is one instance, however, where the planet Venus is spoken of as a guiding star. The narrative of Gallego states that when entering the port they named Santa Ysabel de la Estrella, on 9th February 1568, "at the passage through the reef there appeared to us a real star, though it was broad day, and we took it for a guide and a good omen." A note gives the remark:—"In these latitudes it is not uncommon to see the planet Venus distinctly as early as  $2\frac{1}{2}$  hours before sunset"; and Mendana's narrative says, "Steering for the shore, we saw a very bright and resplendent star which appeared on the right side of the mainmast, and steering to the right, we entered a port with no mishap whatever."

Of Sun-spots the mention is remarkably poor. I have only been able to find two—one, that which is referred to in popular astronomical books, during the voyage of the ship Richard of Arundel to the coast of Guinea; the other in the voyages of Henry Hudson, where he says "Then we observed the Sunne having a slake, and found our height to bee 70 deg. 30 min." A note says "a spot"? The word slake, as a substantive, seems to be a north country word, meaning, according to Brocket, "an accumulation of mud or slime, from slijck, cœnum, lutum. The date of the spot seems to

be March 21, 1609.

It is much to be regretted that Aristotle should have held the doctrine of the purity of the Sun, thereby causing disbelief in sun-spots. The Chinese, however, did not study the works of that illustrious Greek philosopher, and record a certain number. Probably the number would have been much larger, had they not considered that the Emperor was brother of the Sun, and so, would not care to acknowledge spots or blemishes in the face.

It would be interesting if some navigator had noticed a minute spot on the Sun at the time when Venus was performing its transits in 1518 and 1526.

Melplash Vicarage, Bridport, 1903, September 5.

S. J. Johnson.

## CORRESPONDENCE.

To the Editors of 'The Observatory.'

"Galilée et Marius."

GENTLEMEN,-

I am glad to perceive that the owner of the Oxford Note-Book has come to the same conclusion that I did (No. for June, vol. xxvi. p. 254) respecting the work of Prof. Oudemans and M. Bosscha on the discovery of the satellites of Jupiter. But I cannot use in reference to this the last word of Longfellow's expression in 'St. Philomena,'

Our hearts in glad surprise,

for it seems to me that a study of the pamphlet in question carries VOL. XXVI. 2 H

at once conviction with it. I have recently received a letter from Prof. Oudemans (all will greatly regret to hear that he speaks in it of having had a long illness, from which, however, he has providentially now recovered), in which he calls particular attention to the fact that the reason why Marius delayed the publication of the Mundus Jovialis was that he might include in it Tables of Jupiter's satellites. It was his anticipation of him in this that appears to have roused the jealousy of Galileo\*. There was no question of priority in discovery, Marius having so clearly stated that his dates were given in old style, which makes his first perception of the satellites one day after that of the Paduan astronomer, as the "Tuscan artist" was at that time.

Prof. Oudemans points out in his letter two misprints in his pamphlet. The first of these is in the note to page 9, where the anecdote (exhumed by Van Swinden from the archives of the Hague) is told by Henry IV. of France that he wrote, with what almost looks like a presentiment, "J'aurai plaisir de voir les lunettes dont votre lettre fait mention, encore que j'aie à présent plus grand besoin de celles qui aident à voir de près que de loin." This was about sixteen months before his assassination, but the date being 1609 (in the pamphlet before us printed 1809) January 8. The other misprint is in p. 14, where, referring to the diagram in the line immediately below it, BDC should be EDG. He also points out a misprint in my letter to you on the subject, p. 256, line 6, where the first word of the Latin quotation should be not "Quare" but "Quæ." I may add that in the heading of Note V. (p. 73) "le 12 Janvier 1609" should read "le 12 Janvier 1610," on which day Galileo has been erroneously supposed to have observed an eclipse of one (the second) of the satellites.

Blackheath, 1903, Aug. 6.

Yours faithfully, W. T. LYNN.

## The Markings on Saturn.

GENTLEMEN,-

On comparing my first observation of a bright spot central on Saturn July 1 14<sup>h</sup> 1<sup>m</sup> † with Barnard's previous transit of June 23 21<sup>h</sup> 42<sup>m</sup>, an adopted rotation-period of about 10<sup>h</sup> 15<sup>m</sup> was found to accord well with the interval, and a few later transits apparently fitted in very satisfactorily with this value. But as observations accumulated and some early ones by Barnard, Graff, Solà, and others came to hand, it was seen that a longer period was necessary. From about two months' observations the principal spot has exhibited a rotation-period of 10<sup>h</sup> 38<sup>m</sup> and about 23½ minutes longer than the time of rotation found by Prof. Hall from his equatorial spot of 1876–7. This result is interesting as

<sup>\*</sup> Is it due to Milton that we in this country call him thus rather than by the family name of Galilei?

<sup>†</sup> The spot was also seen on this date by Sig. J. C. Solà at Barcelona, and he estimated it on C.M. at 13<sup>h</sup> 55<sup>m</sup> G.M.T.