

PRINCIPAL ARTICLES OF THE CALENDAR FOR THE YEAR 1863.

Golden Number	-	-	-	7	Dominical Letters	-	-	-	ED
Epact	-	-	-	6	Roman Indiction	-	-	-	11
Solar Cycle	-	-	-	1	Julian Period	-	-	-	6581

FIXED AND MOVEABLE FESTIVALS, ANNIVERSARIES, &c., &c.

Epiphany	-	-	Jan.	6	Ascension Day—Holy Thursday	May	21
Septuagesima Sunday	-	-	Feb.	9	Birth of Queen Victoria	"	24
Quinquagesima—Shrove Sunday	-	-	"	23	Pentecost—Whit Sunday	"	31
Ash Wednesday	-	-	"	26	Trinity Sunday	June	7
St. David	-	-	March	1	Corpus Christi	"	11
Quadragesima—First Sunday in Lent	-	-	"	1	Accession of Queen Victoria	"	20
St. Patrick	-	-	"	17	Proclamation	"	21
Annunciation—Lady Day	-	-	"	25	St. John Baptist	"	24
Palm Sunday	-	-	April	5	St. Michael—Michaelmas Day	Sept.	29
Good Friday	-	-	"	10	Birth of Prince of Wales	Nov.	9
Easter Sunday	-	-	"	12	First Sunday in Advent	"	29
Low Sunday	-	-	"	19	St. Andrew	"	30
St. George	-	-	"	23	St. Thomas	Dec.	21
Rogation Sunday	-	-	May	17	Christmas Day	"	25

The year 5629 of the Jewish Era commences September 17, 1863.

Ramadan (Month of Abstinence observed by the Turks) commences December 16, 1863.

The year 1285 of the Mahommedan Era commences on April 24, 1863.

MEMORANDA.

All the articles of the Ephemeris have been reduced from the "Nautical Almanac" for 1863, to the Meridian of Lyttelton.

The time given is in every case *Civil Time*: twelve hours before noon and twelve hours after noon constituting the day.

The Phases of the Moon are calculated to the nearest minute of *mean time*.

The Sun's Declination is the angular distance of the Sun from the Equator, north or south, as indicated at *apparent noon* on each day.

The column of Equation of Time shows the minutes and seconds of difference between *apparent* and *mean time* on each day. When the sign + is prefixed, this difference must be added to *apparent time* to find *mean time*, and subtracted from *mean time* to find *apparent time*. When the sign - is prefixed, the converse operations respectively are necessary.

The Moon's Meridian Passage and Sunrise and Sunset are given in *mean time*, being the time which ought to be shown by the clock at each occurrence. The *apparent time* of these phenomena will be discovered by applying the column of Equation of Time as above indicated.

The Custom-house, Lyttelton, to which all calculations are referred herein, stands as follows:—Longitude, 172 deg. 44 min. 17 sec. E.; latitude, 43 deg. 36 min. 42 sec. S.

JANUARY—XXXI DAYS.

PHASES OF THE MOON.

First Quarter	D. H. M.	Last Quarter	D. H. M.
Full Moon	3 3 33 p.m.	New Moon	17 4 34 a.m.
	10 10 23 a.m.		25 6 49 a.m.
Perigee, 10d. 1h. p.m.		Apogee, 24d. 6h. a.m.	

