

The Lord's Day On A Round World

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A discussion of Sabbath observance as it is related to natural time measurement, the length of the days of Creation, the beginning and ending of the natural day, the International Date Line, and the Far north where during one period of the year the Sun is above, and during another is below, the horizon throughout the full 24 hours of the day.

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The Sabbath on a Round World

BY WILLIAM STILLMAN*

AND Now to trace you round this rolling world, An eastern and a western route you've twirled, And made out nothing by the spacious travel, But what I call a wretched, foolish cavil. And now to make you clearly understand That Sabbath day may be in every land, At least those parts where mortal men reside (And nowhere else can precepts be applied). There was a place where first the orb of light Appeared to rise, and westward took its flight. That moment, in that place the day began, And as he in his circuit westward ran, Or rather, as the Earth did eastward spin, To parts more westward daylight did begin. And thus at different times, from place to place. The

day began-this clearly was the case. And I should think a man must be a dunce. To think that day began all round at once, So that in foreign lands it does appear, There was a first day there as well as here. And if there was a first, the Earth around, As sure as fates the seventh can be found. And thus you see it matters not a whit, On which meridian of Earth we get, Since each distinctly had its dawn of light, And ever since, successive day and night; Thus while our antipodes in darkness sleep, We here the true, primeval Sabbath keep. [A Seventh-day Baptist of New England, who wrote early in the nineteenth century.]

Foreword

THE MUCH discussed Sabbath-Sunday question presses more and more to the fore. It will soon become one of the major religious issues of the day. As men seek more light on the subject, the demand for literature covering hitherto neglected aspects of it is natural.

Although the scope of this book is briefly stated on the title page, an explanation of the general plan of the work is here given to the reader in order that he may more intelligently approach the topics presented.

The natural divisions of time, particularly the day measured off by the rotation of the Earth, are discussed in Chapter 1.

The length of the days of Creation week described in Genesis 1 is the topic of Chapter 2.

What the Bible says concerning the time when the Lord's day begins and ends is set forth in Chapters 3 and 4. Chapter 5 is a compilation of historical data giving information about the rise of the practice of observing Sunday midnight to midnight.

Chapters 6 and 7 tell the story of the establishment of the International Date Line in the Pacific Ocean, and discuss some of the problems that Sabbath-keeping travelers meet when going back and forth between the Americas and the Far East. The Appendix deals with a special phase of the same topic.

People living in more southern latitudes sometimes ask about Sabbath observance in regions north of the Arctic Circle. For example, how can one who keeps the Lord's day from sunset to sunset know when the day begins and ends during the season when the Sun stays above the horizon during the full 24 hours of the day? And when does he begin and end the day during that part of the year when the Sun is hidden below the horizon throughout the entire 24 hours of the day? Chapters 8 and 9 give the answers to these queries.

The last part, Chapter 10, sets forth the personal relation of Jesus Christ to the Sabbath institution from its very establishment.

The dates given for the vernal and autumnal equinoxes, and for the summer and winter solstices are approximate. The insertion of an extra day into the month of February each Leap Year causes a slight variation in the calendar date for these astronomical events. This also causes a slight variation in the hours of sunrise and sunset for a given day of the month each year. For exact information on these points for a given date, consult the current issue of The American Ephemeris and Nautical Almanac, which is prepared by the Nautical Almanac Office of the United States Naval Observatory. Other governments issue similar publications providing such data.

In the preparation of this treatise the spelling of many words in the quotations taken from old English works has been made to conform to modern usage in order to make the reading of such passages easier.

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It is not my intention, in this work, to tell of the rise of Sunday observance to supplant the keeping of the ancient Sabbath among Christian people. The first part of this story has been presented in my book Sunday in Roman Paganism. Present plans call for the presentation of the rest in a volume entitled Sunday in Early Christianity, which is now in preparation.

ROBERT LEO ODOM

1. Our Most Wonderful Timepiece

IN THE wonderland of the world's famous timepieces the clock in the tower of the cathedral of Strassburg, Germany, probably has won most attention. [1] There really have been three clocks in the old church. The first was built in 1352; the second, in 1570; and the third, during the years 1838 to 1842.

Thirty feet high, it is 15 feet wide at its base. A flight of winding stairs on one side is surmounted by five columns; a Gothic pillar with panels, on the other, is full of figure paintings.

In the center at the base a globe represents the heavens and indicates the time of the rising, passage, and setting of the principal stars crossing the meridian of Strassburg. Behind this a calendar shows the 12 months of the year, the days of each month,

the dominical letters, and various church festivals. A statue of Apollo, the pagan Sun-god of long ago, points out the day of the month. The calendar, in the form of a circular band, is arranged to show various astronomical events.

In the gallery above the calendar, seven figures represent the seven days of the week, which pass in order from left to right of the beholder. On every Sunday a chariot drawn by the horses of the Sun appears, with the Sun-god himself as the charioteer. On Mondays the chariot of the moon-goddess appears, drawn by stags. On Tuesdays, Wednesdays, Thursdays, Fridays, and Saturdays in turn are seen Mars, Mercury, Jupiter, Venus, and Saturn, each in his own chariot and on his own day of the week.

Above the symbols of the planetary gods a clock dial shows the time of day. On each side of it sits a winged genius. The one on the left side strikes, with a wand, the first note of each quarter-hour. The one on the right holds an hour glass, which he turns upside down every 60 minutes, at the hour. Above the clock is a large circle divided in 12 parts to show the position of the Sun in relation to the 12 constellations of the zodiac.

On the next level are seen a planetarium, or model of the solar system, and a globe that records the four phases of the moon. Above them movable figures represent the four ages of man. In succession they strike the quarter-hours by hitting a bell. The first, a baby, strikes the bell with a rattle at the first quarter-hour. A youth gives the stroke for the second quarter-hour. He is followed by an old man, whose stroke comes at the third quarter-hour. The last, Death, hits the bell with a bone at the hour.

In the highest compartment is a figure of Christ. At noon of each day a procession of the 12 apostles passes before Him, and all bow at His feet, while a cock perched atop the turret at the left flaps his wings, ruffles his neck, and crows three times.

A Work of Genius

Such a marvelous invention for measuring time as is this old clock truly deserves the attention of men.

Man has made many intricate and dependable devices for the measurement of time. Yet despite all his skill, his clocks and calendars have needed repair and readjustment from time to time. Even the wonderful old Strassburg clock has been rebuilt twice since it was first constructed in 1352.

Our Celestial Timepiece

But the most interesting thing about the world's clocks and calendars is that they are made and regulated primarily to mark off time as it is measured for us by the heavenly bodies, whose combination of wheel-like revolutions constitute the most wonderful and accurate timepiece known to mortals. The Sun, the Moon, and the Earth itself are the grand trio that function as the main wheels in this master clock.

John S. McGroarty relates that "in the Elgin Nation Watch Works there are two master clocks for regulating watches. These clocks are in turn regulated by the stars. The clocks are in charge of two astronomers, who recently made the statement that they have never found the slightest variation in the movement of the stars, even to the extent of one hundredth of a second. And the manager of the Elgin company, when he heard this, stated that he takes his hat off to the Watchmaker who made that watch-the universe." [2]

The Maker of this great celestial timepiece is our all powerful and all-wise Creator. "He tells the number of the stars; He calls them all by their names. Great is our Lord, and of great power: His understanding is infinite." [3] This explains why the days, the months, the seasons, and the years come and go with unfailing regularity, for He has promised that "while the Earth remains, seedtime and harvest, and cold and heat, and summer and winter, and day and night shall not cease." [4]

"Sidereal time," says Mortimer H. Cobb, "is obtained from the stars by astronomers at the United States Naval Observatory in Arlington, Virginia. This star time is the most precise that man can get and is accurate at its source to within a few thousandths of a second." [5]

The heavenly bodies mark off for us three natural divisions of time-the day, the month, and the year. But the week of seven days, the hour, the minute, and the second are artificial time measurements. The week has been well stated in these words: "Like the Sabbath, the week originated at Creation, and it has been preserved and brought down to us through Bible history. God Himself measured off the first week as a sample for successive weeks to the close of time." [7]

The Day

A day is the period of time required for the Earth to make one rotation on its axis. The true solar day is the interval of time during which the Earth makes one rotation on its axis in relation to the Sun. Since the Sun appears to revolve around the Earth in this diurnal motion, astronomers also speak of the true solar day as the "apparent solar day," which they define as the interval of time required for the Sun to make two successive crossings of the meridian of a given place on Earth.

The length of the true solar day varies throughout the year, this variation being chiefly due to the fact that the axis of our planet is inclined 23 degrees and 27 minutes from the perpendicular to the plane of its orbit. This inclination of the axis is also responsible for the changing seasons. As the Earth moves in its path about the Sun, the ends of its axis are pointed alternately toward and away from the Sun, making the light part of the day longer than the night during the summer and shorter in the winter.

For practical purposes astronomers have devised what they call the “mean solar day,” which is of uniform duration, being the average of all the true solar days of the year. The mean solar day is divided into 24 hours of mean Solar time. This is the kind of time used for the regulation of our clocks and watches.

The Month

A month is the period of time during which the Moon makes one revolution around the Earth. The synodic month is the interval of time required for the Moon to make one revolution around the Earth with respect to the Sun, that is from one new Moon to the next. Its average length is 29 days, 12 hours, 14 minutes, and 2.8 seconds

29.530 days. The synodic month is the basis of the alternating 29-day and 30-day months of the lunar civil calendars used in centuries past. When Julius Caesar reformed the Roman civil calendar in 46 and 45 BC, he discontinued the use of the natural lunar months and introduced the system of the 12 fictitious months of the in vogue.

The Year

A year is the period of time required for the Earth to make one revolution around the Sun. The tropical year is the interval of time between two consecutive appearances of the Sun at the vernal equinox. Its length is 365 days, 5 hours, 48 minutes, and 46 seconds - 365.242 days. The calendar year, which begins on January 1, is 365 days long in ordinary years and 366 in leap years.

Since the primary one of the three natural divisions of time is the day, which depends on the rotation of the Earth, it is in this connection that we have our most wonderful timepiece, one that excels in accuracy any clock made by man. Its movements have been carefully studied by able scientists.

“The time of rotation of the Earth,” says Robert S. Woodward, president of the Carnegie Institution in Washington, D.C., “is the most trustworthy unit of time man has discovered. Nevertheless, the period of rotation of the Earth is subject to variation from four obvious causes. These are (1), secular contraction of the earth’s mass. (2), the influx of meteorites, or meteoric dust; (3), tidal friction; and (4), shifting in position of the surface load of the Earth, as in the processes of sedimentation, glaciation, etc. Only the last-named cause can be regarded as being of any appreciable effect within measurable time; that is, within a few centuries. The others would require millions of centuries.” [8]

Testimonies of Scientists

It is patent, therefore, that the Earth itself is our most reliable timekeeper. Professor David Todd, director of the Amherst College Astronomical Observatory, has declared “that if irregularities actually do exist, they probably cancel each other in the long run, and leave the day invariable in length. Uniformity of the Earth’s rotation has been critically investigated by Newcomb, and no change in the length of the day as great as one thousandth of a second in 1,000 years could escape detection.” [9]

“The rotation of the Earth,” remarks another authority, appears to be perfectly uniform, comparisons of the times of transits, eclipses, etc., point to a variation of less than one hundredth of a second since the time of Ptolemy.” [10]

More recently Willis I. Milham, a writer on time measurements, has said: “The conclusion is that during the last several centuries the time of rotation [of the Earth] has certainly not changed by 0.001 of a second of time.” [11]

Henry Norris Russell, chairman of the Department of Astronomy and director of the Astronomical Observatory of Princeton University, writing about man-made timepieces, says: “But we have a more easily available moving body, which gives us a scale for time-measurement which surpasses in uniformity that of any device of human construction—namely, the rotating Earth on which we live.” [12]

After pointing out what are the influences that may cause even the Earth to err slightly, Dr. Russell goes on to say: “It can be calculated, however, that a continuous frictional loss at the rate of 1,000,000,000 horsepower would cause a lengthening of the day by about a thousandth part of a second at the end of a century. No humanly constructed clock can even remotely approach this degree of accuracy in running.” [12]

Checked by Eclipses

“It is remarkable that the discussion of ancient eclipses of the Moon, and their comparison with modern observations, show only a small and rather doubtful change, amounting perhaps to less than one hundredth of a second per century,” reports Simon Newcomb, the great astronomer, in his remarks on the rotation of the Earth. [13]

So dependable are the relative movements of the Sun, and Moon, that our astronomers can supply us with almanacs and timetables telling far ahead of time the hour and the minute of the rising and the setting of the Sun and the Moon, the time of the phases of the Moon, the positions of the planets and the principal stars at different hours of the night, and the time of the rise and the fall of the tides.

The Sun, Earth, and Moon act together as a team to provide men with a wonderful means of keeping a check on time. The eclipses of the Sun and the Moon occur with such regularity that the astronomers can tell us exactly when they took place thousands of

years ago, and can give the dates when they will occur in the centuries that lie ahead. T. R. Uppolzer has prepared a catalogue [14] with the dates and maps of all solar and lunar eclipses from 1207 BC to AD 2161. Simon Newcomb has prepared a set of tables of the solar eclipses from 700 BC to AD 2300. [15]

The Encyclopedia Britannica [16] gives a list of the most important total eclipses of the Sun from now until August 11, 1999, telling how long will be the duration of totality in each instance and what regions of the Earth will be swept by the Moon's shadow.

Eclipses Repeat Themselves

A solar eclipse can take place only at new Moon, for it then that our satellite is nearest to the Sun and in a position where it can pass between the Earth and the orb of day. A lunar eclipse can occur at no time except full Moon, for then only can the Earth pass between our satellite and the Sun. The eclipses repeat themselves in cycles of 6,585.32 days each, or approximately 18 years, 10 and one third days. For example, the solar eclipse of September 20, 1941, was a repetition of the one of September 10, 1923, and so on back to July 17, 1833, and before. Each of the following tables illustrates this.

Solar-Total:	Solar-Total:
1941-Sept. 20	1944-Jan. 25
1923-Sept. 10	1926-Jan.14
1905-Aug. 30	1908-Jan. 3
1887-Aug. 18	1889-Dec. 22
1869-Aug. 7	1871-Dec. 12
1851-July 28	1853-Nov. 30
1833-July 17	1835-Nov. 20
Etc.	Etc.

Many of the important dates of history, even in the centuries before the birth of Christ, have been either established or verified by astronomers by means of eclipses. Ancient writers mention the occurrences of eclipses of the Sun and the Moon as having taken place at the time that certain important events happened among men in those far off days. [17] Knowing the place where the eclipse was visible in each instance, and the period of history in which the eclipse and the event described occurred, the astronomer can tell by mathematical computation exactly what the date was.

Under the Care of God

The faithfulness of the Sun, Earth, and Moon as time keepers is due to the fact that they are governed by natural law's established and upheld by their Creator. Thus God tells men: "Lift up your eyes on high, and behold who has created these things, that brings out their host by number: He calls them all by names by the greatness of His might, for that He is strong in power; not one fails." [18] He "gives the Sun for a light by day, and the ordinances of the Moon and of the stars by night." [19]

These heavenly bodies were ordained to be our time-keepers from the beginning. On the fourth day of the creation week "God said, Let there be lights in the firmament of the heaven to divide the day from the night; and let them be for signs, and for seasons, and for days, and years. And let them, be for lights in the firmament of the heaven to give light upon the Earth: and it was so. And God made two great lights; the greater light to rule the day, and the lesser light to rule the night: He made the stars also. And God set them in the firmament of the heaven to light upon the Earth, and to rule over the day and over the night, and to divide the light from the darkness: And God saw that it was good." [20]

Regulated by Natural Laws

In ancient times the Lord pointed to the unfailing faithfulness with which the heavenly bodies obey the natural laws appointed for their government, reminding men that so constant is His great love for His people. "Thus said the Lord, If My covenant be not with day and night, and I have not appointed the ordinances of heaven and Earth, then will I cast away the seed of Jacob, and David My servant." [21]

"Thus said the Lord, which gives the Sun for a light by day, and the ordinances of the Moon and of the stars for a light by night, which divides the sea when the waves thereof roar; the Lord of hosts is His name. If those ordinances depart from before Me, said the Lord, then the seed of Israel also shall cease from being a nation before Me for ever." [22]

THE HAND THAT MADE US

BY JOSEPH ADDISON

The spacious firmament on high, with all the blue, ethereal sky, And spangled heavens, a shining frame, their great Original proclaim: The unwearied Sun from day to day does his Creator's power display, And publishes to every land the work of an almighty hand.

Soon as the evening shades prevail, the Moon takes up the wondrous tale. And nightly, to the listening Earth repeats the story of her birth. While all the stars that round her burn, and all the planets in their turn, Confirm the tidings as they roll, and spread the truth from pole to pole.

What though in solemn silence, all move round the dark terrestrial ball? What though no real voice nor sound amid their radiant orbs be found? In reason's ear they all rejoice, and utter forth a glorious voice, Forever singing as they shine, "The hand that made us is divine."

2. The Length of the Days of Creation Week

ALTHOUGH Methuselah is often said to be "the oldest man that ever lived," the Good Book records that at least two men have exceeded him in longevity. Methuselah died at the age of 969 [1]. But Enoch and Elijah, prophet who were translated to heaven without tasting death, have surpassed his age by far.

Enoch was born before the Flood and about the year 3382 BC when Adam was a middle aged man of approximately 622 years of age. At the age of 365 years Enoch was taken to heaven. [2] He is still alive, and is now about 5386 years old (3,382 plus 2,004)! He is the only human known to have lived from the days of Adam to the present. Most of the history of mankind has occurred during his lifetime.

Elijah appeared in Bible history about the year 910 BC [3]. We are not given the exact date of his birth, nor how old he was when he was translated to heaven [4]. But his present age must be over 2,900 years. He was seen by the apostles when he appeared and talked with Christ on the occasion of His transfiguration. [5]

Because the Holy Scriptures ascribe to the antediluvian patriarchs a life span averaging a little more than nine centuries a man, which is very long in comparison with the highest longevity records of people living today, two interesting questions have arisen concerning the time measurements used by the inspired writer of Genesis in reference to the days of Creation week and the ages of the people who lived before the Flood.

Two Questions

The two questions are: (1) Does the Bible mean that those antediluvian patriarchs really lived several hundred years each before they died? And (2) were the days of Creation week literal days such as we have now, or were they long periods of 1,000 years each?

Skeptics have suggested that the word "year" means "a month" where the ages of the antediluvian patriarchs are listed in the Bible. Thus they suppose that primitive men lived no longer than people do now. But the doubters' rule does not work. For example, Mahalaleel [6] and Enoch [7] are each recorded as having been 65 years old when their first sons were born. If 65 months were meant, then those men were only five years of age when they became fathers! Such a conclusion is so absurd that it takes far more credulity to accept it than it does faith to take God's word as it stands.

Some men allege that the days of Creation week were periods of 1,000 years each, or even more. As proof they cite this statement by Peter: "That one day is with the Lord as a thousand years, and a thousand years as one day." [8] Thus they assume that the creation of this world in six days was a drawn-out affair of at least 6,000 years. Others contend that they were six indefinite ages of millions of years, during which the Earth slowly evolved from chaos.

The context of Peter's statement reveals that he is not discussing the length of the days of Creation week. He is telling us that in dealing with sinners "the Lord is not slack concerning His promise, as some men count slackness; but is long-suffering to us-ward, not willing that any perish, but that all should come to repentance." [9] The apostle points out that God surely will fulfill His promise to intervene in the affairs of this world and put a halt to the wickedness of men. But He will do it in His own good time, for He is far more desirous of the salvation of men than He is of their destruction.

In that statement Peter makes allusion to a declaration by the psalmist, who contrasts the eternal existence of God with the "threescore years and ten" of puny man. David says of the Lord: "For a thousand years in Thy sight are but as yesterday when it is past, and as a watch in the night." [10]

Several Witnesses

The Genesis record of the creation of this world is not the only witness to the fact that God spent six days in that work. In the fourth commandment of the Ten Commandments explicitly says: "In six days the Lord made heaven and the Earth, the sea, and all that in them is, and rested on the seventh day: wherefore the Lord blessed the Sabbath day and hallowed it." [11] The

Mosaic law also teaches the same thing, for in it God says: "In six days the Lord made heaven and earth, and on the seventh day He rested, and was refreshed." [12]

Here is the enumeration of the seven days of Creation week as found literally in the Hebrew text:

"And there was evening, and there was morning: day one." [13]

"And there was evening, and-there-was morning: day two." [14]

"And-there-was evening, and-there-was morning: day third." [15]

"And-there-was evening, and-there-was morning: day fourth." [16]

"And-there-was evening, and-there-was morning: day fifth." [17]

"And-there-was evening, and-there-was morning: (the) day-of the-sixth." [18]

"And-completed God in-the-day the-seventh His-work which He-made, and-He-sabbatized in-the-day the-seventh from-all His-works which He-had-made. And blessed God the day of the seventh, and-He-made holy it, because in-it He-had-sabbatized from-all His work which had-created God for-to-make." [19]

Each Day Had Evening and Morning

Note that each day of the six days of creative work is said to have consisted of both evening and morning, showing that they were literal days. A modern writer has fittingly commented:

"The Bible recognizes no long ages in which the Earth was slowly evolved from chaos. Of each successive day of creation, the sacred record declares that it consisted of the evening and the morning, like all other days that have followed." [20]

Also: "The statement is made at the close of the first week's record, 'These are the generations of the heavens and of the earth when they were created.' Genesis 2: 4. But this does not convey the idea that the days of creation were other than literal days. Each day was called a generation, because that in it God generated, or produced, some new portion of His work." [20]

The Hebrew word commonly rendered as "day" in our English Bible is yom, which is used in the Sacred Text nearly 1,500 times. Sometimes it is employed in Holy Writ to denote an indefinite period of time. But in biblical chronology it is not used with indefiniteness. When the term "day" is employed with a numeral adjective before it in God's word, it denotes a definite, literal day of 24 hours.

Unequivocal Terminology

As an illustration, we have this statement: "And it came to pass after seven days, that the waters of the Flood were upon the Earth. In the six hundredth year of Noah's life, in the second month, the seventeenth day of the month, the same day were all the fountains of the great deep broken up, and the windows of heaven were opened." [21] The use of the numeral adjective before the word "day" in this statement leaves no room for thinking that the term means an indefinite period of time.

The writer of Genesis clearly understood the difference between a year, and a month, and a day of time. His chronology is clear, specific, and definite. He records that "the waters prevailed upon the Earth an hundred and fifty days," and that "after the end of the hundred and fifty days the waters were abated. And the ark rested in the seventh month, on the seventeenth day of the month, upon the mountains of Ararat. And the waters decreased continually until the tenth month: in the tenth month, on the first day of the month, were the tops of the mountains seen. . . . And it came to pass in the six hundredth and first year, in the first month, the first day of the month, the waters were dried up from off the Earth: and Noah removed the covering of the ark, and looked, and, behold, the face of the ground was dry. And in the second month, on the seven and twentieth day of the month, was the earth dried." [22]

Therefore, it can be laid down as a definite rule that in Bible history, when the word "day" is preceded by a numeral adjective, the term refers to a literal day of 24 hours. [23]

In the Creation record a numeral adjective is used before the word "day" to show that the days of the first week were literal days of 24 hours and were like those so specified elsewhere in Holy Writ. Thus we see the veracity of this observation: "Like the Sabbath, the week originated at Creation, and it has been preserved and brought down to us through Bible history. God Himself measured off the first week as a sample for successive weeks to the close of time. Like every other, it consisted of seven literal days." [24]

In the fourth commandment of the Ten Commandments the Lord says: "Remember the Sabbath day to keep it holy. Six days shall thou labor, and do all thy work: but the seventh day is the Sabbath of the Lord thy God. In it thou shall not do any work, thou, nor thy son, nor thy daughter, thy manservant, nor thy maidservant, nor thy cattle, nor thy stranger that is within thy gates. For in six days the Lord made heaven and earth, the sea, and all that in them is, and rested the seventh day. Wherefore the Lord blessed the Sabbath day, and hallowed it." [25]

Here the word "day" is employed with a numeral adjective before it, showing that a literal, definite day of 24 hours is meant. "Six days shall thou labor." "The seventh day is the Sabbath." "In six days the Lord made heaven and earth, the seas and all that in them is, and rested the seventh day." Surely God means "not six indefinite periods of time; for then there would be no possible way for man to observe the day specified in the fourth commandment." [26]

The Theory Tested

Now let us test the interpretation which teaches that each of the six days of Creation week was a period of 1,000 years, and see how it works.

The Sacred Record says that on the third day God caused the earth to bring forth vegetation- grass, herbs, and trees. “And the evening and the morning were the third day. [27] Thus this day was divided into two parts-the darkness and the light. The night, then, would be 500 years long! Can you imagine, with any scientific reason, grass growing, flowers blooming, and tree bearing fruit in utter darkness lasting five centuries without interruption? Then think of the following 500 years of constant daylight. How could vegetation flourish under such conditions? And, mind you, the next four days of Creation week, each successive day with 500 years of darkness followed by 500 years of blazing light, would amount to 4,000 years!

We read, too, that on the fifth day the Lord made the fowls, and that on the sixth day He formed the animal and man. “And the evening and the morning were the fifth day.” “And the evening and the morning were the sixth day.” [28] They would each be a day of 500 years of continuous night, followed by 500 years of incessant light. How could those creatures live through a single night of darkness longer than the history of the United States. And this, according to the hypothesis, was followed by the seventh day, which is supposed to have been of the same nature.

Yet God says that “all the days that Adam lived were nine hundred and thirty years: and he died.” [29] If the sixth and the seventh days of Creation were each 1,000 years long and Adam was made on the sixth day, then he never lived to see the first Sabbath end! And if we reason the other way and say that each day of Adam’s 930 years was 1,000 years long, then at the rate of 360 days to a year he would have been 334,800 years old when he died!

Believe God’s Word

It is evident, therefore, that those who refuse to take God at His word create for themselves insurmountable difficulties when they try to make Him say something else. “Good understanding gives favor: but the way of transgressors is hard.” [30] There are only two things one can do. He must either accept God’s word as it is or reject it. There can be no compromise. With David we say to God: “The beginning of Thy word is true.” [31]

God is infinite in power and wisdom, and He can create a thing as easily in one day as He can in 1,000 years. He did not have to take six days to create the world, but He did it because He wished to do so. And He rested on the seventh day, blessed that day, and sanctified it as “the Sabbath of the Lord thy God.” [25]

“The Sabbath, as a memorial of God’s creative power, points to Him as the Maker of the heavens and the earth. Hence it is a constant witness to His existence and a reminder of His greatness, His wisdom, and His love. Had the Sabbath always been sacredly observed, there could never have been an atheist or an idolater.” [32]

Our conclusion, therefore, is this: “Of the first day employed in the work of Creation is given the record, ‘The evening and the morning were the first day.’ Genesis 1:5. And the same in substance is said of each of the first six days of Creation week. Each of these periods Inspiration declares to have been a day consisting of evening and morning, like every other day since that time.” [33]

3. When the Day Begins and Ends [A]

A WELL known and widely accepted authority of our time first defines the word “day” as “the time of light, or the interval between one night and the next. The time between sunrise and sunset, from dawn to darkness.” [1] And the term is next defined as “the period of the Earth’s revolution on its axis.” [1]

In Full Agreement

These two modern definitions of the word “day” correspond exactly to the two meanings given it where it is first used in the Sacred Scriptures. Here is the passage:

“In the beginning God created the heaven and the Earth. And the Earth was without form, and void; and darkness was upon the face of the deep. And the Spirit of God moved upon the face of the waters. And God said, Let there be light: and there was light. And God saw the light, that it was good: and God divided the light from the darkness. And God called the light Day, and the darkness He called Night. And the evening and the morning were the first day.” [2]

The Sacred Record reveals that when the Earth itself was created, it appeared in a chaotic and empty state, [3] its surface was covered with water, and it was enveloped in darkness. [4] Darkness results from the absence of light. But when the Spirit of God had “moved upon” the surface of the newly formed world and the globe was set in motion, the Creator caused light to shine upon it. [4] He said, “Let there be light,” and the light appeared at His behest. Whence it came is not told. Paul says that God “commanded the light to shine out of darkness.” [5] It did not come from the Sun, for the record states that the Earth received no light from it until the fourth day. [6]

The Division between Light and Darkness

“And God divided the light from the darkness.” [7] When the light shone upon one side of the Earth, then the terrestrial ball itself, being opaque, intercepted the luminous rays, so that the opposite side of the globe was in darkness. This darkness was due to a lack of illumination. The dividing line between light and darkness was, and still is, a twilight zone running up and down like a band around the Earth. While the Sun appears to set, and nightfall takes place, along that dividing line on one side of the Earth, on the other side of the globe the Sun appears to rise, and daybreak occurs, along that dividing line. And in order for a given place on Earth to have nightfall and daybreak, that place must be turned by the rotation of the globe to the sunset and sunrise points respectively of that line dividing between light and darkness.

