

The above are the instruments of this very interesting observatory, and it will be clear from what I have said that the idea was evidently to aim at precision by taking observations of a similar class by different means and checking one with the other. The accuracy is now far surpassed by more modern methods. The pointing of a stick or thread or the reading of a shadow with a necessarily diffused edge could not of course be strictly accurate, and in many of the observatories the stick had to be held in particular directions—for example perpendicular. Possibly there may have been some aid to this, but any one who has ever tried it will be aware of the difficulties attending such a method from this cause alone. The place, however, is full of interest to the astronomer, and I would recommend any of our members who may be near Delhi to visit these most interesting remains.

Memoranda for Observers.

Standard Time of India is adopted in this Memoranda.

For the month of February 1912.

Sidereal time at 8 p.m.

| | | | | H. | M. | S. |
|-----------------|-------------|-----|-----|-----|----|-------|
| <i>February</i> | <i>1st</i> | ... | ... | ... | 4 | 41 45 |
| | <i>8th</i> | ... | ... | ... | 5 | 9 21 |
| | <i>15th</i> | ... | ... | ... | 5 | 36 57 |
| | <i>22nd</i> | ... | ... | ... | 6 | 4 33 |
| | <i>29th</i> | ... | ... | ... | 6 | 32 9 |

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

Phases of the Moon.

| | | | | H. | M. |
|-----------------|-------------|---------------|-----|-----|-----------|
| <i>February</i> | <i>3rd</i> | Full Moon | ... | ... | 5 28 A.M. |
| | <i>10th</i> | Last Quarter | ... | ... | 6 21 ,, |
| | <i>18th</i> | New Moon | ... | ... | 11 14 ,, |
| | <i>26th</i> | First Quarter | ... | ... | 0 57 ,, |

Meteors.

The following showers occur in February. They are not very brilliant showers :—

| | R. A. | Dec. | Character. |
|--------------------------|----------|------|-----------------|
| <i>February 5th—10th</i> | ... 75° | +41° | Slow, bright. |
| „ 15th | ... 236° | +11° | Swift, streaks. |
| „ „ | ... 261° | +4° | „ „ |
| „ 20th | ... 181° | +34° | Swift, bright. |
| „ „ | ... 263° | +36° | Swift, streaks. |

Planets.

Venus.—Is a morning star. On February 15th at 8 P.M. its position will be R. A. 19 hrs. 26 mts. 59 secs., Dec. 21° 20' 20" S. Time of its rising will be 4 hrs. 3 mts. A.M. on the 16th February.

Saturn.—The position of the planet on 15th February at 8 P.M. will be R. A. 2 hrs. 49 mts. 32 secs., Dec. 14° 1' 15" N. The time of its setting will be 11 hrs. 12 mts. P.M. on the 15th February.

Mars.—The position of the planet on 15th February at 8 P.M. will be R. A. 4 hrs. 13 mts. 44 secs., Dec. 23° 25' 48" N. The time of its setting will be 0 hr. 55 mts. A.M. on the 16th February.

Jupiter.—The position of the planet on 15th February at 8 P.M. will be R. A. 16 hrs. 43 mts. 39 secs., Dec. 21° 31' 10" S. The time of its rising will be 1 hr. 13 mts. A.M. on 16th February.

Extracts from Publications.

The Nebular Hypothesis assumes that long, long ago, perhaps hundreds of millions or thousands of billions of years ago, all suns were either simultaneously or successively in a nebulous state; that the nebulous matter of which they were originally formed was widely and quite uniformly scattered throughout space, but later began to gravitate toward certain slightly denser centres. The particles or masses moving toward these centres not doing so with equal velocities and momentum, or in the same direction, a slight rotation on an axis would result in the nebulous mass; and, if by radiation of heat, the partially con-