# WHEN IT WAS LIGHT 

## THE MESSAGE FROM THE STARS

## BY

HENRY LEE STODDARD

> "A little learning is a dangerous thing;
> Drink deep, or taste not the Pierian spring;
> There swallow drafts, intoxicate the brain, And drinking largely sobers us again."-Pope.

# THE PRE-HISTORIC MYSTERIES DISCLOSED 

Published By
THE YOGI PUBLICATION SOCIET'Y
Chicago, U. S. A.

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HENRY LEE STODDARD

## WHEN IT WAS LIGHT <br> THE MESSAGE FROM THE STARS

## DEDICATION

To my dear wife, Inez, the high priestess of the Priests of Logos, a select society which believes in sex equality, man and woman being equal in all things, provided their intellectual attainments are developed to the same plane, this book is dedicated.

Inspired by my wife's encouragement, constant devotion, loyalty and belief in my discoveries, as set forth in my work, When It Was Light; The Message from the Stars, I was strengthened to continue my efforts and researches toward its completion. For twenty-five years she gave me her untiring efforts, making every sacrifice, suffering every disappointment that the human soul is heir to, as the result of her unshaken confidence in my unswerving purpose to disclose the great truths which this work reflects.

Henry Lee Stoddard.

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Gameskwinchutin,
Bishof of Ginamion

Bishop William Montgomery Brown, D.D.<br>Brownella Cottage, Galion, Ohio.

August 7, 1916.
Dear Professor Stoddard:
Your highly appreciated letters of July 17th and 18th with their respective enclosures came duly to hand and at the earliest possible moment I heartily thank you for them. They were a great uplift and will always be an encouragement to me. The writing of them were kind and thoughtful acts for which I am grateful to you.

The papers concerning your key for the unlocking of the Jewish and Christian scriptures are of great interest to me. In working it out you are rendering a valuable service to the cause of truth, and so to the greatest things in the world: morality and civilization, for their existence and advancement are dependent upon truth, every truth-the truths of the multiplication table quite as really as on the truths of the ten commandments.

There is no truth that does not carry some moral obligation. Every truth constitutes a part of the only gospel which the world has or needs-the gospel which consists of the whole truth and nothing but the truth.

The theological and supernaturalistic elements of both the Old and New Testaments are inexplicable without the assumption that they are embodiments of the solar myths.

With kindest regards and best wishes for the members of the family and for your great work, I am, Very cordially and gratefully yours, Wm. M. Brown (formerly Bishop of Arkansas). Professor Henry Lee Stoddard, Little Rock, Arkansas.








This formation of the Camp of Is-Ra-El indicates the Signs and constellations of the zodiac as they were 2450 B. C. E., at which time they coincided. Since that time we have had the precession of the constellation Taurus, "The Bull" through the Sign of that name, which required 2150 years, approximately (therefore minus 2150 years from 2450); which put Aries ("Agnus Deus", "Lamb of God"-God Sol of the ancients) as the constellation at the vernal equinox, 300 B . C. E. Therefore, 300 B. C. E., plus 1924, A. D., equals 2224 years, minus the precession of Aries, 2150 years, which puts Pisces, "The Fish," at the vernal equinox in the year 1850. The Fish were held by the ancient philosophers to have ruling feminine attributes, its "stella influence" producing an era of sex dementia-according to the ancient phallic philosophy.

The influence of the Fishes (Fomalhaut), Pisces, the constellation now at the vernal equinox will continue for a period of 2150 years, less the 74 years of precession since the constellation became the vernal equinox in the year 1850. During this era the female shrine will be exalted to its highest estate, but this change of purity vs. depravity will not manifest itself until the first quarter period of precession of the Fishes (500 years, approximately) will have elapsed. That a new era has dawned is apparent to the most obtuse mind; shutting one's eyes to facts will not solve problems! There is no gainsaying the fact that the present immoral condition is due to something; if the cause is known the disease may be treated in an efficacious manner. There seems to be no doubt that stella or planetary influence has much to do with our being. "The mills of the gods grind slowly, yet they grind exceeding fine."

## "THE FORMATION OF THE CAMP OF THE CHILDREN OF IS-RA-EL".

In Re: "The Lion From the Belfry of Arras."

The elevation of the sun at Arras, France, at summer solstice is $621 / 2$ degrees, approximately, that is N. Lat. 50 degrees, and as indicated by a protractor the sun, not the "standard" (of "the Lion of the Tribe of Judah, the root of David," which "hath prevailed to open the BOOK, and LOOSE THE SEVEN SEALS THEREOF"-Rev. 5 c. 5 v.: author's italics.), upheld by "The Lion of Arras" has an elevation of sixty-two and one-half degrees, approximately. Is it any wonder that St. Simon remarked about "the unwarranted assumption of armorial bearings by people not entitled to the distinction, WITHOUT AUTHORIZATION FROM THE FOUNTAIN HEAD OF ALL HONORS, THE SUN KING." Read: James, Ist c. 17th verse.

Of the abuse of heraldry, armorial bearings, ensigns, etc., St. Simon spoke of them in his "memoirs" as follows: "Its abuses are far older than is generally known. The unchecked assumption of armorial bearings by people not entitled to them, WITHOUT AUTHORIZATION FROM THE FOUNTAIN HEAD OF ALL HONORS, The Sun King."

Could St. Simon behold the sophists of the present age, using ensigns and armorial bearings "with unwarranted assumption and without authorization," having not the remotest idea of the real significance, he would probably be shocked at their selfstultification; but such doth the age of ego and folly bring unto us. Having due regard for the things that are sacred, the author refrains from saying more upon the subject, suffice to state: "He that diggeth a pit shall fall into it." This is not "Speculative philosophy" or "science", but facts ("Speculative: theoretical; not proven; fictitious; FALSE."-vide, Lexicon.)


From "L'Llluatration," Paris.
THE LION FROM THE BELFRY OF ARRAS,
Now exhibited at the Petit Palais, Paris, among other works of art brought from the devastated regions of France.

## THE STRENGTH OF THE LION OF THE TRIBE OF JUDAH—The Key to the Mysteries.

Many, many times has this admonition been given, "Remember the strength of The Lion of the Tribe of Judah," yet those who repeated it were entirely ignorant of the covert meaning and deep significance of this ages old shibboleth-a law of the solar system (when comprehended and correctly applied). The underlying or esoteric meaning arises from the fact that the position of the Sun (the solar deity of the ancients) in the Sign of Leo, the Lion, denotes the time when the summer solstice occurs (the sun is then said to be crucified upon the astronomical cross). The symbol of the Sign of the zodiac, Leo, the Lion, was the ensignia upon "Judah's standard" and is referred to in the Bible as "the Lion of the tribe of Judah" (Rev. 5 c. 5 v.). The paramount consideration is the position of the Sun on the day of the summer solstice, when viewed as the rising sun, the observer being in a certain north latitude (North latitude $29^{\circ} 50^{\prime}$ plus, approximately) which corresponds to the location of the Great Pyramid of Egypt (the literal mathematical representation or symbol of the celestial hemisphere, Solomon's temple). The angle thus produced by the rising sun on the day of the summer solstice by a ray of light projected from the sun, the observer facing due East, equals $27^{\circ}$ (mathematically and geometrically indicated on a square measuring 1080 units by 1080 units or the perfect rectangle, 1080 by 540 units, located in north latitude $29^{\circ} 50^{\prime}$ plus, as $26^{\circ} 34^{\prime}$, but practically considered as an angle of $27^{\circ}$ ) ; this angle used as a unit as a multiplier or divisor in computing angular measure ( $360^{\circ} \times 60^{\prime}$ equals $21600^{\prime}$ ), arc, dimensions, areas and other angles of Solomon's temple, as described in the Bible, the Great Pyramid of Egypt, prehistoric temples, ancient monuments and symbols throughout the world, indicates units and mathematical results that are characteristic of solar phenomena, thus typifying the mighty works of God Sol (of the ancients!). The Holy Writ specifically points out the
crux thus: "Weep not: behold, the Lion of the tribe of Juda, the Root of David, hath prevailed to open the book, and loose the seven seals thereof." (Rev. 5 c. 5 v.). This significant language cryptologically indicates the key to the mysteries.

Inasmuch as no one has "opened the book" or "loosed the seven seals thereof" within the past 2000 years, it naturally follows that no one knows the secret significance of this ancient phraseology. When its full purport is comprehended by a mathematical, geometrical demonstration (not surmised!) the transcendental glory of God Sol (of the ancients!) is manifested in no uncertain way and even the most ignorant are deeply impressed with the wonders wrought by the Master Architect and Builder, the Sun (called by the ancients God Sol).

Only a brief mention of these marvelous mysteries can be given at this time, but suffice to say-the results are obvious and the evidence axiomatic, viz.: The "Lion of the tribe of Judah" is an essential factor in uncovering the mysteries, therefore, "the strength of the Lion of the tribe of Judah" is beyond comparison; it is the "open sesame" by which the true formation of the Camp of the twelve tribe of Is-Ra-El is correctly formed, by placing the Sign of the zodiac, Leo the Lion, the ensign upon "the standard of Juda" on the EAST side toward the rising of the sun" (that is to say, North of East, the summer solstice point of the sun, "the end of the circuit"; vide, Psalms, 19 c .1 to 6 verses) ; the summer solstice point is the sun's greatest declination north, in its annual course-called "the path of the sun" or the ecliptic. The true position of the sun's summer solstice point is given by the Holy Writ, as designated in Numbers 2 d chapter, 2 d verse, and strange as it may seem, that is the NUMBER of the ensign of the tribe of Juda (No. 2), in the true formation of the Camp of Is-Ra-El, when the 12 tribes are formed into a square and the ensigns upon their standards are coordinated with the 12 Signs of the zodiac and correctly numbered (thus divulging the true kabballah for the first time with-
in twenty-five centuries). The Bible is "put together" upon a principle, and THAT principle is the correct formation of the Camp of Is- Ra- El, as designated in Numbers 2d c. (a book significantly named, as the solution of the great riddle is NUMBERS; the numbers of the twelve tribes of Is- Ra- El and the 12 Signs of the zodiac-correctly numbered and occupying their true positions, instance: "And on the EAST side toward the rising of the sun shall they of the standard of the Camp of Judah pitch throughout their armies" (Numbers 2d c. 3d verse).

By treating the angle $27^{\circ}$ we have (angular measure), 27 multiplied by $60^{\prime}$ equals 1620 , which is $1 / 10$ th of the exterior area of Solomon's temple. Again: $1620^{\prime}$ multiplied by $60^{\prime \prime}$, equals 97,200 , which divided by 2 equals 48,600 , divided by 100 equals 486, the "standard height" of the Great Pyramid of Egypt. Again: The angle of the sun, summer solstice position, being $27^{\circ}$ (north latitude $29^{\circ} 50^{\prime}$, approximately) and the winter solstice position of the sun giving the same angle, thus produces an arc of $54^{\circ}$ (another wonderful unit having to do with the mysteries), therefore $54^{\circ}$ multiplied by $60^{\prime}$ by $60^{\prime \prime}$ equals 194,400 , which is characteristic of one-half of the base area, in inches, of Solomon's temple; the base area of Solomon's temple, 60 cubits ( 18 inch cubits), by 20 cubits, equals, in inches, length 1080, width 360 inches, which gives an area of 388,800 inches; this equals twice the number of seconds (angular measure) indicated by the arc of 54 degrees, the angles of $27^{\circ}$ being projected by the rising sun at its summer and winter solstice position in the north latitude of the Great Pyramid of Egypt. The exterior area of Solomon's temple (as recorded in the Bible) equals 16,200 square feet, which is just $1 / 36$ th part of the area of the base of the Great Pyramid, which equals 583,200 square feet. The secret number of the sun, as taught by the Pythagoreans, was " 36 ".

Unless one is very reluctant to accept the plain truth and is utterly dense as well, the identity of God (the God-idea as set
forth in the Bible), will be disclosed in a striking and unmistakable manner-by the simple process of the science of NUMBERS and the RULE OF POSITION (Kabballah). Let not fear chill your heart for God is a lovable Being, and wherever God is there is also joy and sunshine; the grass of the fields, the perfume of the flowers, the rustling leaves of the forest, the musical murmur of the brooks and water falls, the sighing of the waves of the mighty deep and the whispering evening zephyrs all sing paens to Je Ho Vah, "the Lord God of the hosts," (vide, Psalms, 84 c. 8-11 verses).

So, be not afraid, for God is a God of joy and happiness whose life-giving force fructifies all nature. Lay aside your perturbation and be not disturbed when God is revealed in all of his Majesty; throw off the shackles of ignorant superstition and grasp the inevitable TRUTH. When one gains one's consent to a rational consideration of the evidence herein set forth-then "the mystery of God" is a mystery no longer and the soul attains the surcease for which it hungers.


## INTRODUCTORY.

Memorabilia: The holy scriptures were written according to the cabala.

The cabala was the secret system of numbers demonstrating the ancient Egyptian system of astronomy and astro-theology (physico-theology).
Therefore it is self-evident that the Jews or Israelites did not originally write the holy scriptures, nor were they the authors of the cabala from which the sacred writings were derived.

Charles Darwin wisely wrote: "False facts are highly injurious to the 'progress of science, for they often endure long; but false views, if supported by some evidence, do little harm, for everyone takes a salutary pleasure in proving their falseness; and when this is done, one path towards errors is closed and the road to truth is often at the same time opened". E'x Descent of Man", I. L. of F. L., page 5931. To which the author adds, Multum in parvo.

Science now has a weapon which if wielded, will prove the undoing of ignorance and superstition. THE LIGHT OF REASON WILL SHINE AS IT NEVER HAS BEFORE (Since the days of "The Wisdom of the Ancients) AND KNOWLEDGE WILL INCREASE IN THE SAME RATIO THAT IGNORANCE IS DISPELLED. Ingersoll once said: "One man, when he is right, will finally become a majority."

The great minds of the world have occupied themselves for centuries upon centuries in studying the Holy Scripture. Scientists, historians, students, scholars, bishops and other theo-
logians have combined their efforts to shed additional light upon the scriptures, and of late years have resolved themselves into a school of "Higher Criticism", comprehending the whole extent of religious science, embracing the four principal classes into which theology is divided: historical, exegetical, systematic and practical theology-exegetical theology embracing the interpretation of the Scripture and Biblical criticism.
That their deductions have been erroneous in the main, is obvious, inasmuch as the profound truths have been unrevealed. Their system of interpretation is based upon theories, self-opinions and ill-conceived ideas, illusory and fictitious; this was the natural result of their incompetency, misconception of text and misapplied efforts to fathom the allegories, which were in many instances based upon myths, symbols and solar allegories which were interwoven with astronomical and mathematical science; not being well-grounded in mythology, symbolism, mathematical and astronomical science they are in no sense fitted to offer an exposition of the great underlying truths conveyed by the solar allegories of the Holy Writ.

That the Holy Scripture has a "HIDDEN SENSE" is selfevident, else why the frequent references to "THE HIDDEN WISDOM" and the things which are spoken in "A MYSTERY" and the significant statement "THESE THINGS ARE AN ALLEGORY", as recorded in 1st Corinthians, 2d c. 7th verse and Galatians, 4 c . 24th verse, and 2 d Corinthians, 3 d c. 12-13-14-15 verses?

Only a small per cent of the people who live in this "Twentieth century of progressive thought", though presumably well educated and highly cultured, view the heavens with any degree of awed wonder and seemingly are not impressed with the glory and profound works of nature; the beneficent works of God only interest them in an abstract way. They, at intervals, give thought to the omniscient, omnipresent, omnipotent Being, the Creator of the UNIVERSE, but withal they think only as the
psychology of the occasion affects them, that is to say, how the Psalter is appointed to be read, the chancel, the nave and attendant ceremonies and to give proper and timely attention to the litany, the tables and rules for the movable and immovable feasts, etc.

It never occurs to them that were it not for the movements of the earth in its orbit and its attendant satellite, the moon, as well as the "apparent path" of the sun (the ecliptic) in its annual course, there would not be any "Tables for the Movable and Immovable Feasts", inasmuch as the tables are dependent upon the positions of the sun, earth and moon during the course of the year. If someone did not possess a knowledge of astronomy and mathematics they would lose all account of their "Feast Days", etc., and the ceremonies as well. The Bible states, "The heavens declare the glory of God and the firmament sheweth his handywork." Psalms, 19 c. 1st to 6 th verses.

## THE MESSAGE FROM THE STARS.

The following impressive language is significant and by analysis anyone should discern that it conveys a depth of meaning: "There is one glory of the sun, and another glory of the moon and another glory of the STARS: FOR ONE STAR DIFFERETH FROM ANOTHER STAR IN GLORY. Vide, 1st Corinthians, 15 c. 40-41 verses. That this language has an astronomical sense is made evident as follows: "HE TELLETH THE NUMBER OF THE STARS: HE CALLETH THEM ALL BY THEIR NAMES." Psalms, 147 c. 4th verse. Inasmuch as the Bible GLORIFIES the Sun, the Moon and the Stars why not learn something about them and thus learn what the Bible means in thus glorifying them? It naturally follows that if one does not know anything about the sun, the moon and the stars-then one does not know anything about this part of the Bible, does not understand the language nor cannot comprehend it. Why not know all about the Biblical language; especially
should this be considered when the import of the Holy Scripture is considered in all of its phases. Should one know all about a subject they are considering or is it best that one should only understand part of the subject? One's breadth of thought is certainly curtailed and obviously obscured if one only possesses a meager knowledge of a part of the subject which is being considered. How foolish it would be for one to attempt an engineering feat, if one had not mastered mathematics. Yet it is no more absurd than for one to pose an an exegetical authority in respect to the Bible-a work written with a veil, that is to say, a cryptological work-when one possesses a limited knowledge of only a part of the subject.

An eminent Bishop stated, after investigating the discoveries herein set forth by the author and discoverer: "In the light of your discoveries all the commentaries that have ever been writ ten are without value." Theologians, students and scholars will not dispute this assertion after they have carefully read this work and have considered the mathematical evidence which it sets forth by examples, diagrams and drawings. One may say with impunity that for one not to have this knowledge, yet attempts to become an exponent of the Bible, is to be self-stultified in so far as concerns a real knowledge of the Holy Scripture, history and philosophy.

Intelligent people, those possessing a rational mind, have known for centuries that the Bible was open to investigation and that the Scriptures emanated from earlier "gospel stories" or allegories, in many instances the source of which they could not fathom. The excavations carried on by diligent students of research brought to light the "Tel El Amarna Tablets", "The Chaldean Flood Story" and the "Babylonian Account of Creation", which following the discovery of the "Rosetta Stone" (1799), that gave the key to the Egyptian hieroglyphics and thus made it possible to decipher these ancient records. The translation of these ancient tablets gives the source of the

Hebrew inspired writings, inasmuch as the ancient tablets recorded similar solar allegories. The "Book of the Dead" of the Egyptians gives additional evidence, yet the evidence was not conclusive until the discovery of the TABULATED SYSTEM OF NUMBERS, which indicates mathematically the true principle upon which the Holy Writ is grounded and "serving for the interpretation of the hidden sense of Scripture lifts the veil of the mystery of ages.

It seems that we have, in our progress towards a higher civilization, lost all sense of philosophy and analysis; we have progressed only in chemistry, surgery, mechanics, inventive genius, agriculture and horticulture, and it may be added, the high art of dissembling. This condition has been wrought by man's inaptitude or inanity, and allowing others to do his thinking.

The author has attempted in the preface and introductory of this work to give a condensed idea to the reader of what may be expected in the body of the work. The breadth of the sub-ject-matter makes it necessary to extend the explanations that the reader may have a more clear comprehension of the problems as well as the method by which they are treated. The purpose of this work is to give to the world the TRUTH, that it may influence civilization and mold the minds of the present, as well as coming generations. With this principle in view, the author has not hesitated to be frank and outspoken in presenting the truths herein uncovered for the first time within twenty-five centuries.

## PROLEGOMENA.

On account of the apparent movement of the constellations (not Signs), termed "precession of the equinoxes", the constellations now occupy positions 61 degrees, approximately, from the Signs of the same name. The constellations are the visible representatives or Signs of the month which they appear in; this being the original purpose of the zodiac and the purpose its inventors intended it to be used for in addition to describing 12 Signs of 30 degrees each, which equals 360 degrees. By this method the constellation which rises first above the horizon in the evening becomes the visible representative or Signs of THAT month; instance, the constellation, Cancer, now rises first in the evening during the month of January, the first month of the year and is upon the meridian at midnight on the fifteenth of January. The constellation, Leo, rises first in the evening during the month of February-the month of "Zif", the second month, according to the Bible-and the constellation, Virgo, rises first in the evening during the month of March, the third month. The constellation Pisces is the opposite constellation from Virgo and the sun is said to be in Pisces at the vernal equinox (March 21st). The constellation which is on the meridian at midnight is the constellation which the earth is in always, and the sun, being at an angle of 180 degrees from the earth, is, therefore, always in the opposite constellation from the one which the earth is said to be in (See diagram of the numbered zodiac).

