

## ASTRONOMICAL NOTES.

1. **Comet Notes.**—Comet 1936 *a* (Peltier) which attained naked eye visibility about the end of July, has been widely observed. Although weather conditions were generally unfavourable the Comet appears to have been seen by a few observers in India when it was near its maximum brightness. Several computers have calculated orbits for the comet from the observed positions in May and June, but the period cannot be predicted with certainty on account of the divergence from parabolic motion being very small. A more accurate determination will be possible when all the observations during this apparition, including those from the southern hemisphere, are used in the discussion.

The second new Comet of the year (1936 *b*) was discovered on July 17th by Mr. Kaho, a Japanese astronomer. At the time of discovery it was at its brightest—about the sixth magnitude and just visible to the naked eye.

2. **The Solar Eclipse of June 19, 1936.**—From the available information, it appears the weather was fairly good at many of the stations occupied by observers on the line of totality, although one of the British expeditions (under the leadership of Prof. Stratton) met with unfavourable weather at Hokkaido (Japan). Brief statements from some of the parties have been published, which indicate that the Corona was very bright and a type intermediate between maximum and minimum. Five brilliant prominences, it is stated, were seen during the total eclipse, and coronal arch structure was visible above one of the largest prominences. It will be some time before the

detailed results are available from the several parties of astronomers who observed the eclipse.

3. **The Rings of Saturn.**—The earth passed very near the plane of Saturn's rings on June 28, 1936. Observing with the 36" refractor of the Lick Observatory, J. H. Moore reports that the rings did not disappear entirely, but were clearly visible, about that time, as a fine bright line to the east and west of the planet.

4. **New Stars.**—Both *Nova Herculis* and *Nova Lacertæ* are easily visible at present with binoculars and small telescopes. *Nova Lacertæ* is declining rapidly, its magnitude being 8.4 on September 9. From spectroscopic observations its behaviour is found to be in general, like other novæ, but the absorption lines show remarkably large displacements. Merrill and Wilson have measured the intensities of detached lines in the spectrum of the Nova and have estimated its distance to be about 800 parsecs.

5. **Mass Ratios of Sirius and  $\tau$  Cygni.**—Prof. Van de Kamp has made a new determination (*Astronomical Journal*, 1049) of the mass ratios of these two important binary stars from measures on a long series of photographs taken for parallax work at the Leander McCormick Observatory. In the case of Sirius the masses obtained are 2.6 for the bright star and 1.3 for the companion (taking the mass of the Sun as unity) while for the components of  $\tau$  Cygni the masses are 2.4 and 0.8 respectively.