“And God called the light Day, and the darkness He called Night.” This is the first use of the term “day” in the Bible, and its meaning corresponds exactly to the first dictionary definition we have given, signifying “the time of light, or the interval between one night and the next; the time between sunrise and sunset.” Although the Earth had received no light from the Sun as yet, it did receive illumination from another source, and this produced for the rotating planet the phenomena of “the evening and the morning”-nightfall and daybreak-which corresponded to sunset and sunrise.

Both Evening and Morning

“And the evening and the morning were the first day.” The Hebrew text is more meaningful, for it literally reads: “And there was evening, and there was morning: day one.” The verb really is used twice, denoting a twofold effect. Here the word “day” has the other meaning, signifying “the period of the Earth’s revolution on its axis.” On that very first day of the Creation week the phenomena of both evening and morning, corresponding to sunset and sunrise, were produced. A complete rotation of the Earth on its axis is required in order for both of them to occur for any given place in the world.

The Holy Scriptures not only tell us that our planet is spherical in form, [8] and that God “hangs the Earth upon nothing,” but also that “it is turned as clay to the seal.” [9] It rotates. There is no intimation whatever in Holy Writ that the rotation of the Earth on its axis, so as to produce the day of 24 hours, started at some period subsequent to the Creation week. Therefore, our conclusion is that which has been so clearly stated by another in these words:

“When the Lord declares that He made the world in six days and rested on the seventh day, He means the day of 24 hours, which He has marked off by the rising and setting of the Sun.” [10]

On each successive day of Creation week “there was evening, and there was morning,” which shows that the six days were all alike, each one having its nightfall and its daybreak.

The Day Starts at Evening

Note that the evening is mentioned first, showing that it was reckoned by God as preceding the morning in the order of the march of the day.

While the Sun appears to rise in the east and travel westward across the sky to the place of its setting, it is really the Earth that is rotating in the opposite direction, from west to the east. Hence when the Earth commenced to rotate in the light that God caused to shine upon it, it turned toward the east. And viewed from the direction whence came the light, the Earth’s rotary movement caused evening to fall for the meridian at the extreme right side of the globe, while at exactly the same time it caused morning to begin to break for the meridian at the extreme left side. The logical place for the day to begin and to end naturally would be at the one or the other of these two points. That is, it could be counted as beginning and ending either at the point where morning breaks, or at the point where evening falls. The Creator chose to have the commencement and the ending of the day reckoned from the point where evening-nightfall-occurs. The statement that “the evening and the morning were the first day” shows this. In other words, He elected to have the evening precede the morning in the order of the day. Therefore, the nightfall preceded the daybreak thereafter in the march of the day by approximately the diameter of the globe, or about 12 hours of time.

When did the first day of Creation week begin? At a given place on Earth that day began when the evening (corresponding to sunset) first fell at that place. The day did not begin simultaneously then at all places on Earth. Neither does it do so now. At a given place on Earth evening cannot fall until, as a result of the rotation of the globe, that place is turned to the sunset point of the line dividing between the light and the darkness.

Where Did Evening First Occur?

At what place on Earth did evening first occur? We do not know, for the Holy Scriptures do not reveal it. God has not deemed it essential that we know it.

Let us, now, designate as Meridian X the unknown meridian at which nightfall first occurred on Earth and thus marked the beginning of the first day of Creation week. Furthermore, let us take into account the fact that evening-or sunset-does not now, and did not then, occur simultaneously at all meridians of the globe. For example, when night was falling at Meridian X, day was breaking at the meridian on the extreme opposite side of the world. Hence, any given meridian, except Meridian X, had to be turned by the globe to the dividing line between light and darkness in order for the first complete day of Creation week to begin at that given meridian. It did experience an incomplete day before its first evening occurred to mark the beginning of its first full day. The length of this partial day depended on the distance the meridian happened to be from the line of division between light and darkness.

Was this incomplete day counted either as the first day or as the second day for such regions of Earth? Neither. It was not counted at all in the time reckoning. God started the time count for the world with the beginning of the first whole day that came to any given meridian. Proof of this is seen in the fact that the first day of Creation week is described thus: “The evening and the morning were the first day.” The Hebrew text is more explicit on this point: “And there was evening, and there was morning: day one.” Therefore, the time count, as God has said, began with the first complete day—a day consisting of an evening and a morning.

When man first appeared on Earth, on the sixth day of the week, this day ended, and the seventh day began, for him at the ensuing sunset—evening—at the place where he then was—his Paradise home in the land of Eden. [11]

After the example of the days of Creation week, each of which consisted of “the evening and the morning,” and which began at nightfall and ended the next nightfall, the people of God anciently reckoned the days from sunset to sunset. Speaking of the celebration of their holy days, God commanded Israel: “From even unto even, shall you rest your Sabbath.” [12]

Evening Comes at Sunset

The evening came at sundown. For example, the Passover lamb was to be slain on the fourteenth day of the first month “at even, the going down of the Sun.” [13]

In case a Hebrew should become ceremonially unclean, he must obey this commandment: “It shall be, when evening comes on, he shall wash himself with water: and when the Sun is down, he shall come into the camp again.” [14] This shows that even came at sunset.

“And the king of Ai he [Joshua] hanged on a tree until eventide: and as soon as the Sun was down, Joshua commanded that they should take his carcass down.” [15] This also shows that the evening came at sunset.

Nehemiah tells us what he did to stop the traffic of the merchants in Jerusalem, saying: “When the gates of Jerusalem began to be dark before the Sabbath, I commanded that the gates should be shut, and charged that they should not be opened till after the Sabbath.” [16] This shows that Sabbath observance began at nightfall, that is, at sundown, when darkness begins.

It was still the practice in Jesus’ time to count the day from sunset to sunset. We read that He and His disciples attended a synagogue service on the Sabbath in Capernaum, after which they went to the home of Peter to spend the rest of the day. Then “at even, when the Sun did set, they brought unto Him all that were diseased, and them that were possessed with devils.” [17] Luke says that they came “when the Sun was setting.” [18] This shows that the Sabbath then ended at the setting of the Sun. [19]

From Josephus and the Talmud

Josephus, Hebrew priest and historian who was a contemporary of the apostle John, informs us that “it was the custom for one of the priests to stand and to give notice, by sound of trumpet, in the afternoon of the approach, and on the following evening of the close, of every seventh day, announcing to the people the respective hours for ceasing work and for resuming their labors.” [20]

A similar statement is found in the Babylonian Talmud (Tract Sukkah) as follows: “On the eve of the Sabbath, they blew six times, . . . thrice to interdict the people from doing work, and thrice to separate the holy day from the work day.” [21]

A comment on this practice of blowing the trumpet as a signal to the people to cease their labors when Friday evening came to its close at sundown, is found in another place in the Babylonian Talmud. It reads: “The rabbis taught: Six times was the signal blown on Friday: the first time to stop work in the field, the second to stop it in the city and in the stores, the third time to light the lamps. Then (the beadle) waits about as long as is required to bake a small fish, or for bread to cleave to the oven, and he sounds again the three tones of the signal in succession for the Sabbath (that is already come). [22]

The hour of sunset varies throughout the year in the Holy Land as it does elsewhere: “The Sun in Palestine, at the summer solstice [June 22], rises at five of our time, and sets about seven. At the winter solstice [December 22], it rises about seven, and sets about five.” [23]

4. When the Day Begins and Ends [B]

THE HEBREWS were not the only nation who reckoned the day from sunset to sunset. The Teutonic Peoples of central Europe did the same. Tacitus, the Roman historian (writing between AD 98 and 117), says: “They count not by days as we do, but by nights: their decisions and proclamations are subject to this principle: the night, that is, seems to take precedence of the day.” [1]

The Gauls had a similar practice, according to Julius Caesar, who led a military expedition against them in 57 and 56 BC. Concerning them he wrote: “They determine all periods of time by the number, not of days, but of nights, and in their observance of birthdays and the beginnings of months and years day follows night.” [2]

But Romans used as early as the first century BC a 24-hour day that extended from midnight to-midnight according to a statement by Marcus Varro, one of Rome’s greatest scholars. He lived from 116 to 27 BC. Aulus Gellius (born about AD 130) quotes Varro as follows “Marcus Varro, in that book of his Human Antiquities which he wrote On Days, says: ‘Persons who are born during the 24 hours between one midnight and the next midnight are considered to have been born on one and the same day.’ [2]

In further reference to Varro, Gellius adds: “However Varro also wrote in that same book that the Athenians reckon differently, and that they regard all the intervening time from one sunset to the next as one single day. That the Babylonians counted still differently; for they called by the name of one day the whole space of time between sunrise and the beginning of the next sunrise;

but that in the land of Umbria many said that from midday to the following midday was one and the same day. But it is shown by abundant evidence that the Roman people, as Varro said, reckoned each day from midnight to the next midnight.” [3]

Pliny the Elder

Pliny the Elder, the Roman naturalist who perished as a result of the volcanic eruption of Mount Vesuvius in AD 79, concurs in the statement by Varro and Gellius, saying: “The actual period of a day has been differently kept by different people: the Babylonians count the period between two sunrises, the Athenians that between two sunsets, the Umbrians from midday to midday, the common people everywhere from dawn to dark, the Roman priests and the authorities who fixed the official day, and also the Egyptians and Hipparchus, the period from midnight to midnight.” [4]

Note that both Varro and Pliny state that the Athenians reckoned the day from sunset to sunset. Hipparchus, the Greek astronomer mentioned as starting the day at midnight, lived at Alexandria from 146 to 126 BC. The reckoning of the day from midnight to midnight, according to Pliny, was introduced into Rome by “the Roman priests and the authorities who fixed the official day.” For this reason the day in Roman law was thereafter regarded as extending from one midnight to the next.

Plutarch, a Greek writer who lived between AD 46 and 120, explained that on account of the variation of the time of sunrise and sunset from day to day throughout the year, the Romans adopted midnight as a more fixed point of time for beginning the day. In a treatise of questions and answers on Roman customs he wrote: “Question 84. Why do they reckon the beginning of the day from midnight?”

“Since, therefore, the beginning of day and night is difficult to determine at the time of the rising and settings of the Sun because of the irrationalities which I have mentioned, there is left the zenith or the nadir of the Sun to reckon as the beginning. The second is better; for from noon on the Sun’s course is away from us to its setting, but from midnight on its course is towards us to its rising.” [5]

Paulus, the Roman jurist who lived in the last part of the second and in the first part of the third century after Christ, states: “In accordance with Roman custom, the day begins at midnight, and ends in the middle of the following night.” [6]

The Original Roman Custom

It is probable that the Roman people originally reckoned the day from sunset to sunset. Marcus Varro, already quoted, was a great authority on Roman antiquities. In the first century BC he wrote that the Latin word *supremum* is derived from *superrimum*, superlative of *superum* ‘higher’: therefore the Twelve Tables say: ‘Let the last (*suprema*) time of day be at sunset.’ [7]

The Twelve Tables referred to by Varro were the earliest code of Roman law (civil, criminal, and religious), and were compiled by the decemvirs in 451 to 449 BC. The original bronze tablets on which those laws were written are said to have been destroyed by the Gauls when they sacked Rome in 390 BC. Copies of them, reproduced by memory, stood in the Forum in Rome in the second century of the Christian Era.

Ulpian’s Testimony

It is possible that this original reckoning of the day from sunset to sunset gave rise in Roman law to the practice wherein the day is spoken of as beginning after the sixth hour of the night, that is, from midnight. For example, Ulpian, a noted Roman jurist who wrote between AD 211 and 222, says: “It has been decided that anyone who is born on the Kalends of January can manumit his slave after the sixth hour of the night [*post sextam noctis*] preceding the Kalends, as having, at that time, completed his twentieth year.” [8]

In the Roman calendar the Kalends of January correspond to New Year’s Day in ours. The sixth hour of the night preceding the Kalends of January was midnight at the close of December 31.

Ulpian also said: “Therefore, anyone who begins to have possession at the sixth hour of the day of the Kalends of January will complete the usucaption on the sixth hour of the night [*hora sexta noctis*] preceding the Kalends of January.” [9]

Likewise: “Let us consider at what age males or females can make a will. The better opinion is that males must have attained the age of 14 and females that of 12, to fulfill the legal requirements. In order to make a will, is it sufficient for a party to have reached the age of 14, or must he have passed that age? Suppose a person born on the Kalends of January makes his will upon his fourteenth birthday, will such a will be valid? I hold that it will be valid, and I go even farther, and say that if he made his will upon the day preceding the Kalends of January, after the sixth hour of the night [*post sextam horam noctis*], his desire will be valid, for, according to Marcianus, he is then considered to have completed his fourteenth birthday.” [10]

Luke’s Statement

In the Book of Acts we find that Luke uses this Roman custom when he says that it was “at the third hour of the night” [11] that Claudius Lysias sent Paul under guard from Jerusalem to Caesarea. He doubtless means the third hour after sunset.

The following comment on Luke’s statement agrees with the observations made by several noted commentators: “At nine in the evening, the body of soldiers, with Paul in their midst, marched out of the fortress, and through the dark and silent streets of the city, and at a rapid pace pursued their journey toward Caesarea.” [12]

Constantine's Sunday Law

In AD 321 the Roman emperor Constantine issued the first civil Sunday law, which reads as follows – “Let all judges and towns people and all occupations of trade rest on the venerable day of the Sun. Nevertheless, let those who are situated in the rural districts freely and with full liberty attend to the cultivation of the fields, because it frequently happens that no other day may be so fitting for the planting of grain and setting out of vineyards, lest at the time the commodities conceded by the provision of Heaven be lost. Given on the Nones [the seventh day] of March, Crispus and Constantine being consuls, each of them for the second time.” [13]

This edict did not state the hour of the day when Sunday observance should begin and end. Therefore, in the absence of statutory legislation fixing the time to begin and to end the keeping of Sunday as a weekly festival, it was assumed that the day should be reckoned as beginning and ending in accordance with Roman custom and legal usage, that is, from midnight to midnight. And to the present time Sunday is still reckoned by civil law, both Roman and English, as extending from midnight to midnight, unless statutory provision should specifically assign some other hour for beginning and ending the day.

Thus it is readily seen that for centuries the Christian people of Europe lived under a regime in which Sunday was reckoned from midnight to midnight in matters civil, and from sunset to sunset in matters ecclesiastical. This explains why it was that from time to time ecclesiastical councils, church leaders, and religious kings, in making regulations for the observance of Sunday, were careful to state that the day should be kept from evening to evening.

Vestiges Still with Us

There is abundant evidence that Christians for many centuries after apostolic times reckoned the day from sunset to sunset, particularly in the observance of religious festivals. Vestiges of this custom are still seen, even in our time, in references to “New Year’s Eve,” “Christmas Eve,” and “Halloween” (Hallowed Evening), which indicate that in the days of our forefathers the preceding night was reckoned as the fore part of the festal day.

In the next chapter of this work we present a chain of historical evidence showing that down to the latter part of the eighteenth century Christians observed Sunday from sunset to sunset. However, the change from the biblical and ecclesiastical mode of reckoning each day from evening to evening was, from the Middle Ages onward, gradually made to conform to the Roman civil mode of reckoning each day from midnight to midnight, with the result that the false, pagan way of counting the days at last usurped the true, Christian way of counting them, in so far as the practice of the majority of the world’s inhabitants is concerned.

Standard Time

Not many Sunday keepers are aware of the fact that very few, if any, of their number really keep the first day of the week from midnight to midnight now. When the hands of the clock point to 12: 00 on Saturday night, most observers of Sunday regard that as being midnight, and they reckon their observance of the day from that moment.

But 12: 00 o’clock at night seldom coincides with true midnight under the present system of timekeeping, although it is legally counted as midnight in so far as civil affairs are concerned.

In the United States we now employ a system of civil time counting known as standard time. This plan was devised by Sanford Fleming, a Canadian engineer, who published it in the Journal of the Canadian Institute of Toronto in 1879. Railway managers in the United States adopted it in 1883 for the regulation of timekeeping on the railroads. In 1884 the nations of the world, at the invitation of the United States Government, held an international conference to give study to the proposal to make the adoption of the plan universal. Most of the governments have adopted it. [14]

The new system divided the world into 24 time zones, each embracing 15 degrees of longitude. Hence the United States is divided into four time zones-Eastern, Central, Mountain, and Pacific. The standard time fixed for each zone is the mean solar time of its central meridian. When a traveler goes eastward from one zone into another, he sets his watch ahead one hour; and when he goes westward from one zone into another, he sets his watch back one hour.

Midnight Seldom at 12: 00 O’clock

Now let us take the Central Standard Time zone, for example, and note how 12:00 o’clock at night seldom is true midnight. The central meridian for this zone is 90° west, on which Palmyra, Illinois, is situated. When the hands of well regulated clocks in Palmyra point to 12:00 at night, the hands of the clocks in Chicago, Illinois, and Kansas City, Missouri, also point to 12: 00, for all three of these cities lie within the same time zone.

However, Chicago lies two degrees of longitude east of Palmyra, and Kansas City lies four and one half degrees west of it. This means that true midnight comes to the people of Chicago eight minutes before, and to the citizens of Kansas City 18 minutes after, it comes to Palmyra. That is, if on a given date true midnight comes to Palmyra at 12:00, Central Standard Time, it comes to Chicago at 11:52 PM, eight minutes earlier; and it comes to Kansas City at 12:18, or 18 minutes later. It is very obvious, therefore, that the Sunday keeper who goes by the clock does not keep Sunday from midnight to midnight.

Furthermore, the length of the natural day varies throughout the year, which means that the relation of true midnight to Standard Time varies also. For example, in one season of the year true midnight may correspond to 12:32 AM, Central Standard Time, in Kansas City. Hence when Daylight Saving time is in use, as during World War II, this difference is augmented by one hour, so that true midnight in Kansas City may correspond to either 1:18 or 1:32 AM, Central Standard War Time.

The Roman Catholic Church requires that its communicants fast before partaking of the communion, and this abstinence must begin at the preceding midnight. Hence, that sect has published, for its followers detailed information about how to determine the hour of true midnight in relation to either Standard or Daylight Saving time. [15]

Of course, in the case of the Sunday keeper the time of beginning the observance of the first day of the week is a matter of no importance, because there is in Holy Writ no command requiring the keeping of that day. The Sunday festival being a humanly instituted one, it is generally observed in accordance with man-made regulations, as is done in the observance of other ecclesiastical and national holidays appointed by commandments of men.

But with the Sabbath keeper the case is very different. God Himself instituted the Sabbath. He blessed and sanctified the seventh day, and commanded that it be kept as His holy day. Moreover, He has declared that it extends from evening to evening.

During the millenniums of human history men did not have, until modern times, clocks and time signals whereby they might ascertain with accuracy the varying hour of true midnight. But high in the sky, beyond the reach of tampering fingers of man, the Lord hung the Sun to mark for all men the beginning and the ending of each day. When it drops behind the western horizon, that is the divinely appointed time signal that the old day has ended and the new one has begun. This simple, natural device is very accurate and effective as a means of marking the commencement and the close of the day. It is so simple and easily understood, that men of all lands and tongues, even the most illiterate, can use it in their count of time.

5. When the Day Begins and Ends [C]

AS ADDITIONAL material to chapters three and four of this book, the historical notes that follow will be of value to those interested in the general practice of Christians concerning the beginning and ending of the Sabbath and the Sunday in centuries past.

The Philocalian Almanac, called "the oldest Christian almanac," [1] was compiled in AD 354 by Furius Dionysus Philocalus, personal secretary of Damascus I, bishop of Rome. It contains a Roman calendar declared to have been composed in AD 336, probably for use during the year 337. This notable old almanac presents a series of seven astrological tables prepared for the seven days of the week, one table for each day. Each table has every one of the 24 hours of the day assigned to one of the seven planetary gods of ancient pagan astrology. The most interesting part about this, in so far as our present study is concerned, is the fact that each day begins with sunset. For example, the table showing Sunday (dies Solis) gins with the first hour after sunset, which is assigned to Mercury; and the thirteenth hour, which follows sunrise, is assigned to the Sun, making it the day of the Sun (Sunday) in conformity with ancient astrological practice. Thus we have in this so called "oldest Christian almanac" evidence showing that at a very early date in the history of the Roman Church there was effected an amalgamation of Christian and heathen practices. [2]

Socrates, a Greek writer on church history (AD 430) records: "The Arians [a large and very influential body of Christians of the time], as we have said, held their meetings without the city. As often therefore as the festal days occurred - I mean Saturday [3] and [Sunday] Lord's day [4] in each week, on which assemblies are usually held in the churches, they congregated within the city gates about the public squares, and sang responsive verses adapted to the Arian heresy. This they did during the greater part of the night: and again in the morning, chanting the same songs which they called responsive, they paraded through the midst of the city, and so passed out of the gates to go to their places of assembly." [5] Thus their observance of each of these two days began with the night before.

Leo 1, Bishop of Rome

Leo I, bishop of Rome (AD 440-461), thus wrote to another bishop concerning the ordination of ministers: "After Saturday, [6] the commencement of that night which precedes the dawn of the first day of the week should be chosen on which the sacred benediction should be bestowed on those who are to be consecrated, ordainer and ordained alike fasting. This observance will not be violated, if actually on the morning of the [Sunday] Lord's day it be celebrated without breaking the Saturday [6] fast. For the beginning of the preceding night forms part of that period, and undoubtedly belongs to the day of the resurrection as is clearly laid down with regard to the feast of Easter." [7]

Caesarius of Arles

We find Saint Caesarius of Arles in the sixth century [AD 470 – 543], says T. Slater, a Jesuit writer, "teaching that the holy doctors of the [Roman Catholic] church had decreed that the whole glory of the Jewish Sabbath had been transferred to the Sunday, and that Christians must keep Sunday holy in the same way as the Jews had been commanded to keep holy the Sabbath day. He especially insisted on the people hearing the whole of the mass and not leaving the church after the Epistle and the Gospel had been read. He taught them that they should come to vespers and spend the rest of the day in pious reading and prayer. As with the Jewish Sabbath, the observance of the Christian Sunday began with sundown on Saturday and lasted till sundown on Sunday." [8]

“Until quite recent times some theologians taught that there was an obligation under pain of venial sin of assisting at vespers as well as of hearing mass, but the opinion rests on no certain foundation and is now commonly abandoned. The common opinion maintains that, while it is highly becoming to be present at vespers on Sunday, there is no strict obligation to be present.” [8]

“The method of reckoning the Sunday from sunset to sunset continued in some places down to the seventeenth century, but in general since the Middle Ages the reckoning from midnight to midnight has been followed.” [8]

Caesarius said, for example: “Therefore let us, brethren observe the [Sunday] Lord’s day, and keep it holy, as it is anciently commanded concerning the Sabbath, the Lawgiver saying: ‘From even to even you shall celebrate your Sabbaths.’ (Leviticus 23: 32.) Let us see that our rest be not in vain, but from the evening of the Sabbath day until the evening of the [Sunday] Lord’s day let us rest for divine worship alone, abstaining from rural labor and from all business.” [9]

Canon 15 of the Council of Rouen, France, held on or about AD 650, decreed: “That the people be admonished, that on the [Sunday] Lord’s day and on the feast days all are to attend at the vespers and night vigils, and at the mass. And that the feast days are to be celebrated with due honor from evening until evening [a vespera usque ad vesperam] by abstinence from servile labor.” [10]

In Old Ireland

P. W. Joyce, the learned authority on Irish antiquities, tells us this about his people: “The ancient Irish counted time, rather by nights than by days. Thus in the Life of St. Fechin we are told: ‘Moses was 40 nights on Mount Sinai without drink, without food.’ (Rev. Celtic, XII, 435.) In coupling together day and night they always put the night first: in other words, the night belonging to any particular day was the night preceding. In the Vision of Mac Conglinne, a certain thing is spoken of as happening on Oidche Domnaig, the ‘night of Sunday,’ where it is obvious from the context that the night in question was the night preceding, or what we of the present day would call ‘Sunday eve’ or ‘Saturday night.’ (Mac Conglinne, 18, 20, and 134; see also Adamnan, 230, last line but one.)” [11]

The same writer, describing ancient Irish Sunday observance, remarks: “SUNDAY. The Yellow Book of Lecan and the Leabar Brece [old records in the native Gaelic tongue] contain copies of a tract called Cain Domnaig, or the ‘Law of Sunday,’ which it is said was originally brought from Rome in the sixth century by St. Conall of Inishkeel off the coast of Donegal. In this are laid down rules for the observance of the Sunday, which are very strict. According to the same tract, Sunday was regarded as extending from vespers on Saturday to sunrise on Monday morning; and in this particular it is corroborated by several other authorities. (O’Cury, Man. and Cust. 1, 32; O’Looney, in Proceedings Royal Irish Academy, MSS. Series, p. 195; LB, 204, book 34.)” [12]

An English translation of the Cain Domnaig has been made available by Donald MacLean. In the introduction Mr. MacLean says that it is the last tract (pp. 72-75) of “the oldest and most valuable of the Gaelic manuscripts in the National Library of Scotland,” [13] which is catalogued as MS. XL. He renders the first part of that old Sunday law as follows:

“The sanctity of the [Sunday] Lord’s day is from vespers on Saturday till after matins on Monday.” [13]

In a footnote the translator adds: “The Leabhar Breac reads: ‘O Espartu int shathurnd co hergi grene Dia luain;’ i.e., from vespers on Saturday till sunrise on Monday.” [13]

In Old England

In AD 652 Wilfrid, a Roman Catholic abbot, arrived in England, and started a controversy with the leaders of the Celtic Church concerning the celebration of Easter. He alleged that it was the apostle Peter’s practice when the fourteenth day of the first lunar month “came, if the Lord’s day, then called the first day after the Sabbath, was the next day, he began that very evening to keep Easter, as we all do this day. But if the Lord’s day did not fall the next morning after the fourteenth moon, but on the sixteenth, or the seventeenth, or any other moon till the twenty-first, he waited for that, and on the Saturday [14] before, in the evening, began to observe the holy solemnity of Easter.” [15]

This shows that the Roman Church in the seventh century was observing Easter Sunday from sunset to sunset, after the biblical manner of reckoning the day.

The Council of Trullo

Canon 90 of the Council of Trullo in Constantinople, held in A. D. 692, ordained “that after the priests have gone to the altar for vespers on Saturdays [16] (according to the prevailing custom) no one shall kneel [17] in prayer until the evening of Sunday, at which time after the entrance for compline, again with bent knees we offer our prayers to the Lord. For taking the night after the Sabbath, which was the forerunner of the Lord’s resurrection, we begin from it to sing in the Spirit hymns to God, leading our feast out of darkness into light, and thus during an entire day and night we celebrate the resurrection.” [18]

King Wihtred of Kent, England, promulgated in AD 696 the following Sunday laws: “Law 9. If an slave do any servile labor, contrary to his lord’s command, from sunset on Sunday-eve till sunset on Monday-eve, let him make a fine [compensation] of 80 shillings to his lord.

Law 10. If an servant so do of his own accord on that day, let him make a bot of six [shillings] to his lord, or his hide. Law 11. But if a freeman [so do] at the forbidden time, let him be liable in his heals-fang [a fine paid to save himself from the pillory]; and the man who detects him, let him have half of the cost [fine], and the work.” [19]

In AD 710 the controversy about Easter between the Celtic Church and the Roman Church was revived. In that year the Roman Catholic abbot Ceolfred sent a letter to Naitan, king of the Piets, in which he said that the Easter celebration “begins on the evening.” [20] This was the general practice in the observance of Easter in Europe.