When the zodiac is formed into a square and coordinated with the months of the year, that is the constellation which rises first in the evening being the Sign of THAT month, Cancer becoming number one, the representative of the month of January,
it is at once coordinated also with the 12 Tribes of IS-RA-EI. as the ensigns upon their standards, according to the Encampment of the 12 Tribes of IS-RA-EL as laid down in the Bible (Gen. 1st c. 14-15-16 verses; Gen. 49th chapter and Numbers 2d chapter). There is no mistaking the language-it is unequivocal. Thus the zodiac is coordinated with the 12 months of the year and the 12 Tribes of IS-RA-EL and at once becomes the true principle upon which the Holy Writ is grounded; all the fables, myths and allegories of the Bible are readily applied to the SQUARE ZODIAC thus formed into the CAMP of IS-RA-EL and NUMBERED IN THE PROPER ORDER (according to the months of the year). Numbers, 2 d c. 2 d verse; Joshua, 4th c. 8th verse.

By this arrangement the Bible and the zodiac are perfectly blended and the inexplicable, enigmatical passages make sense; thus the harmony of the Bible becomes unassailable and irrefragable. The zodiac, thus formed into a SQUARE and numbered in its proper order, renders an intelligent account of the Bible allegories (Vide: Galatians, 4th c. 24-25-26th verses); that is, solar allegories, as recounted by the Bible. The zodiac thus formed into a square is the only geometrical design that can be formed which will contain the 12 constellations of the zodiac in the form of a square, as set forth in the second chapter of the book of NUMBERS-a book significantly and appropriately named. The order in which the books of the Bible are arranged has an esoteric significance which the zodiac formed into a square exemplifies. The Bible is a cryptological work that is incomprehensible without the key and the directions for forming the key is recorded in the Bible in simple language, but under the guise of allegories, myths and symbols.

It will be noted that Ezekiel gives an admirable account of the SQUARE and ROUND zodiac, 1st c. 5 th verse to and inclusive of 26 th verse and the 10 th c. 8 th verse to and inclusive of 22 d verse. It is only necessary to read these citations and at
the same time compare them with the diagrams of the ROUND and SQUARE zodiac; only ordinary intelligence is required to perceive his perfect application of the solar allegory he is recounting to the square zodiac, inasmuch as he unequivocally describes the FOUR CARDINAL POINTS, that is, the "Four Fixed Signs" of the zodiac, corresponding to winter solstice (Reuben, Aquarius the "Waterman") ; summer solstice (Leo, the Lion, the ensign upon Judah's standard) ; vernal equinox (Taurus, the Bull, the Sign which the sun is in at the vernal equinox-the ensign upon the standard of Ephraim) ; and the autumnal equinox (the "Flying Eagle" or the constellation put for Scorpio-the sign which the sun is in at the autumnal equinox). Ezekiel's inexplicable and enigmatical language will not make sense if applied in any other way. In fact, Ezekiel could not have made himself more clear than he did, upon the subject he was illustrating, that is to say, a solar allegory made clear by astronomy and the square zodiac. He was not discoursing upon morals or dogma, but a vision which he beheld "in the firmament" as he aptly puts it; this vision of the "Four Fixed Signs" anyone may verify by viewing the heavens upon a starlit night, provided one understands the elements of astronomy or even possesses the knowledge that there is such a thing in our solar system as a boundary which is designated the zodiac.

Under the head of "Sects", Shebsen, and KABBALLISTICZOHAR as given by Chamber's Ency., Ed. 1880, an account is given of a work written by an aramaic scholar, Simeon Ben Joachim, in the 13th century. The work, according to this account, sets forth "The true principle upon which the Holy Writ is grounded-above all things created"; to the casual, or unthinking reader it means very little, but by analysis and logic we find that it is very significant and points the way to further investigation.

That mathematical evidence has now been uncovered which proves the Bible to be a marvelous cryptological work, made up
from morals and dogma, myths, symbols and solar allegories. will offer to intellectual people a satisfying solution of one of the greatest problems that human endeavor has had to grapple with. The acceptance of the truth as demonstrated will not cause any upheaval or catastrophe as the adherents to orthodoxy profess to believe. The disclosures only make sure that which every intelligent person has tacitly accepted. A few zealots, probably, will be shocked at the utter annihilation of the personal God-idea, miraculous conception, resurrection, thaumaturgy and other fanciful delusions. The ignorant, untrained mind will not be able to comprehend the inviolable evidence set forth by the discoveries, hence the rabble is not to be considered in the matter. The Bishops and theologians will be discreet enough to keep quiet-there is a wealth in silenceafter they have digested the astro-theology of the greatest book of all time, the Bible; it is the most beneficent heritage that has been handed down through the ages, that is, when considered for what it is, what it really constitutes.

An article appeared in The Graphic, London, August 20, 1921, under the following caption, "WHEN IT WAS DARK" COMES TRUE, The Explosion That Hit the Church Described by Hannen Swaffer. The following excerpts from this article indicates how the reeds bend before the coming storm:
"During the last few days orthodox Christianity has received the greatest blow it has suffered for many years. Outside the Church, scores of people, learned and skilled in the ways of theology, have been attempting to prove that the basis of Christianity was all wrong and that modern science had destroyed its very foundation. * * * Guy Thorne, in a book written just ten years ago, told the story of how, in order to revenge himself upon an Anglican priest, a high-placed Jew put into a tomb in Palestine faked evidence which proved that Christ was a sham. "WHEN IT WAS DARK" he called it. He pictured, as a result, a world from which the very bottom had fallen out and a civiliza-
tion, the super-structure of which had crumbled. Without a belief in a future life, Faith became a shattered Delusion, Hope became Despair, and Virtue drifted into an ever-blackening Vice. The book caused a great sensation, but it was only a book. The Bishop of London preached about it in St. Paul's Cathedral, and the novel sold by the thousand. * * * Now, Dr. Rashdall, the Dean of Carlisle, Dr. Bethune-Baker, Lady Margaret, Professor of Divinity, the Rev. R. G. Parsons, of Rusholme, have stood up at an Anglican conference and-if their words have been reported rightly-denied the Godhead. * * * "Christ was not divine, but human", said Dr. Rashdall. "I do not for a moment suppose that Christ ever thought of himself as God", said Dr. Bethune-Baker. "Jesus was a man, genuinely, utterly, completely, unreservedly human," said the Rev. R. G. Parsons-"a Palestine Jew who expressed himself through the conditions and limitations of life and thought peculiar to his own time." These three men are not people whose opinions can be disregarded even by the most orthodox of all Christians. They are men of the highest intellectual attainments, men of brilliant achievements in the world of theology, all of them men, as lecturers, and fellows, and professors, have instructed scores of Anglican divines before their ordination and since." Very candidly put.

No theories or self-opinions are set forth by the author and discoverer, but on the other hand only clear, concise mathematical examples are offered. The SQUARE ZODIAC, numbered in its proper order, as depicted by the Camp of the 12 Tribes of IS-RA-EL (according to the 2 d chapter of the book of NUMBERS) is evolved from the traditional symbol of numbers, thus \#, and by projecting lines at right angles enclosing the number symbol, thus: \#

Diagram of the "number symbol" enclosed by lines at right angles. This diagram, as will be noted, contains NINE INSIDE SQUARES (inside the square zodiac, as indicated by diagram, which see).

These nine inside squares conform with or correspond to the NINE MOVING BODIES OF OUR SOLAR SYSTEM, the sun. the chief star, being the TENTH (the perfect number "TEN" of the Pythagoreans, (f. v.) ; by numbering the nine inside squares from RIGHT to LEFT, aceording to the Egyptian method of writing NUMBERS (as described by Herolotus "Firsi Hand Observations of the Egyptians," vide. Library of Original Sources) and numbering the 12 Tribes of IS-RA-EL, or "the ensigns upon their standards"-the 12 Signs of the zodiac. in the proper order. writing the numbers from "right to left." "the secret system of numbers of the ancient miesteraft is formed and the true principle upon which the Holy Writ is grounded, is set forth-for the first time since the dawn of the Christian era (more exact, 500 years before that time) ; anyone with ordinary acumen can follow the mathematical and astronomical explanations herewith given. The solar allegories of the Bible are amplified and exemplified by the only EXACT SCIENCE, mathematics; and "mathematics is mathematics, and does not err"; one has no choice in the matter, as the evidence is irrefragable, transcendental and sublime, instance: "The heavens declare the glory of God; and the firmament sheweth his handywork." "He telleth the NUMBER of the stars (constellations) ; he calleth them all by their names." Psalms, 19 c. 1st verse; 147 c. 4 th verse. The twelve tribes of IS-RA-EL were NUMBERED; read Joshua, 4 c. 8 verse.

The ancient writers possessed a much higher order of ingenuity than has existed in any succeeding era. This is evidenced by the fact that the greatest students, scientists and philosophers, scholars, Bishops, ad infinitum, which the world has produced in the succeeding generations, have failed to fathom the true sense or meaning of the Bible allegories.

These discoveries uncover and accomplish THAT, which all the universities of Europe and twenty centuries of thought have failed to move by even one hair's breadth. Simple, childlike
credulity must give place to REASON and MATHEMATICSinasmuch as mathematics does not consider whether IT exists or not! Magna est veritas, et prevalebit!

In the Bible the ancient philosophers, priests and prophets set forth magnum opus. It is a book, the lustre of which has not been dimmed through all the ages; in preserving the Bible and the knowledge contained therein the greatest heritage and blessing of mankind has been handed down through the ages. It is the alpha and omega, for within it the TRUTH is recorded -not to be comprehended, however, by the rabble, but to be discernible to faithful initiates who sincerely seek LIGHT and KNOWLEDGE. 'Tis said "Knowledge is power"; it has always ruled the world and always will. The world has been surfeited with egotism, vanity, selfishness, sophistry and viciousness of variant types, caused mainly by false teaching. Those who pretend to be teachers may well consider the truths herewith unfolded. Read Isaiah, 29 c . 9th to and inclusive 16th verse; 30 c . 8th verse. He readily saw, and therefore recorded, how the end would be determined.

The following is quoted from the "DIEGESIS", by Rev. Robert Taylor, A.B. and M.C.S. "The highest honor we can pay to TRUTH, is to show our confidence in it, and our desire to have it sifted and analyzed, by how rough a process soever; as being well assured that it is THAT alone that can abide all tests, and which like the genuine gold, will come out all the purer from the fiercer fire."

This volume is a new work, and the deductions incorporated are drawn from new material insofar as the present era is concerned. It has been difficult to decide just what latitude to use in simplifying and cutting down. The author has presumed that the reader has already mastered the elementary subjects, hence, is familiar with the ordinary scientific terms and methods. The author has tried to treat the subjects, herein considered, in a simple and clear manner, omitting technical terms
in every instance, when it was possible to do so, and has "boiled down" the subject-matter at the expense of volume. While this work is by no means "milk for babes" the breadth of the subject. matter it treats of has been simplified with diagrams, so that ordinary laymen can grasp or comprehend the explanations of the phenomena, which the Biblical myths and allegories recount. In a work of this nature errors will creep in, so the author craves the indulgence of the "Higher Criticism" (?). In presenting this work to a critical world the author hopes to arouse and stimulate thought, and thus discourage biased or narrow ways of looking at things.

The TRUTH of the Holy Writ is greater than the opinions of any man, body of men or one hundred generations of men. The truth, as set forth, reflects the highest order of mental development, the acme of intellectuality and the greatest achievement of the brightest minds of the world (ancient world). Do not take offense at anything the author says; his work is only a medium to an end, and he is speaking of generalities, not personalities. Until it is possible for one to abjure "established precedents", academic grooves and traditional influcnces, new fields of thought, progress in mental attainments or discoveries of "veiled truths" are beyond the pale of human endeavor. The proofs of remarkable scientific facts will be submitted and demonstrated, and the reader will no longer dwell in a mental state of doubt and uncertainty, superinduced by incomparable examples of false precepts, based upon delusions that are unsustained by logic or reason. Self-opinions are not offered, but only selfevident facts, demonstrated by the science of numbers. Like Banquo's ghost, the truth will not "down". Time discloses all things, and when truth is thrown aside it invariably returns like a boomerang.

Is your mind open to receive new impressions, whether they be according to "established precedents" or establish new precedents (new to this era)? It is an undeniable fact that "estab-
lished precedents" at one time were new precedents, that is, were simply facts demonstrated for the first time, yet the fact had been a truth always, though not disclosed, hence disclosed for the first time became an "established precedent". If possible dispossess your mind of the thought that you are wise, and forget what you think you know. It is easier to teach one the truth about something regarding which one knows nothing, than about something of which one has some general knowledge, if that knowledge is inaccurate. In the former case one will receive clear impressions; in the latter case one can be taught nothing until the weeds of error have been rooted out of the mind. Have you any doubt about the accuracy of your knowledge? If so, forget what you think you know and read carefully the accurate statements set forth, and the whole subject will become luminous.

## CHAPTER I.

## WHEN IT WAS LIGHT.

An Answer to "When It Was Dark".<br>(Copyrighted 1912, By Henry Lee Stoddard. All Rights Reserved.)

The following references, nine in all, are quoted literally from Burritt's Astronomy. "In the Hebrew Zodiac, Pisces is allotted to the escutcheon of Simeon." (vide, Burritt's Astronomy, p. 22.) "Of those who imagine that the twelve constellations of the zodiac refer to the twelve tribes of Is-Ra-El, some ascribe Aries to the tribe of Simeon, and others, to Gad." (Gad, the author finds, is correct.) Ibid, p. 30. "In the Hebrew Zodiac, Taurus is ascribed to Joseph" (whose twin sons were Ephraim and Manasseh). "Taurus (constellation, Taurus, the Bull) contains two remarkable clusters called Pleiades and Hyades; Alcyone is the brightest star in the cluster called the Pleiades, sometimes called the light of the Pleiades." "Aldebaran is the most brilliant star in the Hyades; Aldebaran is of Arabic origin and takes its name from two words which signify, 'He went before or led the way.'" "The Syrian name of the Pleiades is Succoth (so given by the Bible) or Succothbenoth, derived from a chaldaic word, which signifies, "To speculate-to observe."
"And the men of Succoth were observers of the stars." 2d Kings, 17 c. 30 verse; Burritt's Astronomy, pp. 38-39-40-41, q. v. Again we quote: "In the Hebrew Zodiac, the constellation


Round Zodiac Numbered and Indicating the Positions of the "Fixed Signs" at the " $/$ Cardinal Points."

Planisphere. (c) 1912, By Henry Lee Stoddard.
of the TWINS refers to the tribe of Benjamin-Burritt's Astronomy, p. 56. (This position of the Sign or constellation of the zodiac is erroneous; the correct position of the TWINSGemini, the twins of the zodiac-is, as demonstrated by the diagram of the SQUARE ZODIAC, to ascribe the same as the insignia of Manesseh). "In the Hebrew Zodiac, Leo is assigned to Judah, on whose standard, according to all traditions, a Lion is painted." "This is clearly intimated in numerous passages of the Hebrew writings. Ex.-"Judah is a Lion's whelp; he stooped down, he couched as a Lion, and as an Old Lion; who shall rouse him up?" Genesis, 49 c . 9th verse. "The Lion of the tribe of Judah hath prevailed." Rev. 5 c. 5 v.; Burritt's Astronomy, pp. 68-69. Note, it is specifically stated that, "Leo is assigned to the tribe of Judah on whose standard, a Lion is painted, etc." Rather peculiar and significant language, is it not? Again: "The sceptre shall not depart from Judah." Genesis, 49 c .10 v . The constellation of Leo, the Lion, is shaped like a sceptre. Anyone who will view the heavens on a starlit night cannot but be impressed with the great and profound TRUTHS numbered in the firmament, inasmuch as the key that unveils the GREAT MYSTERY OF GOD lies hidden within the firma-ment-the zodiac, and the placing of the Signs or constellations in their proper positions, as the insignia of the twelve tribes of Is-Ra-El, NUMBERED IN THEIR PROPER ORDER. When this key is applied to the cryptological work of the Egyptian astro-theology-the Bible, it becomes as clear as the noon-day sun. Again we quote: "Many of the elements and fables of heathen mythology are so blended with the inspired writings, that they must needs be studied, in order to have a more proper understanding of numerous passages both in the Old and New Testament." Burritt's Astronomy, pp. 87-88, q. v. Is it not strange, indeed, that there should be such a cohesiveness be-
tween heathen mythology and the inspired writings? We read: "Those who refer the constellations of the zodiac to the twelve tribes of Israel (Is-Ra-El) ascribe the Balance, Libra, to Asher." Ibid, p. 92. "In the Hebrew Zodiac, this Sign-Scorpio-is allotted to Dan, because it is written, "Dan shall be a serpent by the way, an adder in the path." Ibid, p. 102.
"According to Dupuis, the twelve labors of Hercules are only a figurative representation of the annual course of the SUN through the twelve Signs of the Zodiac. Hercules being put for the sun, inasmuch as it is the powerful planet which animates and imparts fecundity to the universe, and whose Divinity has been honored, in every quarter, by temples and altars, and consecrated in the religious strains of all nations." Ibid, p. 105. "When the equinoctial Sun in Aries opened the year, it was denominated the Preserver or Deliverer. On this account according to Pausanius, the Sun was worshipped at Eleusis under the name of the Preserver or SAVIOUR." Ibid, p. 34, q. v.
"In the Zodiac of the Hebrews, Aquarius represents the tribe of Reuben." Ibid, p. 132, q. v. "Some of the most noted antiquarians of Europe have searched every page of heathen mythology and ransacked all the legends of poetry and fable for the purpose of rescuing this subject-the Zodiac-from that impermeable mist which rests upon it, and they have only been able to assure us, in general terms, that they are Chaldean or Egyptian hieroglyphics, intended to perpetuate, by means of an imperishable record, the memory of the times in which their inventors lived, their religion and manners, their achievements in the arts, and whatever in their history was most worthy of being commemorated. There was, at least, a moral grandeur in this idea; for an event thus registered, a custom thus canonized, or thus enrolled among the stars, must needs survive all other traditions of men, and stand forth in perpetual characters to the end of time." Ibid, pp. 144-145. "Dupuis accounts for the origin of the Asses in the following words: "Le Cancer ou
sont les etoiles appellees les anes, forme l'empreinte du pavillon d'Issachar que Jacob assimile a l'ane." (Meaning: The simile or metaphor of Issachar, Jacob's son, compared to an "Ass"). Ibid, p. 65, (q. v. "The Greeks, in copying this Sign, have placed two asses as the appropriate symbol of it, which still remains; called the northern and southern Aselli, that is, Asellus Borealis and Asellus Australis, which are situated in the constellation of Cancer, the Crab. Genesis gives an account in the following language: "Issachar is a strong ass couching down between two burdens. Gen. 49 c. 14 v . The "two burdens" has reference to the two asses, the "northern and the southern Aselli." (The two chief stars in the constellation of Cancer, which Sign of the zodiac was ascribed as the insignia of Issachar).

If one will note the paragraph marks in the 49th chapter of Genesis, one's eye will behold that they are very significant inasmuch as they point out the TWELVE TRIBES OF ISRAEL, which are the symbols of the 12 Signs or constellations. This, the paragraph sign, should be noted in the Book of Numbers, 2d chapter and TENTH VERSE, in which is set forth the directions for forming the Camp of the Children of Is-Ra-El, the positions of the standards, upon which were the 12 Signs of the Zodiac, which were the insignia, thus, the "HEBREW (more properly Egyptian) SQUARE ZODIAC, is developed, that is, when the Signs are co-ordinated with the 12 tribes and numbered in their proper order (the twelve tribes of Israel were numbered, according to Joshua, 4th c. 8th verse).

