

“Sixteen nights after its first appearance, a comet appeared in the same quarter, having a shining nucleus, with a tail in appearance about two or three yards long, but in the tail there was no light or splendor.” [ELLIOT'S History of India, Vol. VI, pages 363 and 406. This is probably Comet 1618, II. See also MALCOLM'S Persia, Vol. I, page 359, foot-note. CHAMBERS' Catalogue (II) No. 500 *q. v.*]

A. H. 237 = A. D. 857. “A great fiery meteor appeared in Askalan, which was for a long time suspended between heaven and earth.” [CHAMBERS' Catalogue (II) No. 276.]

A. H. 328 = A. D. 941. “Stars fell from the sky which appeared like birds of fire and which greatly terrified the people.”

A. H. 442 = A. D. 1050. “A comet appeared.” [See CHAMBERS' Catalogue (II) No. 343.]

A. H. 836 = A. D. 1433. “A comet appeared.” [See CHAMBERS' Catalogue (II) No. 447.]

[The last four extracts are also from Sir HENRY ELLIOT'S History of India, Vol. VIII, pages 31-36.]

A. H. 396 = A. D. 1015-16. “A comet made its appearance for fifteen nights successively and was as large as the Moon.” [CHAMBERS' Catalogue (II) No. 330; *ibid.*, Vol. IV, page 171, note.]
E. S. H.

APPOINTMENTS IN THE LICK OBSERVATORY.

Mr. R. H. TUCKER, now of the National Observatory of the Argentine Republic, formerly of the DUDLEY Observatory, has been appointed Astronomer in the LICK Observatory from July 1; and Mr. C. D. PERRINE has been appointed Secretary of the Observatory from March 1, 1893.
E. S. H.

DISCUSSION OF PROFESSOR BARNARD'S OBSERVATIONS OF THE FIFTH SATELLITE OF JUPITER.

Professor BARNARD has printed all his observations of the fifth satellite of *Jupiter* in the *Astronomical Journal*. Professor H. S. PRITCHETT of Washington University, St. Louis, has undertaken the discussion of these observations and the determination of the orbit, so far as this year's work is sufficient.

E. S. H.

OBSERVATIONS OF *NOVA AURIGÆ* (February 9 to 14, 1893).

Number 26 of the *Publications* contains an extended history of the new star in *Auriga*, based upon observations made at Mt. Hamilton. The positions of the chief nebular line showed that the *Nova* was approaching the solar system with a variable velocity, which decreased from about 190 miles per second in September to about 85 in November (see page 247). My absence from the observatory prevented observations in December and January, but recent measures show that further variations have occurred. The wave lengths and velocities (in miles per second) obtained are:

Date.	λ	Velocity.
1893, Feb. 9	5007.5	+ 17
10	6.2	- 30
14	6.1	- 33

[The result for February 9 is to be rejected on account of the fact that the micrometer wire was subsequently found to have been crooked].

In all the observations the nebular line has been compared with the lead line at λ 5005.63. In 1892 the nebular line was more refrangible than the lead line; it is now less refrangible than the lead line.

W. W. C.

LICK OBSERVATORY ECLIPSE EXPEDITION.

A letter from Professor SCHAEBERLE announces that he arrived at Panama on February 10, and complains that he will be obliged to wait six days for the steamer down the coast. As Panama is one of the few places where fresh pine-apples and northern ice can be had at the same time, he is to be congratulated, not pitied.

E. S. H.