In Italy and France

Canon 13 of the Council of Friaul, Italy held in 791 AD, ordained: “We command all Christians to observe the [Sunday] Lord’s day with all reverence and due devotion, commencing at the beginning of the night, that is, on the evening of the Sabbath, which Lord’s day comes on the first day of the week, at the sounding of the signal, which marks the hour to celebrate the vesper service, not in honor of the past Sabbath, but on account of that holy night of the first day of the week, which is the Lord’s day.” [21]

Theodulf of Orleans (AD 760-821) wrote: “It is fitting for a Christian to come with lights to the church on the Sabbath day; it is fitting to come either to the vigils or to the early morning service.” [22]

On March 3, 789, Charlemagne issued a similar ordinance. Canon 15 of his Capitularies decreed “that from evening until evening [a vespera usque ad vesperam] the [Sunday] Lord’s day be kept.” [23]

Another ordinance listed as canon 46 and dated as in AD 802, commands “that the Lord’s day be celebrated from evening to evening – [a vespera ad vesperam].” [24]

In AD 827 Ansegisus, the abbot of St. Wandrille at Fontenella, made a collection of the capitularies of the Merovingian or Carolingian kings. One given as belonging to the Capitularies of Charlemagne, Ludovicus, and Lotharius, admonishes “that the Lord’s day be kept from evening until evening [a vespera usque ad vesperam].” [24]

Council of Frankfort

Canon 21 of the Council of Frankfort, in A. D. 794, decreed: “That the Lord’s day be kept from evening until evening [a vespera ad vesperam].” [25]

Canon 40 of the Third Council of Tours, held in AD 813, reads as follows: “And also it is forbidden that marketing and pleasure be done on the [Sunday] Lord’s day, on which it is fitting that all Christians persevere in abstinence from servile work in praise and thanksgiving to God until the evening.” [26]

In AD 958 King Edgar the Peaceable issued a Sunday law for the British people, in which he said: “Let the solemnity of Sunday be kept from the ninth hour [3:00 p.m.] of the Sabbath till the dawn of Monday, on peril of the wile [fine] which the doom-book specifies.” [27]

By this time it had become the practice of many Roman Catholic churchmen to enforce the observance of Sunday after the strictest manner of the Jews concerning the Sabbath. It was at the ninth hour (three to four o’clock in the afternoon) that the Hebrews began the religious services that marked the close of each day. Hence, the strict Sunday-keeping churchmen of the Middle Ages insisted on the observance of the first day of the week from either noon or mid-afternoon of Saturday to Monday morning in order to guard the edges of Sunday.

King Canute

King Canute of Denmark, who became king of England in AD 1017, issued in that year the following Sunday law for the English people: “Let every Sunday festival be held from the ninth hour [3:00 PM] of the Sabbath till the dawn of the second day of the week.” [28]

Burchard, abbot of Worms, Germany, during the years 1023 to 1025 AD published a volume of ecclesiastical decrees, one of which ordained: “We decree that all [Sunday] Lord’s days be observed with all veneration from evening to evening [a vespera ad vesperam], and by abstaining from unlawful labor.” [29]

Aelfric, abbot (AD 950-1020) of Eynsham, England, in canon 36 of his Book of Canons said: “Let Sunday’s festival be held, from the noon of Saturday until the dawn of Monday.” And canon 24 of his Ecclesiastical Institutes says: “Sunday is very solemnly to be revered. And it is fitting that every Christian man, who can accomplish it, come to church on Saturday [Sabbath], and bring a light with him, and there hear even-song, and before dawn, matins, and in the morning come with their offerings to the celebration of the mass.” [30]

King Edward the Confessor issued a Sunday law in A. D. 1056 for the British, in which he said: “Let the protection of God and the holy church be throughout the whole kingdom from the Lord’s Advent to the octaves of Epiphany, and from Septuagesima till the octaves of Easter, and from the Lord’s Ascension till the octaves of Pentecost, and in all Ember-weeks. And every Sabbath from the ninth hour [3:00 PM] and through the whole following day till Monday.” [31]

In Old Spain

A council held in Coy, Spain, in AD 1059, decreed in canon 6: “We admonish that all Christians go to church on the evening of the Sabbath day, and on the morning of the [Sunday] Lord’s day hear the mass and all the horaries. That they engage in no servile work nor undertake to travel, unless it be for prayer, to bury the dead, visit the sick, to serve the king, or to repel an attack of the Saracens.” [32]

Ivo of Chartres, France, in his book of Decrees wrote not long before AD 1096: “All [Sunday] Lord’s days we decree to be observed from evening until evening [a vespera in vesperam] with all veneration, and by abstaining from unlawful labor.” [33]

A synod held at Compostela, Spain, in AD 1114, voted that “from the ninth hour [3:00 PM] of the Sabbath until the first hour [dawn] of the second day of the week [Monday] no bailiff may have permission to accept a pledge, except against murderers, robbers, violators of virgins, kidnapers, and traitors.” [34]

K. A. H. Kellner, an authority on the subject, has made this observation: “It is to be noticed that, in the Middle Ages the rest from labor commenced, contrary to our present custom, with the vespers of Saturday. Pope Alexander III [AD 1159-1181], however, decreed that local custom should retain its prescriptive right, and so it came to pass that the practice of reckoning the feast day from midnight to midnight became general.” [35]

Alexander III, Bishop of Rome

Alexander III is quoted by Gregory IX (AD 1227-1241) as saying: “Although it is written, ‘From even to even you shall celebrate your Sabbaths,’ yet the beginning and the ending of the festivals ought to be regarded according to their quality [importance] and according to the custom of the different regions.” [36]

Nevertheless, a determined effort was continued to have Sunday observed from Saturday afternoon to Monday morning. Eustace, an abbot of Flaye and also a representative of the bishop of Rome, had made one unsuccessful try in England, and left. Later, in AD 1201, he returned and began to preach from place to place, saying: “It is my will that no one, from the ninth hour [3:00 PM] on Saturday [Sabbath] until sunrise on Monday, shall do any work except that which is good.” [37]

In support of his preaching, Eustace produced a special commandment which he claimed had been sent from heaven for the purpose. The document describes itself in these words: “The holy commandment as to the Lord’s day, which came from heaven to Jerusalem, and was found upon the altar of Saint Simeon, in Golgotha, where Christ was crucified for the sins of the world. The Lord sent down this epistle, which was found upon the altar of Saint Simeon, and after looking upon which, three days and three nights, some men fell upon the earth, imploring mercy of God. And after the third hour, the patriarch arose, and Acharias, the archbishop, and they opened the scroll, and received the holy epistle from God.” [37]

Eustace in England

The historian records that “Eustace, the lord abbot of Flaye, came to York, and, being honorably received by Geoffrey, the archbishop of York, and the clergy and people of the city, preached the word of the Lord, and on the breaking of the [Sunday] Lord’s day and other festivals, and imposed upon the people penance and gave absolution, upon condition that in the future they would pay due reverence to the Lord’s day and the other festivals of the saints, doing therein no servile work, and that on the Lord’s day they would hold no market of things on sale, but devoutly attend to good works and to prayer. This ordinance he appointed to be observed from the ninth hour on Saturday until sunrise on the following Monday.

“Upon this, the people who were dutiful to God, at his preaching, vowed before God that, for the future, on the Lord’s day, they would neither buy nor sell anything, unless, perchance, victuals and drink to wayfarers. Accordingly, through these and other warnings of this holy man, the enemy of mankind being rendered envious, he put it into the heart of the king and of the princes of darkness to command that all who should observe the before-stated doctrines, and more especially all those who had discountenanced the markets on the Lord’s day, should be brought before the king’s court of justice, to make satisfaction as to the observance of the Lord’s day.” [37]

Because of the opposition of the king and princes, Eustace and his associates began to circulate tall tales of divine judgments having been visited upon men and women for refusing to so observe Sunday. Here are some of them:

“One Saturday, a certain carpenter of Beverley, who, after the ninth hour of the day was, contrary to the wholesome advice of his wife, making a wooden wedge, fell to the earth, being struck with paralysis. A woman also, a weaver, who, after the ninth hour, on Saturday, in her anxiety to finish a part of the web, persisted in so doing, fell to the ground, struck with paralysis, and lost her voice. At Rafferton also, a will belonging to Master Roger Arundel, a man made for himself a loaf and baked it under the ashes, after the ninth hour on Saturday, and ate thereof, and put part of it by till the morning, but when he broke it on the Lord’s day, blood started forth therefrom; and he who saw it bore witness, and his testimony is true.

“At Wakefield also, one Saturday, while a miller was, after the ninth hour, attending to grinding corn, there suddenly came forth, instead of flour such a torrent of blood, that the vessel placed beneath was nearly filled with blood, and the mill wheel stood immovable, in spite of the strong rush of the water; and those who beheld it wondered thereat, saying, ‘Spare us, O Lord, spare Thy people!’ Also, in Lincolnshire a woman had prepared some dough, and taking it to the oven after the ninth hour on Saturday, she placed it in the oven, which was then at a very great heat. But when she took it out, she found it raw, on which she again put it into the oven, which was very hot; and, both on the next day, and on Monday, when she supposed that she should find the loaves baked, she found raw dough.

“In the same country also, when a certain woman had prepared her dough, intending to carry it to the oven, her husband said to her, ‘It is Saturday, and now is past the ninth hour, put it one side till Monday;’ on which the woman, obeying her husband, did as he had commanded. And so, having covered over the dough with a linen cloth, on coming the next day to look at the dough, to see whether it had not, in rising, through the yeast that was in it, gone over the sides of the vessel, she found there the loaves ready made by the divine will, and well baked, without any fire of the material of this world.” [37]

The Source of the Roll

As for that fictitious document, a modern writer assures us that “the pontifical palace at Rome was the source whence it proceeded.” [38]

Matthew of Paris, rector of the renowned Roman Catholic monastery of St. Albans from AD 1217 to 1259, wrote: “But when the patriarch and clergy of all the Holy Land had diligently examined the contents of the epistle, it was decreed in a general deliberation that the epistle should be sent to the judgment of the Roman pontiff [Innocent III], seeing whatever he decreed to be done, would please all. And when at length the epistle had come to the knowledge of the lord pope, immediately he ordained preachers, who, being sent through different parts of the world, should preach everywhere the doctrine of this epistle, the Lord working with them and confirming their words by signs following. Among whom the abbot of Flaye, Eustace by name, a devout and learned man, having entered the kingdom of England, did there shine with many miracles.” [39]

Thomas Morer, a learned Anglican clergyman, says that this roll was set forth two years later in a council in Scotland, and with better results. He says: “To that end it was again produced and read in a council of Scotland, held under Innocent III about two years after, Viz. AD 1203, in the reign of King William, who with the consent of Parliament, then assembled, passed it into a law, that Saturday [Sabbath] from twelve at noon ought to be accounted holy, and that no man should deal in such worldly business, as on feast days were forbidden. As also that at the tolling of a bell, the people were to be employed in holy actions, going to sermons and the like, and to continue thus until Monday morning, a penalty being laid on those who did the contrary.

“About the year 1214, which was 11 years after, it was again enacted, in a parliament at Scone, by Alexander the Third, king of the Scots, that none should fish in any waters, from Saturday [Sabbath] after evening prayer, till sun rising on Monday, which was afterward confirmed by King James I.” [40]

Council of Montpellier

In AD 1215 Peter Beneventano, a papal legate of Innocent III (AD 1198-1216), convened a council of 15 archbishops and 28 bishops at Montpellier, France, to rally the discouraged forces of Romanism to renew their efforts to extirpate the Albigenses. Simon of Montforte was then given an urgent charge to carry out the campaign of extermination with all vigor and speed. Canon 41 of this council decreed: “Let the violators of the peace on each [Sunday] Lord’s day be excommunicated, and after vespers let all the bells throughout the cities, villages, and encampments ring in detestation of them.” [41]

The Roman bishop Gregory IX (AD 1227-1241) published several decrees for the regulation of Sunday observance, among which this was the first: “We decree that all Lord’s days be observed from evening to evening [a vespera in vesperam] with all veneration.” [42]

In issuing this regulation Gregory IX quoted the decree of Alexander III (AD 1227-1241) which permitted local custom concerning the commencement of the day to prevail where it might seem necessary.

Canon 25 of the Council of Toulouse, France, held in AD 1229, enjoined, with a penalty of 12 denarii, that “at vespers on the Sabbath, they [the people] attend their churches with devotion in reverence for the blessed virgin Mary.” [43]

In AD 1359, Simon Islip, archbishop of Canterbury, reminded the British that “it is provided by sanctions of law and canon that all Lord’s days be venerably observed from eve to eve.” [44]

In his Constitutions, Number 3, Islip-as legate of Urban V, bishop of Rome-wrote (in AD 1362) to Simon, bishop of London, saying that the people ought to keep “the holy [Sunday] Lord’s day, beginning at evening on the Sabbath day, not before this hour, lest we should seem to be partakers of the profession of the Jews.” [44] In other words, he would not have them observe Sunday from 3:00 p.m. on Saturday as those before him had ordered to be done.

Benvenuto Cellini

In his autobiography Benvenuto Cellini, the great Italian sculptor, writing about the birth of his sister, Reparata, says that “she was delivered on a night of All Saints, following the feast-day, at half past four precisely, in the year 1500.” [45] In a footnote the translator observes:

“The hour is reckoned, according to old Italian fashion, from sunset of one day to sunset of the next-24 hours.” This means that Reparata was born about 10:30 p.m. on Halloween.

And in relating an experience that he had with a delicate and beautiful vase, Cellini wrote: “It was brought to me before dinner; and at 22 o’clock the man who brought it returned.” The translator remarks in his footnote: “The Italians reckoned time from sundown till sundown, counting 24 hours. Twenty-two o’clock was therefore two hours before nightfall. One hour of the night was one hour after nightfall, and so forth. By this system of reckoning, it is clear that the hours varied with the season of the year; and unless we know the exact month in which an event took place, we cannot translate any hour into terms of our own system.” [45]

The Synod of Diamper

At Diamper, a village 12 miles southeast of Cochin, India, a Roman Catholic synod was held in AD 1599 by the Portuguese Jesuits under Menezes, archbishop of Goa, to bring the ancient Sabbath-keeping Christian churches there under the complete control of the papacy. The council, in canon 16 of act 8 (“On the Reformation of Things Ecclesiastical”), decreed:

“The synod declares that the precept to abstain from forbidden flesh foods, and to fast on certain days, and to observe feast days, be reckoned from midnight to midnight, to the extent that it insists on beginning from the midnight of the preceding day and [continuing] until the midnight of the desired day, or festival. And also as a further example in the matter, the obligation to abstain from flesh foods on the Sabbath day begins at the midnight of the sixth day [Friday] and [extends] until the midnight of Saturday: since the Sabbath day may begin at one midnight and end at another.

“In like manner the obligation to cease from all servile work at midnight of Saturday, for then begins the [Sunday] Lord’s day, may extend until the midnight of the Lord’s day; because then the Lord’s day ends and the following second day [Monday] has its beginning.

“They are deceived, therefore, who think they keep the precept of the church by fasting and by ceasing from servile labors from evening to evening. For neither a whole fast day nor an entire feast day do they keep in compliance with the precept, but they violate the precept, which insists on the full, complete day, and, furthermore, from midnight to midnight. Moreover, they are followers of Jewish customs and rites, which the [Roman] Church condemns: for the Hebrews counted their desired days, or festivals, from evening to evening, whereas contrary to them the [Roman Catholic] Christian Church is wont to count them from midnight to midnight.” [46]

In Early Massachusetts

When the English colonies were planted on North American soil, Sunday was kept there from evening to evening for 200 years. In AD 1628 John Endicott arrived in America by direction of the Company of the Massachusetts Bay to be the governor of the colony. The first general letter sent to him by the company's office in England is dated April 17, 1629, and contains this instruction: "And to the end the [Sunday] Sabbath may be celebrated in a religious manner, we appoint that all that inhabit the plantation, both for the general and particular employment, may surcease their labor every Saturday throughout the year, at three of the clock in the afternoon. And that they spend the rest of the day in catechizing and preparation for the [Sunday] Sabbath, as the ministers shall direct.” [47]

John Cotton

John Cotton (AD 1585-1652), a Puritan clergyman from England, was a prominent figure in the early history of Massachusetts, to which he fled in 1633. His grandson, Cotton Mather (AD 1665-1728), wrote of him thus: “But he that was with God all the week was more intimately with Him on His own day, the chief day of the week, which he observed most conscientiously. The [Sunday] Sabbath he began the evening before: for which keeping of the Sabbath from eve in to evening, he wrote arguments before his coming to New England: and I suppose, ‘twas from his reason and practice, that the Christians of New England have generally done so too. When that evening arrived, he was usually larger in his exposition in his family, than at any other times: he then catechized his children and servants, and prayed with them, and sang a psalm. From thence he retired unto study and secret prayer, till the time of his going unto his repose.” [48]

Also John Norton (AD 1606-1663), the colonial clergyman who succeeded John Cotton as pastor in the First Church of Boston, Massachusetts, has written this about him: “He [John Cotton] began the [Sunday] Sabbath at evening; therefore then performed family duty after supper, being larger than ordinary in exposition, after which he catechized his children and servants, and then returned into his study.” [49]

John Winthrop, who later became governor of the Massachusetts Colony, tells of the arrival of John Cotton in America. And the entry of his journal for Sunday, September 4, 1633 (New Style), reads:

“On Saturday evening, the congregation [at Boston] met in their ordinary exercise [preaching service], and Mr. Cotton, being desired to speak to the question, (which was of the church,) he showed, out of the Canticles [Song of Solomon], 6, that some churches were as queens, some as concubines, some as damsels, and some as doves, etc. He was then (with his wife) propounded to be admitted a member. The [Sunday] Lord’s day following, he exercised [preached] in the afternoon.” [50]

French Visitors

In September, 1646, some Frenchmen visited Boston. John Winthrop says: “The [Sunday] Lord’s day they were here, the governor, acquainting them with our manner, that all men either come to our public meetings, or keep themselves quiet in their houses, and finding that the place where they lodged would not be convenient for them that day, invited them home to his house, where they continued private all that day until sunset, and made use of such books, Latin and French, as he had, and the liberty of a private walk in his garden, and so gave no offence, etc.” [51]

A New Haven Law

The General Court (or Assembly) of the New Haven Colony issued a law on January 31, 1647, stating “that whosoever shall, within this plantation, break the [Sunday] Sabbath by doing any of their ordinary occasions, from sunset to sunset, either upon the land or upon the water, extraordinary cases, works of mercy and necessity, being excepted, he shall be counted an offender, and shall suffer such punishment as the particular court shall judge meet, according to the nature of his offense.” [52]

On October 18, 1648, at Boston, Massachusetts, the master of the Dutch ship made four shots in our harbor, the last [Sunday] Lord’s day, after sunset, whereby he hath forfeited 40 shillings per shot; but in regard he is a stranger, and no man in his ship can speak English, nor any course hath formerly, or now was taken, to give him notice of the law, the court think fit that the penalty for the present offense be remitted to 40 shillings, and some course taken for giving notice to strangers of the said order, and other of like kind, hereafter.” [53] The shot was fired after the sunset of Saturday evening, that is, on what is now called Saturday night.

A Subject of Controversy

At this time there was considerable discussion among Sunday-keeping churchmen in England and America about observing the first day of the week from midnight to midnight instead of from evening to evening.

Thomas Shepard (died in 1649), pastor of the Church of Christ at Cambridge, Massachusetts, came to America in 1634. He was a strong advocate of the keeping of Sunday from sunset to sunset, presenting a powerful argument against those who would start the day at midnight. [54]

In England one William Pynchon published in 1655 a work in which he took issue with Thomas Shepard, alleging that Sunday must both begin at midnight and end at midnight. [55]

In the meantime, on April 19, 1650, during the protectorate of Oliver Cromwell, the British Parliament enacted a Sunday law which declared “that no traveler, wagon driver, butcher, higler, drover, their or any of their servants, shall travel or come into his or their inn or lodging, after 12 of the clock on any Saturday night. Nor shall any person travel from his house, inn or other place, till after one a clock on Monday morning, without good and urgent cause, not incurred through the neglect or occasion of the person so doing, to be allowed by any justice of the peace or head officer before whom complaint shall be made, upon pain that every such traveler, wagon driver, butcher, higler, drover and their servants, and also every inn keeper and alehouse keeper that shall so entertain him or them, shall each of them forfeit 10 shillings for every such offense.” [56]

William Prynne, noted English author and politician, published in 1655 a treatise in which he mustered every argument he could think of to show that “the [Sunday] Lord’s day begins and ends at evening.” [57]

Another Sunday law specifically enjoining the observance of Sunday from midnight to midnight was passed by the British Parliament on June 26, 1657, which declared “that whatsoever person or persons within this commonwealth shall be found guilty according to this act, of doing and committing the offenses hereafter mentioned upon the said [Sunday] Lord’s day, that is to say, betwixt 12 of the clock on Saturday night, and 12 of the clock [Sunday] Lord’s-day night, shall be adjudged, deemed and taken to be guilty of profaning the Lord’s day.” [58]

The same act empowers the civil officers “for the apprehending and punishing of all water men, barge men or other persons whatsoever, who shall on the said day be found contrary to this act, traveling, rowing or working in or with any boat, lighter, barge, or other smaller vessel on any part of such river, and the said boats, lighters, barges and other vessels, shall seize and stay, or cause to be seized and stayed, until 12 of the clock of the said night.” [58]

A Sunday Law of 1658

But in the second session of the General Court (or Assembly) of Massachusetts, for 1658, held at Boston on October 19, the following order was issued:

“Whereas by too sad experience it is observed, the Sun being set, both every Saturday and on the [Sunday] Lord’s day, young people and others take liberty to walk and sport themselves in the streets or fields in the several towns of this jurisdiction, to the dishonor of God and the disturbance of others in their religious exercises, and too frequently repair to public houses of entertainment, and there sit drinking, all which tends, not only to the hindering of due preparation for the [Sunday] Sabbath, but as much as in them lies renders the ordinances of God altogether unprofitable, and threatens rooting out of the power of godliness, and procuring the wrath and judgments of God upon us and our posterity. For the prevention whereof it is ordered by this court, and the authority thereof, that if any person or persons henceforth, either on the Saturday night or Lord’s day night after the Sun is set, shall be found sporting in the streets or fields of any town in this jurisdiction, drinking, or being in any house of entertainment (unless strangers or sojourners, as in their lodgings), and cannot give a satisfactory reason to such magistrate or commissioner in the several towns as shall have the cognizance thereof, every such person so found, complained of and proved transgressing, shall pay five shillings for every such transgression, or suffer corporal punishment, as authority aforesaid shall determine.” [59] Robert Cox reports the following incidents showing that Sunday was kept in Scotland from sunset to sunset in the seventeenth century. ‘You read,’ he says, ‘of a miller at Crawford John, who was cited in September, 1666, before the presbytery of Lanark, ‘for Sabbath breaking by grinding of meal on [Sunday] Sabbath after the sunset.’ And of another who complained in 1667 of having been sent to the pillar by the kirk-session, to make repentance for suffering his mill ‘to go on before the time upon [Sunday] Sabbath’s night.’ (Selections from the Register of the Presbytery of Lanark, printed for the Abbotsford Club, pages 107, 108; Edinburgh, 1839.)’ [60]

Richard Baxter

Richard Baxter, an eminent Non-Conformist minister (died in 1691) in England, took up his pen to give his followers this illogical, double counsel concerning the controversy about the time to begin and end Sunday keeping:

“I think he that judges of the beginning and ending of the day according to the common estimation of the country where he lives, will best answer the ends of the institution. For he will keep still the same proportion of time. And so much as is ordinarily allowed on other days for work, he will spend this day in holy works; and so much in rest as is used to be spent in rest on other days; (which may ordinarily satisfy a well informed conscience). And if any extraordinary occasions (as journeying or the like), require him to doubt of any hours of the night, whether they be part of the [Sunday] Lord’s day or not; 1. It will be but his sleeping time, and not his worshipping time, which he will be in doubt of: and, 2. He will avoid all scandal and tempting others to break the day, if he measure the day by the common estimate: whereas, if the country where he lives do esteem the day to begin at sun setting, and he suppose it to begin at midnight, he may be scandalous by doing that which in the common opinion is a violation of the day.” [61]

The Sunday Law of 1676

A Sunday law enacted in 1676 for the united colonies of New Haven and Connecticut decreed “that if any person or persons henceforth, either on the Saturday night or on the [Sunday] Lord’s day night, though it be after the Sun is set, shall be found sporting in the streets or fields of any town in this jurisdiction, or be drinking in houses of public entertainment or elsewhere unless for necessity, every such person so found, complained of, and proved transgressing, shall pay 10 shillings for every such transgression, or suffer corporal punishment for default of due payment.” [62]

Cotton Mather reports that a synod of churchmen, held at Boston on September 10, 1679, complained that “many, under pretense of differing apprehensions about the beginning of the [Sunday] Sabbath, do not keep a seventh part of time.” [63]

Therefore, we are not surprised to learn that the General Court (or Assembly) of Massachusetts, on October 15, 1679, in session at Boston, enacted a law for that city, which decreed “that there be a ward, from sunset on Saturday night, until nine of the clock or after, consisting of one of the selectmen or constables of Boston, with two or more meet persons, who shall walk between the fortification and the town’s end, and upon no pretense whatsoever suffer any cart to pass out of the town after sunset, nor any footman or horseman, without such good account of the necessity of his business, as may be to their satisfaction; and all persons attempting to ride or drive out of town after sunset, without such reasonable satisfaction given, shall be apprehended, and brought before authority, to be proceeded against as [Sunday] Sabbath breakers; and all other towns are empowered to do the like as need shall be.” [64]

The Sunday Law of 1692

On October 22, 1692, the General Court (or Assembly) of Massachusetts enacted a Sunday law that provided “that no vintner, inn holder, or other person keeping any public house of entertainment, shall entertain or suffer any of the inhabitants of the respective towns where they dwell, or others not being strangers or lodgers in such houses, to abide or remain in their houses, yards, orchards or fields, drinking, or idly spending their time on Saturday night after the Sun is set, or on the [Sunday] Lord’s day, or the evening following, upon the pain and penalty of five shillings for every person, payable by themselves respectively, that shall be found so drinking or abiding in any such public house or dependencies thereof as aforesaid; and the like sum of five shillings to be paid by the keeper of such house for every person entertained by them.” [65]

And section 6 of the same act says that “all and every justices of the peace, constables and tithing men are required to take effectual care and endeavor that this act in all particulars thereof be duly observed, as also to restrain all persons from swimming in the water; unnecessary and unseasonable walking in the streets or fields in the town of Boston, or other places. Keeping open their shops, or following their secular occasions or recreations in the evening preceding the [Sunday] Lord’s day, or any part of the said day or evening following.” [65]

The Sunday Law of 1716

On December 27, 1716, the General Court (or Assembly), in session at Boston, Massachusetts, passed a Sunday law, section 6 of which provides “that the justices of the peace, constables, tithing men, and all other officers appointed for that purpose, be and hereby are fully authorized to enter and search the houses of retailers, in as large, full and ample manner as they may do the houses of common victuallers, inn holders and tavern owners, the evening preceding the [Sunday] Lord’s day, and any part of the said day, or evening following; and if any retailer of strong drink shall entertain or suffer any of the inhabitants of the respective towns where they dwell, or others, not being strangers or lodgers in such houses, to abide in their houses, yards, out-houses or dependencies, drinking or idly spending their time, on Saturday night after the Sun is set, on the Lord’s day, or the evening following, shall forfeit and pay the sum of five shillings for every person found in such houses contrary to this act; and that the like sum of five shillings shall be paid by every person so found and entertained in such house or houses, contrary to this act.

“And whereas, there are differing apprehensions touching the beginning of the [Sunday] Sabbath or Lord’s day; in order, therefore, for the more quiet and orderly observation of the Lord’s day, and to prevent any indecencies and disorders, be it further enacted, that all persons be and hereby are strictly forbidden swimming in the water, unnecessary walking or riding in the streets, lanes

or highways or common field of the town of Boston, and all other towns or places within this province, keeping open their shops or warehouses, or following their secular occasions, the evening preceding the Lord's day, or evening following, on penalty that every person transgressing in any of the aforementioned particulars, shall, for the first offense, forfeit and pay the sum of 10 shillings. And, for the second conviction, the sum of 20 shillings, and give bond, with sureties, for the good behavior, as is in this act provided; and, in case any of the offenders shall be unable or unwilling to pay such fines, then to be punished as in this act is already provided." [66]

In a book published in 1727, William Homes said of the people of New England: "Some in this country begin the observation of the [Sunday] Lord's day the evening before it, others begin it in the morning." [67]

The Sunday Law of 1761

And coming up past the middle of the eighteenth century, we find that legislation passed by the governor and the House of Representatives of Massachusetts on January 31, 1761, reads: "And whereas many persons are of the opinion that the [Sunday] Sabbath, or time of religious rest, begins on Saturday evening, therefore, to prevent all unnecessary disturbance of persons of such opinion, as well as to encourage in all others a due and seasonable preparation for the religious duties of the [Sunday] Lord's day, be it further enacted that no person shall keep open any shop, warehouse, or workhouse, or hawk, or sell, any provisions, or wares, in the streets or lanes of any town or district, or be present at any concert of music, dancing, or other public diversion, on the evening next preceding the Lord's day, on pain of forfeiting 10 shillings for each offense; and no retailer, inn holder, or person licensed to keep a public house, shall entertain, or suffer to remain, or be, in their houses or yards, or other places appurtenant, any person or persons (travelers, strangers, or lodgers excepted), drinking or spending their time on the said evening, on penalty of 10 shillings for each offense." [68]

The late Justice Oliver Wendell Holmes, of the United States Supreme Court, was the son of the great American poet, Oliver Wendell Holmes (1809-1894), whose father was Abiel Holmes (1763-1837), a Calvinist clergyman of Cambridge, Massachusetts. Concerning his own mother, Mrs. Temperance Holmes (1733-1803), Abiel Holmes wrote: "My mother never ate the bread of idleness. She always commenced the [Sunday] Sabbath at sunset on Saturday, as did my father in his lifetime." [69] Mrs. Temperance Holmes lived when the Massachusetts Sunday law of 1761 was enacted.