It would be folly to suppose that the citations and the language set forth by the same were of no special significance; admitting therefore, that some special abstruse significance is conveyed by the account given in respect to the "Hebrew Zodiac" (quoted from Burritt's Astronomy, q. v.) then, the question presents itself, WHAT IS THE HIDDEN MEANING? Why should the Hebrews have a Zodiac, differing in any essential degree from other zodiacs. The evidence goes to show that they had a zodiac
of which the Signs were assigned to the several tribes as their ensignia (the ensignia upon the standards of the 12 tribes being symbolic). Why should the "Hebrew Zodiac" have a dual meaning, by which, the Signs or constellations were compared with or assigned to certain specified tribes, of the 12 tribes of Is-Ra-El? Why should the 12 Signs or constellations be compared with the 12 tribes of Is-Ra-El in an allegorical way, unless the allegory carried with it a hidden truth? Why should there be any connection between the 12 tribes of IS-RA-EL and the 12 Signs or constellations? The answer is, because by comparing the 12 Signs or constellations with the 12 tribes of Is-Ra-El, and assigning to each of the 12 tribes, as their escutcheon or insignia one of the Signs or constellations of the ZODIAC-embraced in one of each of the 12 Signs-and forming the 12 tribes of Is-Ra-El into a SQUARE (as directed in the 2d chapter of NUMBERS), the fundamental principle of a great system of astronemical science is established; the system is made perfect by numbering each of the 12 tribes, counting from one to twelve, AND BY PLACING THESE NUMBERS, TRIBES OR CONSTELLATIONS IN A CERTAIN ORDER, which when applied to astronomy-solar system-gives the most perfect conception of the phenomena of the universe, that the mind of mortal man has ever conceived of (including a perfect calendar) ; further, when the diagram of the square zodiac (called the "Hebrew Zodiac") thus formed and numbered is applied to the Bible it makes clear every enigmatical passage, every allegory or solar myth which the Bible recounts. Each and every phenomena, principle and explanation thereof, rules and methods of calculation, are exemplified and amplified in an amazing and most perfect manner. Astronomy is simplified to a degree that is astounding, and "Everything in the universe becomes number." Pythagoras taught, "Everything in the universe is number", and so far no one has been able to determine just
what this meant; it meant the TRUTH when it is set forth by the Bible allegories-with the veil removed.

Briefly: There are nine specific references given by Burritt's Astronomy, comparing one of the twelve tribes of Israel with one of the Signs or constellations of the zodiac ; the author, after years of research has determined the correct positions of these Signs of the zodiac as well as the other three Signs, which Burritt nor any other authority has ever attempted to place; thus the key to the allegories of the Holy Writ is reconstructed-after a period of more than 2500 years.

The Egyptian astro-theology was amplified and exemplified by a secret system of numbers, by which "Everything in the universe is number." This great system of astro-theology was translated from the original Egyptian into Greek and was taught at the Alexandrian university. After the Jews of Judea were subjugated by Ptolemy Soter, they were settled in large numbers in the territory contiguous to Alexandria, and absorbed the learning of the Greeks at the Alexandrian university, many of them becoming proficient in the science, art and literature of the Alexandrian School. The Hebrew professors of the Alexandrian School translated the Greek version of the Egyptian astro-theology into Hebrew; they laid the scenes in Judea, embellishing and adding to the Egyptian astro-theology the allegory of their Shiloh or Messiah (synonymous terms, Shiloh being the Hebrew word for Messiah-Jesus being equivalent to the Greek word, Bacchus, the god of wine. Their subterfuge is readily apparent to the student and scholar). Originally the Egyptian astro-theology or allegorical system of astronomy was the source of the Biblical allegories, myths and fables. One has no choice in the matter of accepting the evidence herewith offered. The delusion which the world has clung to through blind ignorance, inherited from the mediaeval ages, is dispelled by the Bible itself. No other evidence is offered except the science of numbers-mathematics-and astronomy. The Bible bears
witness that it is, WHAT it is-the TRUTH, which handed down through countless ages, yet has lost none of its value. The Bible and the Zodiac may be said to be coeval, wonderfully blended and indissoluble.

The Bible story (Astro-theology, meaning the story of God as recounted by the STARS) was originally written in Aramaic (NOT HEBREW), instance: "Aramaic, a branch of the Semitic language, nearly allied to the Hebrew and Phoenician, anciently spoken in Syria and Palestine, and eastward to the Euphrates and Tigris. It was the official language of this region under the Persian DOMINATION. In Palestine it supplanted HEBREW, and it was the tongue of the Jews in the TIME OF CHRIST. Parts of Daniel and Ezra are written in Aramaic, or, as this form of it is often named, CHALDEE. An important Aramaic dialect is the Syriac, in which there is an extensive Christian literature."

CHALDEE LANGUAGE: "A name often given to the Aramean language, one of the principal varieties of the ancient Semitic. Chaldee literature is usually arranged in TWO DIVISIONS: The Biblical Chaldee, or those PORTIONS OF THE OLD TESTAMENT WHICH ARE WRITTEN IN CHALDEE, namely, certain chapters in DANIEL, EZRA and JEREMIAH; and the Chaldee of the Targums and other later Jewish writings. Chaldee was presumably the language of Abraham before his migration to Palestine."

BOOK OF NUMBERS: "The fourth of the books of the Pentateuch. It takes its name from THE RECORDS WHICH IT CONTAINS OF THE NUMBERING OF THE ISRAELITE (The twelve tribes of IS-RA-EL or 12 SIGNS OF THE ZODIAC, an allegory, let it be said by the author and discoverer of the TRUE CAMP FORMATION of the 12 tribes of IS-RA-EL, q. v.), the FIRST GIVEN IN CHAPTERS I-IV, and the second in chapter XXVI (The two most important chapters are entirely overlooked, it seems, instance: NUMBERS, 2d
chapter, the forming of the CAMP of IS-RA-EL, the ORDER OF THE TRIBES, and the TENTH CHAPTER, which gives THE NUMBERING OF THE TRIBES. (q. v.). It gives a NAKRATIVE of the JOURNEYINGS OF THE ISRAELITES from the time of their leaving Sinai to their arrival at the plains of Moab, besides PORTIONS OF THE MOSAIC LAW. Formerly the authorship was attributed to Moses, but some modern scholars claim the book is MADE UP OF SEVERAL PARTS, EACH OF WHICH HAS A SEPARATE AUTHOR." See PRACTICAL REFERENCE LIBRARY, Aramaic, Chaldee Language, and NUMBERS, Book of; Hebrew, etc. Vols. 1st and 4th.

Christianity and the Bible have long been open to attack by atheists, infidels (so-called), agnostics and the so-called "higher criticism." The chief weapons of attack have been derision and a flat denial of the INSPIRATION OF THE HOLY WRIT. The irrefragable proof of the "arcane sense" of the Bible has been locked and sealed 'neath the CRYPTOLOGICAL language used by the ancient seers and prophets to recount the allegories which unfold the glory of God.

These allegories in many instances recount SOLAR MYTHS which without their true sense being uncovered, make them enigmatical, but given in their true sense these allegories at once become a palladium, which sophists and demagogues will flee from in terror; they are a perfect antidote against derision, which is the chief weapon of egotists and bigots. The great truth which unseals the true meaning of these allegories, consists of a TABULATED SYSTEM OF NUMBERS, GOVERNED BY THE RULE OF POSITION, and made operative by the science of numbers. This being accomplished, then the allegories AT ONCE DETERMINE AND AMPLIFY THE "ORDINANCES OF HEAVEN"-the LAWS OF GOD as they apply to the governing of the UNIVERSE. The "harmony of
the universe" furnishes cogent proofs of a deity (the Great Cause or Creative Force).

The "tabulated system of numbers" which the discoveries set forth, consists of A SECRET SYSTEM OF NUMBERS, "Serving for the interpretation of the hidden sense of scripture. A mysterious science of the ancient Jewish rabbins." "The true principle upon which the Holy Writ is grounded." Our encyclopaedias and dictionaries give citations which bears out the foregoing. This cryptological key reveals and clearly demonstrates the mysteries in the cryptological work, the Bible.

This great COSMIC SECRET bears witness that the universe is mathematical, and was so established by the deity. God created the universe according to a law-and this law we call mathematics. (When the author uses the term "God", he simply means the material Creative Force, which the Bible states is God.) We have no moral right to assume anything which cannot be proven; anything that is demonstrated by mathematics may be accepted as a fact, but mere theories and self-opinions open the way to error. Anything may be assumed but absolute proof is the only way of convincing the mind that is in doubt. Christianity has opened the way of attack against the "inspiration" of the Bible by assuming fanciful, irrational ideas that are incongruous. How may one ever hope to interpret life truly when one is reasoning from a false basis? The major and minor premises being false, then it necessarily follows that all deductions, in the main, are fallacious. Having devined that the scriptures are woven from the woof and warp of solar allegories and myths, and having determined the true significance by an infallible method-the science of numbers or mathematics-by applying a test key, which fits every part of the Holy Writ, and makes SENSE out of that, which otherwise would be utter nonsense, we may safely say THE MYSTERY OF GOD IS REVEALED. It has been wisely stated: "That which is apparent
may or may not be as it seems, but THAT which is SELF-EV1DENT is a fact."

The body of the work demonstrates what the introductory gives a mere glimpse of. That which follows in simple language, sets forth by "the system of numbers" and exemplifiesThe Great Mystery of God. The most simple mind can comprehend "the unveiled mystery" and is convinced that the truth stands revealed in all of its purity. The idea of a personal God, according to the evidence set forth (and accepted by eminent theologians) is nullified absolutely; the question is forever settled beyond cavil, and anyone with a normal mind feels satisfied that they know, that they know. The human mind obtains surcease, and is resigned to the truth.

The discoveries consist of the "mysteries revealed", and upon which the ESSENES INSTITUTION OF PHILOSOPHY is said to have been founded. The Essenes were a philosophical sect, contemporaneous with the time of the so-called Saviour (Christ, the son of God). The Pythagoreans taught that "EVERYTHING IN THE UNIVERSE IS NUMBER." Pythagoras introduced the true system of astronomy into Greece, and it is recorded that he received his instruction from "Oenuphis, a priest of On in Egypt."

It may be said in passing: "Among the high honors Pharaoh conferred on Joseph, he very wisely gave him in marriage, 'A daughter of the priest of On' ". (Citations: Essenese, Philo Judaeus, 20 B. C.-A. D. 40. Pythagoras, Vide, Burritt's Astronomy, pp. 86-87; Joseph's wife-A daughter of priest of On: Astronomicon of Manillius, ibid pp. 86-87; Genesis, 41st chap. 50th verse.) We read: "And unto Joseph was born two sons before the years of famine came; which Ase-nath, the daughter of Potiph-o-rah, priest of On, bear unto him."

That which will be revealed unto you, will be ASTOUNDING; more than that, AMAZING; even greater than that, DUMBFOUNDING, in truth-AWESOME and APPALLING.

In uncovering this TABLE OF NUMBERS, which Isaiah refers to thus: "Now go, write it before them in a TABLE, and note it in a book, that it may be for the time to come for ever and ever." Isaiah, 30 c. 8 verse. It is, in the light of the discoveries, very evident what Isaiah meant by the term "table"; that he meant a table of numbers is self-evident, inasmuch as that is the only kind of table that could be written "in a book." The mysteries are revealed and unfold the grandest panorama ever spread before the mental vision of man. In the light of these discoveries, the Bible stands revealed in its true light, the

(Fig. A.)
The significance of the "Swas-ti-ka" symbol is here shown. It was primarily derived from the nine inside squares contained within The Camp of the Children of IS-RA-EL-a perfect calendar.
greatest scientific, philosophical. mathematical and astronomical work of all the ages.
Look upon Zion, the city of our solemnities: Thine eyes shall see Jeru-Salem, a quiet habitation, a TABERNACLE that shall not be taken down; not one of the stakes thereof shall ever be removed, neither shall any of the cords thereof be broken." (Isaiah, 33 c .20 th verse.)
Very beautiful language, which is both symbolic and figurative. We are told that Jeru-Salem is a quiet habitation. meaning the city of God, inasmuch as Jeru or Jehu is one of the appellations given to Je-Ho-Vah. Salem means city, hence we have Jeru-Salem, city of God, meaning the firmament or heavens. This is made clear by Psalms, 19 c .1 st to 6 th v.
"The heavens declare the glory of God and the firmament sheweth his handywork. Day unto day uttereth speech, and NIGHT UNTO NIGHT sheweth knowledge. * * * In then hath he set a TABERNACLE FOR THE SUN."

By this language it is unequivocally stated that NIGHT was a component of KNOWLEDGE, inasmuch as it was at nigh: that the Chaldeans, ancient prophets and seers studied the heavens,-"the glory of God", thus noting the movements of the planets, stars and constellations,-the twelve constellations of the zodiac, each being a cluster of stars. We read: "Their line is gone out through all the earth, and their words to the end of the world"-meaning celestial latitude and longitute as applied to the earth. Again: "In them hath he set A TABERNACLE for the Sun, which is as a bridegroom coming out of his chamber, and rejoiceth as a strong man to run a race"; meaning, as it refers to the Sun, in his tabernacle,the annual race or path of the Sun, during the course of the year, inasmuch as the earth makes its annual revolution around the Sun, and thus causes the Sun to apparently rise further north each day from winter solstice to summer solstice, which is his northern LIMIT, and the "end of his circuit", verified as follows: "His going
forth is from the end of the heaven (winter solstice-See Round Zodiac diagram), and his CIRCUIT unto the ends of it (meaning, summer solstice, See Round Zodiac diagram); and there is nothing hid from the HEAT thereof." So, we find that Psalms, 19 c .1 st to 6 th verses, renders a very beautiful, symbolic account of the ANNUAL JOURNEY OF THE SUN, from "the end of the heaven to the end of his circuit." Well may it be said, "The heavens declare the glory of God, and the firmament sheweth his handywork."

We read: Psalms, 74 c. 4th and 9th verses, "Thine enemies roar in the midst of thy congregations; they SET UP THEIR ENSIGNS FOR SIGNS." That is to say, their ensigns or ensignia were "set up" for Signs, and as will be demonstrated, the "signs" which they "set up" means Signs of the Zodiac. Again we read: "We see not our Signs: there is no more any prophet: neither is there among us any that KNOWETH HOW LONG."

This shows conclusively that the Signs had to do with PERIODS OF TIME, and David here laments that "There is none among us that KNOWETH HOW LONG",-meaning that the KNOWLEDGE OF THE ORDER IN WHICH THE SIGNS SHOULD BE "SET UP", that they might denote periods of lime, by forming a calendar or ASTRONOMICAL TABLE, had been "lost".

We find collateral evidence as given by Burritt's Astronomy, to-wit: "The Egyptians and Chaldees early possessed many astronomical facts, many observations of important phenomena and many rules and methods of astronomical calculations; and it has been supposed, that they had the ruins of A GREAT SYSTEM OF ASTRONOMICAL SCIENCE, WHICH IN THE EARLIEST AGES OF THE WORLD had been carried to a high degree of perfection and was LOST." "The Chaldeans have been justly celebrated in all ages for their astronomical observations. When Alexander took Babylon, his preceptor, Calisthenes, found a series of Chaldean observations made in
that city, and extending back, with little interruptions, through a period of 1903 years, preceding that event. This would carry us back to at least 2234 years before the birth of (the so-called Jesus) Christ." (Author's italics.)

The outstanding features of the Holy Writ are the " 12 Apostles" and the "Ten Commandments", which corresponds with the 12 Signs or constellation of the zodiac (and nine inside squares, plus the sun equals ten). The twenty-first chapter of the book of Revelations aptly depicts the "Hebrew Zodiac", that is, the SQUARE ZODIAC within which are the nine squares evolved from the NUMBER SYMBOL, a total of twenty-one squares being thus formed. In this chapter we find that the thirteenth verse describes "THREE GATES ON THE EAST"; ON THE NORTH THREE GATES; ON THE SOUTH THREE GATES; AND ON THE WEST THREE GATES"; verse 12 states "and the names written thereon, which are the names of the Twelve Tribes of the Children of Israel." The significance of this solar allegory is readily comprehended by adding the NUMBERS of the "three gates on the north" and "the three gates on the south", which gives the sum of 39 . Again, by adding the NUMBERS of the "three gates on the east" and the "three gates on the west", which give the sum of 39 (this arrangement of the NUMBERS shows conclusively that the "Hebrew Zodiac" or SQUARE ZODIAC, thus numbered is perfectly balanced. No other arrangement will give these significant results). Now, we find that the books of the Old Testament are arranged in three tables, the sum of which is thirtynine, corresponding with north and south or east and west gates (the sum of). Every allegory of the Bible applies.

Again we read Burritt's Astronomy, p. 29: "The Zodiac was divided into 12 equal portions, corresponding to the 12 months of the year, commencing at the Vernal Equinox. Each of these portions served as the visible representative or SIGN of the month which it appeared in." That is to say, the constellation
which rose first in the evening, and was on the MERIDIAN AT MIDNIGHT, was the SIGN which the earth was in, and was the SIGN OF THAT MONTH. Our present day almanacs still carry this idea into effect, and we find in connection, with the name of the month of the year, always one of the 12 Signs.

This ancient knowledge has been handed down to us, by tradition, since the time King David lamented "the loss of their SIGNS", for be it remembered, the Signs in the almanac are not correct, that is, they are not the visible representatives or Signs of the month which they appear in. This knowledge is again given to the world for the FIRST TIME since the time of Joshua. The Holy Scripture evidences that Joshua possessed this knowledge which David lamented as being LOST.

We read, Joshua, 4 c. 8 v.: "And the children of IS-P.A-EL did so as Joshua commanded, and took up twelve stones (symbolizing the 12 Signs) out of the midst of Jordan, as the LORD spake unto Joshua, ACCORDING TO THE NUMBER OF THE TRIBES OF THE CHILDREN OF IS-RA-EL."

The most significant part of this passage of Holy Writ, is that it contains the SPECIFIC EVIDENCE THAT THE TRIBES OF IS-RA-EL WERE NUMBERED. Instance: "As the Lord SPAKE unto Joshua according to THE NUMBER OF THE TRIBES OF THE CHILDREN OF IS-RA-EL-What was the NUMBER OF THE TRIBES? Admittedly, it is FROM ONE TO TWELVE. The Lord therefore spake unto Joshua IN THE LANGUAGE OF NUMBERS.

## CHAPTER II.

Frequent references in the Holy Writ indicate the value which the ancient prophets put upon the KNOWLEDGE OF THE STARS and "THE ORDINANCES" or LAWS OF HEAVEN. We read, Job, 38 c. 31-32-33 vs.: "Canst thou bind the sweet influences of Pleia-des, or loose the bands of Orion"? The Pleia-des is a cluster of stars or a constellation, which we term in the present day, "the little dipper" or called by some "the SEVEN SISTERS". The Pleia-des is located in the constellation of Taurus, the Bull, that is, the VERNAL BULL (Vide, Deuteronomy, 33 c. 13 to 17 vs. Hosea, 8 c. 5th to 9th vs. Joseph and Ephra-im compared to the bull) for the reason that the SPRING EQUINOX occurs when the Sun is in the Sign of Taurus, the Bull." "Canst thou bind the sweet influences of Pleia-do."", meaning the sweet influences of SPRING, which taketh away the DEATH OF WINTER. Again Job says: "Or loose the bands of O-rion?" The constellation of O-rion precedes that of Taurus, the Bull, and is noted chiefly by THREE BRIGHT STARS in the centre of Orion's belt. The two outside stars are just THREE DEGREES APART, being just one and one-half degrees each from THE CENTRE STAR, and have been used throughout all the ages as a measure of arc, which compasses just three degrees. O-rion is also called "the El and Yard."

Again Job states: "Canst thou bring forth Mazzaroth in his SEASON?" The Hebrew appellation for the 12 Signs of the Zodiac was Mazza-roth, and Job meant, when he said "Canst thou bring forth Mazza-roth in his SEASON." THE ORDER OF THE ZODIACAL SIGNS IN THEIR SEASON, or THE

## ORDER IN WHICH THE VISIBLE REPRESENTATIVES

 OR SIGNS OF THE MONTH APPEARED IN.Again Job states: "Canst thou guide Arc-turus with his sons?" Arc-turus is a bright red star, seen in the northeast heavens during the winter months, and his sons were the two dogs, Aste-rion and Chara, said to be pursuing the "Great Bear" around the pole of the heavens. The Great Bear, "Ursa Major", we term the "Big Dipper", in the present day. It contains two stars in the bowl of the dipper called "The Pointers", which point to the NORTH or Polar Star, in the "Little Dipper", correctly termed, "Ursa Minor" or "The Little Bear."

Job again states: "Knowest thou the ORDINANCES of heaven? Canst thou set the dominion thereof in the earth?" Meaning, can you bring down "the ordinances" or LAWS "of heaven" and APPLY THEM TO THE EARTH, that is, AP. PLYING celestial latitude and longitude to the latitude and longitude of the earth, by astronomy and mathematics?

Would it be possible for anyone to gainsay that Job could know the names, the POSITIONS and HISTORICAL SIGNIFICANCE OF THESE STARS AND CONSTELLATIONS, and yet not know the fundamental laws of astronomy and mathe-matics-BORN OF ASTRONOMY? Arc-turus, in his sweep of the northern skies, as named in the beautiful passages in Job, was significant of THE SEASON of the year. We quote from "Young's Paraphrase":
"Canst thou the sky's benevolence restrain, And cause the Pleia-des to shine in vain? Or, when O-rion sparkles from his sphere, Thaw the cold seasons and unbind the year?
Did Mazza-roth his wonted station know, And teach the bright Arc-turus where to glow?"
We read, Isaiah, 47 c .13 v .: "Thou art wearied in the multitude of thy counsels. Let now the ASTROLOGERS, the STAR

GAZERS, the monthly PROGNOSTICATORS, stand up and save thee from these things that shall come upon thee."

