

ECLIPSES IN 1889.

I. A Total Eclipse of the Sun Jan. 1st. Visible generally throughout the United States as a partial Eclipse. Total at Point Arena, Cal.

	H.	M.	S.	eye.
Eclipse begins.....	0	5	12	"
Total eclipse begins.....	1	30	5	"
Middle of totality.....	1	31	5	"
Total eclipse ends.....	1	32	5	"
Eclipse ends.....	2	52	12	"

In the Eastern States there is only a small Partial Eclipse. At New York Eclipse begins six minutes before sunset. It is invisible at Boston.

II. A Partial Eclipse of the Moon Jan. 16, 1889, visible generally in America.

	Eastern R. R. Time.	Central R. R. Time.
Eclipse begins.....	10 59 P. M.	9 59 P. M.
Middle of Eclipse.....	12 30 P. M.	11 30 P. M.
Eclipse ends.....	2 1 A. M.	1 1 A. M.

Greatest magnitude $8\frac{1}{2}$ digits.

III. An Annular Eclipse of the Sun Jan. 28th, visible only in the Southern Hemisphere.

IV. A Partial Eclipse of the Moon July 12th, not visible in the United States.

V. A Total Eclipse of the Sun Dec. 22d, not visible in the United States.

PLANETS BRIGHTEST.—Mercury, Jan. 30th, after Sunset; March 13th, before Sun rises; May 24th, after Sunset; July 12th, before Sun rises; Sept. 20th, after Sunset; Oct. 31st, before Sunrise. Venus, March 25th, after Sunset. Mars, not this year. Jupiter, June 24th. Saturn, Feb. 5th. Uranus, Aug. 9th. Neptune, Nov. 24th.

MORNING STARS.—Mercury, from February 14th, to April 25th, and from June 19th to Aug. 7th, and from Oct. 15th to Dec. 7th. Venus, from April 30th to the end of the year.

EVENING STARS.—Mercury, from April 25th to June 19th, and from Aug. 7th to Oct. 15th, and from Dec. 7th to the end of the year. Venus, until April 30th.

CYCLES OF TIME.

Golden Number.....	9	Dominical Letter.....	F
Epoct.....	28	Roman Indiction.....	2
Solar Cycle.....	27	Julian Period.....	6602

CHURCH DAYS.

Epiphany Sunday.....	Jan. 6	Easter Sunday.....	April 21
Septuagesima Sunday.....	Feb. 17	Low Sunday.....	" 23
Sexagesima Sunday.....	" 24	Ascension Day.....	May 26
Quinquagesima Sunday.....	March 3	Whit Sunday, Pentecost.....	" 30
Ash Wednesday.....	" 6	Trinity Sunday.....	June 9
Quadragesima Sunday, First Sunday in Lent.....	March 10	Corpus Christi.....	" 16
Mid Lent.....	" 31	1st Advent Sunday.....	Dec. 3
Palm Sunday.....	April 14	Christmas Day.....	" 25
Good Friday.....	" 19		

SEASONS FOR 1889.—Eastern R. R. Time.

	D.	H.	M.		D.	H.	M.
Winter begins 1888, December.....	21	4	3	morn., and lasts.....	89	0	48
Spring begins 1889, March.....	20	4	51	morn., and lasts.....	92	20	19
Summer begins 1889, June.....	21	1	10	morn., and lasts.....	93	14	28
Autumn begins 1889, Sept.....	22	3	38	eve., and lasts.....	89	15	14
Winter begins 1889, December.....	21	9	52	morn., Tropical Year.....	365	5	49

THE NINE WONDERS OF THE WORLD.

- Pyramids of Egypt.
- Hanging Gardens of Babylon, Tower, Walls, and Terrace.
- Statue of Jupiter Olympus, on the Capitoline Hills at Rome.
- Temple of Diana at Ephesus.
- Pharos, or Watch Tower, at Alexandria, Egypt.
- Colossus of Rhodes, a statue 105 feet high, overthrown by an earthquake 224 B. C.
- Mausoleum at Halicarnassus, a Grecian-Persian city in Asia Minor.
- Downs' Vegetable Balsamic Elixir, discovered by Rev. N. H. Downs, in 1828.
- Prolific Poultry Food, discovered by L. B. Lord in 1886.

The Sale of Arnica and Oil Liniment depends on its merits.