The Sunday Law of 1792

On March 8, 1792, a similar Sunday law was enacted by the General Court of Massachusetts, which said: "And although it is the sense of this court that the time commanded in the Sacred Scriptures to be observed as holy times, includes a natural day, or 24 hours. Yet whereas there is a difference of opinion concerning the beginning and ending of the [Sunday] Lord's day, among the good people of this commonwealth, and this court being unwilling to lay any restrictions which may seem unnecessary or unreasonable to persons of sobriety and conscience. Be it therefore enacted by the authority aforesaid, that all the foregoing regulations, respecting the due observation of the Lord's day, shall be construed to extend to the time included between the midnight preceding and the sun setting of the same day." [70]

A Sunday law enacted by the State Legislature of Vermont on November 19, 1839, contains interesting reminders of the time when New England Sunday keepers observed the first day of the week from sunset to sunset. The law says, in part:

"The first day of the week shall be kept and observed by the people of this state, as a Sabbath, holy day, or day of rest from all secular labors, recreations and employment, and if any person shall, between 12 o'clock of the night preceding, and the setting of the Sun of the same day, exercise any secular labor, business or employment, except such only as works of necessity and charity, he shall be punished by a fine not exceeding two dollars."

"If any person shall, after the setting of the Sun, on the day preceding the first day of the week, until after 12 o'clock at night, on the said first day of the week, hold, or resort to any ball or dance, use or exercise any games, sports or plays, or resort to any tavern, inn or house of entertainment, for amusement or recreation, he shall pay a fine not exceeding two dollars." [71]

Other Instances

Dr. Asahel Grant, an American missionary physician who went to labor in 1839 among the Nestorians, a Christian sect of the Middle East, says of them: "The Nestorians have also the 'preparation before the Sabbath,' commencing about three hours before sunset on Saturday, when all labor should cease, except what is necessary to prepare for spending a quiet [Sunday] Sabbath. But the rule has in a measure fallen into disuse." [72]

It appears that the custom of keeping Sunday from sundown to sundown was continued even as late as the nineteenth century in parts of Scotland. Sir J. M. Barrie, novelist and dramatist (1860-1937) noted for his sketches and stories of country life in Scotland, published in 1888 his *Auld Lichts Idylls*, in which he says: "With the severe Auld Lichts the [Sunday] Sabbath began at six o'clock on Saturday evening." [73] Since these stories are said by the author to be the fruits of early observations and of his mother's tales, the practice referred to belongs to the third quarter of the century.

These varied historical items plainly show that throughout Christendom the Sunday was generally observed from evening to evening until the sixteenth century, and that in many parts it was so observed until the eighteenth. Seventh-day Adventist Christians

and some other Sabbath keeping groups (among them the Orthodox Jews) still observe the Sabbath from sunset Friday to sunset Saturday in conformity with the rule laid down in the Holy Scriptures for keeping holy the seventh day.

6. The Line between Today and Tomorrow [1]

THE BERING Strait separates North America from Asia by means of a gap of water 56 miles wide at its narrowest point. In this channel dividing Cape Prince of Wales, on the east, from East Cape (Deshneva), on the west, are two inhabited islands, the Diomedes, which serve as stepping stones between the two continents. Little Diomedede, belonging to Alaska, is under the government of the United States. Big Diomedede, pertaining to Siberia, is under the jurisdiction of Russia.

The two islands are less than three miles apart. Standing on one of them, a person can look across into tomorrow. When it is today in Little Diomedede, it is tomorrow in Big Diomedede. For example, when it was 1:00 PM on Monday, December 31, 1945, on Little Diomedede, it was one o'clock in the afternoon of Tuesday, January 1, 1946, on Big Diomedede.

The reason for this is that the International Date Line runs between the two islands. It is at this line that the civil day, which begins at midnight, starts and moves westward around the globe. Time moves westward around the world because the Earth rotates from west to east.

The Date Line runs more or less along the 180th meridian from the North Pole down through the middle of the Pacific Ocean to the South Pole. Hence, a traveler going from San Francisco to Hong Kong must add 24 hours to his reckoning of time when he crosses the Date Line. And when returning, he must drop 24 hours from his count of time when he passes over that line.

The change of time at the Date Line is well illustrated by the experience of two American astronomers, who wrote thus:

“When the authors of this book crossed the 180th meridian on their voyage to Sumatra to observe a total eclipse of the Sun, the day of March 4 was only 30 minutes in length. The ship’s captain said that we reached the 180th meridian, going westward, on March 3 at 11:30 PM. The time immediately became March 4 at 11:30 PM, and 30 minutes later the date changed to March 5.” [1]

If those scientists had been going eastward, toward America, and had reached the Date Line on March 3 at 11:30 PM, the time would have become immediately March 2 at 11:30 PM, and 30 minutes later the date would have changed to March 3.

Tricky Thinking

Some things happen west of the 180th meridian, and those who live east of it often hear of such occurrences the day before they take place! For example, in World War II many reports of happenings in the Orient that occurred on Tuesday morning were published by the radio and the newspapers of the United States in the afternoon of the preceding Monday. The electric cable and the radio flashed the news of the Far East to this side of the world sooner than the new day could arrive here!

The solar eclipse of June 8, 1937, was such that its path of totality moved eastward and crossed the Date Line, so that the phenomenon ended the day before it started! The total eclipse of the Sun on February 13, 1934, did likewise.

Charles Pond presents a brain teaser in this one. [2] One child of a set of twins was born on an eastbound steamer at 1:00 AM on January 1, 1942. An hour later the ship crossed the Date Line. And at 3:00 AM on December 31, 1941, the second baby was born. Which is the elder of the two? We can press the matter a little farther. If the first child had died at the hour the second was born, would it be an instance of a person dying the day before he was born? This shows how tricky thinking can be done in the matter of the Date Line, and there is need for careful study in order to reach sound conclusions.

The Story behind the Date Line

There is an interesting story behind the Date Line. It was in the Middle East that after the Flood the human family began to multiply and to spread both towards the east and towards the west. Because the world is round, it was both natural and logical that those going westward and those going eastward should meet sometime. And that is what really happened.

The fifteenth century after Christ found the overland trade route between Europe and the Far East cut off at times by the Moslem barrier that formed a crescent around the Mediterranean Sea from Asia Minor by way of Egypt and Morocco to the Strait of Gibraltar. Also there was a desire to escape from the high tariffs and other expenses that were involved in the use of the overland trade routes. Spain and Portugal, the great rival sea powers of that time, were both eager to re-establish trade relations with the Orient by means of sea routes. In their endeavors to do this, Portugal made the greatest headway.

Claiming that by divine right the Roman Catholic Church had jurisdiction over all the lands of the heathen, and that the bishop of Rome might bestow them upon whomsoever he would, the pope of that sect presumed to confer upon the Portuguese the exclusive right of exploration and conquest en route to India. A well known papal authority says concerning this:

“Nicholas V, by a bull of 8 January, 1454, conceded to him [Alfonso V, king of Portugal] all conquests in Africa from Cape Non to Guinea, with power to build churches the patronage of which should be his, and prohibited any vessels from sailing to those parts without leave from the king of Portugal. By another bull of the same date the pope extended Portuguese dominion over all the seas from Africa to India. A subsequent bull granted to the Order of Christ authority in spirituals over the peoples subdued by the Portuguese as far as India, and provided that no one but the king of Portugal should be entitled to send expeditions of discovery to those parts. Finally, in 1481, Sixtus IV confirmed to the kings of Portugal all islands and territories discovered now or in the future from Cape Non to India.” [5]

Therefore, when in the years 1486 to 1488 the Portuguese explorer Bartholomew Diaz rounded the Cape of Good Hope, at the southern tip of Africa, the prospects for the future appeared very bright for Portugal.

The Voyage of Columbus

However, the papal bulls only contemplated exploration and conquest along the west coast of Africa, and southward and eastward from there to India. The Roman popes and Europe in general did not imagine that the Earth was spherical in shape, and that the Orient might be reached by sailing westward across the Atlantic Ocean. Neither did they know that on this westward route there lay the two great continents now known as the New World.

Spain, very jealous of Portugal, was anxious to get a stake in the rich trade with the Far East. Christopher Columbus believed that the Earth was global in form, and that men could reach India by sailing westward across the Atlantic. Portugal refused to accept the offer of the Genoese navigator to attempt that undertaking in her behalf. Such an achievement, if made for Spain, would advance her interests without violating the provisions of the papal bulls. Therefore Ferdinand V and Isabella, the Spanish sovereigns, after some delay accepted the proposition of Columbus and equipped him with a fleet of three vessels for the expedition. After 69 days of voyage on the Atlantic, he found a group of islands (now called the Bahamas) which he believed to belong to India. Hence he called them and the neighboring islands the Indies, and referred to their inhabitants as Indians, not knowing that he had discovered a new land. Ever since then the aborigines of the Americas have been called by that name.

A Line of Demarcation

Columbus's discovery set the Portuguese to fervent activity, for it then appeared that Spain might lawfully obtain a big share in the wealth of the Orient, since the papal edicts did not forbid anyone to go to India by sailing westward across the Atlantic. Seeing the clash of interests between Spain and Portugal in the western Atlantic, the bishop of Rome, Alexander VI, issued on May 4, 1493, a bull establishing a line of demarcation running north and south in the Atlantic Ocean at a point 100 leagues west of the Azores Islands, and provided that all newly discovered lands lying west of that line should belong to Spain, and that all those lying east of it should pertain to Portugal. Here is the principal part of the bull:

"We, of our own accord, not at your instance nor the request of anyone else in your regard, but out of our own sole largess and certain knowledge and out of the fullness of our apostolic power, by the authority of Almighty God conferred upon us in blessed Peter and of the vicar ship of Jesus Christ, which we hold on earth, do by tenor of these presents, should any of said islands have been found by your envoys and captains, give, grant, and assign to you and your heirs and successors, kings of Castile and Leon, forever, together with all their dominions, cities, camps, places, and villages, and all rights, jurisdictions, and appurtenances, all islands and main lands found and to be found, discovered and to be discovered towards the west and the south, by drawing and establishing a line from the Arctic pole, namely the north, to the Antarctic pole, namely the south, no matter whether the said main lands and islands are found and to be found in the direction of India or towards any other quarter, the said line to be distant 100 leagues towards the west and south from any of the islands commonly known as the Azores and Cape Verde. With this proviso, however, that none of the islands and main lands, found and to be found, discovered and to be discovered, beyond that said line towards the west and south, be in the actual possession of any Christian king or prince up to the birthday [Christmas] of our Lord Jesus Christ just past from which the present year 1493 begins." [6]

Another Papal Bull

Another papal bull, issued by the same pope on September 23, 1493, declared that enterprise in the western Atlantic was open to both Spain and Portugal, with the understanding that Spain should not infringe upon the Portuguese monopoly of the trade route to India via the west coast of Africa.

Sailing up the east coast of Africa as far as Mombasa, a Portuguese navigator, Vasco da Gama, reached India in 1497. And while Spain was pressing forward her program of exploration and colonization in the New World, a Portuguese expedition under the command of Pedro Cabral, sailing for the East Indies, took a course too far west and discovered and claimed for Portugal the coast of Brazil in 1500. He claimed Labrador and Newfoundland for Portugal in 1501 and 1502. The Portuguese expeditions led by Americus Vesputius, Duarte Coelho, and others during the years 1501 to 1503 enlarged the territorial claim of Portugal in Brazil.

As the interests of the two powers increasingly clashed in the western hemisphere, Spain and Portugal signed on June 7, 1494, with the papal see approving, a treaty at Tordesillas, Spain, that established a new line of demarcation running north and south in the Atlantic at a point 360 leagues (1,475 miles) west of the Cape Verde Islands. This permitted Portugal to maintain her claims to the Azores, Labrador, Newfoundland, and the eastern part of Brazil. The convention provided that all lands thereafter discovered west of the new line of demarcation should belong to Spain.

Magellan's Expedition

In 1512 the Portuguese discovered and claimed in the Orient what were called thereafter the Spice Islands, which included those island groups known today as the Malayan (Indian) Archipelago, the Timor group, and the Philippines. This afforded Portugal a rich trade in spices and other commodities much desired in European markets.

The next year, 1513, Vasco Nunez de Balboa, while in Panama, discovered the great body of water now known as the Pacific Ocean, to which he gave the name Southern Sea. Not long afterwards Ferdinand Magellan, a Portuguese adventurer whom the king of Portugal had offended, proposed to Charles I of Spain (later known as Charles V of Europe) that he send an expedition of ships to the Spice Islands by the westward route. This would not violate the provisions of the Treaty of Tordesillas, which in 1494 forbade Spain to reach the Far East by this way. Magellan believed that it would be possible to find a way either through or around the Americas.

The Spanish monarch accepted Magellan's proposal, and sent him forth with five ships from Seville, Spain, on August 10, 1519. Seeking a way to get through or around the New World, Magellan discovered on October 21, 1520, at the southern tip of South America, the passage now known as the Strait of Magellan. On November 28 of the same year he reached the wide expanse of water to which he gave the name Pacific Ocean. Continuing westward he discovered on March 16, 1521, the island of Samar in what are now known as the Philippine Islands, but which he called the Islands of St. Lazarus. On April 27 he was killed by the natives at a place near Cebu. Having been previously in the service of Portugal in the Moluccas, which lay a little to the southeast of Cebu, Magellan truly had circumnavigated the globe, and is the first human being known to have done it. [7]

Sebastian Elcano took command of the expedition after the death of Magellan, and brought one of their ships, the Victoria, back to Europe in 1522 by way of the Moluccas and the west coast of Africa.

The Mystery of a Lost Day

Francisco Albo, who was a member of Magellan's expedition, has left behind the record that the Victoria doubled the Cape of Good Hope between May 18 and 19, arrived at the Cape Verde Islands "on [Wednesday] the ninth of July, and anchored in the port of Rio Grande in Santiago [Saint James], and they received us very well, and gave us what provisions we wanted; and this day was Wednesday, and they [the people of those islands] reckoned this day as Thursday, and so I believe that we had made a mistake of a day." [8]

The mistake made was their failure to add 24 hours to their count of time when making the westward crossing of the Pacific. Had this been done, the Spanish would have found their reckoning of the days all right when they returned to Europe. Antonio Pigafetta, an Italian noble man, kept a log of Magellan's expedition, and his account is the chief source of information concerning this first voyage around the globe. He wrote thus of their return:

"Finally, constrained by our great extremity, we went to the islands of Cape Verde. Wednesday, July 9, reached one of those islands called Sancto Jacobo [Saint James], and immediately sent the boat ashore for food. We charged our men when they went ashore in the boat to ask what day it was, and they told us that it was Thursday with the Portuguese. We were greatly surprised, for it was Wednesday with us, and we could not see how we had made a mistake. For as I had always kept well [health wise], I had set down every day without interruption. However, as was told us later, it was no error, but as the voyage had been continually toward the west and we had returned to the same place as does the Sun, we had made that gain of 24 hours, as is clearly seen." [9]

Richard Eden's Account

In his English account of the expedition, Richard Eden (writing in 1555) tells of their arrival in Spain. He said: "The Spaniards having sailed about three years and one month, and the most of them noting the days, day by day (as is the manner of all them that sail by the ocean), they found when they were returned to Spain, that they had lost one day. So that at their arrival at the port of Seville being [Sunday] the seventh day of September, was by their account but [Saturday] the sixth day." [10]

A Puzzling Problem

This disparity between the European calendar and the log-books of the survivors of Magellan's expedition upon their return from the trip around the world puzzled many minds of that day. Peter Martyr D'Anghera (1459-1525), a learned counselor of Charles V, specialized in narrating the story of exploration and discovery in those days. He wrote thus:

"When the Victoria reached the Cape Verde Islands, the sailors believed the day to be Wednesday, whereas it was Thursday. They had consequently lost one day on their voyage, and during their three years' absence. I said: 'Your priests must have deceived you, since they have forgotten this day in their ceremonies and the recitation of their office [prescribed religious service].' They answered: 'Of what are you thinking? Do you suppose that all of us, including wise and experienced men, could have made such a mistake? It often happens that an exact account is kept of the days and months, and moreover many of the men had office books and knew perfectly what had to be recited each day. There could be no mistake, especially about the office of the blessed virgin [Mary], at whose feet we prostrate ourselves each moment, imploring her assistance. Many passed their time reciting her office and that of the dead. You must, therefore, look elsewhere for an explanation, for it is certain that we have lost one day.'

“Some gave one reason and some another, but all agreed upon one point, they had lost a day. I added: ‘My friends, remember that the year following your departure, that is to say, the year 1520, was a bissextile [leap] year, and this fact may have led you into error.’ They affirmed that they had taken account of the 29 days in the month of February in that year, which is usually shorter, and that they did not forget the bissextile of the calends of March of the same year. The 18 men who returned from the expedition are mostly ignorant, but when questioned, one after another, they did not vary in their replies.

“Much surprised by this agreement, I sought Gaspar Contarino, ambassador of the illustrious Republic of Venice at the court of the emperor [Charles V]. He is a great sage in many subjects. We discussed in many ways this hitherto unobserved fact, and we decided that perhaps the cause was as follows:

“The Spanish fleet, leaving the Gorgades [Cape Verde] Islands, proceeded straight to the west, that is to say, it followed the Sun, and each day was a little longer than the preceding, according to the distance covered. Consequently, when the tour of the world was finished-which the Sun makes in 24 hours from its rising to its setting the ship had gained an entire day; that is to say, one less than those who remain all that time in the same place. Had a Portuguese fleet, sailing towards the east, continued in the same direction, following the same route first discovered, it is positive that when it got back to the Gorgades it would have lost a little time each day, in making the circuit of the world; it would consequently have to count one day more. If on the same day a Spanish fleet and a Portuguese fleet left the Gorgades, each in the

opposite direction, that is to say one towards the west and the other towards the east, and at the end of the same period and by different routes they arrived at the Gorgades, let us suppose on a Thursday, the Spaniards who would have gained an entire day would have called it Wednesday. The Portuguese who would have lost a day would declare it to be Friday. Philosophers may discuss the matter with more profound arguments, but for the moment I give my opinion and nothing more.” [11]

This is the first time in recorded history that men have been known to go around the world. The voyage was made around the globe in 1519 to 1522; more than 350 years before the location of the Date Line was agreed upon by the nations in 1884. Thus it was demonstrated very clearly, unwittingly, and without any intention on the Part of the men of the expedition, that 24 hours must be added to one’s count of time when making the east-to west crossing of the Pacific Ocean, and that 24 hours must be subtracted from his reckoning of time when making the west-to-east crossing of the same body of water. This addition and subtraction of 24 hours when making the voyage across the Pacific, therefore, is not a manmade, arbitrary thing that men do. They are compelled by nature to do it in order to keep their travel time correctly regulated. Furthermore, it must be 24 hours no more and no less-that they must add or subtract each time that they do this. How so? The explanation is given in the following pages.

7. The Line Between Today and Tomorrow [2]

TWO OTHER experiences that occurred long before the present location of the Date Line was agreed upon by the nations, showed that it should be in the Pacific Ocean.

On the grounds of Magellan’s westward expedition, Spain claimed that the Spice Islands lay as much within her half of the world as they did within that of the Portuguese. But circumstances later forced Charles I to relinquish all of Spain’s claims to sail or to trade west of another demarcation line agreed upon by the Spanish and the Portuguese. This concession was made in the treaty which the two powers signed in Saragossa, Spain, in 1529. The new demarcation line was fixed in the antipodes, and ran north and south in the Pacific Ocean at a point 297 leagues east of the Moluccas.

By signing the Treaty of Saragossa, Spain really relinquished all her alleged rights to the Islands of St. Lazarus, and they passed legally to the exclusive jurisdiction of Portugal, because they lie a little to the west of the Moluccas. But in contravention of that agreement, Spain dispatched in 1542 an expedition under the command of Ruy Lopez de Villalobos to conquer the islands. This commander gave them their present name of Philippine Islands in honor of the Spanish crown prince, who later became King Philip II. Other expeditions soon followed, and with that of Miguel Lopez de Legazpi the Philippine Islands became both a colony of Spain and a special mission field of the Roman Catholic Church.

But the Philippine Islands were never regarded officially by Spain as being on the Asiatic side of the Date Line until January 1, 1845. In the neighboring islands to the south, colonized by the Portuguese and exploited also by Roman Catholic missionaries, the reckoning of time was one day ahead of that in the Philippines. [1]

One Day Out of Harmony

The Portuguese and the Spanish expeditions for exploration and conquest had sailed to the Far East in opposite directions, the former going east by way of the Cape of Good Hope, and the latter going west by way of the Strait of Magellan. Hence, the Portuguese, by traveling eastward, were going against the apparent course of the Sun, and- their time was gradually getting ahead, so that the day commenced earlier and earlier for them than it did in Europe. The Spanish, by going westward, were traveling with the apparent course of the Sun, and their time was gradually getting behind, so that the day began later and later for them than it did in Europe. Therefore, when the Portuguese arrived in their island possessions near the Philippines, they were eight hours ahead of European time on the Iberian Peninsula; but the Spanish, on arriving at the Philippines, were 16 hours behind European time on the Iberian Peninsula. The eight hours and the 16 hours made a total of 24 hours of difference between the beginning of the day for the Portuguese and the

commencement of the day for the Spanish in the Far East. The result was that what was Saturday to the Spanish in the Philippines was Sunday to the Portuguese in the near-by islands.

The eight hours traveled eastward by the Portuguese, and the 16 hours traveled westward by the Spanish, made a total of 24 hours of difference in the time count of the two groups of migrants in the Orient. The Spanish did not make an adjustment of 24 hours in their time count when making the westward crossing of the Pacific Ocean, and as a result they found in the Philippines that they were one day of the week behind the Portuguese in the nearby island groups. This difference in time keeping was not adjusted until the year 1844.

This difference in the reckoning of time by the Portuguese and the Spanish in the Far East lasted more than 300 years. It was a constant source of confusion and annoyance to them in their dealings with each other, both in correspondence and in travel back and forth between the two island groups. [2] The cause of the disparity was well known to both the civil and the ecclesiastical authorities in the Philippines, but for centuries they refused to do anything to rectify it. The Spaniards wished to have the dates and days of the week in those islands the same as they were in Spain and in Spanish America, and thus they refused to add or to drop 24 hours in going back and forth across the Pacific Ocean. Moreover, an acknowledgment of error on their part, to the effect that the reckoning of time in the Philippines ought to have been the same as in the near-by Portuguese islands, would have been tantamount to a confession that Spain was in the wrong and that Portugal was in the right in colonizing that part of the world. According to the Treaty of Saragossa, the Portuguese really were in the right, and the Spanish were in the wrong.

Tuesday, December 31, 1844, Dropped

Finally, Governor-general Narciso Claveria y Zaldúa issued a decree ordering that in the Philippines the day following Monday, December 30, 1844, should be called Wednesday, January 1, 1845. [3] "He suppressed [Tuesday] the 31st day of December of 1844 in order to make the counting of time uniform with that of America and Europe." [4] This was done with the approval of the Roman Catholic archbishop. [5]

Having thus learned by experience that the Date Line should lie in the Pacific Ocean, men found it necessary to come to an agreement concerning its exact location. The increasing intercourse between the Americas and the Far East made it very necessary in order to avoid confusion in the reckoning of time and in the publication of data needed for navigation on the Pacific Ocean.

In 1882 a joint resolution was passed by the Congress of the United States to authorize the president "to call an international conference to fix and recommend for universal adoption a common prime meridian to be used in reckoning longitude, and in the regulation of time throughout the world." [6]

Date Line Fixed in 1884

The International Prime Meridian Conference convened in Washington, D. C., on October 1, 1884, with delegates present from 26 nations. It was agreed by the large majority of them that the meridian passing through Greenwich (London), where the Royal Astronomical Observatory in England was located, should be the prime one from which all other meridians are to be reckoned, and from which astronomical time, which begins at noon, is to be counted. The 180th meridian from Greenwich was declared to be that of the International Date Line, and that from it the civil day, which commences at midnight, is to start. [7]

The choice of the 180th meridian to be that of the International Date Line was a wise selection, because running from the North Pole down through the middle of the Pacific Ocean, to the South Pole, it passes through less inhabited territory than does any other.

However, a look at the map reveals that even the 180th meridian cuts through a few inhabited regions. Thus if the Date Line were to follow that meridian unswervingly from pole to pole, it would be possible for a man on either Rambe or Taveuni of the Fiji Islands to stand with one leg in Monday and the other in Tuesday. And it also would be possible to build a town in Siberia so that the Date Line would run down the middle of a street, with the result that on one side of the thoroughfare it would be Saturday while on the other it would be Sunday.

The International Date Line, by general agreement of the nations, follows more or less along the 180th meridian from north to south through the Pacific Ocean. It is made to swerve slightly in a few places to avoid dividing the people of certain countries and islands in their time-keeping.

Therefore the nations agreed to make the Date Line swerve a little either to the west or to the east as the case should demand, in order that no people should find themselves divided by the line between today and tomorrow.

Starting on the 180th meridian at 70' north, the Date Line bends southeasterly to 169' west and 65' north, passing thence through the Bering Strait with Siberia to the west and Alaska to the east, and then runs southwesterly to 170' east and 52'30' north so as to leave all the Aleutian Islands to the east. The line then goes southeasterly to the 180th meridian at 48' north, and continues southerly

along that meridian to 5' south, whence it bends southeasterly to 172°30' west and 15°30' south so as to leave the Samoan Islands to the east and the Fiji Islands to the west. From there it goes southerly on the meridian of 172°30' west to 45°30' south, leaving New Zealand to the west, and from there it proceeds southwesterly to the 180th meridian and southerly on it to 60' south. [8]

What Happened in Alaska

This fixing of the exact location of the Date Line resulted in a notable case of embarrassment. Professor Simon Newcomb tells how it happened in Alaska:

“As colonization extended toward the east and the west men carried their count of the days with them. The result was that whenever it extended so far that those going east met those going west they found their time differing by one day. What for the westward traveler was Monday was Tuesday for the eastern one. This was the case when we acquired Alaska. The Russians having reached that region by traveling east, it was found that, when we took possession by going west, our Saturday was their Sunday. This gave rise to the question whether the inhabitants, in celebrating the festivals of the Greek Church, should follow the old or the new reckoning of days. The subject was referred to the head of the church at St. Petersburg, and finally to Struve, the director of the Pulkowa Observatory, the national astronomical institution of the empire. Struve made a report in favor of the American reckoning, and the change to it was duly carried out.” [9]

When crossing the Date Line, the traveler neither really gains nor really loses a day of time. The gain and the loss involved are merely apparent, not real. To illustrate this, let us suppose that John and Mike, twin brothers, start from Greenwich (London) to go around the world. John goes eastward, and Mike goes westward. After a few weeks they meet again in Greenwich. Mike finds that although he set his time keeping ahead 24 hours when he crossed the Date Line, he is still exactly as old as John, who set his time keeping back 24 hours when he crossed the 180th meridian. If it were really true that Mike had gained a day, and really true that John had lost one, then the one would have found himself older than his brother when they returned home. And if they should repeat their journeys enough times, the day would come when Mike would find himself much older than John, his twin brother! This, of course, is impossible, and to think that a person can make himself either older or younger by merely going around the world is ridiculous.

The Time Loss Is only Apparent

Therefore, we repeat that the loss or the gain of a day in going back and forth across the Date Line is only apparent and not real. The facts are that in traveling around the world a person accumulates 24 hours of error in his counting of time. Hence, the addition and the subtraction of 24 hours at the 180th meridian are merely the means whereby a correction is made for the accumulated error.

