brighter than usual.

1. Es.-Bm.	2. Bm.	3.	4. Constellation.	5. R.A. 1900.	6. Decl. 1900.	7. Mag.	8.	9. Spectrum type.
54	...	B.D. +58°501	Cassiopeia	<sup>h</sup> 2 <sup>m</sup> 32 <sup>s</sup> 18	+59° 10'	9·5	...	IV.?
97	83	+67°350	Camelopardus	4 40 51	+68 0	7·0	ROr <sup>4·1</sup>	IV.
101	85	+28°707	Taurus	4 45 15	+28 21	8·1	Or <sup>3·9</sup>	IV.
152	120	+24°943	„	5 39 6	+24 23	8·5	ROr <sup>4·0*</sup>	IV.
158	123	+30°1014	Auriga	5 41 41	+30 36	8·5	ROr <sup>3·4†</sup>	IV.
281	211	+17°1973	Cancer	8 49 45	+17 37	6·5	Or <sup>4·3</sup>	IV.
696	...	+45°3349	Cygnus	20 54 32	+46 5	8·1	ROr <sup>3·7</sup>	III.

\* Midway between ROr and Or.  
† Midway between ROr and OrR.

Col. 7 gives the B.D. magnitude; col. 8 the average colour from my observations, the notation being the same as that in letter on p. 278, *The Observatory* for July 1897; col. 9 gives the type of spectrum as given by Krüger in his 'Catal. der farbigen Sterne.'

Es.-Bm. 54 is the same as Es.-Bm. 54*a*, there having been a mistake in the identification in forming the appendix to that catalogue. It is orange, but too faint to show colour well with a 4½-inch refracting telescope.

So far as my observations have gone, the variation of all these stars, although certain, is small, none of them much passing a range of a half magnitude. That of Birmingham 85 is less than a half magnitude as occasionally observed during the last five years. Gore includes it in his list of suspected variables, showing a range among the various authorities of three magnitudes. Of course my observations do not prove that this range is not sometimes reached, especially as we know that this class of variable is apt to show occasional changes much greater than at other times.

In all cases the periods are long or irregular.

West Hendon House,  
Sunderland, 1902, March 17.

T. W. BACKHOUSE.

*An Eclipse Phenomenon.*

GENTLEMEN,—

The mention of an observation of a ray of light projecting from the cusps of the Moon in the solar eclipse as having been