Is it not apparent that this language is significant of the WISDOM of the "star gazers", who were known in the days of the "WISDOM OF THE ANCIENTS" as ASTROLOGERS and "STAR GAZERS", but which are termed in the present day, astronomers.

Isaiah further admonishes how this knowledge should be preserved. We read, Isaiah, 30 c .8 v .: "Now go, write it before them in A TABLE and note it in A BOOK, that it may be for the time TO COME for ever and ever." Isaiah here refers to the TABULATED SYSTEM OF NUMBERS evolved from the 12 Signs of the Zodiac, which were used as the insignia upon THE STANDARDS OF THE TWELVE TRIBES OF IS-RA-EL, and which were NUMBERED IN THEIR PROPER ORDER. When thus co-ordinated, as we shall see, the TABLE spoken of by Isaiah, is again perfected, and THE SECRETT SYSTEM OF NUMBERS, SERVING FOR THE INTERPRE. TATION OF THE HIDDEN SENSE OF THE HOLY WRIT', is again made OPERATIVE for the first time since the dawn of the Christian era. It unfolds the grandest panorama of "the ordinances" and LAWS of heaven ever conceived in the mind of man.

We read, Revelation, 5 c. 5 v.: "Weep not, behold! The Lion of the tribe of Judah, the root of David, hath prevailed to OPEN THE BOOK, and to LOOSE THE SEVEN SEALS THEREOF."

We find further evidence that "the book" has been "sealed" in Daniel, 12 c. 4 v . which states: "But thou, O Daniel, shut up the WORDS, and SEAL THE BOOK, even unto the time of the end."

Referring again to Isaiah, we read, 29 c. $11 \mathrm{v} .:$ "And the vision of all has become unto you as the words of a book that is SEALED, which men deliver to one that is learned, saying,

Read this, I pray thee; and he saith, I cannot, FOR IT IS SEALED."

Verse 14 states: "Therefore, behold I will proceed to do a MARVELOUS WORK among this people, even A MARVELOUS WORK AND A WONDER, for the WISDOM of their wise men shall perish, and the UNDERSTANDING of their prudent men shall be hid."

We read, 1st Corinthians, 15 c. $40-41$ vs.: "There are also celestial bodies, and bodies terrestrial, but the glory of the celestial is one, and the glory of the terrestrial is another. There is one glory of the SUN, and another glory of the MOON, and another GLORY OF THE STARS, for one STAR differeth from another star in glory."

We read, James, 1st c. 17th v.: "Every good gift and every perfect gift is from above, and cometh down from the Father of LIGHTS, with whom is no variableness, neither shadow of turning." Which is true, as the SUN casts no shadow as he turns upon his axis.

We must accept the SUN as GOD'S material representative as a CREATIVE PRINCIPLE, the fructifier of all nature; through him God manifests his COGENT CREATIVE FORCE. What this CREATIVE FORCE or POWER is, we cannot tell. No one has ever been able to determine what constitutes the CREATIVE ENERGY of the SUN-"God moves in a mysterious way his wonders to perform." (Cowper). Instance: "And God made two great LIGHTS, the greater LIGHT (the SUN) to rule by day, and the LESSER LIGHT (the MOON) to rule by night. He made the STARS also." Genesis, 1st c. 16th v.

Therefore, the SUN vicariously TRANSMITS LIFE, and as the SUN is the Chief Star of the Zodiac, he thus NUMBERS THE STARS, as stated in Psalms, 147c. 4 v. "He telleth the NUMBER of the STARS; he calleth them all by their names." Here it is clearly stated that the STARS are NUMBERED, and the appellation, "STARS" is used synonymously with constella-
tions, which in the SQUARE ZODIAC are NUMBERED; thus NUMBERED IN THEIR ORDER. THE 12 Signs of the Zodiac PRODUCES THE CRYPTOLOGICAL KEY TO THE HOLY WRIT.

As to the 12 tribes of IS-RA-EL or 12 Signs being NUMBERED, we find this salient fact verified absolutely by referring to Joshua, 4 c .8 v . And the children of IS-RA-EL did so as Joshua commanded, and took up twelve stones (symbolizing the 12 Signs of the Zodiac) out of the midst of Jordan. AS THE LORD SPAKE UNTO JOSHUA, ACCORDING TO THE NUMBER OF THE TRIBES OF THE CHILDREN OF IS-RA-EL.

It is specifically stated, ACCORDING TO THE NUMBER OF' THE TRIBES OF THE CHILDREN OF IS-RA-EL," hence, we must accept this as being irrefragable evidence that the twelve tribes of IS-RA-EL were NUMBERED. Inasmuch as Jacob characterizes his 12 sons as the 12 SIGNS of the Zodiac in an unequivocal manner, as stated in Genesis, 49 chapter; and as Moses FORMED THE TWELVE TRIBES INTO A CAMP that was SQUARE, we thus determine that the SQUARE ZODIAC was derived from the 12 tribes of IS-RA-EL, and was NUMBERED, and when thus FORMED and NUMBERED IN THEIR PROPER ORDER THE GREAT COSMIC SECRET IS REVEALED AND IT PRODUCES THE CRYPTOLOGICAL KEY TO THE BIBLE, "a mysterious science of the ancient Jewish rabbins, SERVING FOR THE INTERPRETATION OF THE HIDDEN SENSE OF SCRIPTURE."

CHAPTER III.

## JACOB LIKENS HIS 12 SONS TO THE 12 SIGNS OF THE ZODIAC.

Read, Genesis, 49 c .: Moses formed the Camp of IS-RA-EL by arranging the 12 tribes, which were NUMBERED in the form of a SQUARE. It is a SIGNIFICANT FACT that this is recorded in THE BOOK OF NUMBERS. He thus lays the foundation for the system of numbers.

The universe-the solar system-produces a mathematical system, and mathematics is the only EXACT SCIENCE--it does not consider whether it exists or not.

We find in Numbers, 2d c. the ORDER of the encampment of the twelve tribes of IS-RA-EL, which is formed into a SQUARE as described by Moses. This is fully corroborated by Numbers, 10th chapter, which gives the ORDER in which they "set forward" or marched. "As they encamp, so shall they set forward, every man in his place by their standards." Numbers, 2 d c. 17 v .

Not only were the tribes SPECIFICALLY NAMED IN THE ORDER IN WHICH THEY SHOULD ENCAMP, AND IN WHICH THEY SHOULD "SET FORWARD" OR MARCH, but they were thus CO-ORDINATED WITH THE 12 SIGNS OF THE ZODIAC, which Signs constituted the ensignia or ensigns UPON THEIR STANDARDS. Furthermore, we find that after forming the Camp, as directed by Moses, that not only does he ASSIGN EACH TRIBE ITS ENSIGN OR STANDARD ACCORDING TO THE SIGNS AS THEY FOLLOW EACH OTHER IN SUCCESSION IN THE ZODIAC, but we find the harmonious plan extended to include also the NUMBER OF EACH OF THE 12 TRIBES OF IS-RA-EL, thus co-ordinating
the NUMBER of each of the tribes WITH THE SIGN OF THE ZODIAC or ensign which they bore upon their STANDARDS. "according to the ensign of their father's house."
The forming of the Camp of IS-RA-EL begins: Numbers, 2d c. 2 verse: "Every man of the children of IS-RA-EL shall pitch by his own standard, with the ensign of their father's house. Far off about the tabernacle of the congregation shall they pitch. And on the EAST SIDE TOWARD THE RISING OF THE SUN shall they of the standard of the camp of Ju-dah pitch throughout their armies."

Judah, the generalissimo, is here named first and it is SPECIFICALLY STATED that he shall pitch his standard "ON THE EAST SIDE TOWARD THE RISING OF THE SUN." (Meaning, however, northeast, the summer solstice position of the sun. Not understanding this astronomical parable has been the chief cause of the failure to form the Camp of Is-Ra-El correctly.)

We recall that according to Jacob's blessing Ju-dah was designated as a "Lion's whelp", that is Leo, the Lion, and the Lion of the tribe of Ju-dah is frequently referred to in the Bible. Read Genesis, 49 c. 9 v. and Revelation, 5 c. 4-5th verses.

The summer solstice position of the SUN is in the Sign of I.eo, the Lion, and as a matter of fact at the summer solstice the SUN rises in the NORTHEAST, so Ju-dah here personifies the SUN and bore the symbol of the sun upon his standard, as well as THE SYMBOL OF THE SIGN OF THE ZODIAC, Leo, the Lion (in which the summer solstice occurred. See "Lion of Arras"). Read Numbers, 2 d c. 5 v.; 7 v.; 10 v.; 12 v.; 14 v.; $17 \mathrm{v} . ; 18 \mathrm{v} . ; 20 \mathrm{v} . ; 22 \mathrm{v} . ; 25 \mathrm{v} . ; 27 \mathrm{v} . ; 29$ and 31 st verses "AS THEY ENCAMP, SO SHALL THEY SET FORWARD." Numbers, 2d c. 17th verse. HOW THE CAMP IS FORMED: The Camp of the 12 Tribes of IS-RA-EL, in the "order" as directed by Moses follows: By referring NUMBERS, 10 c., we note the ORDER in which "they set forward" or marched "in
their journeyings" (Vide, 10 c. 28th verse). This is one of the most salient features connected with the forming of the Camp of Is-Ra-El. Without this feature being kept in mind the problem becomes doubly difficult,-abstruse.

Now, by referring to Numbers, 10 c. 14th to 27 th verses, inclusive, the ORDER in which the 12 Tribes of IS-RA-EL "set forward" in "their journeyings" is given in simple language, and which CORRESPONDS TO THE ORDER IN WHICH THEY ENCAMPED-"As they encamp, so shall they set forward, every man in his place by their STANDARDS"; the "standards" bearing their ensigns, WHICH WERE THE SIGNS OF THE ZODIAC, as they follow one another, ACCORDING TO "THE ORDINANCES OF HEAVEN."

The directions laid down by Moses in the 2d and 10th chapters of Numbers-mark well, NUMBERS, the BOOK OF NUM-BERS-are clear and explicit and since the printing of the Holy Scripture, the Bible has reposed in the home of every Christian household. Nevertheless, no one until the present time has been able to correctly form THE CAMP OF THE CHILDREN OF IS-RA-EL, notwithstanding that the foremost and best students of the world have tried for centuries, and some of the leading fraternal organizations have expended vast sums of money in research, excavations-DIGGING. As will be demonstrated, the instructions laid down by Moses were so SIMPLE that even a child can comprehend, when it is shown that the ORDER of their marching was the ORDER in which they encamped. "AS THEY ENCAMP, SO SHALL THEY SET FORWARD, EVERY MAN IN HIS PLACE BY THEIR STANDARDS." Numbers, 2d c. 17th verse.

By referring to the ROUND ZODIAC we observe the Signs in their proper order and inasmuch as the annual orbit of the earth around the sun, carries it through each of the 12 Signs, which causes the sun always to appear at an angle of 180 degrees (that is to say, the earth being in Cancer, the sun would
always be in the OPPOSITE Sign, and would therefore be in Capricorn. Or if we note the earth in Leo, the Lion, THEN the sun would be in Aquarius) which makes the sun appear in the OPPOSITE Sign from the one the earth is in-this being one of LAWS or "ORDINANCES OF HEAVEN." We therefore find that the ORDER in which the 12 Tribes of IS-RA-EL are named in the encampment, as well as the ORDER in which they "SET FORWARD" or marched, PLACED EACH OF THE 12 TRIBES IN THE ORDER OF THE 12 SIGNS OF THE ZODIAC; and marvelous though it may seem, NUMBERED EACH OF THE 12 TRIBES, THUS CO-ORDINATING THE 12 TRIBES WITH THE 12 SIGNS OF THE ZODIAC IN THEIR PROPER ORDER, AND NUMBERING THEM, TO WIT.

We recall that Ju-dah was directed to "PITCH HIS STANDARD ON THE EAST SIDE TOWARD THE RISING OF THE SUN"-Numbers, 2d c. We therefore assign to Ju-dah NUMBER 2 as the number upon his "standard". This NUMBER is also the measure of the Sun's disc-that is, he describes his disc in RISING within just 2 minutes of diurnal time (day and night time) ; thence, the sun in Leo, the Lion, at summer solstice or Ju-dah's STANDARD numbered the rest of the 12 tribes.

We read: "And those that pitch next unto him shall be the tribe of Issa-char." By noting the ROUND ZODIAC we find the Sign of Cancer next to Leo, the Lion, we therefore assign THAT Sign as Issa-char's ensignia upon his "standard". We therefore designate Issa-char as NUMBER I, inasmuch as Ju-dah precedes him and is Number 2, for the reason that the Signs of the Zodiac must be NUMBERED IN THEIR ORDER as they precede or follow one another. It must be noted that the Sign of Cancer corresponds to the TROPIC OF CANCERthe tropical range of the sun being, from the TROPIC OF CAPRICORN to the TROPIC OF CANCER (the tropics are located north and south of the equator, their LIMITS now being

23 degrees and 27 minutes, plus). From the Tropic of Cancer we find that the sun travels to the Tropic of Capricorn, the Goat. Moses directs, in the forming of the camp, that after Issa-char-Cancer-"THEN the tribe of Zebu-lun." We thus find by referring to the ORDER of the Signs in the ROUND ZODIAC, that Zebu-lun, who is NEXT UNTO ISSA-CHAR, bore upon his "standard" the Sign of Capri-corn, the Goat, THE OTHER TROPIC. In order to determine the NUMBER upon the "standard" of Zebu-lun, we do not assume anything, but simply recall "the ordinances of heaven", one of which is THE TROPICAL RANGE OF THE SUN, which is SIX MONTHS. It requires SIX MONTHS for the sun to travel from the Tropic of Cancer to the Tropic of Capri-corn, vice versa. That is to say, from Capri-corn to Cancer, 6 months or from winter solstice to summer solstice, 6 months; or from vernal equinox to the autumnal equinox, the range of the sun is SIX MONTHS. Therefore, the NUMBER upon Zebu-lun's "standard" must be a digit that will give A REMAINDER OF SIX after subtracting Issa-char's NUMBER, Cancer NUMBER 1, which must be SEVEN, as 1 from 7 leaves 6 , or the 6 months' tropical range from Capri-corn to Cancer.

This as you note, forms the EAST SIDE OF THE ENCAMPMENT and compasses the summer solstice position of the sun and his TROPICAL RANGE-Capri-corn to Cancer, and back again.

Moses next directs-Numbers 2d c. 10th v.-"On the SOUTH SIDE shall be the standard of the camp of Reuben", who we recall, Jacob said, was as "UNSTABLE AS WATER", pointing clearly to Reuben's "standard" as being Aquarius, aquameaning WATER. By noting the ROUND ZODIAC we find that Aquarius is the WINTER SOLSTICE POSITION OF THE SUN.

Now the six months' tropical range of the sun from Aquarius, winter solstice, carries him to Leo, the Lion, summer solstice,

Ju-dah's "standard" which is NUMBER 2, therefore the NUMBER upon Reuben's "standard", Aquarius, must be a digit that will give A REMAINDER of SIX, after subtracting Ju-dah's NUMBER, Leo, the Lion, NUMBER 2, which must be 8, as 2 from 8 leaves 6 , the six months' Tropical Range of the sun from Aquarius, winter solstice to Leo, the Lion, summer solstice. Thus, was "the standard of the camp of Reuben" NUMBERED.
We read: "And those which pitch by him shall be the tribe of Simeon." By referring to the ROUND ZODIAC we see that Pisces, the FISH, follows Aquarius, hence we allot to the tribe of Sime-on as the ensign upon his "standard" the Sign of the FISHES, Pisces, and his NUMBER is 9, as Pisces follows Aquarius in the ORDER of the Signs of the Zodiac. This order of NUMBERING THE SIGNS continues to the limit of the TABLE NUMBERS 12, at which point we will have reached the Autumnal Equinox and at that point it will again be necessary to refer to the Tropical Range of the Sun, in order to determine the NUMBER of the tribe. Thus was the ensign upon the standard of Sime-on NUMBERED.

We read: "Then the tribe of Gad"-Whose NUMBER was number 10. We read: "Then the TABERNACLE of the congregation shall set forward with the camp of the Levites in the midst of the camp." We will therefore place "the tabernacle in the midst of the camp", with the Levites.

We read: "On the WEST SIDE shall be the standard of the Camp of Ephra-im"-Whose NUMBER is number 11, in the successive order of the Signs of the Zodiac, and whose ensign was Taurus, the Bull.

We read: "And by him shall be the tribe of Manasseh"Whose NUMBER is number 12, in the successive order of the Zodiac, and his ensign was Gemini, the Twins.

We read: And "then the tribe of Benja-min." Having reached the limit of the TABLE NUMBERS, TWELVE. in the successive order of the Signs of the Zodiac, it is apparent that
we cannot number Benja-min 13. We therefore again refer to the Tropical Range of the sun in order to determine the NUMBER upon the "standard" of Benja-min. By observing the ROUND ZODIAC we see that the Sign OPPOSITE of NUMBER 12, Gemini, the ensign of Manasseh, is Sagittarius, at an angle of 180 degrees

This 180 degrees denotes the Tropical Range of the sun, which, as previously explained is SIX MONTHS. Therefore the NUMBER upon Benja-min's "standard" must be a digit which subtracted from Ma-nasseh's NUMBER, 12, the limit of the TABLE NUMBERS, will give a REMAINDER OF SIX. Benja-min's NUMBER therefore must be 6, as 6 from 12 leaves 6, that is the six months' Tropical Range of the sun from the Sign of Gemini to the Sign of Sagittarius. This, therefore, gives Benja-min the Sign of Sagittarius as his ensign upon his "standard", his number being NUMBER 6.

We have thus completed the WEST SIDE of the camp and we find the "house of Rachel" happily arranged together-Benjamin, Ephra-im and Ma-nasseh. The "house of Rachel" is thus spoken of in many instances: "Ephra-im, Benja-min and Ma-nasseh" (see PSALMS, 80 c. 2d v.).

Ephra-im and Ma-nasseh were Joseph's TWIN SONS by Rachel. We find that Ephra-im's ensign in the ORDER of the camp is Taurus, the Bull, the Sign which the sun is in at the Vernal Equinox. This is significantly set forth in Deuteronomy, 33 c. 14 and 17 verses, which compares Joseph and Ephra-im to the SPRINGTIME and the VERNAL BULL.

We read: "The standard of the camp of Dan shall be on THE NORTH SIDE by their armies." By referring to the ROUND ZODIAC we find that the Sign Scorpio is OPPOSITE of the Sign of Taurus, the Bull, Ephra-im's ensign, NUMBER 11, being opposite it is at an angle of 180 degrees, which denotes the SIX MONTHS' Tropical Range of the sun. Therefore the NUMBER upon Dan's "standard" must be a digit which sub-
tracted from Ephra-im's NUMBER 11, will give A REMAINDER OF SIX. Therefore Dan's NUMBER must be 5 , as 5 from 11 leaves 6, denoting the angle of 180 degrees, the Tropical Range of the sun. This, therefore, gives Dan the Sign of Scorpio, as his ensign upon his "standard", his number being 5.

The ancient priests or prophets substituted Aquila. the "Flying Eagle", for the Sign of Scorpio for certain esoteric reasons; and we find, as will be shown later, that Ezekiel thus refers to Scorpio as the "eagle" (Ezekiel, 1st c. 10th verse), in naming "THE FOUR FIXED SIGNS". Thus, Dan's ensign upon his "standard" was NUMBER 5, the Flying Eagle or Scorpio.

We read: "And those that encamp by him shall be the tribe of Asher." By referring to the ROUND ZODIAC we find that the Sign Libra is next to Scorpio and OPPOSITE or at an angle of 180 degrees from Aries, NUMBER 10, the ensign upon the "standard" of Gad. Therefore the NUMBER of Asher's ensign, Libra, must be 4, as 4 from 10 leaves 6 , denoting the angle of 180 degrees, the Tropical Range of the sun. This therefore gives Asher the Sign of Libra as his ensign, his NUMBER being 4.

We read: "Then the tribe of Naphta-li." By referring to the ROUND ZODIAC we find that the Sign Virgo is next to Libra, "the Balance" and OPPOSITE or at an angle of 180 degrees from Pisces, the FISH, NUMBER 9, the ensign of Sime-on. Therefore, the NUMBER of Naphta-li's ensign, Virgo, must be 3, as 3 from 9 leaves 6, denoting the angle of 180 degrees, the Tropical Range of the sun. This, therefore, gives Naphta-li the Sign of Virgo as his ensign, his NUMBER being 3.