Indeed, when we speak of either adding or subtracting a day in time keeping upon crossing of the Date Line, we do not refer to a natural day but rather to 24 hours of travel time, which is equivalent in duration to a natural day. For example, if a traveler going westward should cross the Date Line on Saturday at 1:00 PM (civil time) according to the count of the days of the week on the American side, 24 hours would be added so as to change his time keeping to one o'clock Sunday afternoon according to the count of the days of the week on the Asiatic side. This is not a case of changing Saturday to Sunday. The traveler adds the 24 hours to his reckoning by skipping the latter part (11 hours) of Saturday and the first part (13 hours) of Sunday. If he should cross the Date Line exactly at midnight at the close of Sunday and the beginning of Monday, then the time would change to midnight at the close of Monday and the beginning of Tuesday, so that the addition of the 24 hours in this case would coincide exactly with the civil day. At any other time of day such a coincidence cannot exist. There is only one instant-at exactly midnight (civil time)-when such a thing can happen, and it is very rare that a traveler crosses the Date Line at exactly that instant. As a rule, parts of two days, to the amount of 24 hours, are involved.

The day is measured by the rotation of the Earth on its axis. And as the globe rotates, one full day of 24 hours is measured from the revolution of a fixed place on the Earth's surface in relation to the Sun until that same place returns to its original position relative to the solar orb. But a person traveling either eastward or westward does not remain in a fixed place on the Earth while it rotates. He begins his day of travel at one place and ends it at another, and he finishes it at a point where the day begins and ends either earlier or later than it does at the place from which he started.

Time and Longitude

For example, when a person travels one degree of longitude, either eastward or westward, there are four minutes difference of solar time between his starting point and his stopping point. In other words, the day begins and ends either four minutes earlier or four minutes later at his terminal point than it does at his starting point. If he travels westward, the day begins and ends four minutes later at his stopping point than it does at his point of departure. If he goes eastward, then the day begins and ends four minutes earlier at his place of stopping than it does at his starting point.

But when a person journeys around the world, he generally counts each day of travel as one full day, although in reality he travels 24 hours plus four minutes or minus four minutes for each degree of longitude covered. Therefore, in a journey around the world this error of four minutes for each of the 360 degrees of longitude covered accumulates to the amount of 24 hours. Instead of correcting his

computation by adding or subtracting four minutes every time he travels one degree of longitude, the traveler lets the four minutes accumulate as error in his computation of travel time, and at the Date Line he makes the correction for the full 360 degrees of longitude by the addition or the subtraction of 24 hours.

Time and Travel

A town on the Earth's surface at the Equator constantly revolves at the speed of about 1,035 miles an hour while the globe rotates on its axis. Let us suppose that an aviator should start at noon from a given town and make a non-stop flight around the world in a plane flying westward at the speed of about 1,035 miles an hour. The Earth, in the meantime is turning eastward, i.e., from west to east. Thus he would be moving at the same speed as the Earth beneath him. He would have the Sun overhead and at its midday position in the sky during the entire journey, until the moment he should return to his starting point. Could he say, then, that because he had the Sun directly overhead throughout the whole journey, so that for him it did not set during the trip, he had circled the globe in no time and had arrived home at the very same moment of the very same day on which he left? Of course, he could not. The people living in the town from which he departed could certify that they had seen the Sun go down once and rise once during his absence, and that one day of time had elapsed between his departure and his return, because the Earth had made one rotation on its axis in the meantime. And although he had not seen his position relative to the Sun change in the least during his journey, yet he must set his time keeping ahead 24 hours in his reckoning of travel time in order to be in accord with the calendar and with the count of the days of the week among the people of his home town.

Let us suppose that the twin brothers John and Mike set out from Greenwich to reach the Date Line at the 180th meridian in 12 days. John goes eastward, and Mike goes westward. And remember that the circle of the Earth's circumference being 360 degrees in length, there are 15 degrees of longitude to one hour of time. This is seen by dividing 360 by 24, which shows that 15 degrees of rotary movement by the Earth produces one hour of time.

An Illustration

When John has traveled to a point 15 degrees of longitude east of Greenwich, he finds that the day begins one hour earlier there than it does at his starting point. This is because the Earth rotates from west to east, so that day begins sooner at places east of where you live than it does where you reside. In the meantime Mike has reached a place 15 degrees of longitude west of Greenwich, so that he finds that the day begins one hour later there than it does at the place of his departure. Because the Earth rotates from west to east, the day begins later at places west of where you live than it does at the place where you dwell. Therefore, the brothers are now 30 degrees of longitude and two hours of time apart, and the day begins two hours sooner at the place where John is than it does where Mike is.

Continuing, we find that when John has traveled eastward the space of 90 degrees of longitude, the day begins for him six hours earlier there than it does at Greenwich. And Mike, having traveled westward the distance of 90 degrees of longitude in the meantime, finds that the day begins six hours later there than it does in Greenwich. Hence, by the way of Greenwich a distance of 180 degrees of longitude and 12 hours of time now separate the two brothers. The day begins, therefore, 12 hours earlier where John is than it does where Mike is. Proof of this is seen by the fact that, being 180 degrees of longitude apart, Mike is on the opposite side of the Earth from John. Thus when it is noon where one of them is, it is midnight where the other is.

At the left it is seen that John, traveling one hour or 15' of longitude east of Greenwich, finds that the day begins and ends two hours earlier for him than it does for Mike, who has traveled one hour or 15' of longitude west of Greenwich.

At the right it is seen that John, traveling two hours or 30' of longitude east of Greenwich, finds that the day begins and ends for him four hours earlier than it does for Mike, who has traveled two hours or 30' of longitude west of Greenwich. The rest of the journey and its results are depicted on page 109.

Finally John, continuing his eastward journey, arrives at the Date Line, which, by the way he has gone, lies at 180 degrees of longitude east of Greenwich. Mike also, traveling westward, has arrived at the Date Line, which, by the route he has taken, lies 180 degrees west of Greenwich. Thus by the way of Greenwich there is a distance of 360 degrees of longitude and 24 hours of time separating the twins. The day begins 24 hours earlier on John's (the Asiatic) side of the Date Line than it does on Mike's (the American) side, which proves that while it is today east of the 180th meridian, it is tomorrow west of it.

At the left it is shown that John, traveling six hours or 90' of longitude east of Greenwich, finds that the day begins and ends 12 hours earlier for him than it does for Mike, who has traveled six hours or 90' of longitude west of Greenwich. When it is midnight where John is, it is midday where Mike is.

At the right it is shown that John, having traveled 12 hours or 180° of longitude east of Greenwich, finds that the day begins and ends 24 hours earlier for him on the Asiatic side of the Date Line than it does for Mike on the American side, who has traveled 12 hours or 180° of longitude west of Greenwich. This difference of 24 hours in time at the Date Line makes necessary the adjustment that travelers make in their time-count when crossing the Pacific Ocean.

It is clear, therefore, that when a person crosses over from the west (Asiatic) side of the Date Line to the east (American) side of it, he must set his time keeping back 24 hours. And when he crosses over from the east (American) side to the west (Asiatic) side of the Date Line, he must set his keeping of time ahead 24 hours. He is obliged to do this because the Earth, by its rotary motion from west to east, starts the day 24 hours earlier on the west (Asiatic) side of the 180th meridian than it does on the east (American) side of it.

God, who “hangs the Earth upon nothing,” [10] causes this planet to rotate, so that “it is turned as clay to the seal.” [11] It is He who has “caused the dayspring to know his place.” [12] The Earth rotates on its axis from west to east, and thus measures off the days, in obedience to natural laws which the Creator has ordained for this purpose. [13] Man has no control over this matter of time. He merely notes the movements of the Sun, Moon, and Earth in their relation to each other, and regulates his clocks and calendars to correspond to them. Now and then he finds that his mode of reckoning time is not in perfect accord with movements of the heavenly bodies, and he has to adjust his timepieces and calendars to make them agree with those celestial timekeepers of God’s appointing. [14]

Living Two Days at a Time

As it has been said in this chapter, mankind at large is living two days at a time. There is only one instant when the civil day is one and the same all over the world. That is when it is exactly midnight at the Date Line. There is only one instant in the day when it is the Sabbath in all the world at the same time, and that is when it is exactly the moment of sunset at the close of Friday evening on the east (American) side, and at the same moment it is sundown at the close of Saturday evening on the west (Asiatic) side, of the Date Line. As the Earth rotates from west to east from that one moment onward, the hours of the Sabbath are reeled off the terrestrial spool while those of the first day of the week follow right behind.

Therefore, it is a physical impossibility for all the people on the Earth to keep the Sabbath simultaneously over a 24-hour period. And let those Sunday keepers who cry, “You cannot keep the Sabbath on a round world!” remember that our planet does not flatten out when Sunday arrives. The Earth is just as round and spherical on the Sunday as it is on the Sabbath. Therefore, if it is impossible to observe the seventh day on a round world, it is equally impossible to keep the first day on it. Thus the boomerang hurled at the head of the Sabbath keeper falls back on the pate of him who throws it.

Can It Be Done?

But is it true that the Lord’s day cannot be kept on a round world? To say that it cannot be done is tantamount to charging God with being unjust by commanding us to do the impossible. His requirements are not unjust. David declares that “all His commandments are sure. They stand fast for ever and ever, and are done in truth and uprightness.” [15] Also: “My tongue shall speak of Thy word: for all Thy commandments are righteousness.” [16] Paul tells us that “the law is holy, and the commandment holy, and just, and good.” [17]

Such a charge also implies that Sabbath keeping is hard, burdensome, and inimical to man’s welfare. But John assures us that “His commandments are not grievous.” [18] Jesus said that “the Sabbath was made for man, and not man for the Sabbath.” [19] It is intended for our good, and for that purpose it was originally blessed by the Creator. [20] “Blessed is the man that does this, and the son of man that lays hold on it. That keeps the Sabbath from polluting it, and keeps his hand from doing any evil.” [21]

Although the fourth precept of the Ten Commandments is to be obeyed by all mankind, it is not required that all the people on the Earth begin and end the observance of the Lord’s day at the same instant and simultaneously on all sides of the globe. This is obvious from the fact that God’s word says that the seventh day is to be kept from sunset to sunset. The Sun does not go down in all parts of the world at one and the same instant. God knows this, and we know it. The Sun goes down several hours earlier in New York City, for example, than it does in Los Angeles, California. It sets on one side of the Earth about 12 hours sooner than it does on the opposite side. It even does not set for people living at the extreme eastern side of Palestine at identically the same instant that it goes down for those dwelling at the extreme western side of that country. The same can be said of midnight, the hour when Sunday keepers start the observance of the first day of the week. There is not an instant when the Sun is not setting somewhere and at the same moment is not rising somewhere. There is not an instant when it is not midnight somewhere in the world.

From Sunset to Sunset

What are we to gather from this? It means that each one of us is to begin to keep the Sabbath at sunset at the place where he is when the seventh day comes. Sunday keepers follow a similar rule in their observance of the first day of the week. When it is midnight on one side of the globe, it is high noon on the opposite side. They do not assume that they are to start to keep Sunday in all

parts of the Earth at one and the same instant, but each man begins it at midnight at the place where he happens to be when the first day of the week comes.

I have lived a few years in the Far East, that is, on the opposite side of the Date Line from the United States, where I am now. I found that Sunday keepers in the Philippines, China, and Japan begin their Sunday observance at midnight when it comes to them there. I was a Sunday keeper then, being a member of the Methodist Episcopal Church, with my membership in a local church in the United States. I also found that Sabbath keepers in those countries begin the observance of the seventh day when the Sun goes down for them there. I have resided many years in Europe and in Latin America, as well as in the United States, and have found, in all of the lands that I have visited, that Sunday keepers begin the observance of their day of rest at midnight at the place wherever they happen to be, regardless of the fact that on the opposite side of the globe it is noon at that instant. In those places I found that Sabbath keepers commence the observance of the seventh day at sunset at the place wherever they happen to be, although on the opposite side of the world the Sun is rising at that moment.

By this rule of observing the seventh day from even to even, everybody in a given community can keep the Lord's day simultaneously, for there the Sun sets for all of them at one and the same time.

Date Line No Obstacle

The Date Line creates no more of an obstacle for Sabbath keeping than it does for Sunday keeping. I have crossed the line twice, going each time in a different direction. I know that thousands of missionaries and visiting ministers from Sunday keeping churches in America have crossed the Pacific Ocean to travel and labor in the Far East and Australia. There are millions of native Sunday keeping Christians living over there. They find no difficulty in knowing which is the first day of the week over there, nor in knowing when to begin to keep their day of rest. There are also many thousands of Sabbath keepers, religious workers and laymen, living over there, and they have no difficulty in knowing which day is the seventh, nor in knowing when comes the sunset that marks the beginning of the Lord's holy day in those distant lands.

Since the Sun sets 12 hours earlier in Singapore and Bangkok than it does in New York City, it means that the Sabbath begins and ends that much earlier for Sabbath keepers living in the Straits Settlements and Thailand (Siam) than it does for those residing in the eastern part of the United States. Midnight also comes to Sunday keepers dwelling in Singapore and Bangkok about 12 hours earlier than it does to those abiding in New York City, so that Sunday begins and ends for those in the Straits Settlements and Thailand that much earlier than it does for those in the eastern part of the United States.

Jesus Christ declared that "the Sabbath was made for man." [22] It was made in the beginning, when man was made. [20] And when God made the Sabbath, He knew that He had told Adam to "be fruitful, and multiply, and replenish [in Hebrew, "fill"] the Earth, and subdue it." [23] This shows that the observance of God's holy day was never thought by the Lord to be something impossible for man to do as the human family should spread over the face of the round world.

God's Command

But in fulfillment of the Lord's command to "be fruitful, and multiply, and replenish the Earth, and subdue it," Adam's descendants doubtless spread both eastward and westward over the globe. It is written that Cain settled "in the land of Nod, on the east of Eden, where he built a city."

In their migrations, those going eastward found the day beginning one hour earlier for every 15 degrees of longitude traveled, than it did in Eden; and those going westward found the day beginning one hour later for every 15 degrees of longitude traveled, than it did in Eden. If the two streams of migrants did meet eventually on the other side of the world from Eden, they found that there was a difference of 24 hours in their time count, for the sum total of the distance traveled by them would be the distance around the globe—360 degrees of longitude. This, of course, was before the Flood.

But after the Flood the Lord said to Noah and his sons: "Be fruitful, and multiply, and replenish the earth." [25] Starting from the mountains of Ararat, [26] the descendants of Noah spread eastward and westward until the two streams of migrants finally met in the Pacific Ocean, and that historically and logically is the place where the Date Line ought to be, and the world in general has recognized the fact.

The claim that the Sabbath cannot be kept on a round world, because of the Date Line dividing between today and tomorrow, is both absurd and false. When analyzed in the light of reason, of science, and of the word of God, it is seen to be based either on ignorance of the facts involved or on a desire to evade the obligation of keeping the fourth commandment of the Ten Commandments.

Love for God leads the sincere in heart to obey Him gladly. "For this is the love of God, that we keep His commandments: and His commandments are not grievous." [27] Obedience is proof of our loving loyalty to Him. "If you love Me, keep My commandments." [28] Such is the example of devotion that Christ left us. "If you keep My commandments, you shall abide in My love; even as I have kept My Father's commandments, and abide in His love." [29] He could say: "I delight to do Thy will, O My God: yea, Thy law is within My heart." [30] "And hereby we do know that we know Him, if we keep His commandments. He that said, I know Him, and keeps not His commandments, is a liar, and the truth is not in him. But who so keeps His word, in him verily is the love of God perfected: hereby know we that we are in Him." [31]

8. In the Land of the Midnight Sun [1]

IN THE Far North, between the Arctic Circle and the North Pole, are those places often referred to as “the Land of the Midnight Sun.” The inhabited areas of the Arctic Region are in the northernmost parts of Alaska, Canada, Greenland, Norway, Sweden, Finland, Russia, and Siberia. Spitsbergen, a remote island belonging to Norway, is perhaps the most northern habitation of man. Although the lands of the Antarctic Region are uninhabited, they are visited from time to time by explorers.

The ancients had a knowledge of the Arctic Circle and the Antarctic Circle. [1] The name “Arctic” itself is derived from the Greek word *arktos* (“bear”), because the Arctic Region was referred to in olden times as the Region (of the constellation) of the Great Bear, which now is popularly called “the Big Dipper.”

How long ago it was that men first began to inhabit lands of the Far North is not known. Early references to the Arctic Region by the Greeks and Romans, who called it *Ultima Thule*, indicate that people then lived in the northernmost parts of Europe. The civilized world, however, appears to have known little about them prior to the birth of Christ. About 325 BC Pytheas, a celebrated Greek navigator and geographer, made a voyage of exploration and discovery from Massilia (Marseilles) along the west coast of Europe northward to England, Scotland, and the Scottish isles. [2] He also explored the northern coasts of Germany as far east as Jutland, and probably visited Norway. But he did not go as far north as the Arctic Circle. He described a land which he called *Thule*, where in midsummer the Sun shone in the sky throughout the 24 hours of the day, and where in midwinter the Sun was never seen during the whole day. Scholars believe that it was Norway. Some think it was Iceland.

Records of the Ancients

The first recorded sea voyage across the Arctic Circle is reported by King Alfred the Great (AD 848-900) in his translation of the works of Orosius. He tells the story as it was “told him by the Norwegian Ottar (Alfred calls him *Ohthere*), who about 870 rounded the North Cape [of Norway], sailed eastwards along the Murman coast and discovered the White Sea, where he reached the south coast of the Kola Peninsula and the boundary of the land of the *Biarmians* (*Beormas*).” [3] But it was not until January 17, 1773, that the Antarctic Circle was crossed for the first time in history. [4] At that date two ships under the command of Captain James Cook, in search for *Bouvet Island*, reached latitude 67° 15' south, in longitude 39° 35' east, where their voyage was blocked by ice.

Marcus Varro, the great Roman scholar (116-27 BC), wrote of the lands that “lie between the Arctic Circle and the [North] Pole, where the Sun is not visible for six months at a time,” and “where the day and the night are each six months long.” [5]

Strabo, the Greek geographer (63? BC - AD 24?), wrote concerning the Far North: “In those regions, the Sun moves above the Earth throughout the whole revolution of the universe.” [6] And he says also: “On the evidence of our senses, the Sun moves along a circle parallel to the revolution of the universe.” [6] In those days the ancients believed that the Sun and all the rest of the heavenly bodies revolved around the Earth, which they supposed to be stationary.

Pliny, the Roman naturalist (AD 23-79), pointed out that “as on summer days the Sun approaches nearer to the top of the world, owing to a narrow circuit of light the underlying parts of the Earth have continuous days for six months at a time, and continuous nights when the Sun has withdrawn in the opposite direction towards winter. Pytheas of Marseilles writes that this occurs in the island of *Thule*, six days' voyage north from Britain.” [7]

And in mentioning various distant lands, Pliny also wrote: “The most remote of all those recorded is *Thule*, in which, as we have pointed out, there are no nights at midsummer when the Sun is passing through the sign of the Crab, and on the other hand no days at midwinter; indeed some writers think this is the case for periods of six months at a time without a break.” [8]

Procopius, the Byzantine historian of the reign of Justinian I (AD 527-565), has told us how the people of *Thule* kept track of the passing of time:

“In that place a very wonderful thing takes place each year. For the Sun at the time of the summer solstice never sets for 40 days, but appears constantly during this whole time above the Earth. But not less than six months later, at about the time of the winter solstice, the Sun is never seen on this island for 40 days, but never-ending night envelops it. I made enquiry from those who come to us from the island as to how in the world they are able to reckon the length of the days, since the Sun never rises nor sets there at the appointed times. And they gave me an account which is true and trustworthy. For they said that the Sun during those 40 days does not indeed set just as has been stated, but is visible to the people there at one time toward the east, and again toward the west. Whenever, therefore, on its return, it reaches the same place on the horizon where they had previously been accustomed to see it rise, they reckon in this way that one day and night have passed. When, however, the time of the nights arrives, they always take note of the courses of the Moon and stars and thus reckon the measure of the days. And when a time amounting to 35 days has passed in this long night, certain men are sent to the summits of the mountains—for this is the custom among them—and when they are able from that point barely to see the Sun, they bring back word to the people below that within five days the Sun will shine upon them.” [9]

Land of the Midnight Sun

The Far North is called “the land of the Midnight Sun” because in midsummer the Sun shines continually above the horizon, and in midwinter stays hidden below the horizon, throughout the full 24 hours of the day.

Describing her winter stay in Spitsbergen, at latitude 78° north, with the North Pole only 12° away, Martha Phillips Gilson says that the Sun was high in the sky during the full 24 hours of August 3. [10] On August 23 the Sun dipped behind the northern horizon at

midnight. Thereafter they had each day a sunset instead of the midnight Sun. The daylight period grew shorter and shorter until by September 23 (the autumnal equinox) they had to use electric lights for dinner at 6:00 PM. By October 1 the Sun disappeared behind the southern horizon, and they had nothing but noonday twilight thereafter. This midday glow steadily paled from day to day until it gave way to continuous night-three months without a ray of sunlight. It was then as dark at 12:00 noon as it was at 12:00 midnight.

But watching at the door at noon on the following January 19, Mrs. Gilson spied a narrow, faint, pinkish light on the horizon to the south. It lasted only a few minutes. Each day the noontime light grew in intensity and duration until by January 31 they could distinguish objects in the house for a few hours around midday. By February 15 the reflection of the Sun could be seen on the mountain tops. Finally, the solar disk itself was seen at noon and to the south on March 9.

Up in Lapland, a region in which Norway, Sweden, Finland, and Russia each now have a share, it is thus: "In the northern parts unbroken daylight in summer and darkness in winter last from two to three months each." [11] A similar condition prevails in northern Alaska.

A Puzzling Question

Seeing that the Holy Scriptures teach that the Sabbath is to be kept from sunset to sunset, some people are puzzled to know how this can be done in the Far North, where there is in each year a period during which the Sun remains above, and another during which the Sun stays hidden below, the horizon during the full 24 hours of the day. Indeed, certain Sunday keeping opponents of the observance of the seventh day set forth this apparent difficulty as an argument that the Sabbath cannot be kept on a round world. If the Earth were round only on the Sabbath day, the proponents of that objection might have something better to sustain their contention. But this terrestrial ball is just as spherical in form on the first day of the week as it is on the seventh.

The Sunday keeper, observing the first day of the week from midnight to midnight, in so far as the apparent movement of the Sun is concerned, is confronted with the same difficulty as that which the Sabbath keeper has to meet. For example, at Point Barrow, Alaska, the midwinter season with no Sun above the horizon lasts 1,728 hours! In midsummer there is a season of similar duration when the Sun never sets below the horizon, and when there is no apparent midnight! Yet it is a well known fact that in the Far North live many Sunday keepers-Protestants, Greek Orthodox Catholics, and Roman Catholics-who can testify that it is not difficult to know when it is the midnight hour at which to begin the observance of the first day of the week during those periods. And it is likewise a certainty that numerous Sabbath keepers reside there too, many of whom are devout Christians, and they say that it is not hard to know when comes the sunset hour at which to begin the observance of the seventh day during those same seasons. Indeed, they express surprise at the thought that anybody should think it impossible.

Six Different Zones

To illustrate the subject, we shall represent here the surface area of the Earth as geographically divided into six temperature zones, which are: (1) the North Frigid Zone, extending from the North Pole to the Arctic Circle. (2) The North Temperate Zone, reaching from the Arctic Circle to the Tropic of Cancer. (3) The North Torrid Zone, lying between the Tropic of Cancer and the Equator. (4) The South Torrid Zone, the region between the Equator and the Tropic of Capricorn. (5) The South Temperate Zone, spreading from the Tropic of Capricorn to the Antarctic Circle; and (6) the South Frigid Zone, stretching from the Antarctic Circle to the South Pole. Geographers usually regard the two torrid zones as one, since they are contiguous and have the same climate.

The limits of those six temperature zones are not based upon man's imagination. They are established by the God of nature Himself, for the North Pole is the upper central point around which the Earth rotates, while the South Pole is the lower pivotal point about which it turns. The Earth's axial line runs through these polar points. The Equator, the line halfway between the North Pole and the South Pole, divides the globe into two parts the Northern Hemisphere and the Southern Hemisphere. The Arctic Circle belts the Earth at 23°27' south of the North Pole and the Antarctic Circle girdles it at 23°27' north of the South Pole. The Tropic of Cancer runs around the globe at 23°27' north of the Equator, while the Tropic of Capricorn circles it at 23°27' south of the Equator. The astronomical basis of the geographical division of the surface of the planet into those six zones is the Earth's inclination of 23°27' from a perpendicular to the plane of her orbit around the Sun.

The Globe Is Tilted

Remember that the axial line of the poles of the globe does not run perpendicular to the plane of the ecliptic, the orbit of the Earth, but that it is inclined 23°27'. The apparent effect of this is generally known as "the declination of the Sun." Because of this declination, or inclination, there are only two times in a year when exactly one half of the Earth along its axial line is illuminated by the Sun, so that the daylight portion and the night portion of the day are equal in length. They are March 21 and September 23-the respective dates of the vernal and the autumnal equinoxes. The Sun then appears to be on the Equator-midway between the North Pole and the South Pole.

While the Earth advances in her orbital course after the passing of the autumnal equinox of September 23, the North Pole, on account of the globe's inclination of 23°27', gradually turns away from the Sun each day until December 22, the date of the winter solstice. On this day the North Pole is at its maximum inclination away from the solar orb, and the Northern Hemisphere has "the shortest day" and "the longest night" of the year. As the northern half of the globe then leans away from the Sun, the Equator also is inclined, so that on the

side toward the light it is raised to an angle of 23°27' in relation to the plane of the Earth's orbit. Thus the Sun appears to have moved 23°27' south of the Equator by midwinter (December 22). This is what determines the location of the Tropic of Capricorn.

Equinoxes and Solstices

But the Earth moves on in her orbit after the passing of the winter solstice of December 22, with the North Pole turning little by little toward the Sun until March 21, the time of the vernal equinox. [12] At this date exactly one half of the globe along its axial line is illuminated by the Sun, the dark portion and the light part of the day being of equal duration. The Sun then seems to be on the Equator, that is, halfway between the North Pole and the South Pole.

This diagram shows the relative positions of the Earth to the Sun at the equinoxes and the solstices. Note that in midsummer (at the left) the North Pole leans toward the Sun, so as to provide sunlight for the Arctic regions during all 24 hours of the day. And that in midwinter (at the right) the North Pole leans away from the Sun, so as to deprive the Arctic regions of sunlight during the entire 24 hours of the day. At the time of the equinoxes day and night are equal.

The Earth continues her orbital journey after the passing of the vernal equinox of March 21, with the North Pole gradually swerving toward the Sun until June 21, the date of the summer solstice. On this day the North Pole reaches its maximum inclination toward the Sun, and those who live north of the Equator have "the longest day" and "the shortest night" of the year. Because the Northern Hemisphere is tipped toward the Sun at this time, the Equator also, on the side toward the sunlight, is inclined downward at an angle of 23°27' in relation to the plane of the Earth's orbit. Thus the Sun appears to have moved to a point 23°27' north of the Equator by midsummer (June 21). This is what determines the location of the Tropic of Cancer.

The Earth goes on in her orbital course after the passing of the summer solstice of June 21, with the North Pole slowly turning away from the Sun until September 23, the time of the autumnal equinox. At this date exactly one half of the globe along its axial line is again illuminated by the Sun, so that the light portion and the dark part of the day are of equal length. Again the Sun appears to be on the Equator, that is, at a point halfway between the North Pole and the South Pole.

Another result of the inclination of the Earth at an angle of 23°27' is that whereas at the North Pole itself the Sun is continuously invisible from September 24 to March 20, it is constantly visible there from March 22 to September 22. The same happens at the South Pole, except that the dates of these seasons are transposed. Thus the poles have a year consisting of a period of daylight of six months' duration and a season of darkness of equal length.

At the Poles

Because the globe leans at an angle of 23°27', so that the North Pole reaches its maximum inclination away from the Sun on December 22 (the winter solstice), the season of darkness at the top of the world attains its maximum scope on this date, extending to a point 23°27' south of the North Pole. Conversely, because the North Pole attains its maximum inclination toward the Sun on June 21 (the summer solstice), the period of continuous Sun at the top of the globe reaches its maximum scope on this day, extending to a point 23°27' south of the North Pole. This is what determines the location of the Arctic Circle. It is, therefore, the most southern point in the Northern Hemisphere at which there can be a day with the Sun visible above the horizon during the full 24 hours, and at which there can be a day with the Sun hidden behind the horizon throughout the whole 24 hours. (There is a slight exception due to the bending of the Sun's rays in passing through the atmosphere.) Hence, at the Arctic Circle the Sun never appears in the heavens on December 22, and on June 21 it never disappears from the sky.

