

Explanation of the Calendar Pages.

Column

- 1 & 2 Contains the days of the month and week.
- 3 & 4 The rising and setting of the Sun's *centre* in Mean time.
- 5 The time of the Sun's passing the meridian the difference of which from noon will give the equation of time.
- 6 The Sun's declination or distance North or South of the Equator.
- 7 The rising and setting of the Moon—the setting being given from New to Full, and the rising from Full to New Moon.
- 8 The time of the Moon's southing or passing the meridian.

The letter *m* signifies morning, and *a* afternoon.

The top of each page gives the Moon's phases, or times of New and Full Moon, and of the first and last quarters, or two quadratures with the Sun.

The *Epact* is simply a derivative from a Greek word to intercalate, and signifies nothing more than the Moon's age at the end of the year, the only use of it is to adjust the lunar to the solar year.

CYCLE OF THE MOON is a period of 19 years, after which the new moons come back to the same days of the months, only about an hour and a half earlier in the day, the number of years in the Cycle is called the *Golden Number*, because it determines on which day of the month Easter Day shall fall.

CYCLE OF THE SUN is a period of 28 years, after the expiry of which the days of the Month throughout the year return to the same days of the week, if it was not for leap years, it is obvious the Cycle would consist only of seven years.

ROMAN INDICTION, a period of 15 years used by the ancient Romans still used by the ecclesiastical authorities of Rome who date their acts according to its year.

JULIAN PERIOD the product of these three cycles multiplied by each other [$19 \times 28 \times 15$,] and thus amounting to 7980, it had an imaginary beginning 710 years before the creation so that we are now in the 6580th year of it when in the year 3267 A.D., this period shall be completed the three cycles will start together again.

DOMINICAL LETTER, The 1st of January of each year is denoted by the letter A and so on until the seventh is denoted by G; after which we go back to A for the eighth and so on throughout the year. Now the letter which stands against all the Sundays of the year, is called the Dominical Letter for that year. There is an exceptional arrangement in the case of leap years, in them the letter is changed at the end of February, moving a letter backwards so that every leap year has two Dominical Letters.

The divisions of time are simply measures and these we call years, months, weeks, &c., these are partly natural and partly arbitrary. The natural are the day and years; the former being the time in which the earth rotates on its axis; the latter, that in which it revolves once round the sun. The abstract day is always equal from noon to noon. The source from which the names of the days of the week are derived are as follows. Sunday the day of the Sun. Monday the day of the Moon. Tuesday is the day of the God of war in the old German mythology, and so corresponding to the Mars of the Romans. Wednesday is the day of Wodein, one of the chief deities of the Germans and undoubtedly the same as the oriental Buddha. Thursday is the day of Thor, corresponding in some respects to the Jupiter of the Romans. Friday is the day of Freya the German Venus. Saturday is the day of Sator or Saturn.

The beginning either of the eq some argument fixed on the 1st up to 1752 the this however s having all along which our series birth of Christ, cording to the b done in the sixt true date is 4 o selves reckon fr sometimes from temple, and fr nations date fr Medina on the 1 synodical month years they coun periods of four The Romans rec Rome, namely 7

The Planets l the planet is to planet is to the about 290 days than 45° from t elongation it ap ated by its bein Mercurys; to 1 Mars; 973 Jupi nearest is three the second 7,200 ring is said to r hours and 10 mi is seldom scen. and in Perigee c tude we someti arises from the days near the a same time by th sing as we proce must be two ecl the moon are ab year. There wi December 22. 1 total eclipse of atmosphere whe According to periodic shower this is correct, a astonishing brill 1867.