This makes the complement of the 12 Signs of the Zodiac and completes THE FORMATION OF THE CAMP OF THE 12 TRIBES OF IS-RA-EL as directed by Moses. "As they encamp, so shall set forward, every man IN HIS PLACE BY THEIR STANDARDS." Numbers, 2d c. 17th verse.

## CHAPTER IV.

The Zodiac is the fundamental principle of the plan of the UNIVERSE. It is the FULCRUM upon which rests "THE ORDINANCES OF HEAVEN", and without the Zodiac the "GLORY OF GOD WHICH THE HEAVENS DECLARE", and "HIS HANDYWORK", which "THE FIRMAMENT SHEWETH", could not be demonstrated.
"THEY BUILD TOO LOW, WHO BUILD BENEATH THE STARS." Joseph likens himself to one of THE TWELVE STARS or constellations.

We read, Genesis, 37, 6-7-8-9-10 vs.: He first compares himself to a "sheaf upright" and his eleven brothers to 11 other sheaves, who "made obeisance to him." He then uses the simile of "THE ELEVEN STARS". that is some particular starsmeaning the 11 constellations applied to "his brethren making obeisance" to himself, whom he puts as THE TWELFTH STAR. There is no mistaking his meaning inasmuch as he mentions the SUN and THE MOON, stating: "The SUN and the MOON, and THE ELEVEN STARS, made obeisance to me." He thus specifically mentions "THE ELEVEN STARS." He did not say "The Sun and the Moon and eleven stars, but used the term "THE ELEVEN STARS". We find corroborative and collateral evidence by referring to Revelations, 12 c. 1st verse. Note the SIGNIFICANCE of the NUMBER OF THE CHAPTERNo. 12. The first verse states: "And there appeared a great "WONDER IN HEAVEN", a woman clothed with the SUN and the MOON under her feet, and upon her head a crown of TWELVE STARS." This shows that the "stars" spoken of by Joseph were TWELVE IN NUMBER, he, himself, being the

12th STAR, the complement of the 12 constellations of the zodiac.

The Zodiac is specifically referred to as "The HOSTS OF' HEAVEN", the annotations stating: "Twelve Signs or Constellations". 2d Kings, 23 c. 5th verse.

We read, Genesis, 35 c. 22 to 26th vs.: "Now the sons of Jacob were TWELVE: The sons of Leah; Reuben, Jacob's first born, and Simeon, and Levi, and Judah, and Issachar, and Zebulum: the sons of Rachel; Joseph, and Benamin: and the sons of Bilhah, Rachel's handmaid; Dan, and Naphtali: and the sons of Zilpah, Leah's handmaid; Gad, and Asher."

In thus convoking the TWELVE TRIBES IN THIS ORDER, the order of the 12 Signs of the zodiac is SE' $\Gamma$ FORTH IN THE NATURAL ORDER OF THEIR SUCCESSION. The convening of the houses of Leah, and Zilpah, her handmaiden, and Rachel, and Bilhah, her handmaiden, is wrought upon a basis of consanguinity. The whole ARRANGEMENT IS UNIFORM and enforces continuity.

The conclusion to be drawn from this DISPOSITION OF THE TWELVE TRIBES is, that 1st: Jacob's "blessing" of his TWELVE SONS likens them to the 12 Signs of the Zodiac; 2d. Moses forms them into a CAMP THAT IS SQUARE, stating: "Every man of the children of Is-Ra-El shall pitch by his own STANDARD, with the ensign of their father's house." 3d. This ORDER puts the TWELVE TRIBES in the order of the 12 Signs of the zodiac. 4th. This arrangement of CONTINUITY or sequence also ALLOTS THE TRIBES ACCORD. ING TO THEIR BLOOD RELATIONSHIP and establishes the harmony of the heavens, the "ordinances" of God, ky PRODUCING THE SECRET SYSTEM OF NUMBERS--the cryptological key to the Bible.

This additional conclusive evidence is only another factor to indicate that the entire arrangement of the Camp of the Children of IS-RA-EL is according to "the ordinances of heaven"-

CO-ORDINATING THE TWELVE TRIBES WITH THE 12 SIGNS OF THE ZODIAC AS THEY FOLLOW ONE ANOTHER IN SUCCESSION. Its astronomical attributes give you THE SEASONS and MONTHS OF THE YEAR. Its chronological attributes give accurate evidence as to when the books of the Bible were written. Its genealogical phase gives an equitable and harmonious division of the houses of Leah, and her handmaiden, Zilpah; and of Rachel and her handmaiden, Bilhah, -THE HOUSE OF JACOB.

The division is equitable and absolutely perfect and is EFFECTED BEFORE MOSES ASSIGNS THE TWELVE TRIBES to "their standards and ensigns"-which is in the order of the sequence of the 12 Signs of the zodiac.

The grandeur of the heavens depicted upon a star-lit night impresses everyone with the MAJESTY of God. How often have we asked ourselves, the meaning, the construction of the universe. THE MESSAGE OF THE STARS, which speak the language of God-we find is NUMBERS. "He telleth the NUMBER of the stars; he calleth them all by their names."
'Tis no wonder that the ancient seers and prophets, as they viewed the grand galaxy of stars at night upon the plains of Chaldea, from whence came Abraham, uttered with sublime devotion, the thought: "Night unto night sheweth knowledge."

The origin of the zodiac is veiled with the impermeable mists of ages. The greatest scholars, students and scientists of the world have, since the renaissance-the renewal, so-called, of art, lended their efforts towards unravelling the tangled skein of theology, mythology, astrology, astronomy and mathematics, MATHEMATICS being the fundamental principle of the PROBLEM, but have utterly failed to accomplish or achieve their goal.

In the WONDERFUL PLAN OF CREATION God left nothing undone, everything is as it should be, NOT ANYTHING IS HAPHAZARD. God ordained and fixed TIME according to "THE ORDINANCES OF HEAVEN", for he said: "And the
evening and the morning were the first day." "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."-Genesis, 1 c. 5th and 16th vs. Therefore, it is stated, God made the ZODIAC, for it is composed of CLUSTERS OF STARS. "The ordinances of heaven" being MATHEMATICAL, could not be set forth or DETERMINED, except. by the zodiac.

There is no record extant of THE ORIGIN OF THE ZODIAC, and it is admitted by all astronomers and students that there is NO PROOF or RECORD that the zodiac was INVENTED by man.

The Zodiac is a broad circle in the heavens about 16 degrees in width containing the 12 Signs, through which the sun passes in his annual course, the movement of the sun being apparent, and which is caused by the annual revolution of the earth around the sun. Within the zodiacal circle the planets comprising our SOLAR SYSTEM appear to revolve. The annual apparent path of the sun inscribes a CENTRAL LINE through the zodiac, which is called the ecliptic. The plane of the ecliptic intersects the EQUATOR at an angle of about 23 degrees, and 27 minutes, plus, which is called "the obliquity of the ecliptic. The zodiac was divided into 360 degrees. Man in his ego tried to divide it into 400 degrees, and in another instance 1000 degrees, but as a matter of fact it would not WORK, as such a division was not in accordance with "THE ORDINANCES OF HEAVEN". The zodiac was divided into 12 equal portions, each of these portions serving as the visible representative or SIGN OF THE MONTH which it appeared in. "Signs of the Zodiac", Smith's Astronomy, p. 9. Asa Smith, New York, 1848.


THE ZODTAC, THE ARCHETYPE OF THE BIBLE.
The following explanation corrects the position of the Signs of the zodiac, as they are shown in our present day textbooks on astronomy. The Signs, as here shown, are shifted thirty degrees (30) in excess of their true position. This was the basic part of the conspiracy of the priestcraft, who re-wrote the allegories incorporated in the Bible. It was done to confuse and to prevent the coordinution of the zodiac with the book called the Bible (Bible: derived from Greek, bibli-0, book). The constellations shown inside are correct.

CHAPTER V.

God appointed twelve greater and twelve minor prophets and there were twelve apostles, corresponding in NUMBER to the 12 Signs of the zodiac. Could not God have appointed the 12 Signs of the zodiac when he established "the ordinances of heaven". We admit that he appointed the twelve prophets and ESTABLISHED "THE ORDINANCES OF HEAVEN", and by inspection we see that "the ordinances of heaven"-law's of the universe, are BASED UPON THE 12 SIGNS OF THE ZODIAC.

The 12 constellations coincided with the 12 Signs of the zodiac 2450 B. C. E., and the 12 constellations, taken collectively including the SUN-THE CHIEF STAR-contain THE EXACT NUMBER OF STARS that there are DAYS in a Tropical Year, that is, 365 . This is referred to clearly in Genesis, 1st c. 14th v. "And 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." Could anything be plainer than that God here ESTABLISHED TIME? Could anything be more impressive of his WISDOM that he allotted just 365 STARS TO THE 12 CONSTELLATIONS, CORRESPONDING TO THE 365 DAYS OF THE YEAR?

The apostle Paul, presents unmistakable evidence of the use of the ZODIAC by mariners in his day, for he said: "And after three months we departed in a ship of Al-ex-andri-a, which had wintered in the isle, whose Sign was Cas-tor and Pollux." Acts, 28 c. 11 v .

We here see the significance of Paul's reference to Castor and Pollux, which is the Sign of Gemini, the TWINS, through THE CENTRE OF WHICH THE SUN PASSES IN HIS ANNUAL

COURSE-the ecliptic. By noting the Camp of the 12 Tribes of IS-RA-EL it will be seen that the SUN passes directly through Gemini, the Twins-Cas-tor and Pollux.

The caravans of Chaldea, Arabia and Egypt traveled the desert by night on account of the intense heat during the day and were guided solely by the stars.

The SEASONS are determined by "THE FOUR FIXED SIGNS" which were the "Cardinal Points" 2450 B. C. E., that is, Aquarius, winter solstice; Taurus, the Bull, the constellation and Sign which the sun was in at the vernal equinox; Leo, the Lion, summer solstice, and Aquila, the Flying Eagle-put for Scorpio -the autumnal equinox.

"That Great City, the Holy Jeru-Salem"; the City of Heaven.
This is clearly set forth in Ezekiel, 1st c. 4 to 10th verses. We read: "As for the likeness of their faces, they FOUR had the face of a man, and the face of A LION, ON THE RIGHT SIDE:
and they FOUR had the face of an OX ON THE LEFT SIDE; They FOUR also had the face of AN EAGLE." The 13th verse states: "As for the likeness of THE LIVING CREATURES, their appearance was like BURNING COALS OF FIRE, and like the appearance of LAMPS." As Ezekiel beheld the "living creatures in the heavens or firmament, he certainly described THE FOUR FIXED SIGNS IN THE CAMP.

Ezekiel had no doubt of the position of "THE FOUR FLXED SIGNS" inasmuch as he specifically states: "The face of the man and the face of the Lion were on THE RIGHT SIDE; and the face of an OX and an EAGLE were on THE LEET SIDE. He was therefore speaking of the SQUARE ZODIAC as it is formed by THE CAMP FORMATION OF THE 12 TRIBES OF IS-RA-EL, it being evident that THE ROUND ZODIAC could not be so depicted. Ezekiel, 10 c. 10th v. states: "And as for their appearances, they FOUR had one likeness, as if a WHEEL had been in the midst of a WHEEL."

"The Wheel in the Midst of a Wheel"; The Round Zodiac.

He here refers to the ROUND ZODIAC, the WHEEL OF THE SIGNS. He also refers to the zodiac as "LIVING CREA-TURES."-1st c. 5th verse. We read: "Also out of the midst thereof came the likeness of FOUR LIVING CREATURES." As you will note the zodiac is "a circle of living creatures, with one exception, LIBRA, the Balance.

John on the isle of Patmos also beheld a like vision, Rev. 4 c . 7 v .: We read: "And the first beast was like a LION, and the second beast like a CALF, and the third beast had a face as a MAN, and the FOURTH BEAST was like "A FLYING EAGLE"-that is, Aquila. John here describes the ROUND ZODIAC and uses the term "beasts." The word zodiac was derived from a Greek word, Zoar, meaning beast.

Ezekiel's and John's vision certainly applies to the FOUR FIXED SIGNS IN THE ZODIAC AS YOU HERE SEE THEM. If anyone can offer a LOGICAL or RATIONAL explanation as to John's and Ezekiel's language by APPLYING IT TO ANYTHING, EXCEPT THE ROUND AND SQUARE ZODIAC AND ASTRONOMY, or REFUTE THIS CONCISE explanation as to the real sense or meaning, they will give to the world what no one else has ever been able to do, and shed NEW LIGHT upon the Bible, thus winning for themselves much credit and honor.

John describes "THAT GREAT CITY, THE HOLY JE-RUSA-LEM, descending out of HEAVEN from God." Its application to the Camp of the 12 Tribes of IS-RA-EL is perfect for the reason that the Camp of IS-RA-EL embraces the 12 Signs of the Zodiac and the SUN in his "TABERNACLE" and sets forth in a sublime manner "THE ORDINANCES OF HEAVEN."

We find this recorded in Revelations, 21st c. 1st to 21st verses. Mark well the REVELATION, for something is to be REVEALED. Note well the NUMBER of the Chapter, 21, and the NUMBERS of the verses, 1 to 21 . As we observe there are just 21 SQUARES CONTAINED IN THE CAMP OF THE 12
$5 \times 24$ are 120 and $6 \times 120$ are 720 . Which is the SIX MONTHS TROPICAL RANGE OF THE SUN. This is as far as we may proceed without passing through the TABERNACLE. The TABERNACLE was taboo to all but the priests, hence we begin counting the beasts again at the winter solstice point, to wit: $8 \times 7$ are $56 ; 9 \times 56$ are $504 ; 10 \times 504$ are $5040 ; 11 \times 5040$ are 55440 ; $12 \times 55440$ equals 665280 , to which is added the first number obtained, 720 , the sum of which is 666000 . John refers to the number 144000 , Revelation, 14 c .1 v . This number he could have obtained by squaring the number 12 , that is $12 \times 12$ are 144 , which number multiplied by TEN THREE TIMES equals 144000. By using this same method, dividing by TEN THREE TIMES, we obtain from 666000 the apocalyptical number 666. By multiplying the first number obtained, 666000 by the square of the number 12 ( 12 Tribes) we obtain $666000 \times 144$ equals $95,904,000$ (miles), THE DISTANCE TO THE SUN.

We find the books of the Old Testament divided into three TABLES. Each of the THREE TABLES contains 13 books, corresponding in NUMBER with THE THIRTEEN TRIBES OF IS-RA-EL, that is, including the Levites in the centre of the camp, where the TABERNACLE was placed by Moses. We also recall that there were TWELVE apostles, which, including Jesus, numbered THIRTEEN. It may be added, also, that the MOON in its monthly orbit around the earth passes through and into THIRTEEN SIGNS OF THE ZODIAC.

The SUM of the THREE TABLES of THIRTEEN BOOKS EACH, contained in the Old Testament, equals 39 . We observe that the SUM OF THE NUMBERS of the "THREE GATES ON THE NORTH" and the "THREE GATES ON THE SOUTH"-in the order mentioned by John-of THE CAMP OF. IS-RA-EL equals 39. Again the SUM OF THE NUMBERS of the East side and the West side of the camp equals 39, corresponding by this division to THE NUMBER OF BOOKS CONTAINED IN THE OLD TESTAMENT.

There is no other geometrical figure that can be drawn which will contain the TWELVE TABLE NUMBERS ARRANGED IN THE FORM OF A SQUARE. If we regard the 12 signs of the Zodiac in the form of a CIRCLE with the SUN in the centre we have thirteen and if we regard the Camp of the 12 Tribes of Is-Ra-El with their ensigns, THE 12 SIGNS, and the Levites in the CENTRE in the TABERNACLE, we have thirteen.

The Camp of Is-Ra-El depicts the SOLAR SYSTEM, the heavens, and it is recorded in Psalms, 19 c.: "In them hath he set a TABERNACLE FOR THE SUN". Considering the sun in his tabernacle in the centre of the Camp we find an amazing mathematical anomaly, to wit: A STRAIGHT LINE PROJECTED THROUGH THE CENTRE OF THE SUN INTERSECTS NUMBERS, THE SUM OF WHICH IS 13. This is the case if the line is projected in any direction. (Demonstrated by the Camp of IS-RA-EL.) Commencing at any point it is possible to count 13 all the way around the Camp of IS-RA-EL.

By noting the numbers contained within the TEMPLE, inside the "OUTER COURT" we find that the numbers are written backward, that is, from RIGHT TO LEFT, which was the method used by the Egyptians. Let us not forget that Moses formed the Camp of IS-RA-EL, and this is an example of his wisdom.

We read: "And Moses was learned in all the WISDOM of the Egyptians, and was mighty in words and in deeds."-Acts, 7 c. 22 v.

THE CAMP OF THE CHILDREN OF IS-RA-EL GIVES THE DISTANCE TO THE SUN: We read: "Here is WISDOM. Let him that hath UNDERSTANDING count the NUMBER OF THE BEAST: for it is the NUMBER of a man; and his NUMBER is SIX HUNDRED THREESCORE AND SIX." Rev. 13 c. 18 v.

John here refers to the Zodiac, the word zodiac being derived from the Greek word, Zoar, meaning beast. We count the number of the beasts as follows: $2 \times 1$ are $2 ; 3 \times 2$ are $6 ; 4 \times 6$ are 24 ;
$5 \times 24$ are 120 and $6 \times 120$ are 720. Which is the SIX MONTHS TROPICAL RANGE OF THE SUN. This is as far as we may proceed without passing through the TABERNACLE. The TABERNACLE was taboo to all but the priests, hence we begin counting the beasts again at the winter solstice point, to wit: $8 \times 7$ are $56 ; 9 \times 56$ are $504 ; 10 \times 504$ are $5040 ; 11 \times 5040$ are 55440; $12 \times 55440$ equals 665280 , to which is added the first number obtained, 720 , the sum of which is 666000 . John refers to the number 144000 , Revelation, 14 c .1 v . This number he could have obtained by squaring the number 12 , that is $12 \times 12$ are 144 , which number multiplied by TEN THREE TIMES equals 144000. By using this same method, dividing by TEN THREE TIMES, we obtain from 666000 the apocalyptical number 666. By multiplying the first number obtained, 666000 by the square of the number 12 ( 12 Tribes) we obtain $666000 \times 144$ equals $95,904,000$ (miles), THE DISTANCE TO THE SUN.

We find the books of the Old Testament divided into three TABLES. Each of the THREE TABLES contains 13 books, corresponding in NUMBER with THE THIRTEEN TRIBES OF IS-RA-EL, that is, including the Levites in the centre of the camp, where the TABERNACLE was placed by Moses. We also recall that there were TWELVE apostles, which, including Jesus, numbered THIRTEEN. It may be added, also, that the MOON in its monthly orbit around the earth passes through and into THIRTEEN SIGNS OF THE ZODIAC.

The SUM of the THREE TABLES of THIRTEEN BOOKS EACH, contained in the Old Testament, equals 39. We observe that the SUM OF THE NUMBERS of the "THREE GATES ON THE NORTH" and the "THREE GATES ON THE SOUTH"-in the order mentioned by John-of THE CAMP OF. IS-RA-EL equals 39. Again the SUM OF THE NUMBERS of the East side and the West side of the camp equals 39, corresponding by this division to THE NUMBER OF BOOKS CONTAINED IN THE OLD TESTAMENT.

The SUM of the NUMBERS of THE FOUR SIDES OF THE CAMP OF THE CHILDREN OF IS-RA-EL equals 78, which is the NUMBER OF STARS in the constellation of Orion, the constellation mentioned by Job. The CENTRE of this constellation is MIDWAY BETWEEN THE POLES OF THE HEAVENS AND DIRECTLY OVER THE EQUATOR.

We thus observe that the Camp of the 12 Tribes of IS-RA-EL is PERFECTLY BALANCED-the sum of the North and South side, and the sum of the East and West side being EQUAL. THIS is a marvelous mathematical arrangement of the TWELVE TABLE NUMBERS.

The solar year is demonstrated by the Camp of the 12 Tribes of IS-RA-EL. Examples:

The Camp of IS-RA-EL when correctly FORMED and NUMBERED demonstrates every astronomical law and SOLVES ALL THE PROBLEMS OF THE UNIVERSE. It gives the difference between SOLAR and LUNAR TIME-the epact-and CO-ORDINATES SOLAR and LUNAR TIME, which all students have held to incommensurable. It determines the solar and lunar ECLIPSES FOR THOUSANDS OF YEARS-one of the cycles being 8400 years, the calculations being made within the space of THREE MINUTES, in connection with ITS LUNAR Table. It would require a corps of astronomers 500 years to make THIS CALCULATION, WHICH WOULD THEN NOT BE CORRECT.