It is manifest, therefore, that the length of the period of sunless days, and the duration of the season of nightless days, at a given point in the Arctic Region depends on how far north the place is above the Arctic Circle.

9. In the Land of the Midnight Sun [2]

DURING the time between the end of the period without Sun and the beginning of the season with constant Sun, the solar orb rises and sets every day in the Far North as it is wont to do at points south of the Arctic Circle. The same is true during the time between the end of the period of constant Sun and the commencement of the season of sunless days. During these two portions of the year Sabbath keepers in the Far North can know by the visible sunset or by the sunset tables of their almanacs when the seventh day begins.

But let us now consider the problem of knowing when to begin the Sabbath during the season when the Sun is continually hidden below the horizon.

We have "the longest day" and "the shortest night" of the year on June 21, the date of the summer solstice. After the passing of this date the Sun rises a little later and sets a little earlier each day, so that the daylight period shortens and the night lengthens until December 22, the date of the winter solstice. For example, whereas in New York City the Sun rose at 4:28 AM and set at 7:35 PM local mean time on June 21, 1946, it rose at 7:21 AM and set at 4:36 PM on December 22 of that year. The difference of time between the rising and the setting of the Sun on the two dates is considerable. The explanation of this is that whereas the North Pole is at its maximum

inclination toward the Sun on June 21, it is at its maximum inclination away from the Sun on December 22. Consequently, more than half of the Northern Hemisphere is lighted by the Sun on June 21, and less than half of it is illuminated on December 22.

The farther north a place is, the longer is the night and the shorter is the daylight period on a stated day between September 23 and December 22, the Sun rising later and setting earlier. People living a little to the south of the Arctic Circle have the Sun above the horizon only for about an hour a day in midwinter. At the Arctic Circle itself the Sun does not appear above the horizon on December 22. And still farther north it is not seen for days before and after the winter solstice. The duration of this depends on the latitude of the place.

At Nordkyn

At Nordkyn, situated five miles from North Cape in Norway, the Sun stays hidden below the southern horizon from November 18 until January 24. The last days before the long disappearance of the Sun from view are as follows: On November 16 the Sun's disk slowly rises on the Southern horizon shortly before noon, its lower rim just touching above the horizon at noon, and then it slowly turns downward right after noon, and hides itself below the horizon for the rest of the day. Thus we have both sunrise and sunset at noon. On November 17 only the upper half of the solar disk peeps above the southern horizon at midday, and then it immediately slides down behind it. But on November 18 the upper rim only of the disk of the Sun touches the southern horizon at noon. On November 19 only the brilliant glow of the hidden Sun is seen on the southern horizon at noontime, this also corresponding to both sunrise and sunset. Each day thereafter the noonday glow of the hidden Sun at the southern horizon becomes a little fainter, because the zenith of the Sun moves farther and farther below the horizon, and finally it is as dark there at noon as it is at midnight. This is because every day the Sun's zenith descends a little farther below the horizon until December 22 (the winter solstice).

This photograph, taken at intervals by the United States Army air forces at Fairbanks, Alaska-about 75 miles south of the Arctic Circle shows the Sun moving from left to right along the southern horizon on December 22, the date of the winter solstice. Note that the solar disk was at its zenith-the highest point in its path above the skyline-at noonday. At a latitude still farther to the north the solar disk was seen peeking above the horizon at midday for a very short time, so that both sunrise and sunset occurred at noon. Compare this picture with the one on page 133.

When the winter solstice (December 22) has passed, the zenith of the Sun gradually moves a little higher each day and, therefore, day by day comes a little closer to the southern horizon at noon. Eventually there is seen at noon a narrow, faint, pinkish light on the horizon to the south. Thereafter that noonday light increases daily in duration and intensity, because each day the Sun's zenith climbs a little nearer to the horizon. Finally, on January 22 the upper rim of the solar disk touches the southern horizon at noon, and then goes down again. On January 23 the upper half of the Sun's disk peeps above the same horizon at noonday, and then goes down again. But on January 24 the entire solar orb is seen in the sky at noon time, the lower rim of the Sun being above the horizon, after which it slowly goes down again. Thus sunrise and sunset both occur at midday. Each day thereafter the Sun rises a little earlier before noon, and sets a little later after noon.

This photograph, taken at 20-minute intervals in Lapland, in Sweden, during a period of three hours, shows the Sun moving right to left along the northern horizon on a midsummer night. It is a picture of the midnight Sun. When the Sun is at the dip-the lowest point in its path along the skyline-it is midnight. At a latitude a little farther to the south on that day the Sun dipped behind the northern horizon at midnight for a very short time, and then started upward so that both sunset and sunrise occurred at midnight. Compare this picture with the one on page 132.

Note, therefore, that the last sunset prior to the commencement of the period of sunless days occurs at noon, and that the first sunset at the close of the same period takes place at noon.

Autumn

1. During the autumn the people of the Far North have regular sunsets and sunrises, and Sabbath keepers there observe the Lord's day from evening to evening.

2. As the winter solstice approaches, the day comes when the solar disk, at its zenith, appears on the southern horizon at noon, its lower rim touching just above the skyline, and then descends, so that sunrise and sunset occur almost simultaneously at midday.

3. On the next day part of the solar disk appears above the southern horizon at noon, so that both sunrise and sunset occur simultaneously and due south at midday. This last sunset marks the beginning of the season of sunless days in the Far North.

4. On the following day the solar disk ascends so that its upper rim touches just beneath the southern horizon at midday, and then descends. The sky is brilliantly illuminated by its fiery glow, but the Sun itself is not seen, except from a high building or a hilltop. Thereafter the sunrise-sunset point for the people in the Arctic regions is noon, when the Sun is at its zenith.

5. During the season when the Sun does not appear above the horizon during the 24 hours of the day in the Arctic regions, Sabbath keepers observe there observe the Lord's day from noon to noon.

Winter

1. At the winter solstice the Sun's zenith descends to its farthest point below the southern horizon in the Arctic regions, for the North Pole is then at its maximum inclination away from the orb of day. Thereafter the Sun's zenith ascends a little closer to the southern skyline at noon of each day.

2. As the North Pole swings slowly toward the Sun, the day comes when the solar disk ascends so that its upper rim touches just beneath the southern horizon at noon. The sky is then brilliantly illuminated by its fiery glow, but the Sun itself is not seen, except from a high building or a hilltop.

3. On the next day part of the solar disk appears above the southern skyline at noon, so that both sunrise and sunset really occur simultaneously and due south at midday. This sunset closes the season of sunless days in the Far North. Thus a Sunset marks the beginning, and one marks the ending, of this sunless season, and they both occur at noon on the southern horizon.

4. On the following day the whole solar disk is seen above the southern horizon at noon, its lower rim touching just above the skyline, so that sunrise and sunset occur almost simultaneously at midday.

5. Thereafter the people of the Far North have regular sunrises and sunsets, and Sabbath keepers there observe the Lord's day from evening to evening.

Spring

1. During the spring the people of the Far North have regular sunsets and sunrises, and Sabbath keepers there observe the Lord's day from evening to evening.

2. As the summer solstice approaches, the day comes when the solar disk, at its nadir, nears the northern horizon at midnight, its upper rim touching just under the skyline, so that sunset and sunrise occur almost simultaneously at midnight.

3. On the next day part of the solar disk appears above the northern horizon at midnight, so that both sunset and sunrise occur simultaneously and due north at midnight. This last sunset marks the beginning the season when the Sun is above the skyline during all the 24 hours of the day in the Far-North.

4. On the following day the whole solar disk appears above the northern horizon at midnight, its lower rim touching just above the skyline. At its nadir, the Sun is then at the lowest point-its "dip" - in its path above the horizon. It is only in summer that the midnight Sun is seen.

5. During the season when the Sun is above the horizon throughout the entire 24 hours of the day, Sabbath keepers observe the Sabbath from dip to dip, i.e., from midnight to midnight.

Summer

1. At the summer solstice the Sun's nadir ascends to its highest altitude above the northern horizon in the Arctic regions, for the North Pole is then at its maximum inclination toward the Sun. Thereafter the Sun's nadir descends a little closer each day to the northern skyline at midnight.

2. As the North Pole swings away from the solar orb, the day comes when the solar disk descends so that its lower rim touches just above the northern skyline.

3. On the next day part of the solar disk is seen above the northern horizon at midnight, so that both sunset and sunrise occur simultaneously and due north at midnight. This first sunset closes the period when the Sun is above the skyline during all of the 24

hours of the day. Thus a sunset marks the beginning, and one marks the ending, of the season, and they both occur at midnight on the northern horizon.

4. On the following day the whole solar disk descends below the northern horizon at midnight, its upper rim touching just beneath the skyline, so that both sunset and sunrise then occur almost simultaneously at midnight.

5. Thereafter the people of the Far North have regular sunsets and sunrises, and Sabbath keepers there observe the Lord's day from evening to evening.

During this period when the Sun is ever hidden below the horizon, Sabbath keepers in the Far North observe the seventh day from Friday noon to Saturday noon, because that hour corresponds to sunset in the Arctic Region in midwinter. For each day during the time that the Sun is hidden behind the southern horizon, it is at its zenith at noon, as it were both rising and setting beneath the horizon at that hour.

Sunsets in the Spring

From then on Sabbath keepers have visible sunsets to mark the commencement and the end of the seventh day. Each day the Sun rises a little earlier and sets a little later, so that by March 21 (the vernal equinox) sunrise takes place about 6: 00 AM, and sunset occurs about 6: 00 PM. From March 22 onward the Sun rises earlier and earlier, and sets later and later, so that the daylight portion of the day grows longer, and the night part becomes shorter, until June 21 (the summer solstice). And the farther north a place is in the Northern Hemisphere, the earlier the Sun rises and the later it sets each day between those two dates. This is why vegetation grows so rapidly, and ripens in so short a period of time, in the more northern latitudes, for the daylight portion of their summer days is of much longer duration than that of ours. The people just south of the Arctic Circle have a day or two of about 23 hours of sunlight each, and during the other hour they have a brilliant twilight because the Sun has dipped only a little way below the horizon for that short time. Indeed, from hilltops one can even see the glowing solar orb during that hour. [1]

At Circle, an Alaskan town situated a few miles south of the Arctic Circle, the people in midsummer practically have what is called the midnight Sun. Agnes Rush Burr describes the sunset thus: "Slowly, in a sky of gold the Sun sinks almost to the horizon. The water is a great shining pathway of gold, and in this glory two small islands are darkly silhouetted. Down, down almost to the water's edge drops the great globe, hesitates there a few moments as if undecided whether to go to bed or to go to work again, and then, having made up his mind, slowly moves in seemingly almost a straight line along the horizon for a brief space and then slowly begins to rise." [2]

The Midnight Sun

North of the Arctic Circle they have the midnight Sun in midsummer. For example, at Nordkyn, Norway, the daylight period of the day keeps lengthening after March 21 (the vernal equinox), with the Sun rising earlier and earlier, and setting later and later toward the north while its zenith gradually moves farther and farther southward from the northern horizon. On May 11 the solar orb describes a circle in the sky and just dips behind the horizon to the north at almost midnight. At nearly 12: 00 midnight the Sun glides from left (west) to right (east) along the northern horizon, lowering itself behind it, so that at its nadir the Sun's upper rim touches the horizon at midnight and then it starts upward. Being thus at its nadir, the Sun then both sets and rises at midnight. On May 12 the Sun, having described another circle in the sky, glides down to the northern horizon, so that only the lower half of its disk dips behind it at exactly midnight, and immediately starts up again. And on May 13 the same process is repeated, except that the solar disk descends to the northern horizon, with its lower rim barely touching upon it at midnight. There it seems to hesitate a moment, and then slowly commences to climb upward into the sky. Thus we have the first midnight Sun of the season. And each day thereafter the Sun's nadir moves a little higher above the northern horizon until June 21 (the summer solstice), after which it will lower little by little until the last midnight Sun of the season is seen at Nordleyn on July 29. After that there will be a sunrise and a sunset each day for the people there until November 18, after which the Sun disappears to remain behind the horizon all day.

Note, therefore, that the last sunset at the commencement of the period of days of continuous sun occurs at midnight, and that the first sunset at the close of the same period takes place at midnight.

When the Sun is at its zenith-the highest point in its apparent circular path in the sky-during the midsummer days when it never sets, the people above the Arctic Circle know that it is noon. And when it is at its nadir the lowest point in its apparent circular path in the sky in midsummer days, they know that it is midnight. This lowest point in the Sun's apparent 24-hour circuit in the sky is called "the dip" by those living in the Far North, and it occurs at true midnight and at a point due north. It corresponds to sunset, as pointed out already. Hence, Sabbath keepers living above the Arctic Circle observe the seventh day from midnight Friday to midnight Saturday in midsummer, because the Sun is then at its nadir the dip-which is also the sunset point.

Due North at Midnight

E. Burton Holmes, tells how he and his party watched for the appearance of the midnight Sun near the island of Fuglo off the coast of northern Norway. His description of it reads as follows:

“Here, near the summit of the world, the Sun does not appear to sink right down to the horizon as in old familiar sunsets we have so often watched. Instead, it glides from left to right along the horizon, its downward trend so slight that for an hour it seems to hover just a little above the line between the waters and the sky. Still there is a lowest point in the long downward arc described by the slow moving Sun. That point is due north, and as we gaze along the ship’s compass we see that the Sun will reach that point as soon as it has passed behind the island of Fuglo. The Sun has almost grazed the waters ere it disappears, eclipsed by the great screen of rock, yet when it reappears about a quarter of an hour later it seems not to have sunk an inch nearer to the horizon....

“Meantime, watches in hand, we wait-all eager to assure ourselves that this time we shall see the midnight Sun at midnight. The long minute-hand stands nearly parallel with the short hand that marks the twelfth hour on the dial. The slow, low Sun rolls imperceptibly toward that point of the compass where it should be at midnight, between the twenty-seventh and the twenty-eighth days of July. The passing of that point marks midnight, marks the end of yesterday and the beginning of tomorrow.

“At last the ship’s cannon roars. The Sun has touched the spot in space toward which it has been sweeping since last it arose, toward which it has already begun to trend again, starting without an instant of repose on its eternal daily round, upward and eastward, southward and westward and downward again toward the north, ever its starting point and ever its destination.” [3]

Note that Mr. Holmes states that the Sun’s “passing of that point marks midnight, marks the end of yesterday and the beginning of tomorrow.” Bayard Taylor well remarks: “It is neither sunset nor sunrise but the blended loveliness of both.” [4] And we say, What a beautiful marking of the beginning of the Lord’s holy Sabbath day!

On Cloudy Days

Some one may ask, “Well, how can they know when the Sun is at its nadir-the dip-on a cloudy, midsummer day?” They know it just as easily as we know when the Sun sets in the United States on a cloudy day. The people in the Far North have astronomical almanacs by which they can know the hour of sunrise and sunset. They also have clocks that accurately tell the time of day. By telegraph and by radio they get daily time signals from efficiently operated astronomical observatories and thus keep their timepieces regulated. They can know when it is midnight by looking at the clock. (In Europe 12:00 midnight is called “24 o’clock” in some countries.)

During the season of days without Sun-in mid winter the people of the Far North depend largely upon their clocks to know when it is noon and when it is midnight.

Paul Du Chaillu, describing his stay in Lapland during the winter season when the Sun was not seen above the horizon, says: “The Lapps could tell from the stars whether it was night or day, for they were accustomed to gauge time by them according to their height above the horizon, just as we do at home with the Sun.” [5]

The same writer, who traveled widely, describes in another work a trip that he made northward in Sweden and Norway. He says:

“Between the stations of Kunsjarvi and Ruokojarvi (jarvi means “lake” in Finnish) we crossed the Arctic Circle at 66°32’ North, or 1,408 geographical miles south from the [North] Pole, where the Sun shines for an entire day on the twenty-second of June, and the observer will see it above the - horizon at midnight, and due north. After that date, by journeying north at an average of about 10 miles a day, he would continue to see the midnight Sun till he reached the pole. On the twenty-second of September the Sun descends to the horizon, where it will rest, so to speak, all day long; on the following day it disappears till the twenty-second of March.

“When returning southwards at the same rate, the traveler will continue to see the midnight Sun in his horizon till he reaches the Arctic Circle, where for one day only, as we have seen, the Sun is visible.

“The Sun at midnight is always north of the observer, on account of the position of the Earth. It seems to travel around a circle, requiring 24 hours for its completion, it being noon when it reaches the greatest elevation, and midnight at the lowest.” [6]

No Difficulty Encountered

Neither Sunday keepers nor Sabbath keepers have any difficulty in knowing when to begin their religious rest days in the Far North. During two seasons of the year the visible sunset serves to mark the beginning and the end of the seventh day for the Sabbath keepers in the Arctic Region. And during the period of days without the Sun’s appearance above the horizon, the Sabbath is kept from Friday noon to Saturday noon, because that hour corresponds to the sunset time, as is proved by the last visible sunset occurring at the beginning of the period, and by the first visible sunset taking place at the close of the season. But during the season when the Sun is in the sky continuously throughout the day, the Sabbath is kept from midnight Friday to midnight Saturday, because the Sun is at its sunset point-the nadir or dip at that time of day, as is proved by the last visible sunset occurring at the beginning of the period, and by the first visible sunset taking place at the close of the season.

10. The World's Oldest Festival

WHEN ADAM, the father of mankind, first opened his eyes and looked about him, he saw all around him a beautiful, perfectly formed world furnished and ready for human habitation. The trees, the flowers, the insects, the fowls, the reptiles, the animals, and the fish were already here. He had not the least knowledge of either how or when they came into being. Indeed, he did not even know the story of his own origin, nor what day of the week it was, when he became a living soul.

Like us, Adam had to learn those things by divine revelation. And, like us, he had to accept that revelation by faith in the word of God. Apart from the Bible, no human reasoning and speculation can tell how and when this world was brought into existence. "Through faith we understand that the worlds were framed by the word of God, so that things which are seen were not made of things which do appear." [1] The world is here, and so are we, and of the fact of our existence there can be no doubt. But how and when our existence came to be, we do not know of ourselves. We are simply told: "By the word of the Lord were the heavens made; and all the host of them by the breath of His mouth. For He spoke, and it was done; He commanded, and it stood fast." [2] They came into existence by the creative power of the word of the Almighty.

The Sacred Word declares that Adam was created on the sixth day of Creation week. The set of Sun that marked the close of that sixth day, also signaled the beginning of the next—the seventh. The fact that "the Sabbath was made for man," yet is "the Sabbath of the Lord," [3] and was made back there when man was created, indicates that God took Adam into His plans and purposes concerning the institution of the Lord's day. "He hath made His wonderful works to be remembered." [4] Man ought not to forget His Creator, the Sustainer of all things. Hence the story of Creation, including the origin of himself, was revealed to Adam by his Maker. It was made known to him that the next day after he came into being was the seventh day of this world's history, and that it would mark the close of the first week of time for this planet. The very fact that "the Sabbath was made for man", is evidence that the Lord's day was instituted with Adam's having knowledge of it, of both the act and the purpose of God in blessing and sanctifying the seventh day.

It was most fitting that the next day after Adam's creation should be the one chosen for the Sabbath. Adam was not even in existence during the first five days of Creation week, and had the first day been chosen to be God's holy day, man would have had no share in the institution of it. He and his wife were the last of the created works to which God gave existence on the sixth day. And until the work of that day was done, this world was incomplete. But when the seventh day came, all-including establishment of the human family in its Edenic home was complete, "for in six days the Lord made heaven and earth, the sea, and all that in them is." [5] There was no long process of evolution in this. "The works were finished from the foundation of the world." [6] The seventh-day Sabbath is, therefore, not a memorial of the beginning of an unfinished undertaking, but it commemorates a completed work.

Of all the world's festivals the Sabbath is the most hoary with age. Before the first thought of evil defiled the inner chambers of a human soul, and ere the blight of sin had scarred the face of nature in this world, the seventh day was set apart by the Creator for holy use. "The Sabbath was made for man." [3] It was instituted before mankind had need of salvation from sin. Therefore, the Sabbath could not be a typical and ceremonial feast day foreshadowing Christ's work of delivering man from the bondage of evil.

A Memorial of Creation

Like many of the world's notable holidays, the Sabbath is not a reminder of something to be done in days to come, but is a memorial of something done in days gone by. The Creation narrative of Genesis, the fourth commandment of the Ten Commandments, an ordinance of the Mosaic law, and one of the New Testament epistles specifically point to the foundation of the world as the time when the Sabbath was instituted, and they present it to us as commemorative of the creation of the Earth.

"And on the seventh day," says the writer of the first book of the Bible, "God ended His work which He had made; and He rested on the seventh day from all His work which He had made. And God blessed the seventh day, and sanctified it: because that in it He had rested from all His work which God created and made." [7]

"Remember the Sabbath day, to keep it holy. Six days shall thou labor, and do all thy work: but the seventh day is the Sabbath of the Lord thy God: For in six days the Lord made heaven and earth, the sea, and all that in them is, and rested the seventh day. Wherefore the Lord blessed the Sabbath day, and hallowed it." [8] These words were spoken by the Almighty Himself when He proclaimed the Ten Commandments personally in awful majesty from the summit of Mount Sinai. He also wrote them in the bosom of the Ten Commandments that He engraved with His own finger upon tables of stone. [9] Thus the seventh-day Sabbath whose observance is enjoined in the divine law, is none other than that which was blessed and sanctified by the Creator in the beginning.

One of the statutes of the Mosaic law that commanded Israel to regularly observe the Sabbath as a national holy day closes with these words: "For in six days the Lord made heaven and earth, and on the seventh day He rested, and was refreshed." [10]

The apostle reminds his readers of this same truth, saying: "For He [God] spoke in a certain place of the seventh day on this wise, And God did rest the seventh day from all His works." [11]

Work Ended on Seventh Day

Did you note that it is said in Genesis 2: 2 that "on the seventh day God ended His work"? Yet Exodus 20: 11 declares that "in six days the Lord made heaven and earth, the sea, and all that in them is." How then, could He end His work on the seventh day, if heaven and earth, the sea, and all that in them is were made in six days? The answer is that although He did make those things in the first six days

of Creation week, there still remained something else for the Lord to make on the next day. “The Sabbath was made,” [12] says the Savior. God ended His work on the seventh day by making the Sabbath.

How did He do that? He did it by four acts: (1) He chose the seventh day to be the Sabbath, (2) He rested on the seventh day, (3) He blessed the seventh day, and (4) He sanctified the seventh day. By choosing the seventh day to be the Sabbath, He singled it out as His special day – “the Sabbath of the Lord thy God.” [13] By resting upon the seventh day, He set a divine example for the keeping of the Sabbath. By blessing the seventh day, He designed that its observance should be for the good of those who keep it holy. “The Sabbath was made for man,” declared Jesus.” And the ancient prophet was instructed to say to men: “Blessed is the man that does this, and the son of man that lays hold on it. That keeps the Sabbath from polluting it, and keeps his hand from doing any evil.” [14] By sanctifying the seventh day, God set it apart as holy and to be used for a sacred purpose.”My holy day.” [15]

The Christian Sabbath

The Sabbath is a Christian institution from its very beginning. It is inseparably linked with the Author of the Christian religion. It is not a Mosaic festival, but was established about 2,500 years before Moses knew anything about it. Not Moses, but “the Son of man is Lord even of the Sabbath day.” [16]

One of the most glorious revelations that the Sacred Scriptures give of the divine character of Christ is the fact that He is Creator of this world. He once said to His Father: “Thou loved Me before the foundation of the world.” [17] Also: “O Father, glorify Thou Me with Your own self with the glory which I had with Thee before the world was.” [18] The apostle refers to Him as the Word of God. This is a very appropriate name, because the Logos was the One through whom the will of the Deity concerning the creation of this world was executed. “In the beginning was the Word, and the Word was with God, and the Word-was God. The same was in the beginning with God. All things were made by Him and without Him was not any thing made that was made.” [19] If He made everything that was made, then He must have made the world. “The world was made by Him.” [20] God has “spoken unto us by His Son, whom He hath appointed heir of all things, by whom also He made the worlds.” [21]

The revelation of our Savior as the Creator and the Sustainer of all creation is beautifully set forth in these words from Paul: “By Him were all things created, that are in heaven, and that are in earth, visible and invisible, whether they be thrones, or dominions, or principalities, or powers. All things were created by Him, and for Him: and He is before all things, and by Him all things consist.” [22]

This truth that Christ was with His Father in the beginning, and shared with Him the planning and the creating of this world, throws light on this statement: “And God said, Let Us make man in Our image, after Our likeness.” [23] Note the plurality of Creators indicated in that passage.

Christ Sanctified It

The same Christ who created the world is the One who rested on the seventh day, and blessed and sanctified it in that long ago. He was the Divine One who made the Sabbath for man. Thus the Sabbath is the Lord’s day, and has been a Christian institution from the start. “Therefore the Son of man is Lord also of the Sabbath.” [24]

The ancient poet taught Israel to sing: “Ascribe you greatness unto our God. He is the Rock.” [25] The apostle Paul identifies Him more definitely as the One who brought Israel out of Egyptian bondage, saying: “They drank of that spiritual Rock that went with them: and that Rock was Christ.” [26] Yes, Christ proclaimed the law of Ten Commandments on Mount Sinai, and wrote them on the two tables of stone. The same One who entrusted Israel with the transcripts of the divine law was also the One who would save His people from sin. “For the Lord is our Judge, the Lord is our Lawgiver, the Lord is our King; He will save Us.” [27]

The time finally came when, as the prophet Isaiah had foretold, the Son of God became the Son of man Emmanuel, God with us.” [28]

Christ Upheld God’s Law

It was also foretold: “He will magnify the law and make it honorable.” [29] This was to be expected, for through David He had said: “Lo, I come: in the volume of the Book it is written of Me, I delight to do Thy will, O My God: yea, Thy law is within My heart.” [30]

In keeping with His purpose to uphold God’s law, Christ in His notable sermon on the mount publicly announced that He had come with no intention whatever to alter it: “Think not that I am come to destroy the law, or the prophets,” He declared. “I am not come to destroy, but to fulfill. For verily I say unto you, Till heaven and earth pass, one jot or one tittle shall in no wise pass from the law, till all be fulfilled. Whosoever therefore shall break one of these least commandments, and shall teach men so, he shall be called the least in the kingdom of heaven: but whosoever shall do and teach them, the same shall be called great in the kingdom of heaven.” [31] And at a later date He restated His purpose concerning the law in words that leave no room for doubt as to its immutability: “It is easier for heaven and earth to pass, than one tittle of the law to fail.” [32]

The fourth commandment, which enjoins upon men the keeping of the Sabbath, is not only embedded in the very bosom of the Ten Commandments, but constitutes a very large part of it. In the light of what Christ said about the unchangeable nature of God’s law, we cannot expect Sabbath observance to fail as long as the sky is over our heads and the earth is under our feet.

“Sin is the transgression of the law.” [33] “For where no law is, there is no transgression.” [34] “Whosoever shall keep the whole law, and yet offend in one point, he is guilty of all.” [35] But Christ “was in all points tempted like as we are, yet without sin.” [36] He “did no sin.” [37] In other words, He did not in any wise transgress any precept of the law of God.

The Lord’s Day

Jesus was a faithful Sabbath keeper in His childhood and throughout His whole life among men. It is recorded that “He came to Nazareth, where He had been brought up: and, as His custom was, He went into the synagogue on the Sabbath day, and stood up for to read.” [38] Thus He not only attended worship on God’s day, but He took a leading part in it. After He was driven from Nazareth, He “came down to Capernaum, a city of Galilee, and taught them on the Sabbath days.” [39] His disciples went with Him to the house of worship on the Sabbath day. [40]

Christ never disagreed with the Jews in the least concerning which day of the week was the Lord’s holy day. But He did resolutely oppose their severe man-made regulations for its observance. Thus He defended the Sabbath against fanatical abuse, and set forth its true purpose to be a blessing to man. [41] In the presence of His friends and His enemies He emphatically declared that the Sabbath is the Lord’s day, His own day. “The Son of man is Lord even of the Sabbath day.” [42] He could say this because He, as Creator of the world, had instituted the Sabbath in the beginning.

In relating to the apostles what would be some of the signs of the fall of Jerusalem and of His second coming, Christ revealed to them His regard for the Sabbath day by issuing to them this command: “Pray you that your flight be not in the winter, neither on the Sabbath day.” [43] Had He already abolished the law and done away with Sabbath observance, He would not have given such a command as this to pray about the matter of the observance of the Sabbath when Jerusalem should be destroyed by the Romans in AD 70.

