

# Harness Mounting—C. G. Berryman, Barlow's Corner.

1870.]

ECLIPSES—MORNING AND EVENING STARS, ETC.

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II. SUN. A partial eclipse. January 31st. Invisible in the Dominion of Canada. May be viewed only in the Antarctic Ocean.

III. SUN. A partial eclipse. June 28th. Not visible in any part of Continent of America; but may be seen in a large portion of South Pacific, and by our fellow-subjects in Victoria, Van Dieman's Land, and New Zealand.

IV. MOON. A total eclipse. July 12th.

Enters Penumbra, July 12, 8h. 22m. p. m.

“ Umbra, “ 4h. 21m. p. m.

Beginning of total phase, “ 5h. 20m. p. m.

Middle of eclipse, “ 6h. 10m. p. m.

End of total phase, “ 7h. 0m. p. m.

Emerges from Umbra, “ 8h. 0m. p. m.

“ “ Penumbra, “ 8h. 58m. p. m.

Magnitude of eclipse (Moon's diameter.—1) 1.67b. This phenomenon can scarcely be viewed by any in St. John, for the moon emerges from the Umbra, just as she rises above the South-Eastern horizon.

V. SUN. A partial eclipse. July 28th. Invisible to all in the Dominion of Canada; but may be viewed in the Arctic Ocean.

VI. SUN. A total eclipse, December 22d. It will be central and total to inhabitants of Caucasian Russia, European Turkey, Greece, Malta, Algeria, Southern Spain and Portugal, Black Sea, Archipelago, Mediterranean, and N. W. across the Atlantic to lat. 56° 11' N, and long 48° 5' W.

As a partial eclipse it will end at 7h. 45m. in the morning to the inhabitants of St. John; and will end as the sun appears above the horizon in the Counties of Westmorland, Kent, Northumberland, and Gloucester.

## Morning and Evening Stars for 1870.

Venus (♀) will be a Evening Star until February 23rd, then a Morning Star till December 7th, after which she appears as an Evening Star.

Jupiter (♃) will be a Morning Star until 1st February, then an Evening Star till 24th May—a Morning Star thence till 18th September, after which an Evening Star.

## Astronomical Symbols.

☉ Sun.	♃ Pallas.	♄ Conjunction.	W. West.
☿ Mercury.	♄ Juno.	☐ Quadrature,	° Degrees.
♀ Venus.	♁ Vesta.	♁ Opposition.	' Minutes (arc.)
♁ Earth.	♃ Jupiter.	♂ Ascending Node	" Seconds (arc.)
☾ Moon	♄ Saturn.	♂ Descending Node	h. hours.
♂ Mars.	♅ Uranus.	N. North. S. South.	m. Minutes, time.
♁ Ceres.	♆ Neptune.	E. East.	s. Seconds, time.

perih. perihellon. aph. aphellon. ap. apogee. per. perigee. p. m. afternoon.  
A. m. morning. inf. inferior. sup. superior. a. aft. m. morn. st. sta. stationary.

SUMMER SPRING	{ 0 ♀ Aries, - - - 0°	WINTER AUTUMN	{ 6 ♄ Libra, - - - 180°
	{ 1 ♂ Taurus, - - - 30		{ 7 ♀ Scorpio, - - - 210
	{ 2 ♀ Gemini, - - - 60		{ 8 ♄ Sagittarius, - - - 240
	{ 3 ♀ Cancer, - - - 90		{ 9 ♄ Capricornus, - - - 270
	{ 4 ♀ Leo, - - - 120		{ 10 ♄ Aquarius, - - - 300
	{ 5 ♀ Virgo, - - - 150		{ 11 ♄ Pisces, - - - 330

Saws made and repaired at the Alexandra Works.

Unvarnished Rubber Belting, at Keen's, 80 Prince William Street.