Modern astronomers admit their errors: Young's General Astronomy, Sec. 437, gives "The Problem of Three Moving Bodies." Predicting their positions at any future date TRANSCENDS THE PRESENT POWER OF OUR MATHEMATICS. The difficulty of the problem lies simply in the inadequacy of our PRESENT MATHEMATICAL METHODS, and it is altogether probable that some time in the future this difficulty will be overcome, very possibly by the INVENTION OF NEW FUNCTIONS AND NUMERICAL TABLES which will bear
some such relation to our PRESENT TABLES of logarithms, sines, etc., as THESE DO TO THE OLD MULTIPLICATION TABLE OF PYTHAGORAS. Sec. 461 states: Questions like this, and those relating to the remaining discrepancies between the LUNAR TABLES AND THE OBSERVED PLACES OF OUR SATELLITE (The Moon), lie on the very frontiers of mathematical astronomy, and can be dealt with only by the ablest and most skillful analysts."

## CHAPTER VI.

THE PERILS OF THE CHRISTIAN CHURCH; NOW OPEN TO ATTACK:

The world was not yet old enough, and the ancient prophets and seers had not had sufficient time to have gathered the necessary data, to have formed a system of astronomy and developed it TO THE DEGREE OF TRANSCENDENTAL PERFECTION WHICH THIS BIBLE SYSTEM OF ASTRONOMY SETS FORTH, and which would have required the lapse of 500,000 years, or more, of time, and the use of superior astronomical instruments, which as a matter of fact, well known and admitted-THEY DID NOT POSSESS.

The marvelous and wonderful system of astronomy and almanac knowledge which the ancient priests and prophets possessed, as revealed by these discoveries, is INCONTROVERTIBLE EVIDENCE OF THE DIVINE INSPIRATION OF GOD'S PRIESTS AND PROPHETS. Hence, divine inspiration of the Holy Scripture is forever proven. "That which is apparent may or may not be as it seems, but THAT which is EVIDENT is a FACT." MATHEMATICS IS MATHEMATICS AND DOES NOT ERR—inasmuch as Mathematics does not consider whether IT EXISTS OR NOT."

## ANSWER TO THE UNIVERSITY PROFESSORS OF THE UNITED STATES OF AMERICA:

We will admit that it sounds mystifying. Many or you probably have asked yourselves: "What's it all about?" What is it? What does it mean? Probably the answer has been, in the vernacular of the day-"SEARCH ME!" The desire to know,
"What's it all about", is strong in everyone of us. Were it not for this normal attribute-TO LEARN, TO GET KNOWL-EDGE-which is not mere curiosity-the human race would be unproductive of progress. It was primarily on account of this desire to learn, TO GET KNOWLEDGE, on the part of the author and discoverer, that the REVELATIONS, WHICH HAVE BEEN HIDDEN FOR TWENTY CENTURIES, are now presented to you.

These demonstrated TRUTHS, which in every case are AXIOMATIC, not THEORETICAL, puts to shame the bigots who would PROFANE THE BIBLE, and defends any and all attacks as to the Bible's AUTHENTICITY and INSPIRATION.

We read: "History and criticism have made the Bible a new book, or rather, a new collection of books, written for the most part, we know not by what authors or at what dates, and PUT TOGETHER AS A BIBLE, WE KNOW NOT UPON WHAT PRINCIPLE." Excerpts from a series of articles entitled: "The Blasting of the Rock of Ages", "Christianity in the Crucible" and "Avatars of the Almighty". COSMOPOLITAN MAGAZINE, May, July and August, 1909, q. v.

The series of articles were written by :
Professor Jacob Gould Shurman, President Cornell University.

Professor Arthur Twining Hadley, President Yale University.
Professor Jordan, President Stanford University.
Professor Butler, President Columbia University.
Professor Sumner, of Yale.
Professor Dickinson Miller.
Professor Boris Sidas, and many others.
The "Scholastic Doctrine", as set forth by the worthy professors of the universities of America, shows clearly the TERRIBLE PERIL which the Christian religion CONFRONTS. This "scholastic doctrine" accelerates the forming of DOUBT in the student-mind, and without these discoveries which PRO-

CLAIM THEMSELVES DIVINE REVELATIONS (originally, the author does not claim to be inspired), and which PROVE THE INSPIRATION and INFALLIBILITY OF THE BIBLE, the poison of INFIDELITY, AGNOSTICISM AND ATHEISM WILL BE INJECTED INTO EVERY STUDENT'S MIND, and as they state: "The religion of DOGMA WILL LIE EXHAUSTED ON THE FIELD."
"There is only one EVIL, ignorance; there is only one GOOD, KNOWLEDGE." Evil is certainly wrought by ignorance and KNOWLEDGE is certainly productive of GOOD. Again: "He builds too LOW, WHO BUILDS BENEATH THE STARS."

The following little story gives a great moral lesson: "A traveler as he passed through a large and thick wood, saw a part of a huge oak which appeared misshapen, and almost seemed to spoil the scenery. 'If', said he, 'I were the owner of this forest, I would cut down that tree'. But when he ascended the hill and had taken A FULL VIEW of the forest, this same tree appeared the most beautiful part of the whole landscape. 'How erroneously', said he, 'have I judged, when I SAW ONLY A PART'. This plain tale, says De Olin, 'illustrates THE PLANS OF GOD. We now SEE BUT IN PART. THE FULL VIEW, the harmony and proportion of things, are all necessary to CLEAR UP our judgment."

The moral lesson conveyed is this: Until one has A FULL VIEW and A COMPREHENSIVE KNOWLEDGE of a matter, they should withhold their judgment.

This series of articles, which we have referred to, express the viewpoints of the heads of the leading universities of America, relative to the Bible, and the statu quo of the industrial system of modern times, as well as the sociological problems, however, CRITICISM OF THE BIBLE PREDOMINATES. These men are supposed to represent a TYPE of advanced intellectuality. They are fearless critics, or, one might say, ICONOCLASTS, whose self-assurance and self-complacency cannot be questioned.

Were these college men permitted to hold full sway, and have their way about it, they would RE-EDIT THE BIBLE, and "simply prune away what is considered by the college men as spurious."

The question is, ARE THEY COMPETENT? These professors advocate more liberty, as they call it. Professor Sumner, of Yale, states: "The New England Puritans in the seventeenth century tried to build a society on the Bible, especially the Books of Moses (The Pentateuch). The attempt," says Professor Sumner, "was in every way a failure. It may well be doubted," he adds, "if any society ever existed of which the books referred to are a description. The Pentateuch, the FIVE BOOKS OF MOSES, were found ill-adapted to seventeenth century facts." And he reiterates the statement that the customs made by any age for itself, may be good and right for that age, while proving absolutely unsuited to a succeeding period."

Professor Sumner teaches that, "in the Middle Ages the crucifixion was an instrument of RELIGIOUS SUGGESTION to produce vivid apprehension of the death of Jesus, and that in many very well-known cases the passions of the crowd were raised by the crucifix to the point of violence."

Professor Dickinson Miller states: "It was given to America, reputed to be the most sordid of nations, to LEAD THE WORLD in the application of NEW PHILOSOPHY." Professor Miller also states: "That American metaphysicians occupying chairs of instruction in our colleges have progressed beyond Socrates and Plato."

President Arthur Twining Hadley, of Yale, states: "The individual conscience cannot work out a new line of judgment and a new system of right and wrong apart from the traditions under which our ideas of law have grown up. Just as the contemporary world regards the Greek myths, the university philosopher approaches God."

President Jordan, of Stanford University, states: "Whiskey,
cocaine and alcohol bring temporary insanity, and SO DOES A REVIVAL OF RELIGION-one of those religious revivals in which men lose their reason and self-control. This is simply a form of drunkenness, NO MORE WORTHY OF RESPECT THAN THE DRUNKENNESS THAT LIES IN THE GUTTER!"

Professor Sidas, of the Pathological Institute, New York, states: "Professor Jordan was too mild in his expression, RELIGIOUS REVIVALISM IS A SOCIAL BANE. It is more dangerous to the life of society than DRUNKENNESS. AS A SOT, MAN FALLS BELOW THE BRUTE; AS A REVIVALIST, HE SINKS LOWER THAN THE SOT."

Thus, they offer a deadly INSULT to every Christian man and woman. EGOMANIA is a worse form of insanity than that produced by WHISKEY, COCAINE and ALCOHOL or as they put it, "DRUNKENNESS," caused by "A RELIGIOUS REVIVAL". These professors seem to be thoroughly innoculated with the virus and are DRUNKEN WITH THEIR OWN CONCEIT.

Isaiah, the prophet, foresaw this calamitous condition, it seems. See Isaiah, 29 c. 9-10-11-12th verses. We read: " 28 c. 9-10-11-12 verses: "Whom shall he teach knowledge? and whom shall he make to UNDERSTAND DOCTRINE? Them that are weaned from the milk, and drawn from the breast. For precept must be upon precept, precept upon precept; line upon line, line upon line; here a little, and there a little: For with stammering lips, and ANOTHER TONGUE will he speak to this people. To whom he said, This is the REST WHEREWITH YE MAY CAUSE THE WEARY TO REST; and THIS IS THE REFRESHING: Yet they would not hear."

It is most significant that these university professors dwell at great length upon their knowledge of astronomy,-the UNIVERSE. In doing so they get into deep water, beyond their depth. The result is, they are engulfed in the FOLLY which
they, themselves created, instance: Professor Hoffman, who is at the head of the department of PHILOSOPHY at Union College, says: "One of the greatest reflections upon a man's character, in the age when so much is being added to our knowledge of the UNIVERSE, is, that his views about religion never change."

Again: Dr. Jacob Gould Schurman, President of Cornell University, says: "The arrogance of this DOGMATISM is hastening the close of the second stage of religion. Dogmatism has conjured up the AVENGER DOUBT. Astronomy has set the earth spinning, DISLOCATED HEAVEN AND HELL, and whirled man from the center of the spatial UNIVERSE."

President Butler, of Columbia University, says: "Almost all the men and women of our nation or of any other, get their religion and their politics where they get their astronomyENTIRELY AT SECOND HAND. Being untrained, they are no more able, intelligently, to examine a DOGMA, than they are to CALCULATE AN ECLIPSE." "This, therefore, serves to explain why the college authorities feel called to INTERPRET THE PROFOUND THINGS OF RELIGION AND LIFE. They believe that they are qualified as EXPERTS to take the lead in DOING THE THINKING OF THE CONTEMPORARY AGE."

So, they believe that "they are qualified as experts"-EXPERTS OF WHAT? As they roll the sweet morsel under their tongues, "ASTRONOMY and CALCULATING ECLIPSES", we must assume that they believe themselves experts in THE REALMS OF ASTRONOMICAL SCIENCE. In the LIGHT of these discoveries, having to do with the phenomena of the UNIVERSE, the movements of the heavenly bodies, and THE LAW which measures the movements, as well as the LAW which CONTROLS or GOVERNS the movements (MATHEMATICS and GRAVITATION), especially the MOON and its ECCENTRICITY, these worthy professors are CONFOUNDED. They are
as UNLEARNED in regard to astronomical science, as a child who attends school for the first time. Inasmuch as it has been cited that they ADMIT that "the observed place of our satellite, the MOON, does not correspond to our LUNAR TABLES." As a matter of fact, their predictions in regard to the MOON'S place in the Signs or constellations are in error in some instances 30 degrees and other instances 45 degrees, and as to their predictions respecting the LUNATIONS-New Moonsand FULL MOONS, they are in error from 15 to 24 hours in many instances.

Their astronomy being WRONG, then their opinions in regard to the Bible, which they attack and attempt to criticise, are of no value. They do not offer any EVIDENCE to prove their assertions-not one jot or tittle, deeming it sufficient to PROCLAIM THEIR VIEWS, and thus forever settle any discussion of the questions involved.

The doctrine of these men is, "if we move our students, we move the world." Professor Patten of Pennsylvania, denominates this doctrine as "SCHOLASTIC PHILOSOPHY AND FAITH."

These self-satisfied egotists who attack the Bible assume a VAST RESPONSIBILITY in THUS MOLDING PUBIIC OPINION, DESTROYING THE CHRISTIAN RELIGION and TEACHING AGNOSTICISM and ATHEISM.

## CHAPTER VII.

There are in the United States of America 293 institutions of higher learning, with an aggregate income of forty million dollars. 'The value of the University grounds and buildings, plus the productive funds and endowments, raises the material worth of these temples of MIS-LEARNING to FIVE HUNURED MILLION DOLLARS. The students annually pay thirteen million, three hundred and forty-seven thousand dollars in tuition fees. This does not include the University of California, with its hundreds of students and other universities, in which education is free. There are in the class-rooms two hundred and twenty-nine thousand students, who daily listen to instruction from more than 21,000 professors and assistants. 'Thus, more than A QUARTER of a MILLION people are busy with new ideas, doctrines, etc., many of which are ERRONEOUS, in so far as concerns the Bible. These fanciful illusions, resting upon the QUICK-SAND OF SPECULATIVE PHILOSOPHY, from which is molded the SOFT, PLASTIC IDEAS OF THEORETICAL DOCTRINES, FICTITIOUS, and at once MISLEADING, are not supported by one iota of evidence, yet, these misguided students who have been fed with the PABULUM of these GREATER THAN MOSES university professors, are potent factors whose influence is transforming society.

Well they may say, "if we move our students, we move the world." Edwin L. Earp, of Syracuse University, states: "It is unscientific and absurd to imagine that God ever turned STONE-MASON and CHISELED COMMANDMENTS ON A ROCK."

Their whole attack is against what they define as "DISSIPATED MEDIEVAL MYTHS as embodied in the Holy Writ."

They also state: "The doctrine of the virgin birth-of Jesuswas only an esoteric doctrine-that is to say, a secret doctrine. Our generation does not share this old belief." Dr. Willet also states: "That a number of Old Testament stories are untrue and unethical." By Professor Herbert L. Willet, University of Chicago.

The only reason these stories are stated to be UNTRUE is because they are not UNDERSTOOD. That is to say, the CRYPTOLOGICAL MEANING of these stories-allegories-, which makes the stories RECOUNT FACTS, is not comprehended. Hence their false position and confusion. The universe is PERFECT-not "NEARLY", as our modern astronomical textbooks state, but ABSOLUTELY PERFECT. The heavenly bodies move in REGULAR ORDER, in REGULAR CYCLES WITH ABSOLUTE PRECISION-are controlled by the LAW OF GRAVITATION and MEASURED BY THE SCIENCE OF MATHEMATICS. The greatest mathematician is the CREATOR OF THE UNIVERSE, for he ESTABLISHED THE UNIVERSE BY MATHEMATICS OR NUMBERS. He evidently was proficient in the science of mathematics, for there is not anything in NATURE or the COSMOS, but what answers to the LAWS OF MATHEMATICS. Hence the movements of the Moon, which our modern astronomers proclaim are incommensurable to SOLAR TIME, may be determined with mathematical accuracy for any period of time, FORWARD OR BACKWARD for THOUSANDS OF YEARS, by THE TABLE OF NUMBERS SET FORTH BY THE HOLY SCRIPTURE, which these worthy professors deride and defame by proclaiming that "the Bible is a book composed of medieval myths," "PUT TOGETHER AS A BIBLE, we KNOW NOT UPON WHAT PRINCIPLE." Plato, when asked what occupied God's time, chiefly, said: "He is geometrizing!"

## CHAPTER VIII.

"The Bible, many of the professors say, has outlived its usefulness as an infallible authority. The world today does not need, nor will it much longer tolerate, the belief that any book on earth was written by a God. They say it is not strange that Comte should say of the Christian's God that science would 'ultimately escort him to the frontier and bow him out with thanks for his professional services'". "Christianity in the Crucible," Cosmopolitan Magazine, August, 1909, pp. 311-315.

What do you think of such doctrine? What will be the ultimate outcome of teaching agnosticism, atheism, infidelity and irreverence of the sacredness of marriage? What will it eventually lead to? Answer: A REPETITION OF THE FRENCH COMMUNE, when blood ran like water down the streets of Paris, under a government which decreed: "GOD IS THE UNIVERSE AND DEATH IS AN ETERNAL SLEEP."

Unless this truculent attack upon Christianity and the Bible is RESENTED BY EVERY CHRISTIAN MAN AND WOMAN IN AMERICA, we had just as well admit self-stultification and bow our heads in cowardice and shame. We would not be worthy of our own self-respect.

The evidence is set before you that the Bible is "PUT TOGETHER" UPON A PRINCIPLE, which principle is mathe-matics-NUMBERS, hence to state that it ERRS would be folly.

These discoveries make it possible to turn the TABLE upon these erudite professors who ridicule the Bible-THE TABLE BEING THE TWELVE TABLE NUMBERS, and "escort THEM" "TO THE FRONTIER" and "BOW THEM OUT WITH THANKS FOR THEIR PROFESSIONAL SERVICES."

The marvelous revelations which are embodied in these discoveries, and which are SELF-EVIDENT, inasmuch as each and every proposition is demonstrated and proven by the infallible science-MATHEMATICS, ABSOLUTELY DISPROVE AND REFUTE EVERY ASSERTION MADE BY THESE UNIVERSITY PROFESSORS.

When an honest man is wrong, and is shown the error of his way, he hastens to set himself right with the world and with his conscience. If the truth does not abide with him, and his vanity and conceit have warped his mind, then, an admission of error is the last thing to be expected. "As a man thinketh, so is he." There is no other satisfaction possible to humanity, that will compare with the sublime and surpassing peace wrought by FAITH and A BELIEF in the Almighty God.

We will now have some examples demonstrating the Camp of the 12 Tribes of IS-RA-EL, NUMBERED IN ITS PROPER ORDER, as an exegetical authority, showing it to be the cryptological key to the Bible. By referring to the diagram we see that there are NINE inside squares, corresponding to the nine moving bodies of our solar system, the SUN, the Chief Star, being the TENTH. We also see that there 12 outside squares, corresponding to the 12 Signs of the ZODIAC. By inspection we see that 9 and 12 are 21. Now, by referring to the 21st chapter of the book of Revelation we find recorded A PERFECT DESCRIPTION of this diagram as you behold it. We read: "And he carried me away in the SPIRIT to a great and high mountain, and shewed me that great city, the Holy Jeru-Salem, descending out of heaven from God." (Jeru means God, and Salem means city; that is, 'city of God'.) The diagram constitutes the FIRMAMENT or heavens, that is, the nine moving bodies of our solar system and the 12 Signs of the Zodiac-that is, the HEAVENS or city of God.

Again we read: "And had a wall great and high, and had TWELVE GATES, and at the gates twelve angels, and names
written thereon, which are the NAMES OF THE TWELVE TRIBES OF THE CHILDREN of IS-RA-EL. On the EAS'T, THREE GATES; ON THE NORTH, THREE GATES; ON THE SOUTH, THREE GATES and ON THE WEST, THREE GATES." This language is clear and there is no mistaking the meaning.

We find the books of the Old Testament divided into THREE TABLES of 13 books each, that is, a total of 39 books. By counting the NORTH and SOUTH NUMBERS of the Camp of IS-RA-EL, we find that the sum is 39 . Again we count the EAST and WEST SIDES and we find that the sum is 39 , corresponding in each case to the number of books in the Old Testament. It also indicates that the NUMBERED Camp of the 12 Tribes of IS-RA-EL is PERFECTLY BALANCED, the sum of the North and South sides and the sum of the East and West sides being the same-39. The sum of the Camp is 78, which is the number of STARS in the constellation, ORION. This constellation contains the "Yard and EL" or "Orion's Belt", also called the "THREE KINGS". The CENTRAL STAR is directly over the equator. This constellation was frequently mentioned by Job, as we shall see later.

## CHAPTER IX.

## THE SERBONIAN SHADOW OF THE GREAT PYRAMID SHROUDS THE DESTINY OF THE WORLD.

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The world seems to think that we are far removed from the wars of the Persians against the Greeks and Egyptians; from Xerxes slaying the sacred bull Apis (a symbol of Taurus) ; from Alexander's conquest of Babylon, and his invasion and subjugation of Egypt, followed by the Ptolemaic dynasty, the reign of which began 332 B. C. E., and continued, we may say, with impunity, to the enlightenment of the world until the romance of Mark Antony and Cleopatra was rudely shattered by the Caesars, who placed the Roman yoke upon the neck of the then civilized world.
We think that it is very improbable indeed that these great crises have to do with our present civilization; that our present status, as is defined by our civil, political, religious, legal, educational, scientific, philosophical, industrial and social conditions were cast from the mold that was formed by these crumbling empires, seems a remote possibility. Yet, from the crucible of internecine strife, carnage and pillage, called the glories of war, the dross and finer material of our well-being in the present era emanated, and our present mental condition is the inherent result of these great panoramas of the so-called ancient world.