Sabbath Kept after Crucifixion

On the following Friday He was crucified. He was buried that afternoon late, “when the even was come, because it was the preparation, that is, the day before the Sabbath.” [44] “That day was the preparation, and the Sabbath drew on.” [45] In the new tomb of Joseph of Arimathea they laid the Lord of the Sabbath to rest, and while in the grave He rested on the seventh day from the work of redemption He had wrought for man on the cross, also His followers went home and “rested the Sabbath day according to the commandment.” [46] The Bible reveals that “according to the commandment” of God’s law, “the seventh day is the Sabbath.” [8]

In Apostolic Times

The early Christians followed the practice of observing the seventh-day Sabbath. When Paul and his company of evangelists came to Antioch in Pisidia, the apostle preached the gospel to the congregation assembled in the synagogue there on the Sabbath day. So great was the interest aroused, that “the Gentiles besought that these words might be preached to them the next Sabbath. And the next Sabbath day came almost the whole city together to hear the word of God.” [47]

It is remarkable that there should be such a large number of “the Gentiles” there observing the Sabbath. It reminds us that the fourth commandment of the Ten Commandments was intended to apply to “the stranger” [48] as well as to the Israelite. It also recalls the promise made to the Gentiles of lands afar over seven centuries before the Savior was born. The Lord then said: “Blessed is the man that does this, and the son of man that lays hold on it; that keeps the Sabbath from polluting it, and keeps his hand from doing any evil.” [49] This blessing is all-inclusive, being limited to no particular race or nation of people. That the Gentiles were included in the promised blessing is emphasized in the following statement:

“Also the sons of the stranger, that join themselves to the Lord, to serve Him, and to love the name of the Lord, to be His servants, every one that keeps the Sabbath from polluting it, and takes hold of My covenant. Even them will I bring to My holy mountain, and make them joyful in My house of prayer: their burnt offerings and their sacrifices shall be accepted upon Mine altar. For Mine house shall be called an house of prayer for all people.” [49]

When Paul and his associates came over into Europe, they spent several days at Philippi, the chief city of Macedonia, where a Christian church was raised up. One of the apostle’s letters—the Epistle to the Philippians—was sent to the believers there. Luke writes concerning their stay in this city: “On the Sabbath we went out of the city by a river side, where prayer was wont to be made; and we sat down, and spoke unto the women which resorted thither.” [50] The word “wont” indicates that these God-fearing persons were accustomed to go to that place on the Sabbath day to pray. Paul and his company joined with them in their worship, as he was always wont to do on the Lord’s day.

In Thessalonica

When they came to Thessalonica, where a large Christian church was raised up as a result of his labors, the work of the gospel was started in the synagogue. “And Paul, as his manner was, went in unto them, and three Sabbath days reasoned with them out of the Scriptures, opening and alleging that Christ must needs have suffered, and risen again from the dead; and that this Jesus, whom I preach

unto you, is Christ. And some of them believed, and consorted with Paul and Silas; and of the devout Greeks a great multitude, and of the chief women not a few.” [51]

Note that the Gentiles again are mentioned, for “of the devout Greeks a great multitude, and of the chief women not a few,” were then attending divine service on the Sabbath day week after week.

In the great city of Athens the apostle occupied himself in making tents for a livelihood on the work days. But not so on the Lord’s day, for “he reasoned in the synagogue every Sabbath, and persuaded the Jews and the Greeks.” [52] Again we note mention is made of Sabbath keeping Greeks attending the services conducted by the apostle. This he did “every Sabbath” while “he continued there a year and six months, teaching the word of God among them.” [52]

The apostle John, exiled to the isle of Patmos for the truth’s sake, must have kept careful count of the passing days so as not to forget which was God’s sacred day. He writes he “was in the Spirit on the Lord’s day,” [53] and that then he received a special revelation from Christ. As shown earlier in this chapter, “the Son of man is Lord even of the Sabbath day.” [42] It is Christ’s holy day, and for this reason God’s law says: “The seventh day is the Sabbath of the Lord.” This is not said of any other day of the week, for they are called “the six working days.” [54]

Still to Be Observed

In words of exhortation to the people of the Christian church the Lord has said: “There remains therefore a keeping of a Sabbath to the people of God. For he that is entered into His rest, he also hath ceased from his own works, as God did from His.” [55] The American Standard Version reads: “So then, there remains a Sabbath rest for the people of God.” What day is here referred to is shown by the apostolic writer in the same connection: “For He spoke in a certain place of the seventh day on this wise, And God did rest the seventh day from all His works.” [56] This clearly indicates that the Sabbath rest which remains for the Christian people is the seventh-day Sabbath which God blessed and hallowed in the beginning.” [57]

After His resurrection Jesus ascended to heaven. But before He went away, He promised: “If I go and prepare a place for you, I will come again, and receive you unto Myself; that where I am, there you may be also.” [57] This promise is echoed and re-echoed throughout the New Testament. And we have this assurance from Him: “When the Son of man shall come in His glory, and all the holy angels with Him, then shall He sit upon the throne of His glory: and before Him shall be gathered all nations and He shall separate them one from another. Then shall the King say unto them on His right hand, Come, you blessed of My Father, inherit the kingdom prepared for you from the foundation of the world.” [58]

In the New-Earth Kingdom

The coming kingdom of Christ is the one for which He taught us to pray: “Thy kingdom come. Thy will be done in earth, as it is in heaven.” [59] It is the one that Christ had in mind for man when He made this world. By disobedience mankind has delayed the realization of the Creator’s original purpose in the making of this planet. But it finally will be carried out. “For thus said the Lord that created the heavens; God Himself that formed the earth and made it; He hath established it, He created it not in vain, He formed it to be inhabited.” [60]

This present sinful world will be purified by fire and made into a new earth. In that day “the [atmospheric] heavens shall pass away with a great noise, and the elements shall melt with fervent heat, the earth also and the works that are therein shall be burned up.” [61] And Peter adds: “Nevertheless we, according to His promise, look for new heavens and a new earth, wherein dwells righteousness.” [62] Centuries before the Lord had said: “Behold, I create new heavens and a new earth.” [63] John saw them in vision, and wrote: “I saw a new heaven and a new earth.” [64] He beheld also its glorious metropolis, the New Jerusalem, which shall be the capital of the kingdom of Christ upon earth. [65] “The throne of God and of the Lamb shall be in it; and His servants shall serve Him.” [66]

It was the transgression of God’s law that caused man to lose the right to “the kingdom prepared for you from the foundation of the world.” [58] And only those who, by the grace of Christ, are disposed to obey that law can have a part in that kingdom when it shall become a reality. “Blessed are they that do His commandments, that they may have right to the tree of life, and may enter in through the gates into the city.” [67] All those who shall be privileged to enter the capital city of the kingdom of Christ will be Sabbath keepers then, for one of “His commandments” tells us to keep the Sabbath holy. Yes, all the inhabitants of the world to come will be Sabbath keepers. “For as the new heavens and the new earth, which I will make, shall remain before Me, said the Lord, so shall your seed and your name remain. And it shall come to pass, that from one new moon to another, and from one Sabbath to another, shall all flesh come to worship before Me, said the Lord.”

In Conclusion

Established by Christ at creation and before the thought of sin entered the heart of man and ere the curse of sin marred the beauty of nature in this world, the Sabbath will be faithfully kept throughout the ceaseless ages of eternity after sin and sinners shall be no more. The Sabbath is, therefore, an everlasting institution.

In this study we have noted

- (1) That the keeping of time by the celestial bodies for this world as God has appointed is very accurate and dependable.
- (2) That the days of Creation week were literal days of 24 hours each.
- (3) That sunset is the natural and divinely appointed marker of the beginning and the ending of the day.
- (4) That anciently the practice of reckoning the day from sunset to sunset was very general in the world.
- (5) That until the nineteenth century Sunday was kept by many people from evening to evening.
- (6) That the International Date Line has a scientific basis and creates no problem for the Sabbath keeper.
- (7) That in the regions beyond the Arctic Circle it is simple and easy to know when the Sabbath begins and ends.
- (8) That the Sabbath was instituted by Christ when He made this world and before any taint of sin had defiled the human race.
- (9) That in the kingdom which Christ shall establish upon the new earth the Sabbath will be observed regularly throughout eternity by all flesh.

May we hold so true to the law and the gospel that it shall ever be said of us: "Here is the patience of the saints: here are they that keep the commandments of God, and the faith of Jesus." [70]

When Crossing the Date Line

A SABBATHKEEPER, traveling by ship from the United States to China, crosses the Date Line at 10 o'clock Saturday morning. He has observed the Lord's day since the sunset of the evening prior to his arrival at the Date Line. Ought he, upon crossing the line, to continue to observe the passing hours as sacred until the next sunset should come to him? Or, may he properly end his observance of the Sabbath the moment that he makes the crossing?

The inquiry is a practical one. Sabbath keepers frequently meet such a problem as this, or others similar to it, when they cross from one side of the Date Line to the other. The solution is not so simple as it seems at first to the inexperienced traveler.

In this matter of crossing the Date Line the Sunday keeper, who observes the first day of the week from midnight to midnight, faces a similar perplexity when he crosses the Pacific Ocean.

But there is one fundamental difference between the problem of the Sunday keeper and that of the Sabbath keeper. The Holy Scriptures support the latter in his observance of the Lord's day from sunset to sunset. But the Sunday keeper has no Bible grounds for his keeping of Sunday from midnight to midnight. This practice is based on custom and civil law which are traceable to pagan Rome. Furthermore, the Sunday keeper usually commences his observance of the first day of the week by reference to the hands of the clock regardless of the fact that it is seldom true midnight at 12 o'clock in the night.

In seeking the solution to the various problems and perplexities that may present themselves in relation to Sabbath observance when one crosses the Date Line, there are several facts that need to be kept in mind. Therefore, we shall consider them first in this study.

Facts to Keep in Mind

Let it be kept in mind that since the Earth turns from west to east in its rotation, the day moves from east to west around the world. In other words, the Earth's turning on her axis causes the Sun to appear to move from east (sunrise) to west (sunset) in the march of the day around the Earth.

The Date Line, which runs north and south over the Pacific Ocean, is the point on the Earth's surface where the day is reckoned to begin and to end. Its prime meridian is 180° of longitude either east or west of the meridian of Greenwich, England. The first hour of the first day of the week, for example, begins at the Asiatic side of the Date Line, and with the other 23 hours of the day following in its train, it moves westward around the globe by way of the meridian of Greenwich until it arrives at the American side of the line. Following right behind the last hour of Sunday comes the first hour of Monday, with the other 23 hours of this day in its train. Thus not only does the march of the hours of the day begin and end at the Date Line, but also the procession of the days of the week commences and closes there.

By moving either eastward or westward, the traveler changes his geographical position in relation to the procession of the days of the week around the globe from the Asiatic to the American side of the Date Line by way of the meridian of Greenwich.

For example, a traveler crosses the Pacific Ocean from the United States to China. He arrives at the American side of the Date Line at 10 o'clock Saturday morning. Crossing the line at that moment, he finds that it is 10 o'clock Sunday morning on the Asiatic side.

The traveler returns to the United States from China by the same route. He arrives at the Asiatic side of the Date Line at 10 o'clock Saturday morning. Crossing the line at that moment, he finds that it is 10 o'clock Friday morning on the American side. By changing his geographical position in relation to the march of the days of the week around the globe, the traveler creates for himself the problem of adjusting his count of the days of the week when he crosses the Date Line.

A Simple Matter

The matter of adjustment in the count of the days of the week is a very simple one when the traveler crosses the Date Line. All he needs to do when making the journey westward across the Pacific Ocean is to set his time keeping ahead 24 hours to make his count of the days of the week harmonize with that of the people living on the Asiatic side of the line. And when he makes the journey eastward across the Pacific Ocean, all he has to do is to set his time keeping back 24 hours to make his count of the days of the week correspond to that of the people dwelling on the American side of the line. The solution to the problem is as simple as that. The difficulty and perplexity lies chiefly in the fact that most people have given very little thought to time as it relates to the world in general and to the Date Line in particular.

The precise location of the Date Line is not established by a law of God, but rather is fixed by an agreement between the nations. While it is scientifically true that the traveler going across the Pacific Ocean must make an adjustment in his time keeping by setting it ahead 24 hours when making the westward journey, and by setting it back 24 hours when making the eastward journey, yet the exact place where the adjustment is to be made is determined by men in the light of reason, experience, and convenience. In other words, some elasticity in the matter is justifiable in so far as the place where such adjustments are to be made is concerned.

How Change in Time Is Made

Generally the captain of a ship neither announces to the crew and the passengers the exact moment when the vessel crosses the Date Line, nor changes the civil count of the days of the week on the ship at the exact moment that the crossing is made. He usually waits until the first midnight comes after the line is crossed, and then makes the adjustment in the count of the days of the week. Thus the ship's log contains no records for fractions of days, but rather accounts for whole days only.

For example, a vessel making the westward journey on the Pacific Ocean crosses the Date Line at 10 o'clock Sunday morning according to the time kept on the American side. Instead of changing the civil count of the days of the week for the vessel to 10 o'clock Monday morning at the moment when the line is crossed, the captain continues to regard the passing hours thereafter as belonging to Sunday until the ensuing midnight comes. At this hour he sets the time keeping on the ship ahead 24 hours. Thus this midnight not only marks the close of the civil day of Sunday for the people aboard that vessel, but it also marks the beginning of the civil day of Tuesday for them, and immediately puts their count of the days of the week in harmony with that of the people dwelling on the Asiatic side of the Date Line.

The ship makes the return trip, journeying eastward, and crosses the Date Line at 10 o'clock Sunday morning according to the count of the days of the week on the Asiatic side. Instead of changing the civil count of the days of the week for the vessel to 10 o'clock Saturday morning when the line is crossed, the captain continues to regard the passing hours thereafter as belonging to Sunday until the following midnight comes. At this hour he sets the time keeping on the ship back 24 hours. Thus this midnight not only marks the close of the civil day of Sunday for the people aboard that vessel, but it also marks the beginning of Sunday for them. It is really the same Sunday, but it has come to them twice. While the last hours of Sunday were leaving them in the westward march of time from the Asiatic side of the Date Line, the first hours of that same Sunday met them on the American side of the line.

The Sabbath and the Date Line

There is only one instant when it is the same civil day of the week on both sides of the Date Line, and that is when it is midnight at the line. For example, at that moment the last second of civil Sunday is leaving the Asiatic side of the Date Line, and at that same moment the first second of that same Sunday is arriving at the American side of the line. There is only one instant when it is the biblical Sabbath on both sides of the Date Line, and that is when it is sundown on Friday evening at the line. At that moment the last second of the Lord's day is leaving the Asiatic side of the Date Line, and the first second of that same Sabbath is arriving at the American side of the line. At all other times it is one day of the week later on the Asiatic side of the Date Line than it is on the American side.

Sabbath keepers who have crossed the Date Line report that two practical and satisfactory methods are followed by them in making the necessary adjustment in the count of the days of the week in journeying across the Pacific Ocean. These methods are presented in the following paragraphs by means of illustrative cases. Under the heading "The Westward Crossing" they are presented as they relate to a crossing made from the American to the Asiatic side of the Date Line. And under the caption "The Eastward Crossing" they are shown as they pertain to a crossing made from the Asiatic to the American side of the Date Line.

This is a bird's-eye view of the Earth from a point above the North Pole at the time of the spring equinox. It is exactly midnight at the International Date Line, at which hour the civil day begins. The corresponding hours for the other prime meridians of the globe at that instant are also shown. The biblical day which begins at sunset, commences about six p.m.-approximately six hours earlier-than does the civil day in the equatorial regions. For a given latitude elsewhere the difference depends on the season of the year.

The Westward Crossing

Example. On his journey from the United States to China by way of the Pacific Ocean, a Sabbath keeper crosses the Date Line at 10 o'clock Saturday morning according to the count of the days of the week on the American side of the line. He has observed the

Sabbath since the sunset of the evening prior to his arrival at the Date Line. How does he make the necessary adjustment in the count of the days of the week when he crosses the line?

Answer. He makes the adjustment at the moment that he crosses the Date Line. He then terminates his observance of the Sabbath, sets his time keeping ahead 24 hours, and regards the passing hours thereafter until sunset as pertaining to Sunday. Thus his count of the days of the week is made to harmonize with that of the people living on the Asiatic side of the Date Line.

Answer. He crosses the Date Line and continues to regard the passing hours thereafter until sunset as pertaining to the Sabbath. At the going down of the Sun he terminates his observance of the Sabbath, sets his time keeping ahead 24 hours, and regards that sunset as marking the beginning of Monday for him. Thus he drops Sunday entirely out of his reckoning, and his count of the days of the week is made to harmonize with that of the people dwelling on the Asiatic side of the Date Line.

In this second answer an exception is made in the case where the Sabbath keeper crosses the Date Line and reaches the next stop (of the plane or ship) before sunset. Under such circumstances he terminates his observance of the Sabbath upon his arrival at that place, which (we shall suppose, for example) is four o'clock in the afternoon. At this moment he sets his time keeping ahead 24 hours, regards the passing hours from then on until sunset as pertaining to Sunday, and thus puts his count of the days of the week in harmony with that of the people dwelling on the Asiatic side of the Date Line.

This diagram shows a ship making the westward crossing of the International Date Line. On the American side it is 10 o'clock Saturday morning, and on the Asiatic side it is 10 o'clock Sunday morning, at that time. The corresponding time of day is shown for the other time meridians of the globe at that instant. The hour of sunset (and also of sunrise) in different latitudes varies according to the seasons of the year. Hence this diagram represents the day as it is at the time of the equinoxes, when day and night are equal. The Date Line moves with the rotation of the globe-counter clockwise-from west to east. At the moment shown, the first 10 hours of Sunday have run on, and the last 14 hours of Saturday remain to run off, the spinning world. The 10 hours of Sunday that have already run on, and the 14 hours of Saturday that remain to run off, make a total of 24 hours. Thus while a period of 48 hours elapses from the moment the first second of a day runs on, until the instant the last second of that day rims off, yet there are never more than 24 hours on the Earth at one time.

Why is this exception made? The reason is that if, after his arrival at that place, he should continue to regard the passing hours until sundown as pertaining to the Sabbath, he would find himself observing as holy time hours which the Sunday keeping people of the place would be celebrating as belonging to their weekly festival of rest and worship-the first day of the week. Moreover, he would find his Sabbath keeping brethren who dwell there employing those same hours as common time-Sunday-and doubtless spending them in common labor or other secular concerns. Would it not seem incongruous to him to be observing as sacred time hours which the inhabitants of the place-among them his own brethren-affirm to pertain to Sunday? And would he not appear to be somewhat like the soldier who thought that all the men of his company were out of step but himself? Therefore, for the sake of consistency and harmony he falls into line with the people dwelling on the Asiatic side of the Date Line in their count of the days of the week.

Another Example

Another Example. On his journey from the United States to China by way of the Pacific Ocean, a Sabbath keeper crosses the Date Line at 10 o'clock Friday morning according to the count of the days of the week on the American side of the line. How does he make the necessary adjustment in the count of the days of the week when he crosses the Date Line?

Answer. He makes the adjustment at the moment he crosses the Date Line. He then sets his time keeping ahead 24 hours, begins to observe the Sabbath, and regards the passing hours thereafter until sunset as sacred. Thus he makes his count of the days of the week harmonize with that of the people living on the Asiatic side of the Date Line.

Answer. He crosses the Date Line and continues to regard the passing hours thereafter until sundown as pertaining to Friday. At the going down of the Sun he sets his time keeping ahead 24 hours, and regards that sunset as marking the beginning of the first day of the week, commonly called Sunday. In doing this he drops the Sabbath entirely from his reckoning, and thus makes his count of the days of the week conform to that of the people dwelling on the Asiatic side of the Date Line.

In this second answer an exception is made in the case where the Sabbath keeper crosses the Date Line and reaches the next stop (of the plane or ship) before sundown. Under such circumstances he makes the adjustment in his time keeping when he arrives at this place, which (we will suppose, for example,) is four o'clock in the afternoon. At this moment he sets his time keeping ahead 24 hours, regards the passing hours from then on until sunset as sacred and pertaining to the Sabbath, and thus puts his count of the days of the week in harmony with that of the people on the Asiatic side of the Date Line.

Why is this exception made? The reason is that if, after his arrival at that place, he should continue to regard the passing hours until sundown as pertaining to Friday, which to him would be common time, he would find himself in an embarrassing situation. His Sabbath keeping brethren living there would be found observing the day as the Sabbath until the setting of the Sun, and they certainly would not agree with him in his opinion that it was Friday, a work day. Moreover, he would find it difficult to explain to Sunday keepers who should learn that he is a Sabbath keeper, why he regards as common time that which the people-even his own brethren-on the Asiatic side of the Date Line affirm to belong to the seventh day. Thus for the sake of consistency and harmony the Sabbath keeper adjusts his count of the days of the week to make it conform to that of the people living on that side of the line.

The Eastward Crossing

Example. On his journey from China to the United States by way of the Pacific Ocean, a Sabbath keeper crosses the Date Line at 10 o'clock Saturday morning according to the count of the days of the week on the Asiatic side of the line. He has observed the Sabbath since the sunset of the evening prior to his arrival at the Date Line. How does he make the necessary adjustment in his count of the days of the week when he crosses the line?

Answer. He makes the adjustment at the moment that he crosses the Date Line. He then terminates his observance of the Sabbath, sets his time keeping back 24 hours, and regards the passing hours thereafter until sunset as pertaining to Friday. At the going down of the Sun he begins again to observe the Sabbath. Thus his count of the days of the week are made to harmonize with that of the people living on the American side of the Date Line.

Answer. He crosses the Date Line and continues to regard the passing hours thereafter until sundown as pertaining to the Sabbath. At sunset he sets his time keeping back 24 hours, and regards that sunset as marking the beginning of the Sabbath, which he observes accordingly. Thus he keeps the Sabbath twice in succession with no common time coming between the two observances. But his count of the days of the week is made to conform to that of the people living on the American side of the Date Line.

In this second answer an exception is made in the case where the Sabbath keeper crosses the Date Line and reaches the next stop (of the plane or ship) before the Sun goes down. Under such circumstances he terminates his observance of the Sabbath upon his arrival at that place, which (we will suppose, for example,) is four O'clock in the afternoon. At this moment he sets his time keeping back 24 hours, regards the passing hours thereafter until sunset as belonging to Friday. This sunset will mark for him the beginning of the Sabbath day, and he will keep it accordingly. Thus his count of the days of the week is made to harmonize with that of the people dwelling on the American side of the Date Line.

Why is this exception made? The reason is that if, upon his arrival at that place, he should continue to regard the passing hours as sacred time until sunset, he would be regarded by the inhabitants of that place as keeping Friday holy, and would find himself out of harmony with his Sabbath keeping brethren there, who doubtless would be engaged in common labor and making their Friday preparations for starting the observance of the Sabbath at sundown. Therefore, for the sake of harmony and consistency he falls into line with the people dwelling on the American side of the Date Line in the matter of the count of the days of the week.

Another Example

Another Example. On his journey from China to the United States by way of the Pacific Ocean, a Sabbath keeper crosses the Date Line at 10 o'clock Sunday morning according to the count of the days of the week on the Asiatic side of the line. How does he make the necessary adjustment in his count of the days of the week when he crosses the line?

Answer. He makes the adjustment at the moment he crosses the Date Line. He then sets his time keeping back 24 hours, begins to observe the Sabbath, and regards the passing hours from then on till sunset as sacred. Thus he puts his count of the days of the week in harmony with that of the people dwelling on the American side of the Date Line.

Answer. He crosses the Date Line and continues to regard the passing hours thereafter until sunset as pertaining to Sunday. At sundown he sets his time keeping back 24 hours, and regards that sunset as marking the beginning of Sunday. In this case he has Sunday coming twice to him with no other day of the week between. But his count of the days of the week is brought into harmony with that of the people living on the American side of the Date Line.

In this answer an exception is made in the case where the Sabbath keeper crosses the Date Line and reaches the next stop (of the plane or ship) before the Sun goes down. Under such circumstances he makes the adjustment in his time keeping when he arrives at this place, which (we will suppose, for example,) is four o'clock in the afternoon. At this moment he sets his time keeping back 24 hours, and regards the passing hours from then on until sunset as pertaining to the Sabbath, which he observes accordingly. That sunset will mark for him the end of the Sabbath and the beginning of Sunday.

Why is this exception made? The reason is that if, upon his arrival at this place, he should continue to regard the passing hours until sunset as Sunday, he would encounter embarrassment. He would find the people of the place affirming it to be Saturday. His Sabbath keeping brethren there would be observing the hours as holy time until sundown. And he would find it difficult to explain to Sunday keeping people there who should learn that he is a Sabbath keeper, why he regards as common time the hours which all the people of the place-including his Sabbath keeping brethren-declare belong to the seventh day of the week. Therefore, for the sake of consistency and harmony, he puts his count of the days in accord with that of the people living on the American side of the Date Line.

The Date Line is not an obstacle to Sabbath observance. To the contrary, it is a help, for it enables men to keep an accurate count of time. The roundness and sphericity of our world presents no difficulty to the Christian, the Jew, and the Mohammedan in the observance of the days which they regard as sacred.

When it is sunset Saturday evening on the Asiatic side of the Date Line, it is sunset Friday evening on the American side. At this time, and this only, it is the Sabbath day all around the globe. Then the last moments of the Lord's day are leaving the Asiatic side while the first moments of the same Sabbath are arriving on the American side of the Date Line.

The traveler who crosses from the Asiatic to the American side at this moment keeps the same Sabbath twice in succession. It is 48 hours from the time the Sabbath begins on the Asiatic side until that same Sabbath ends on the American side. While the Earth

rotates from west to east, time moves with the apparent motion of the Sun from east to west around the world. The traveler who makes the eastward crossing of the Date Line at exactly sunset, as indicated above, steps from the end of the Sabbath on the Asiatic side to the beginning of the same Sabbath on the American side, and thus keeps the day twice in succession.

Questions And Answers

Question. How do you explain the fact that in some instances when the Sabbath keeper crosses the Date Line on his journey eastward across the Pacific Ocean he has two Sabbath days coming one right after the other and with no common time between them?

Answer. Two observances of the Sabbath, one right after the other and with no common time between them, can result under one condition only. That is when the adjustment in the count of the days of the week is made at sunset. For example, the Sabbath keeper journeying from China to the United States reaches the Date Line Saturday evening at sunset according to the count of the days of the week on the Asiatic side of the line. He has kept the Sabbath since the sunset of the evening prior to his arrival at the line. At the moment he crosses the Date Line, which is done exactly at sunset, he adjusts his time keeping by setting it back 24 hours. As a result of this setting of his time keeping back 24 hours, that sunset which was the terminal one-closing one-marking the end of his keeping the day on the Asiatic side of the line, now becomes the initial one-the beginning one-marking the commencement of the Sabbath for him on the American side of the line. While there are two Sabbath observances for him in this case, it is really the same Sabbath that is observed in both instances, strange as it may seem. The explanation is as follows.

The Sabbath keeper made the adjustment in his time keeping at the very moment when the last hour of the seventh day of the week was leaving him on the Asiatic side of the Date Line, as well as at the very moment when the first hour of that same Sabbath, which was 24 hours ahead of the last hour in the march of the day around the globe, was reaching the American side of the Date Line. It is only at sunset at the Date Line that the one and the same biblical day can be in all parts of the world at one time. In this case the day of 24 hours may be likened to a freight train of 24 cars, of which the engine is the first and the caboose is the last. The backend of the caboose is against the Asiatic side of the Date Line, the middle of the train (where cars Nos. 12 and 13 join) would be at the Greenwich meridian, and the front end of the locomotive would be against the American side of the Date Line. The crossing of the Date Line in this case may be compared to that of a brakeman stepping off the backend of the caboose onto the front end of the engine. He is still on the same train! The traveler really has done nothing but step out of the tail end of the Sabbath into the front end of the same day!

Another Question

Question. A Sabbath keeper going from America to Asia arrives at the Date Line at 10 o'clock Saturday according to the count of the days of the week on the American side of the line. He makes the necessary adjustment in his time keeping when the line is crossed, then terminates his observance of the Sabbath, and regards the passing hours thereafter as pertaining to Sunday in accord with the count of the days of the week on the Asiatic side of the line.

In another case he may cross the Date Line at the time indicated above but without making the adjustment in his time keeping when the line is crossed. Instead, he continues to regard the passing hours thereafter as sacred and pertaining to the Sabbath which he commenced to observe at the sunset prior to his arrival at the Date Line. But about four o'clock in the afternoon he reaches the next stop (of the ship or plane), which means that the Sun has not yet gone down. He makes the adjustment in his time keeping upon his arrival there, then terminates his observance of the Sabbath, and regards the passing hours thereafter until sunset as belonging to Sunday, in harmony with the count of the days on the Asiatic side of the Date Line. On the return trip there may be similar cases where Sabbath observance either is not begun at sundown or is not ended at sunset. In other words, in none of them has the Sabbath keeper observed the Sabbath from even to even as the Scriptures require. How do you solve this problem?

