

the force of gravity at the surface of the planet is too weak to retain an atmosphere of anything like the density of our own. Even the most ardent advocates of the possibility of life on Mars admit that if one of us were to be suddenly transported to that planet, he would probably die in a few minutes because of the rarity of the atmosphere. But it is claimed that beings like ourselves might gradually become accustomed to an atmosphere much rarer than ours, and this is probably true. That water is comparatively scarce there, is also unquestioned. The spectroscopic observations of Mars at Flagstaff indicate very little, if any, absorption by water vapour, and those by Campbell at the summit of Mount Whitney show no trace of any at all. In fact, if Lowell be right, it is this very scarcity of water which has brought about the evidence which comes nearest to proving that there are actually living intelligent beings on Mars.

[*Popular Astronomy.*]

Memoranda for Observers.

Standard time of India is adopted in these Memoranda.

For the Month of January 1912.

Sidereal time at 8 p.m.

			H.	M.	S.	
January	1st	...	...	2	39	32
	8th	...	...	3	7	8
	15th	...	...	3	34	44
	22nd	...	...	4	2	20
	29th	...	...	4	29	56

From this table the constellations visible during the evenings of January can be ascertained by a reference to their position as given in a Star Atlas.

Phases of the Moon.

				H.	M.	
January	4th	Full Moon	...	...	7	0 P.M.
	11th	Last Quarter	...	...	1	13 ..
	19th	New Moon	...	...	4	40 ..
	27th	First Quarter	...	...	2	21 ..

Meteors.

There is one important shower in January—the Bötoids of 2nd and 3rd.

Radiant Point.		Character.
R. A.	Dec.	Swift, long paths.
15h. 20m.	+53°	

Other showers occur on 3rd, 11th, 17th, 17th—23rd, 25th and 29th January.

Planets.

Venus.—Is a morning star. Its position on the 15th January at 8 P.M. will be R. A. 16h. 46m. 34s., Dec. 20° 12' 35" S. The time of its rising will be 3h. 21m. A.M. on the 16th January.

Mars.—The position of this planet on the 15th January at 8 P.M. will be R. A. 3h. 32m. 29s., Dec. 21° 28' 51" N. The time of its setting will be 2h. 13m. A.M. on 16th January.

Jupiter.—The position of this planet on the 15th January at 8 P.M. will be R. A. 16h. 22m. 45s., Dec. 20° 48' 37" S. The time of its rising will be 2h. 57m. A.M. on the 16th January.

Saturn.—The position of this planet on the 15th January at 8 P.M. will be R. A. 2h. 46m. 17s., Dec. 13° 37' 5" N. The time of its setting will be 1h. 12m. A.M. on the 16th January.

Notices of the Society.

Election of Members.

The attention of members is invited to Bye-Law No. 14, regulating the election of persons who desire to join the Society. It is hoped that those who are already members will induce others to join. Forms of application can be had from the Secretary, Mr. P. N. Mukherji.

The Library.

A subscription list exists and several members in Calcutta have subscribed and enabled the Council to make a beginning with the Library. Other members outside Calcutta, however, have not except in one or two cases yet come forward, and as the Library will be one of the most important adjuncts of the Society, and will be available to members both in and out of Calcutta, those who have not yet done so are invited