Legends and traditions have been lost-purposely, in most in-stances-kingdoms and empires have arisen and fallen as centuries upon centuries have laid the blighting hand of time upon monuments, temples and palaces, yet, withal, we still yearn for
a solution of some of the problems that have come down to us from those halcyon days of remote times, when the world was young, adorned with splendor, riches, romance and power; when the wisdom of Hypatia, the sweet songs of Sapho, the sensuous dances of Salome and the ravishing beauty of Cleopatra were illusory diversions; when the conquests of Alexander and the P'tolemies, the philosophy of Thales, Pythagoras, Socrates, Pericles, Plato and Aristotle; the sculpture of Phidias, the eloquence of Cicero, Demosthenes and Antony; the poetry of Homer and the theogony of Hesiod and Pliny charmed the populace and won the plaudits of nations.

Were not these glorious times, and should we not feel a just sense of pride in that, all of our real knowledge was born of the subtle emanations from these gifted minds that produced original and wholesome thoughts, the best of which have molded the destiny of the world to its present time.

One may say, we have cast into oblivion the foibles of the ignorant pagans. A professor of one of our noted universities is quoted as saying, "We have progressed much farther in philosophy than Socrates, Plato or Aristotle." We must accept such gush with a smile, and make due allowance for the egotism of this misguided pedagogue.

When the Caesars placed the Roman yoke upon the civilized world by despoiling the P'tolemaic empires, they laid the foundation upon which is built our present structures of religious, nolitical, educational, industrial and social existence. When Archbishop Theophilus led the Roman legions of Theodosia the Great and destroyed the Alexandrian Library, the iron bands of the Roman yoke were tightened, and intellectual progress was throttled. Since that great calamity befell the world, man's mind has been warped, its development dwarfed until today, we find it a thing misshapened. This malformation has been brought about by false teachings, the outgrowth of which is a kaleidoscopic panorama of superstition, fear and ignorance. No
one thing has molded the destiny of the world so much as the Great Pyramid of Gizeh (JEEZEH). The pyramids are the most famous spot for travelers on the face of the earth. They are the greatest structures of masonry ever erected by man. The great pyramid is the colossus of all buildings. It is the enigma of ages, an impenetrable problem which no man has ever been able to fathom, the mystery of mysteries. Yet, the secrets locked within and without its confines possesses more power than the combined armies and navies of the entire world, and the ultimate disclosures are destined to utterly change the civil, religious, political, social and domestic life of the whole world.

Some have said that the pyramids possess no beauty or usefulness. This is said because they are not understood. Their usefulness to dispense knowledge is far greater than all the volumes in all the libraries of the world. It is the oracle of arcane wisdom, the Golgotha, the alpha and omega.

## CHAPTER X.

## THE GREAT PYRAMID AND THE PURPOSE FOR WHICH IT WAS BUILT.

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The great pyramid is a record of the wisdom of the ancients relating astronomical, chronological, geometrical and other important truths. Its testimony confounds the wisdom of the wise. It is a witness of the "lost system of astronomy" and its disclosures reveal startling truths that have been locked within and without its confines for more than 3000 years. The 1.2 Constellations or the figures by which they are represented are records of higher stages of civilization; of a period when wisdom or intellectual attainments constituted the aristocracy, instead of money. They ascend to times of which no other record exists, and are destined to remain when all others shall be lost. They represent fragments of history, curious dates and documents relating to chronology, geography, geometry, religion and mythology and are the fundamental principles of astronomy, all of which are preserved in imperishable characters. Zodiac is derived from a Greek word, zoar, meaning beast. Hence, Zodiac, a circle of beasts or "Living Creatures" as all of the 12 SIGNS represent "living creatures" with one exception, Libra.

Most of us have a very limited knowledge of the science of astronomy, therefore, most of us have no idea how useful it is. In many ways, astronomy is the most marvelous of all sciences, and until we have obtained at least an elementary knowledge of astronomy, we can not say that we are educated, or even well informed.

One of the most difficult things for any of us to imagine, is how we would feel and what we would think if it were possible to visit the planet Mars. Upon this planet astronomers claim to have discovered what seems to be a system of canals. Astronomy is a new world of knowledge to most people, and its revelations are almost as wonderful as a trip to Mars would be. The author remembers that when he was a boy, astronomy was taught in many of the high schools. Why the teaching of this science has been discontinued, he is unable to say. It might be well to ask some of your leaders of thought. It is a pertinent question.

Modern astronomy owes much to the Danish monk, Nicolas Koppernix-called Copernicus-his successor, Galileo, and Giordano Bruno, both of whom were forced to recant, one being thrown into prison, the other burned at the stake for exploiting the science of astronomy; nor must we omit J. Kepler, Sir Isaac Newton and the great English philosophers, Roger Bacon, who invented the magnifying glass in the 13 th century and his successor, Sir Francis Bacon; also Herschel, who rediscovered the planet Uranus and Leverrier, the mathematician, who rediscovered the planet Neptune. Yet "lest we forget", we must mention La Place and his hypothesis, the "Mechanique Celeste". La Place is called by some "the father of the Solar System", yet developments seem to show that if anyone is entitled to this title, it would better fit "Oenuphis, a priest of On, in Egypt," who taught Pythagoras the "TRUE SYSTEM."

Without Kepler's "laws that measures the movements of the planets", and Newton's "laws of gravitation", modern astronomical science would be a sea of unsound logic. As it is, and at best, it is very confusing.

A knowledge of astronomy is of incalculable value to humanity. The GREAT FACTOR so ESSENTIAL to HUMAN WELFARE, is a knowledge of the SEASONS, THE TRUE YEARS LENGTH, and an accurate knowledge of TIME. TIME is the

GREAT RECKONER of all things. To possess full knowledge of its worth is to be assured success. To possess the knowledge of the TRUE TIME is of more value than the treasures of Midas or the riches of Croesus. Were one without the knowledge of time, treasures or riches would be dross.
"Time is the transient and deceitful flatterer of falsehood but the tried and final friend of truth. It is the salutary counselor of the wise but the stern corrector of fools, bringing all they hope to the one, and all that they dread to the other. It is the cradle of hope, but the grave of ambition. It is the grand discloser of all things, yet, is itself undisclosed."

The whole fabric of astronomical knowledge is permeated with the units, principles, etc., of the Great Pyramid System, instance: The Nautical Almanacs, Astronomical Text Books, which give the 12 Signs and " 10 moving bodies"-planets(meaning the 8 planets, the Sun and Moon) as given by the socalled Pythagoreans, that is, the Pyramid System; the apparent diameters of the sun and moon; the degree sign, thus ${ }^{\circ}$, derived from the moon as a unit, and "Sun-distance as the greatest unit of measure." All of these were part of the Pyramid System, which gives the distance to the sun probably more accurately than modern astronomy.

Millions of dollars have been expended in building astronomical observatories which is a laudable purpose. The distance to the sun has not yet been determined, and until it is, all astronomical measures and dimensions are inaccurate. However, a great deal of nervous energy has been applied to searching for "star dust", nebulae, etc. In what manner do these affect our mundane sphere? Would it not have been better if a quota of these herculean efforts had been applied to perfecting our present cumbersome system of astronomy? No one will disavow that the sun, moon and earth are the chief factors that affect human existence. Before going on exploring expeditions to the distant
fields of nebulae and resolving the nebulae into "Stars", would it not be best to set our own house in order?

For many years the greatest students and scholars of the world have studied the great pyramid. By measuring its base, its height, its vertical height and radius, areas, angles, declinations, etc., they have only been able to adduce mathematical evidence that the pyramid was a great geometrical work. The following examples go to prove that the pyramid was built in an age when wisdom was supreme. The base side length of each of the four sides of the pyramid was 365.242 pyramid cubits. The pyramid cubit was 25 inches, which unit of measure was derived from the circumference of the moon, the apparent diameter of which is 8.3333 inches, hence 25 inches in circumference. The units of measure and the mathematical and geometrical ratios of the Great Pyramid, were derived from the relative positions, sizes and distances of the sun and earth (the planets and constellations were factors that were also considered, the 12 SIGNS being the fundamental principle of astronomy) hence, have an astronomical significance.

The slope of the great pyramid was thus determined by the angle of the Sun's equinoctial mid-day elevation (that is, on the days of the equinoxes at true mid-day the angle of the slope was produced by the elevation of the sun). The true equinoctial slope of the great pyramid caused the pyramid to consume its North slope shadow exactly at meridian noon, on the day of the equinox. The great pyramid was built upon the 30 th degree of North latitude and could not have been built at any other place and give the wonderful geometrical and mathematical ratios and units of astronomy.

The Cairo mid-day elevation of the sun at the equinoxes indicated that peculiar slope required to shape the perfect $P i$ (the ratio of the diameter to the circumference of a circle, that is, 3.14159 equals $P i$ (equals $\pi$ ) pyramid and furnish its characteristic "Arris-line Ridges," which we may define as the angular
ridges along the joints uniting the slopes from the four corners of the base to the apex. The 4 "arris ridges", so carefully fixed to the corner compass points, N. E., S. E., S. W., and N. W., were primarily designed as a quadruple "gnomon", or "style", for the HUGE SUN DIAL, which the great pyramid really was on account of its position and angles.
THE HUGE SIZE OF THE GREAT PYRAMID: The enormous size of the great pyramid was entirely due to the two essentials of height and slope, which were necessary to define the true year's length by the slope of the pyramid corresponding with the elevation of the sun at meridian noon on the days of the equinoxes. The height, 486 feet, ( 486 feet, but some authorities state 486.2) was necessary to give the desired slope. The EQUINOCTIAL SLOPE, so necessary, required the pyramid to be spread from the 486 feet apex height, by sloping sides governed by the sun's equinoxial noon-rays fixing the slope to the ground level, thus the huge pile of masonry was built permanently over the vast area of thirteen and $1 / 3+$ acres into the stupendous great pyramid, which for over 50,000 years has been, and still is, THE GREATEST WONDER OF THE WORLD.
"Our wonder grows beyond our mental conception when we remember that the great pyramid is but one in a series of about seventy pyramids, which were built during the preceding periods of thousands of years, while they were striving to perfect this great year-finding and astronomical observatory. The granite stone blocks of which the great pyramid is constructed were quarried some four hundred miles up the Nile, down which they were transported by boats to the canal and wharves, specially constructed near the great pyramid's site. Many of the stones of which the pyramids were constructed weighed about two and one-half tons each. We can hardly imagine the stupendous labor required in the construction of the great pyramid, which is one of a group of three." (Rational Almanac, q. v.)

The "casing stones", still capping the second pyramid shows

the stone layers whilst the overhanging shoathing proves that the outside casing began at the apex, which was a massive stone carefully pyramid-shaped and polished, as befitting the crowning point, or headstone, in the corner of man's mightiest building which he has ever erected upon the face of the earth.

1st. "The vertical pyramid height, applied as radius to describe a circle, produces a circumference exactly equal in length to the sum of the four square base lines, $i$. e., it solves the celebrated quadrature or 'squaring of the circle' problem."

2 d . "The area of the vertical central section (parallel to the base lines) is to the area of the base as 1 is to 3.14159 ( $\pi$ ).

3d. "The vertical height is to the sum of any two sides of the base as the diameter is to the circumference of the circle, i. e., as 1: 3.14159, which latter number is herein called Pi ( $\pi$ ).
This " $\pi$ " ratio is the great geometric factor from which arose all these and other remarkable proportions of the great pyramid as developed in its significant position near Cairo ( N . Lat. 30 degrees). That position could only be found on the 30th parallel of N. Lat., as mathematical experts can see at a glance." (Rational Almanac, p. 100, q. v.)
The late Astronomer-Royal of Scotland, Prof. Piazzi Smyth, found that the upward passage angles of the great pyramid, correspond to a telescope and that the "Entrance Passage" corresponds to an astronomer's "pointer"; upon investigation his calculations showed that a Draconis (the 3d star in the Dragon's tail, which was the pole star 2600 years B. C. E.) had occupied the position in the heavens corresponding to the elevation of the passage way, and at mid-night on the Autumnal Equinox 2170 B. C., would have been directly in line with the passage and visible to an observer looking through the passageway. With his pointer fixed upon a Draconis and considering the ascending passages as a telescope, his calculations showed that at that date ( 2170 B . C.) indicated by the pointer, that the

Pleiades, the most significant constellation in the heavens (the constellation of Taurus, the Bull, the Leader of the heavenly hosts), would have been in line with the ascending passages, that is, their elevation would have caused them to have been visible to an observer looking through the passage.

The precessional cycle, that is, the precession of the 12 Signs of the Zodiac is accomplished within a period of 25,800 years, approximately. The precession of a Sign (meaning Constellation, as the SIGNS ARE FIXED) that is, the precession of a constellation through a Sign or 30 degrees of arc is completed within a period of 2150 years, approximately. To be more specific, one of the constellations occupies a period of 2150 years, approximately, as it retrogades past one of the Cardinal Points: Vernal and Autumnal Equinox, Summer and Winter Solstice, the cardinal points always occupying FIXED POSITIONS. 2150 years x 12 signs equals 25,800 years approximately.

The great pyramid thus gives a measure corresponding to the precessional cycle. Measuring diagonally across the base from S. E. to N. W., and from N. E. to S. W., which two measures added, gives in number of inches 25,827 (modern scholars hold that the period is, approximately, 25,864 ).

The distinguished German astronomer, Prof. J. H. Maedler, made the discovery that Alcyone, the brightest star in the cluster Pleiades, was the central sun around which the entire universe revolved. Its diameter is said to be 10,000 times that of our sun. The Egyptians possessed this information 50,000 years ago, and timed the completion of the great pyramid to a nicety, for at midnight on the autumnal equinox, 3733 B . C., the apex of the Great Pyramid pointed to the sublime star Alcyone (of the Pleiades) which was directly upon the meridian at that hour and minute. That the Great Pyramid is a "pointer" to the central throne of the Universe, is a solemn and sublime thought.

The sum of the four sides at base-line level is equal in num-
ber of pyramid cubits to the number of days within a period of four years, including the fractional Leap Year.

Example: The four square base lines of pyramid thus, 365.242 sacred cubits (equals 25 inches each) multiplied by

4 (sides)
1460.98 (cubits)
equals number of days in the 4 -year period inclusive of the fractional Leap Year, i. e., plus one day every four years. An analogy is found in the Great Sothic Cycle (the Year Finding Period of the ancient Egyptians) of 1460 TRUE SOLAR YEARS, which equals 1461 Lunar Years of 365 days, the difference in the 1460 years being just one year between true solar and lunar TIME. It is not necessary to add that the ancient Egyptians or the highly civilized race who built the Great Pyramid possessed the Pi ratio, and were capable of constructing a monument or building that in this day and time, with our so-called culture and refinement, "higher education" and advanced thought, it goes without saying that we could not duplicate this stupendous, marvelous wonder of the world. In fact, within the entire world there are only a limited number of people who possess brains or intelligence enough to comprehend the importance and significance of the evidence that it now brings to light after a period of 3000 years of mental lethargy.

Considering the wonderful geometrical and mathematical ratios, astronomical units and "year-finding purposes of the Great Pyramid, one point especially should be remembered, and that is, "all the remarkable data disclosed therein are due to the relative sizes and inclinations of the Sun and Earth when separated by the Equinoctial Sun-distance, when the Sun is viewed at 30 degrees N. Lat., from the Earth's Equator; and that the pyramid cubit of 25 inches was derived from the apparent circumference of the moon. That this is not the golden age of knowledge and wisdom, is self-evident. The idea that the Great

Pyramid was built for the purpose of a tomb or sepulchre of the Pharaoh, Cheops, Khufu, etc., or any other king, is too absurd for intelligent people to lend attention to.

According to Herodotus, the ancient historian, it required 100,000 men, for a period of twenty years to complete the building of the great pyramid. (The Great Pyramid is referred to by Isaiah, 19th c. 19-20-21 verses, q. v.)

The great pyramid is THE GREATEST WONDER OF THE WORLD. It is a mathematical "WITNESS" of arcane wisdom. It is the stone monument that was erected to record the only true calendar system which the world has ever possessed. A perfect calendar is the basic thing of astronomical science, the thing upon which our very existence depends. The vital, everyday affairs of life are wholly dependent upon a perfect calendar. It is said, "knowledge is power". This is a wise and true saying for knowledge has always ruled the world and always will. Is it not time to awaken the world from its state of mental lethargy? Can we progress beyond a certain well defined point until we have unlearned some of the vagaries that we have become obsessed with?

## CHAPTER XI.

THE CAMP OF ISRAEL SOLAR YEAR.

The Sign precedes the position of the sun in the constellations, always in the Solar calendar phase. In referring to the position of the sun in the constellations, it is meant to convey the apparent position of the sun, that is, the ecliptic; the annual orbit of the earth around the sun; as perforce, the sun does not move (so far as the solar system is concerned), yet, seems to do so, i. e., seeming to rise a little further north each day after the Winter Solstice (December 22d), until the earth in its orbit arrives at the Vernal Equinox (March 21st). At this point, day and night are equal. The earth continues its orbit, making the transit of one of the constellations, every thirty days (nearly). Therefore, when it is said that the sun is in the constellation (Taurus), it is meant to convey, apparently so, as the sun is always in the constellation opposite of the one the earth is in in its annual orbit. For example, the position of the sun being in the constellation Taurus, at vernal equinox, the earth would be in the constellation Scorpio, i. e., always opposite to the position of the sun, for the reason, that the sun would seem to be in Taurus, as the constellation Taurus would be rising heliacally, that is, with the sun, and for the reason that the constellation would be on the opposite side of the sun, from the earth, which being in Scorpio, the constellation Taurus would be opposite, and therefore, the sun would be in Taurus, though not visible to the eye as it would be rising and settling with the sun.

The apparent daily path of the sun through the heavens, is a little further north each day after winter solstice, and it reaches a higher altitude in arc (the daily elevations of the sun is 15
minutes angular measure, approximately, i. e., half a sun disc higher in the heavens each day approximately, from winter solstice, Dec. 22d, to summer solstice, June 21st).

This is caused by the position of the earth in its annual orbit around the sun, hence the sun during one part of the year will be seen to rise every day further and further towards the north, and to continue longer and longer above the horizon, to be more and more elevated at mid-day, until he arrives at a certain limit; which limit is June 21st, Summer Solstice, at which point (in the annual orbit of the earth) the sun was in the constellation of Leo, the Lion (the Lion of the tribe of Judah) 2450 B. C. E., (the Sign, Leo, the Lion, 2450 B. C., coincided with the constellation).

## THE CAMP OF ISRAEL AS A CALENDAR.

The beginning of the year of the Children of Israel was at Vernal Equinox (excerpts are given elsewhere in this chapter to authenticate this statement), and as denoted by the Camp of Israel the position of the sun at vernal equinox was in the constellation of Taurus, the Bull, March 21st, and the Sign Gemini, preceded the position of the sun. Here, let it be noted, that the Sign does the counting of the months in the Solar phase of the Camp of Israel, indicating the annual orbit of the earth around the sun, that is, the ecliptic, or apparent passage of the sun.

1st. The sun being in Taurus, March 21st, the position of the earth was in Scorpio. As the earth made the transit of Scorpio during the month of March (and part of AprilAprilus) and passed into the constellation of Sagittarius, the sun would make the transit of Taurus and pass into Gemini, and as this was effected, the Sign would be Cancer (sec Camp of Israel) No. 1, and would count one Solar Month, as indicated by Number One in the constellation of Cancer (which
constellation is directly east of Gemini, the ecliptic passing directly through the centre of Gemini, the only one of the twelve constellations through which the ecliptic passes directly through the centre). This would be April 21st.

2d. As the earth made the transit of Sagittarius, thence to Capricorn, the sun would make the transit of Gemini, thence to Cancer (making the transit of the Camp, and passing directly through the tabernacle) and the Sign would be Leo, the Lion, and count Two Solar Months, the Sign preceding the position of the sun, as previously explained.

3d. As the earth made the transit of Capricorn, thence to Aquarius the sun would make the transit of Cancer, thence to Leo, the Lion, and the Sign (preceding the position of the sun in the constellation) would be Virgo, and count Three Solar Months, that is, June 21st, Summer Solstice.

4th. As the earth made the transit of Aquarius, thence to Pisces, the sun would make the transit of Leo, the Lion, thence to Virgo, and the Sign would be Libra, and count Four Solar Months.

5th. As the earth made the transit of Pisces (the fish), thence to Aries, the sun would make the transit of Virgo, thence to Libra, and the Sign would be Scorpio (Aquila, the Flying Eagle), and count Five Solar Months.