Answer. In reply to this practical inquiry, we point out that the law of the Sabbath is admitted by most Sabbath keepers to be a general one. There are numerous perplexing particular instances of Sabbath observance concerning which the general law does not give specific rules to be followed. The Sabbath law lays down principles rather than regulations to be followed in every case of Sabbath keeping. It is not so rigid that in his loyalty to God one cannot take into account extraordinary conditions and circumstances that may arise in connection with his observance of the Lord's day. Christ declared that "the Sabbath was made for man, and not man for the Sabbath." He indicated that certain kinds of labor generally considered as unlawful to do on the Sabbath day are permissible in particular cases. The performance of work needed to be done for the care of the afflicted and distressed, even of domestic animals, is permitted on the Sabbath. Also labor necessary for the performance of public worship on the Sabbath day is allowed. The care of infants and the aged, as well as the things necessary to be done for maintenance and protection of life on God's holy day, are considered lawful on that day.

Suppose that a faithful Sabbath keeper drops dead or is killed at 10 o'clock Saturday morning. Do his brethren assume that he has failed to keep the Sabbath properly because he has not closed his observance of it at sundown? No. He has faithfully kept the day as long as it lasted for him. This is an exceptional case.

The rule generally followed by Sabbath keepers is to begin keeping the Sabbath when it comes to them, and to stop keeping it when it leaves them. This applies in the matter of Sabbath observance in connection with the Date Line crossings. When, for example, the Sabbath keeper going from the United States to China arrives at the Date Line at 10 o'clock Friday morning according to the count of the days of the week on the American side, then crosses the line, and then begins to observe the Sabbath until sunset in accord with

the count of the days of the week on the Asiatic side, he has followed this principle in this exceptional case. In this particular instance the Lord's day does not come to him at its initial sunset, but at 10 o'clock the next morning.

Man is powerless to stay the march of time and tide. He can neither speed them up nor slow them down. They are subject to the laws that the Creator has ordained for the control of nature. To say that when a Sabbath keeper on his way from the United States to China arrives at the Date Line at 10 o'clock Saturday morning, he ought to wait there and not cross the line until sundown in order that he may truly say that he has kept that particular Sabbath from even to even as the Bible says, is virtually to say that man was made for the Sabbath, and not the Sabbath for man.

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21. Jeremiah 33:25, 26.
22. Jeremiah 31:35, 36.

2. The Length of the Days of Creation Week

1. Genesis 5:21-27.
2. Genesis 5:18-24; Hebrews 11:5.
3. 1 Kings 17:1.
4. 2 Kings 2:10-18.
5. Matthew 17:1-8; Mark 9: 1-8; Luke 9:28-36.
6. Genesis 5:15.
7. Genesis 5:21.
8. 2 Peter 3:8.
9. 2 Peter 3:9
10. Psalm 90:4, 10.
11. Exodus 20:11.
12. Exodus 31:17.
13. Genesis 1:5.
14. Genesis 1:8.
15. Genesis 1:13.

16. Genesis 1:19.

17. Genesis 1:23.

18. Genesis 1:31.

19. Genesis 2:2, 3. Note: The Hebrew verb translated “rest” in the Authorized Version of the Holy scriptures is shabbath, which means to cease, to rest, to Sabbatize, to keep a Sabbath. The noun corresponding to it is shabbath, which means “a cessation, a rest, a Sabbath.” The abbreviation “ace.” is the English equivalent of ‘eth, which is used in the Hebrew as a sign to indicate that the noun or pronoun immediately following is the direct object of the verb.

20. Ellen G. White, *Patriarchs and Prophets*, p. 112.

21. Genesis 7: 10, 11.

22. Genesis 7:24; 8:3-5, 13, 14.

23. Note: In the Books of Daniel and the Revelation the literal day of 24 hours is sometimes employed as a symbol to denote a year of prophetic time. In symbolic prophecy one day represents a year of time. (See Ezekiel 4:6 and Numbers 14:34.)

24. Ellen G. White, *Patriarchs and Prophets*, p. 111.

25. Exodus 20:8-11.

26. Ellen G. White, *Testimonies to Ministers*, p. 135.

27. Genesis 1:9-13. 28. Genesis 1:20-31.

28. Genesis 5:5.

29. Proverbs 13:15.

30. Psalm 119:160, margin.

31. Ellen G. White, *Patriarchs and Prophets*, Page 336.

32. Ellen G. White, *Education*, p. 129.

3. When the Day Begins and Ends [A]

1. Webster’s New International Dictionary, second edition, p. 672, article “Day.”

2. Genesis 1:1-5.

3. Note: The Hebrew words *tohu* and *bohu*, which are translated as “without form” and “void” respectively, literally mean here that when the Earth first appeared, it was a mass of unorganized matter and was not furnished with plants and animals.

4. Note: “The theory that God did not create matter when He brought the world into existence, is without foundation. In the formation of our world, God was not indebted to pre-existing matter.” - Ellen G. White, *Testimonies for the Church*, Volume 8, Page 258.

5. 2 Corinthians 4:6.

6. Genesis 1:14-19.

7. Note: In the Hebrew this statement is literally: “And God caused to divide between the light and between the darkness.”

8. Isaiah 40: 22; Proverbs 8: 27.

9. Job 26: 7; 38: 14.
10. Ellen G. White, Testimonies to Ministers, p. 136.
11. Genesis 1:24-31; 2:7, 8.
12. Leviticus 23:32, margin.
13. Deuteronomy 16:6.
14. Deuteronomy 23:11.
15. Joshua 8:29. See also Joshua 10:26,27; Deuteronomy 21:23.
16. Nehemiah 13:19.
17. Mark 1:29-32.
18. Luke 4:40.
19. Matthew 8:16.
20. Josephus, The Jewish War, Book 4, Chapter 9, Section 12.
21. The Babylonian Talmud, (M. L. Rodkinson's translation) Volume 7, Page 85 of Tract "Succah, Mishnah 3".
22. Idem, Volume 1, Pages 60-61 of Tract Sabbath. Note: "At the setting of the Sun on the evening of the preparation day the trumpets sounded, signifying that the Sabbath had begun." - Ellen G. White, The Desire of Ages, p. 774.
23. A Biblical and Theological Dictionary, new edition, page 300, column 2, article "Day."

4. When the Day Begins and Ends [B]

1. Tacitus, De Germania, chapter 11.
2. Julius Caesar, The Gallic War, Book 6, chapter 18.
3. Aulus Gellius, Attic Nights, Book 3, Chapter 2.
4. Pliny the Elder, Natural History, Book 2, Chapter 79.
5. Plutarch, The Roman Questions, Quest, 84, in Plutarch's Moralia, Volume 4, Page 129.
6. Paulus, On Sabinus, Book 13, quoted in the Digests (Pandects) of Justinian, Book 2, Title 12, Chapter 8.
7. Marcus Varro, De Lingua Latina, Book 7, Chapter 51.
8. Ulpian, On Sabinus, Book 6, quoted in the Digests (Pandects) of Justinian, Book 40, title 1, chapter 1.
9. Idem, Book 27, quoted in the Digests of Justinian, Book 41, title 3, chapter 7.
10. Idem, Book 6, quoted in the Digests of Justinian, Book 28, Title 1, Chapter 5.
11. Acts 23:23.
12. Ellen G. White, Sketches from the Life of Paul, Page 227.
13. Code of Justinian, Book 3, title 12, law 3, in Corpus Juris Civilis.

14. Encyclopedia Britannica, eleventh edition, Volume 26, Page 987, article "Time, Standard." Note: In this article on standard time, Simon Newcomb says: "When the system was first established in the United States a delicate legal question arose as to whether the business of banks and courts should be legally adjusted to the new time. This was soon settled by state laws making the standard time legal within the limits of each zone."

15. Gerald Kelly, S. J., Article "The Fast before Communion," in *The Catholic Mind* (Jesuit), Volume 43, Number 990 (June, 1945), Pages 378-380,

5. When the Day Begins and Ends [C]

1. The Catholic Encyclopedia, Volume 3, Page 511, article "Cemetery."

2. Note: For fuller details and illustrations, see the chapter entitled "The Planetary Week in the Philocalian Almanac" in my book *Sunday in Roman Paganism*, pp. 205-223.

3. Note: The word is "Sabbath" in the Greek text.

4. Note: Since the latter part of the second century Sunday, the first day of the week, had been called "Lord's day" in some churches.

5. Socrates Scholasticus, *Ecclesiastical History*, Book 6, chapter 8, in *A Select Library of Nicene and Post-Nicene Fathers*, second series, Volume 2, Page 144.

6. Note: The word is "Sabbath" in the Latin text.

7. Leo the Great, Letter 9 (to Dioscorus, bishop of Alexandria). Note: In comment on this passage, a footnote in *A Select Library of Nicene and Post-Nicene Fathers*, second series, Volume 12, Page 7, makes this observation: "That is to say, the weekly resurrection festival (Sunday) begins with the vespers of the preceding evening."

8. The Catholic Encyclopedia, Volume 14, page 336, article "Sunday."

9. Caesarius of Arles, Sermon 280, in J. P. Migne's *Patrologia Latina*, Volume 39, columns 2274-2275.

10. G. D. Mansi, *Sacrorum Conciliorum Nova et Amplissima Collection*, Volume 10, columns 1202-1203.

11. P. W. Joyce, *A Social History of Ancient Ireland*, Part 3, chapter 27 (or Volume 2, page 391).

12. *Idem*, Part 2, chapter 10 (or Volume 1, pages 386-387). Note: Other authorities think the Coin Domnaig dates from the seventh century.

13. Donald Maclean, *The Law of the Lord's Day in the Celtic Church*, pages 1 and 3.

14. Note: The word is "Sabbath" in the Latin text.

15. Bede, *The Ecclesiastical History of the English Nation*, Book 3, chapter 25.

16. Note: The word is "Sabbath" in the Greek text.

17. Note: Canon 20 of the Council of Nicea (AD 325) had forbidden anyone to kneel in prayer on Sunday.

18. *A Select Library of Nicene and Post-Nicene Fathers*, second series, Volume 14, p. 403-404; P. Labbe and G. Cossart, *Sacrosancta Concilia*, Volume 6, columns 1180-1181. Note: In a footnote, Van Epsen remarks: "For many centuries this custom was preserved even in the Latin Church; and the custom of keeping feasts and whole days generally from evening to evening is believed to have been an apostolic tradition, received by them from the Jews."

19. A. W. Haddan and W. Stubbs, *Councils and Ecclesiastical Documents Relating to Great Britain and Ireland*, Volume 3, page 235. Note: In comment on the expression "from sunset on Sunday-eve till sunset on Monday-eve," a footnote says: "That is, from sunset on Saturday until sunset on Sunday." What is now called Saturday night was then regarded as being Sunday evening, and what is

now called Sunday night was then spoken of as Monday evening. See also Benjamin Thorpe, *Ancient Laws and Institutes of England*, Volume 1, pages 39-40.

20. Bede, *The Ecclesiastical History of the English Nation*, Book 5, chapter 21.

21. G. D. Mansi, *Sacrorum Conciliorum Nova et Amplissima Collectio*, Volume 13, columns 851-854; P. Labbe and G. Cossart, *Sacrosancta Concilia*, Volume 7, columns 1007-1008.

22. Theodulf of Orleans, *Capitularies*, chapter 24, "On the Observance of the Lord's Days," in J. P. Migne's *Patrologia Latina*, Volume 105, column 198.

23. *Monumenta Germaniae Historica*, Laws, Section 2, Volume 1, part 1, the "Capitularia Regum Francorum," pp. 55, 104.

24. J. P. Migne's *Patrologia Latina*, Volume 97, columns 239, 511.

25. Jean Hardouin, *Acta Conciliorum et Epistolae Decretales*, Volume 4, column 907; J. P. Migne, *Patrologia Latina*, Volume 91, column 16; and P. Labbe and G. Cossart, *Sacrosancta Concilia*, Volume 7, column 1061.

26. Jean Hardouin, *Idem*, Volume 4, column 1028.

27. F. Liebermann, *Die Gesetze der Angelsachsen*, Volume 1, page 199, column 1,

28. *Idem*, Volume 1, page 294, column 3.

29. Burchard of Worms, *Twenty Books of Decrees*, Book 2, chapter 81, in J. P. Migne's *Patrologia Latina*, Volume 140, column 640.

30. Benjamin Thorpe, *Ancient Laws and Institutes of England*, Volume 2, pp. 342-343, 420-421.

31. F. Liebermann, *Die Gesetze der Angelsachsen*, Volume 1, p. 628, column 1.

32. Juan Tejada y Ramiro, *Coleccion de Canones y de Todos los Concilios de la Iglesia de Espana*, second edition, Volume 3, page 98; P. Labbe and G. Cossart, *Sacrosancta Concilia*, Volume 9, column 1065.

33. Ivo of Chartres, *Decrees*, Part 4, chapter 16, in J. P. Migne's *Patrologia Latina*, Volume 161, col. 267,

34. Juan Tejada y Ramiro, *Coleccion de Canones y de Todos los Concillios de la Iglesia de Espana*, second edition, Volume 3, page 237.

35. K. A. H. Kellner, *Heortology*, pp. 12-13.

36. Alexander III, quoted in *Decretalium D. Gregorii Papae IX*, Book 2, title 9, chapter 2, in *Corpus Iuris Canonici*, Part 2, page 271.

37. Roger de Hoveden, *Annals*, Volume 2, pp. 526-530,

38. E. G. White, *The Great Controversy between Christ and Satan*, page 576.

39. Matthew of Paris, *Chronica Majora*, Volume 2, page 464, ad anno 1200.

40. Thomas Morer, *A Discourse in Six Dialogues on the Name, Notion, and Observation of the Lord's Day*, pp. 290-291. See also P. Labbe and G. Cossart, *Sacrosancta Concilia*, Volume 11, part 1, columns 24-27.

41. P. Labbe and G. Cossart, *Sacrosancta Concilia*, Volume 9, part 1, column 115; Jean Hardouin, *Acta Conciliorum et Epistolae Decretales*, Volume 6, part 2, column 1051.

42. *Decretalium D. Gregorii Papae IX*, Book 2, title 9 ("De Feriis"), chapter 1, in *Corpus Iuris Canonici*, Part 2, page 270.

43. C. J. Hefele, *Conciliengeschichte*, Volume 5, section 655, page 983; P. Labbe and G. Cossart, *Sacrosancta Concilia*, Volume 11, part 1, columns 432-433.

44. John Johnson, *A Collection of the Laws and Canons of the Church of England, from Its Foundation to Henry VIII*, new edition, Volume 2, pages 417, 426; Wm. Lyndwood, *Provinciale (seu Constitutiones Angliae)*, page 55, column 1.
45. Benvenuto Cellini, *The Autobiography of Benvenuto Cellini* (translated by J. Addington Symonds), chapters 3 and 24 (pages 6 and 44). Note: See also *Encyclopaedia Britannica*, eleventh edition, Volume 4, page 988, article "Calendar," where it is said that in parts of Italy and Bohemia the day is reckoned from sunset to sunset.
46. G. D. Mansi, *Sacrorum Conciliorum Nova et Amplissima Collectio*, Volume 35, columns 1320-1321.
47. Records of the Company of the Massachusetts Bay, reprinted in *Transactions and Collections of the American Antiquarian Society*, Volume 3, page 92.
48. Cotton Mather, *Magnolia Christi Americana, or the Ecclesiastical History of New England*, Book 3, chapter 1, section 30 (Volume 1, page 253).
49. John Norton, *Memoir of John Cotton*, pages 55-56,
50. John Winthrop, *Winthrop's Journal, "History of New England," 1630-1649*, Volume 1, page 107.
51. *Idem*, Volume 2, page 286.
52. Records of the Colony and Plantation of New Haven from 1638 to 1649, page 358.
53. Records of the Governor and Company of the Massachusetts Bay in New England, Volume 2, pages 258-259.
54. Thomas Shepard, *Theses Sabbaticae, or, The Doctrine of the Sabbath*, Part 3, page 229-296.
55. William Pynchon, *The Time When the First Sabbath was Ordained*, part 2, pages 1-20.
56. C. H. Firth and R. S. Rait, *Acts and Ordinances of the Interregnum (1642-1660)*, Volume 2, page 384; Henry Scobell, *A Collection of Acts and Ordinances of General Use Made in the Parliament (From November 3, 1640, to September 17, 1656)*, Part 2, page 119.
57. William Prynne, *A Brief Polemical Dissertation Concerning the True Time of the Inchoation and Determination of the Lord's Day Sabbath*, pages 1-98.
58. C. H. Firth and R. S. Rait, *Acts and Ordinances of the Interregnum (1642-1650)*, Volume 2, page 1162; Henry Scobell, *A Collection of Acts and Ordinances of General Use Made in the Parliament (From November 3, 1640, to September 17, 1656)*, Part 3, pages 438, 440.
59. *The Records of the Governor and Company of the Massachusetts Bay in New England*, Volume 4, part 1, page 347.
60. Robert Cox, *The Literature of the Sabbath Question*, Volume 1, page 254.
61. Richard Baxter, *Practical Works*, Volume 13, pages 428-429.
62. *The Public Records of the Colony of Connecticut from 1665 to 1678*, Volume 2, page 280.
63. Cotton Mather, *Magnalia Christi Americana; or The Ecclesiastical History of New England*, Book 5, part 4, section "The Necessity of Reformation," paragraph 5 (Volume 2, page 275).
64. Records of the Governor and Company of the Massachusetts Bay in New England, Volume 5, pages 239-240.
65. *The Acts and Resolves, Public and Private, of the Province of the Massachusetts Bay*, Volume 1, pages 58-59.
66. *Idem*, Volume 2, page 457.
67. William Homes, *A Brief and Plain Discourse Wherein the Doctrine of the Sabbath Is Explained*, pages 51-52.

- 68.The Acts and Resolves, Public and Private, of the Province of the Massachusetts Bay, Volume 4, pages 416-417.
- 69.Quoted by Catherine D. Bowen, Yankee from Olympus, page 17.
- 70.Acts and Laws of the Commonwealth of Massachusetts (1790-1791), page 353; The Laws of the Commonwealth of Massachusetts, Passed from the Year 1780 to the End of the Year 1800, Volume 2, page 537.
- 71.The Revised Statutes of Vermont (Title 21, chapter 82), pages 394-395.
- 72.Asahel Grant, The Nestorians, Part 2, chapter 16 (page 185).
- 73.Sir J. M. Barrie, Auld Lichts Idylls, Chapter 4, page 77.

6. The Line Between Today and Tomorrow [1]

- 1.S. A. Mitchell and C. G. Abbot, The Fundamentals of Astronomy, page 75.
- 2.Charles Pond, article “That Tricky Pacific Date Line,” in The New York Times Magazine, February 1, 1942, page 15.
- 3.Genesis 8: 4.
- 4.Genesis 9:18, 19; 10:1-32; 11:1-9.
- 5.The Catholic Encyclopedia, Volume 12, page 302, article “Portugal.”
- 6.Alexander VI, bull Inter Caetera (May 4, 1493), in Documents of American History (edited by H. S. Commager), pages 2-3.
- 7.Note: The historical data given in this connection may be found in The Catholic Encyclopedia, Volume 12, page 302, article “Portugal;” Volume 14, page 183, article “Spain;” The Encyclopedia Britannica, eleventh edition, Volume 1, page 806, art. “America;” The Encyclopedia Americana, edition of 1938, Volume 1, page 492, article “America;” Volume 18, page 114, article “Magellan;” Volume 19, page 331, article “Moluccas;” The New International Encyclopedia, edition of 1903, Volume 14, pages 26-27, article “Philippines.”
- 8.Francisco Albo, Log-book extract, in The First Voyage around the World (edited by Lord Stanley of Alberby), page 235.
- 9.Antonio Pigafetta, The First Voyage around the World, in The Philippine Islands 1493-1803, Volume 34, page 143. Note: Together with this English translation appears in a parallel column the Italian text as reproduced from the original manuscript in the Bibliotheca Ambrosiana in Milan, Italy.
- 10.Richard Eden, The First Three Books on America (edited by Edward Arber), p. 246,
- 11.Peter Martyr D’ Anghera, De Orbo Novo (Fifth Decade), Volume 2, pages 170-171.

7. The Line Between Today and Tomorrow [2]

- 1.Note: This difference was not the result of any difference in dates in the countries from which these islands were colonized and governed, for in Spain and Portugal the days of the week and the monthly dates were exactly the same. They had the same system of calendation, both countries having adopted the Gregorian calendar reform at the same time in 1582.
- 2.The Philippine Islands, 1493-1803 (edited by E. H. Blair and J. A. Robertson), Volume 2, page 295, 298. Volume 17, page 125, 126. Volume 38, page 62. Volume 39, page 79. Volume 49, page 140.
- 3.Idem, Volume 17, page 304.

4. Encyclopedia Universal Illustrada, edition of 1924, Volume 23, page 1373, article “Claveria y Zaldua.”
5. The Philippine Islands, 1493-1803, (edited by E. H. Blair and J. A. Robertson), Volume 1, page 22, footnote.
6. The New International Encyclopaedia, edition of 1903, Volume 14, page 513, article “Prime Meridian Conference;” edition of 1930, Volume 22, page 284, article “Time, Standard.”
7. Note: France did not subscribe to this agreement, and still reckons the meridians and time from the meridian on which Paris is located. Holland still computes them from the meridian of Rotterdam.
8. The World Almanac and Book of Facts for 1946, page 167.
9. Simon Newcomb, Astronomy for Everybody, pages 23-24.
10. Job 26:7.
11. Job 38:14.
12. Job 38:12.
13. Jeremiah 31:35, 36; 33:25.
14. Genesis 1:14-18.
15. Psalm 111:7, 8.
16. Psalm 119:172.
17. Romans 7:12.
- 18.1 John 5:3.
19. Mark 2:27.
20. Genesis 2:2, 3; Exodus 20:11.
21. Isaiah 56:2.
22. Mark 2: 27.
23. Genesis 1: 28.
24. Genesis 4: 16.
25. Genesis 9:1.
26. Genesis 8:4, 18, 19; 9:18, 19; 10:1-32; 11:1-9.
- 27.1 John 5:3.
28. John 14:15.
29. John 15:10.
30. Psalm 40: 8.
- 31.1 John 2: 3-5.

8. In the Land of the Midnight Sun [1]

- 1.Strabo, Geography, Book 1, chapter 1, section 6; Book 2, chapter 2, sections 2, 3; chapters 3, section 1; chapter 5, sections 36, 43.
- 2.William Smith, Dictionary of Greek and Roman Geography, Volume 2, page 1191, column 1, article "Thule;" Dictionary of Greek and Roman Biography and Mythology, Volume 3, page 627, article "Pytheas;" Strabo, Geography, Book 1, chapter 4, section 3; Book 2, chapter 5, section 8. See also Encyclopedia Britannica, eleventh edition, Volume 21, page 938, article "Polar Regions;" Volume 22, page 703, article "Pytheas (of Marseilles)."
- 3.Encyclopedia Britannica, eleventh edition, Volume 21, page 939, column 1, article "Polar Regions." King Alfred, History of Paulus Orosius, Book 1, page 249.
- 4.Encyclopedia Britannica, edition of 1946, Volume 2, page 14, article "Antarctic Regions."
- 5.Marcus Varro, On Agriculture, Book 1, chapter 2, sections 3-6.
- 6.Strabo, Geography, Book 2, chapter 5, section 43.
- 7.Pliny the Elder, Natural History, Book 2, chapter 77.
- 8.Idem, Book 4, chapter 16.
- 9.Procopius, History of the Wars, the Gothic War, Book 6, chapter 15, sections 6-15.
- 10.Martha P. Gilson, "A Woman's Winter on Spitzbergen," in The National Geographic Magazine, Volume 54, Number 2 (August, 1928), pages 227-244.
- 11.Encyclopedia Britannica, edition of 1946, Volume 13, page 718, column 1, article "Lapland."
- 12.Note: In our discussion from now on we shall speak only of the Arctic Region, because the Antarctic Region is uninhabited. The same phenomena of days without Sun and days with continuous Sun are annual occurrences in the Far South, but the dates of their seasons are the opposite to those of the Far North. When the North Pole is at its maximum inclination toward the Sun on June 21, so that it is midsummer in the Northern Hemisphere, the South Pole is at its maximum inclination away from the Sun on that same date, so that it is midwinter in the Southern Hemisphere. And as the position of the poles is reversed on December 22, the Northern Hemisphere has midwinter on this date, while the Southern Hemisphere then has midsummer. Therefore the South Pole has its midnight Sun between September 23 and March 21, and its sunless days between March 21 and September 23.

9. In the Land of the Midnight Sun [2]

- 1.See Mary Lee Davis, Uncle Sam's Attic, pages 128-130.
- 2.Agnes Rush Burr, Alaska, Our Beautiful Northland, pages 134-135. (By special permission of the publishers.)
- 3.E. Burton Holmes, Burton Holmes Travelogue, Volume 7, pages 108-111. (By permission of the author and publisher.)
- 4.Bayard Taylor, Northern Travel, page 306.
- 5.Paul Du Chaillu, The Land of the Long Night, pages 75-76.
- 6.Paul Du Chaillu, The Land of the Midnight Sun, Volume 1, page 61.

10. The World's Oldest Festival

- 1.Hebrews 11:3.
- 2.Psalm 33:6, 9.

3. Mark 2:27; Exodus 20:8-11.
4. Psalm 111:4.
5. Exodus 20:11.
6. Hebrews 4:3.
7. Genesis 2:2, 3.
8. Exodus 20:8-11.
9. Exodus 31:18; 32: 15, 16.
10. Exodus 31:17.
11. Hebrews 4:4.
12. Mark 2:27.
13. Exodus 20:10.
14. Isaiah 56:2.
15. Isaiah 58:13.
16. Matthew 12:8; Mark 2:28; Luke 6:5.
17. John 17:24.
18. John 17:5.
19. John 1:1-3.
20. John 1:10.
21. Hebrews 1:2.
22. Colossians 1:16, 17.
23. Genesis 1:26.
24. Mark 2:28; Luke 6:5; Matthew 12:8.
25. Deuteronomy 32:3, 4. See also verses 15, 18, and 31.
26. 1 Corinthians 10:4.
27. Isaiah 33:22.
28. Isaiah 7:14; 9:6; Matthew 1:21.
29. Isaiah 42:21.
30. Psalm. 40:7,8.
31. Matthew 5:17-19.
32. Luke 16:17.

- 33.1 John 3:4.
- 34.Romans 4:15. See also Romans 5: 13.
- 35.James 2:10.
- 36.Hebrews 4:15.
- 37.1 Peter 2:22.
- 38.Luke 4:16.
- 39.Luke 4:31.
- 40.Mark 1:20, 21.
- 41.Mark 2:23-28; 3:1-6; John 7:19-24; 9:13-16; Matthew 12:1-13.
- 42.Matthew 12:8.
- 43.Matthew 24:20. Note: It is sometimes argued that Christ gave this command out of fear that flight on the Sabbath day might incur the wrath of the unbelieving Jews upon the disciples. But this is not true. Jesus defended His disciples in their disregard of the Jewish man-made regulations for Sabbath observance, etc. (Matthew 12:1-13; 15:1-9.) He said to His own: "Fear them not." Also: "Fear not them which kill the body." Matthew 10:26, 28.
- 44.Mark 15:42.
- 45.Luke 23:54.
46. Luke 23: 56.
47. Acts 13: 14, 42, 44.
48. Exodus 20: 8-11.
49. Isaiah 56: 2, 6, 7.
- 50.Acts 16: 12, 13.
- 51.Acts 17: 1-4.
- 52.Acts 18:1-4, 11.
- 53.Revelation 1:10.
- 54.Ezekiel 46:1.
- 55.Hebrews 4:9, 10, margin.
- 56.Hebrews 4:4.
- 57.John 14:3.
- 58.Matthew 25:31-34.
- 59.Matthew 6:10.
- 60.Isaiah 45:18.

61.2 Peter 3:10.

62.2 Peter 3:13.

63.Isaiah 65:17.

64.Revelation 21:1.

65.Revelation 21:2, 9-27; 22:1-5.

66.Revelation 22:3.

67.Revelation 22:14.

68.Exodus 20:8-11.

69.Isaiah 66: 22, 23.

70.Revelation 14: 12.

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