DAYS.	REMARKABLE DATES.	SUN'S AP- PARENT DE- CLINATION.	EQUATION OF TIME.		MOON'S AGE, AT NOON.	MOON'S MERIDIAN PASSAGE.		MEAN TIME CORRECTED.		DAYS.
			ADD TO APPARENT TIME.	M. S.		H. M.	Mean Time.	Sun Rises.	Sun Sets.	
1 W	Circumcision	23 5 5	3 22-73	6	4 37p.m.	4 29	7 39	1		
2 Th	Capture of Calcutta, 1757	23 0 7	3 51-11	7	5 21	4 29	7 39	2		
3 F		22 54 43	4 19-60	8	6 6	4 30	7 39	3		
4 Sat	All Eng. Eleven beat Victorians, 1864	22 49 17	4 47-70	9	6 54	4 31	7 39	4		
5 S	Epiphany.	22 43 5	5 14-97	10	7 44	4 32	7 38	5		
6 M		22 36 11	5 41-61	11	8 38	4 33	7 38	6		
7 T		22 29 9	6 8-63	12	9 35	4 34	7 38	7		
8 W		22 22 6	6 34-12	13	10 36	4 35	7 38	8		
9 Th	Nelson buried, 1806	22 13 58	6 59-80	14	11 39	4 36	7 38	9		
10 F	Penny Postage established, 1840	22 5 31	7 24-49	15	—	4 37	7 38	10		
11 Sat	Hilary term begins	21 56 37	7 49-06	16	0 41a.m.	4 38	7 37	11		
12 S	First Sunday after Epiphany.	21 47 31	8 12-59	17	1 42	4 40	7 36	12		
13 M	First convicts, Botany Bay	21 37 46	8 36-03	18	2 40	4 41	7 35	13		
14 T		21 27 37	8 58-86	19	3 34	4 42	7 35	14		
15 W	Battle of Corunna	21 17 6	9 20-55	20	4 25	4 43	7 35	15		
16 Th		21 6 16	9 42-04	21	5 15	4 44	7 35	16		
17 F		20 55 21	10 2-87	22	6 2	4 45	7 35	17		
18 Sat	Earthquake at Sydney	20 43 19	10 22-57	23	6 49	4 47	7 34	18		
19 S	Second Sunday after Epiphany.	20 31 10	10 42-07	24	7 36	4 49	7 33	19		
20 M	John Howard died	20 18 35	11 0-85	25	8 23	4 50	7 33	20		
21 T		20 5 44	11 18-04	26	9 10	4 51	7 32	21		
22 W		19 52 29	11 36-01	27	9 50	4 52	7 31	22		
23 Th	Wellington Provincial Anniversary	19 38 54	11 52-13	28	10 45	4 54	7 30	23		
24 F	Duke of Kent died, 1820	19 24 55	12 7-38	29	11 32	4 55	7 30	24		
25 Sat	Princess Royal married	19 10 34	12 22-33	0	0 19p.m.	4 56	7 29	25		
26 S	Third Sunday after Epiphany.	18 55 53	12 36-48	1	1 6	4 57	7 28	26		
27 M	Governor Hobson arrived, 1840	18 40 53	12 49-77	2	1 50	4 58	7 28	27		
28 T		18 25 9	13 2-24	3	2 34	4 59	7 27	28		
29 W	Auckland Provincial Anniversary	18 9 38	13 13-93	4	3 18	5 0	7 26	29		
30 Th	King Charles I. beheaded	17 53 42	13 24-78	5	4 3	5 1	7 25	30		
31 F	Hilary term ends	17 37 21	13 34-78	6	4 49	5 3	7 23	31		

PHENOMENA FOR THE MONTH.

JANUARY.—2nd, 10h. 47m. a.m., Uranus in opposition with the Sun; 2nd, 5h. 33m. p.m., Mars in conjunction with the Sun; 3rd, 3h. 41m. p.m., Sun in Perigee; 6th, 7h. 26m. p.m., Venus greatest heliocentric latitude south; 8th, 1h. 7m. a.m., Mercury in Aphelion; 9th, 9h. 44m. p.m., Uranus in conjunction with the Moon—Uranus 4 deg. 36 min. north; 18th, 9h. am., Mercury in conjunction with Mars—Mercury 0 deg. 55 min. south; 20th, 2h. 66m. a.m., Saturn in conjunction with the Moon—Saturn 3 deg. 19 min. south; 24th, 1h. 21m. p.m., Mercury in superior conjunction with the Sun; 24th, 8h. 38m. p.m., Mars in conjunction with the Moon—Mars 4 deg. 9 min south; 25th, 10h. 44m. am., Mercury in conjunction with the Moon—Mercury, 4 deg. 46 min. south; 28th, 1h. 42m. a.m., Venus in conjunction with the Moon—Venus 1 deg. 22 min. south; 28th, 8h. 9m. a.m., Jupiter in conjunction with the Moon—Jupiter 0 deg. 35 min. south; 28th, 11h. 4m. am., Mercury greatest heliocentric south; 31st, 8h. 35m. a.m., Venus in conjunction with Jupiter—Venus, 0 deg. 23 min south.

FARMING OPERATIONS.

Finish haymaking and stacking; hoe and mould up potatoes; finish hoeing and thinning all the root crops. Be careful that all furrows and drains are open, that the root-covered land may be quickly relieved of any water that may fall; dry, well-cultivated lands do not suffer from drought so much as those which have been previously water-sodden. Keep the plough going in breaking up unimproved lands.