

ASTRONOMICAL NOTES.

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THE evening sky is rendered unusually interesting to the observer by the favorable position of the brighter planets, and the more so that they are set amidst the most beautiful of the constellations. Venus, now evening star, is rapidly moving eastward, having passed superior conjunction with the sun, and though far from being at her brightest may be seen before sunset, being still in that part of the orbit which is convex to the earth. The disc of the planet is but slightly gibbous, fully nine-tenths being illuminated. Then we have Mars, diminishing in lustre, but still most conspicuous for his rapid motion among the stars. On Feby 26th, the planet was directly south of the Pleiades but is now nearing Aldebaran and on the 18th of March, the ruddy star and the ruddy planet form a beautiful picture, the latter about seven degrees to the north. Jupiter culminates on the meridian now about 6 o'clock in the evening, and at so high an altitude that the definition in the telescope is particularly good, if the air be at all clear. The evenings of the 12th and 28th of March will be most interesting for noting the phenomena of the satellites. During 1894 there were no eclipses of Satellite IV, these being rare on account of the greater inclination of its orbit which may allow of the passing clear of the shadow of Jupiter altogether. During the present year the conditions are such that if we consider the orbit of the satellite as a ring about Jupiter, it is foreshortened so much that its minor axis is less than the planet's diameter. Eclipses are then possible. On the evening of March 24th there is an eclipse of Satellite IV, the disappearance occurring at 8h, 14m and the reappearance

at 9h 45m. These predictions are given in the American nautical almanac with very great accuracy, but we are not told what class of telescope is supposed to be used in observing. In a small instrument a satellite is lost sight of sooner than under great magnifying power and with large aperture, for under those conditions the moons of Jupiter have very sensible discs and all the phenomena of first, central and last contact with the planet's shadow can be readily noted.

Saturn, among the stars of Virgo, rises now about 10 o'clock in the evening but reaches a meridian altitude of only 35° , rather low for first class observation. The ring system is now seen under very favorable conditions, in southern latitudes, and, under clear skies, it must present a beautiful spectacle. The direction of Saturn is now about 90° from the point where the ring crosses the ecliptic and the earth is therefore elevated about 18° above the ring-plane, the northern surface being broadly in view. The feature, known as Cassini's division is within the power of a first class 3 inch telescope, which should also show at least three of the satellites. In the sidereal heavens we have the ever beautiful constellation Orion as the most conspicuous. Some recent observations of the well-known nebula have caused a renewal of the discussion as to whether the stars that are in the nebulous region are really physically connected with it, or not. Every new series of observations seems also to add to the dimensions of this wonderful object, and to startle the astronomer with the question of its probable dimensions. It would seem that the great nebula covers whole