

ASTRONOMICAL NOTES—DECEMBER.

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THE giant Jupiter is still the leader among the planets, his beauty out-rivalling all the stars of Aquarius, in which constellation he is placed. He is, however, waning in his splendour, drawing nearer and nearer to the sun, and gradually giving way, as an object of interest for observers, to Saturn and Venus.

Jupiter sets at 10 h. 22 m. local mean time on December 21st. He culminates with the bright star Fomahaut in the Southern Fish on December 14th.

Saturn is slowly asserting his right to the proud title of the "most beautiful telescopic object in the heavens." The rings which re appeared October 30th are now seen as a slender thread of light extending on each side of the disc. In October he was seen as a clear round ball devoid of rings, but will not be so seen again until 1906. He rises at midnight on December 19th, and reaches a meridian altitude of 48° at 6 hrs. A. M.

Venus is evening star in December, reaches her greatest declination south on the 6th, after which she becomes more and more favourably situated for observation. She sets on December 1st at 5 h. 30 m., and on the 21st at 6 h. 5 m.

Mercury is also evening star in December, and reaches her greatest elongation on the 11th, being then $20\frac{1}{2}$

degrees east of the sun. Although very far south in declination the careful observer may obtain a glimpse of Mercury, so seldom seen by amateurs, on that day. He will set in the horizon of Toronto at 5 h. 37 m., his true compass bearing being west $35^\circ 44'$ south. On the evening of December 6th Mercury will be seen in the same field of the telescope with the 3rd magnitude star λ Sagittarii.

Mars and Manus are morning stars in December. The Planet of War and the "Star of the Georges" will appear in the same field of the telescope on the morning of the 15th, rising at 3 h. 20 m. A. M. and culminating at 8 h. 35 m. at an altitude of 34° .

Neptune is well placed for observation. He culminates on December 3rd at 11 h. 34 m. P. M. at an altitude of $66^\circ 19'$; preceding Aldebaran the bright red star in Taurus, by 3 m. 33 s. and being $3^\circ 41'$ north of that star. In the path of the moon for December there lie many bright stars. The most noticeable occultation is that of Mars on the morning of December 26th. The true conjunction in Right Ascension occurs at 9 h. 38 m. 3s. local mean time. As the contact occurs in broad daylight a good telescope will be required to observe it.

We shall be pleased to hear from any of our correspondents who may observe this phenomenon.

EDITORIAL NOTES.

THIS number completes the thirteenth volume of this Magazine. We have to thank all the friends of THE MONTHLY, and they are many, who have helped us in any way to make the Magazine what it is and has been. Many, both in our own country and in the United States and Britain, have

spoken words of praise and of encouragement in regard to our efforts, to have a Magazine worthy of Canada. We hope the friends of THE MONTHLY will, with promptitude and vigour, see to it that we are sustained with more energy and good will than ever. Let us have a Magazine worthy of Canada.