6th. As the earth made the transit of Aries, thence to Taurus, the sun would make the transit of Libra, thence to Scorpio (the personification of evil, i. e., Typhon), and the Sign would be Sagittarius, and count Six Solar Months, September 23d, Autumnal Equinox. At this point, day and night are again equal, as the earth has passed half way around the sun in its orbit, and again crosses the equinoctial (a line drawn directly east and west through the sun). As herewith indicated the earth has made the transit of Six Constellations, causing the sun to apparently pass through six constellations, to wit: from vernal equinox, March 21st, to autumnal equinox, September

23d, and having made the transit of six constellations, the sun passed from Taurus, number 11, to Scorpio, number 5. The tropical range of the sun being indicated by subtracting the position of the sun at Autumnal Equinox-Scorpio, number 5, from the position of the sun at Vernal Equinox-Taurus, number 11, which gives the difference-6, i. e., the Six Months Tropical Range of the Sun from Vernal Equinox to Autumnal Equinox, vice versa. This is evidenced by the Signs also, to wit. The Sun being in Taurus at Vernal Equinox, the Sign was Gemini, number 12, and the sun being in Scorpio at Autumnal Equinox, the Sign would be Sagittarius, number 6, and six from twelve leaves 6, that is, the six months tropical range of the sun.

7th. The earth at Autumnal Equinox being in Taurus, makes the transit thence to Gemini, and the sun in Scorpio makes the transit thence to Sagittarius, and the Sign would be Capricorn, and count Seven Solar Months.

8th. The earth makes the transit of Gemini, thence to Cancer, and the sun passes from Sagittarius (by making a transit of the Camp at an angle of 45 degrees), to Capricorn, and the Sign would be Aquarius, and count Eight Solar Months.

9th. The earth makes the transit of Cancer, thence to Leo, the Lion, and the sun passes Capricorn, to Aquarius, and the Sign would be Pisces, the Fish, and count nine Solar Months.

10th. The earth makes the transit of Leo, the Lion, thence to Virgo, and the sun passes from Aquarius to Pisces, and the Sign would be Aries, and count Ten Solar Months.

11th. The earth makes the transit of Virgo, thence to Libra, and the sun passes from Pisces to Aries, and the Sign would be T'aurus, the Bull, and count Eleven Solar Months.

12th. The earth makes the transit of Libra, thence to Scorpio, and the sun passes from Aries to Taurus, the Bull, and the Sign would be Gemini, and count TWELVE SOLAR MONTHS, to wit: THREE HUNDRED AND SIXTY-FIVE

DAYS, FIVE HOURS, FORTY-EIGHT MINUTES AND FORTY-SIX SECONDS.

It will be noted that from the position of the sun in Capricorn, as indicated in the Zodiac in its square formation, as depicted by the Camp of Israel, the sun passes through the constellations, Aquarius, Pisces and Aries, from east to west or from right to left, as the earth makes the transit of Leo, the Lion, Virgo and Libra, the earth passing from north to south, in the normal phase of the Zodiac, that is, the Zodiac Circle as indicated by the Planisphere (see Fig. 3).

By comparing the Square formation of the Zodiac-the Camp of Israel, with the Zodiac Circle-the Planisphere-this anomaly is manifested, and the explanation is more readily understood.

The position of the sun being in Scorpio, at the Autumnal Equinox, number 5, and the tropic of its range, Capricorn (the southern tropic towards which the sun travels in its path after autumnal equinox), number 7, which two numbers added together, equals 12, comparing with the 12 Solar months. Thence, Libra, number 4, and Aquarius number 8, equals 12 ; thence, Virgo, number 3, and Pisces, number 9, equals 12 ; thence, Leo, Lion, number 2, and Aries, number 10, equals 12; thence, Cancer, number 1, and Taurus, number 11, equals 12. At this point the equinoctial arbitrarily interferes with counting further, that is, at number 11.

Again, beginning with the position of the sun in Taurus (at vernal equinox), number 11, and the tropic of its range, Cancer (the path of the sun from vernal equinox-Taurus, is toward the tropic of Cancer), number 1, added, equals 12, corresponding with the Twelve Solar Months; thence, Aries number 10, Leo, the Lion, number 2, equals 12 ; Pisces, number 9, and Virgo number 3, equals 12 ; Aquarius number 8, and Libra number 4, equals 12; Capricorn number 7, and Scorpio number 5, equals
12. Here the equinoctial again arbitrarily interferes with counting further, at the number 7.

The two arbitrary numbers, 7 and 11 , therefore prevent the counting of the twelve solar months, it being only possible to count ten, the two arbitrary numbers 7 and 11, as may be readily seen are the only two of the table numbers, that is, one to tuelve, that will not divide 360 degrees, that is, the Zodiacal Circle. These two numbers interfering with the counting of the 12 Solar Months, indicates their mathematical relationship to the table numbers. 1 to 12 , by the position they occupy in the Square Zodiac, as the table numbers are immediately above them in the arrangement of the Camp of Israel-Zodiac-the secret treatise of astronomy.

The six monthly periods of the six months tropical range of the sun, is indicated by the Camp of Israel as follows: Beginning with the Tropic of Cancer, number 1, in juxtaposition with the Tropic of Capricorn, number 7, and subtracting Cancer from Capricorn leaves 6; Leo, the Lion, number 2, Summer Solstice, June 21st, from Aquarius number 8, Winter Solstice, December 22d, leaves 6; Leo, the Lion, Summer Solstice being June 21st, therefore Virgo would correspond to July 21st, and Aquarius being Winter Solstice, December 22d, Piscer would correspond to January 22d, hence, Virgo number 3, July 21st, from Pisces number 9, January 22d, leaves 6; Libra, number 4, August 21st, from Aries, number 10, February 22d, leaves 6; Scorpio, number 5, September 23d, from Taurus, number 11, March 21st, leaves 6; and the Sign concludes by subtracting from Gemini, Sign at Vernal Equinox, number 12, Sagittarius, the Sign at Autumnal Equinox, number 6, which leaves 6. Thus in a very simple manner the tropical range of the sun is briefly and beautifully demonstrated by the Camp of Israel, the LIGHT OF THE WORLD, for and during the period of eternity (so far as earthly affairs are concerned).

When the sun enters the Sign, Cancer, at the summer solstice,
he discontinues his progress towards the North Pole (or toward the pole star in the Little Bear-Major Minor-i. e., constellation of the Little Dipper-apparently as viewed from the earth), and begins to return towards the South Pole. "This retrograde motion was fitly represented by a Crab, which is said to go backward. The sun enters this Sign about the 22d of June" (Burritt's Astronomy, p. 145). "The Fishes now occupy the same place in the zodiac, that Aries did in the time of Hip-parchus"-ibid, p. 28. "That is, the constellation Aries is now in the Sign Taurus, Taurus in Gemini, and Gemini in Cancer, and so on"-ibid, p. 28.

Hence, it is apparent that there has been a precession of the constellations since the time of Hipparchus, 156 B. C. E., to the extent of one complete constellation, and a little more as Pisces is now the constellation at Vernal Equinox; e. g., the Constellation of Taurus 2450 B. C. E., at Vernal Equinox describes the Sun's position. Subtracting the percession of one Sign- 2150 years approximately, from 2450, leaves 300 . At about this time Aries became the Sign at Vernal Equinox. Therefore, by adding 1924, the present date, to 300 B. C. E., would give 2224, from which the precession of the Sign of Aries is subtracted, that is, 2150 vears, approximately, which gives 74 years, which is about the time that Pisces became the Sign at Vernal Equinox, that is; the Vernal Equinoctial point is now in the first degree of Pisces, as the annual rate of precession is $501 / 4$ seconds, which equals one degree within a period of 71.66 years. "Taurus is now the second Sign, and third constellation of the Zodiac, but anterior to the time of Abraham, or more than four thousand years ago, the Vernal Equinox took place, and the year opened when the Sun was in Taurus; and the Bull, for the space of 2000 years was the prince and leader of the celestial host. The Ram succeeded next, and now the Fishes lead the year. The head of Taurus sets with the Sun, about the last of May, when
the opposite constellation, the Scorpion, is seen to rise in the Southeast" (Burritt's Astronomy, p. 38).
"Both the Egyptians and the Persians worshipped. a Deity under this figure (a snow-white Bull), by the name of Apis; and Belzoni is said to have found an embalmed bull in one of the notable sepulchres near Thebes." "In the Hebrew Zodiac, GEMINI is ascribed to Joseph." Ibid.

Let it be noted that the author in forming the Camp of Israel ascribes the constellation Taurus as the ensign of Ephraim, the twin brother of Manasseh-Joseph's twin sons. At the time of the Exodus when Moses first formed the Camp, by divine revelation, Joseph was dead, and Moses states in Numbers, 2d chapter, "That the Children of Israel shall pitch by his own standard, with the ensign of their father's house". Joseph being dead, therefore Manasseh succeeded to his father's standard (to be specific, he succeeded to the standard of Benjamin, Joseph's brother, who in the "House of Jacob", the Round Phase of the Zodiac, possessed the Sign of Vernal Equinox, Gemini, as his standard or ensign, and Joseph possessed the ensign, Taurus, the sun being in Taurus at Vernal Equinox. Levi possessed the Sign Sagittarius at this time, which as stated, was before the forming of the Camp, or perfecting of the Calendar System, after which they required 13 tribes, providentially fulfilled by Joseph's twin sons, Ephraim and Manasseh), GEMINI, the twins. The bull (Taurus) is ascribed to Ephraim. Deut. 33 c. 17th verse; Hosea, 8 c. 5 v. (as a calf) ; Hosea, 10 c. 11 v. (as a heifer).

Note.-The Sign precedes the position of the Sun in the Constellations, for the reason that IT DOES THE COUNTING OF THE MONTHS, IN THE SOLAR CALENDAR OF THE CAMP OF THE CHILDREN OF ISRAEL. The Sign evidently had to precede the position of the Sun in order TO COUNT THE NUMBER OF THE SOLAR MONTHS, according to the peculiar arrangement of the numbers of the Constellations-Tribes. This
seems to be the natural solution of the question of the Sign preceding the position of the Sun, etc.

And again, a Sign equals 30 degrees and may contain several constellations-there being 48 originally-yet, each Sign of 30 degrees contains only one of the 12 , or great constellations. A Sign equals 30 degrees, the distance which the Sun traverses in its path every thirty days, approximately, and therefore really records or counts thirty days or 30 degrees, when it moves its position preceding the Sun.


## CHAPTER XII.

## THE PRECESSION OF THE SIGNS RECORDED FOR ETERNITY.

The 7 Planets were the factors of the "Great System of Astronomical Science, which reached a high degree of perfection in the early (very early) ages of the world," and many evidences of the influence of the Seven Planets are found in the monumental ancient ruins of Chaldea and Egypt, so, not only do we find there foot-prints along the shores of time in monumental ruins, but also in the world's greatest literary production, the Bible.

The arbitrary numbers in the Camp of Israel, as previously explained, are seven and eleven, their positions being below the table numbers-one and twelve (vide, illustration of the Camp of Israel). These two numbers, 7 and 11, and the positions they occupy, being above and on either side of figure 9 , produce some interesting and startling results relative to eclipses.

To make the matter clear, the author quotes from Asa Smith's Astronomy, p. 35. Pub. by Cady and Burgess, New York, 1848, relative to Eclipses.
"The Greatest Number of Eclipses in a Year.-After the sun, moon and nodes have been once in a line of conjunction, they return nearly to the same position again in 223 lunations, or 18 years, 11 days, 7 hours, 43 minutes, and 20 seconds, when four Leap Years are included or one day less, when 5 Leap Years are included. Consequently, if to the mean time of any eclipse of the Sun or Moon we add 18 years, 11 days, 7 hours, 43 minutes, and 20 seconds, we shall have the mean time of the return of the same eclipse for a long period of time. This period was first
discovered by the Chaldeans, by a long series of observations, extending through many centuries, and by it they were able to foretell, with considerable exactness, the appearance of an eclipse, varying at most but a few hours. Every eclipse within this period of 18 years belongs to a separate series of eclipses, that is, there is but one eclipse during the 18 years, which belongs to the same series. If any series of eclipses commence at the ascending node, the shadow of the moon just touches the earth at the north pole. At its next return in 18 years, the shadow will pass across the earth a little more to the south, and each return, the shadow will continue to pass more to the south until it will have appeared about 77 times, which will take about 1,388 years, when it will pass off the earth at the south pole, and at the expiration of 12,492 years, the same eclipses will commence again to go through a similar course."
"The mean ecliptic of the Sun is $161 / 2$ degrees on each side of the node. The mean ecliptic for the Moon is $101 / 2$ degrees on each side of the node. In the former case, then, there are 33 degrees, about each node, making in all 66 degrees out of 360 degrees, in which eclipses of the Sun may happen. In the latter case there are 21 degrees about each node, making in all, 42 degrees out of 360 degrees in which eclipses of the Moon usually occur. The proportion of the solar to the lunar eclipses, therefore, is as 66 to 42 , or as 11 to 7."-Burritt's Astronomy, p. 220.

The ratio of the solar to the lunar eclipses, is therefore, as 66 to 42 , or 11 to 7 . Example: The numbers 11 and 7 are the arbitrary numbers of the Camp of Israel as previously explained in counting the Solar months of the Solar Year, and the ratio of the lunar to the solar eclipses is as 7 to 11, or vice versa. The number 7 represents the proportion of lunar eclipses, which is in itself interesting, considering the number of times 7 occurs as representing the Moon's phases, 28 day lunar month, the sabbath year- 7 years-and $7 \times 7$ years equals 49 years, plus 1, recording their fifty-year period-Jubile Year-etc., as demon-
strated in the ancient lunar calendar system of the Camp of Israel. Let it be recalled also, that the Sun was in Taurur (2450 B. C. E.) and his number is 11 , in the Camp formation. The number 7, plus 11, equals 18 , corresponding to the 18 years of the cycle of eclipses (plus 11 days). Again $7 \times 11$ equals 77 , and $77 \times 18$ ( 18 years of cycle) equals 1,388 (plus the 11 davs of each cycle), that is, the second series of eclipses. As stated the Moon's shadow then passes off the south pole. The south pole of the Camp of Israel is represented by number 9, and the series of cycles ( 18 years, 11 days, plus), occurring 77 times, equals 1,388 years, which number, $1,388 \times 9$ (the south pole of the Camp) equals 12,492 years, the GREAT CYCLE, after the expiration of which, "the same eclipses will commence again to go through a similar course."

Thus it becomes apparent that this period ( 18 years, 11 days, 7 hours, 43 minutes and 20 seconds), which the Chaldeans discovered "by a long series of observations", with its two series1,388 years, and 12,492 years-must have necessitated a very long series of observations, in fact it logically follows that to have discovered these long series of cycles, they must have made observations covering at least two of the GREAT CYCLES of 12,492 years, to have made their deductions exact. It is significant, to say the least, that the Chaldeans also had a Great Cycle which they termed a Sar, a period of thirty-six thousand years!

These examples, as illustrated by the Camp of Israel, offers self-evident proof of the unparalleled simplicity of the secret Calendar and Astronomical System of the ancients.

The marvelous arrangement of the numbers in the Camp of the Children of Israel will record the precession of the Signs during an equinoctial year ( 25,000 years, approximately), and as the precession of each Sign occurs, at the four cardinal points, the position of the Sign at the cardinal points will indicate by its number the six months tropical range of the Sun be-
tween the four cardinal points. Example: about 2450 B. C. E., Taurus was the position of the Sun at vernal equinox (whose number in the Camp formation is 11); and the position of the Sun at autumnal equinox was Scorpio (whose number in the Camp formation is 5). The Signs precede the position of the Sun, and Gemini was the Sign at vernal equinox, whose number is 12 . The Sign at autumnal equinox was Sagittarius, whose number is 6 . By subtracting the number of the Sign of Sagittarius (autumnal equinox), number 6 from Gemini, the Sign at vernal equinox, number 12 , we have 6 , the six months tropical range between those points; or by subtracting Scorpio, number 5 (the position of the Sun at autumnal equinox), from Taurus, number 11 (the position of the Sun at vernal equinox). The remainder is 6 , that is, the six months tropical range.

Taurus, in which the vernal equinox took place 2450 B. C. E., passed out and was succeeded by Aries, the Ram, about 300 B. C. E. Aries has passed out and was succeeded by Pisces (whose number is 9 in the Camp formation), number 9. The point of vernal equinox is now in about the first degree of Pisces. The precession of the Signs at the cardinal points Summer Solstice, Autumnal Equinox and Winter Solstice were therefore as follows: Scorpio (Autumnal Equinox 2450 B. C. E.), was succeeded by Libra, and Libra has passed out and was succeeded by Virgo (whose number in the Camp formation is number 3), number 3, and 3 from 9 leaves 6 , the six months tropical range. Aquarius was the position of the Sun at Winter Solstice ( 2450 B. C. E.) and was succeeded by Capricorn, which Sign has passed out (the precession of a Sign requires a period of 2,150 years, approximately) and was succeeded by Sagittarius, which is now the Sign at Winter Solstice (whose number in the Camp formation is number 6) number 6. Leo, the Lion, the position of the Sun at Summer Solstice ( 2450 B. C. E.) was succeeded by Cancer, which Sign has passed out and was succeeded by Gemini (whose number in the Camp formation is number 12),
number 12; and by subtracting Winter Solstice, Sagittarius, whose number is 6 , from Summer Solstice, Gemini, whose number is 12 , the difference gives the six months tropical range.

Now, when Pisces, the Sign at vernal equinox, at present, is succeeded in about 2,000 years, by Aquarius, whose number is 8 , and Virgo at the autumnal equinox is succeeded, in about 2,000 years, by Leo, the Lion, whose number is 2 , by subtracting 2 (Leo, the Lion, the position of the Sun at autumnal equinox 2,000 years from now) from 8 (Aquarius, the position of the Sun at vernal equinox 2,000 years from now) the difference is 6, the six months tropical range.

It is therefore self-evident that the marvelous arrangement of the 12 Constellations in the order or positions they occupy in the Camp of Israel, as they are numbered, will give the precession of the Signs at the cardinal points, and denote the six months tropical range, for and during the period of ETERNITY, so far as earthly affairs are concerned. The sum of the Signs (as numbered in the Camp) as they passed each of the 4 Cardinal points, during an Equinoxial Year ( 25,000 years) in the order of precession, would be 78, which number multiplied by 4 ( 4 cardinal points) equals 312 , plus 36 ( 36 divisions of the zodiac), plus 12 Signs of Zodiac, equals 360, corresponding to the 360 degrees of the equinoxial year. The precession of the Signs as demonstrated by the Camp of Israel is a PERFECT EXAMPLE OF PERPETUAL MOTION-of numbers.

Again: within a half equinoctial year ( 12,500 years), the numbers would record at the 4 Cardinal points (each cardinal point) the number $39,39,39,39$, the sum of which is 156 , corresponding to the number of the constellations which the moon passes through during twelve solar months (nearly), that is, 156 constellations; e. g., the moon makes the transit of 13 constellations each month (nearly), hence, $13 \times 12$ ( 12 solar months) equals 156 constellations. Therefore, from vernal equinox to autumnal equinox (their six months year period) the moon
makes the transit of 78 constellations, corresponding to the number recorded at each of the 4 Cardinal points, within an equinoxial period ( 25,000 years). The marked relationship shown by the number 78 and its multiples, as an astronomical unit is capable of far greater deductions.

In an Equinoctial Year the precession of the Signs-NUM-BERS-would occur in the following order (the sun in the constellation of) :
(V.E.)(S.S.) (A.E.)(W.S.)

| Signs, | 2450 | B.C.E. | 11 | 2 | 5 | 8 | equals 26 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Signs, | 300 | B.C.E. | 10 | 1 | 4 | 7 | equals 22 | equals 78 |
| Signs, | 1850 | A.D. | 9 | 12 | 3 | 6 | equals 30 |  |
| Signs, | 4000 | A.D. | 8 | 11 | 2 | 5 | equals 26 |  |
| Signs, | 6150 | A.D. | 7 | 10 | 1 | 4 | equals 22 | equals 78 |
| Signs, | 8300 | A.D. | 6 | 9 | 12 | 3 | equals 30 |  |
| Signs, | 10450 | A.D. | 5 | 8 | 11 | 2 | equals 26 |  |
| Signs, | 12600 | A.D. | 4 | 7 | 10 | 1 | equals 22 | equals |
| Signs, | 14750 | A.D. | 3 | 6 | 9 | 12 | equals 30 |  |
| Signs, | 16900 | A.D. | 2 | 5 | 8 | 11 | equals 26 |  |
| Signs, | 19050 | A.D. | 1 | 4 | 7 | 10 | equals 22 | equals 78 |
| Signs, | 21200 | A.D. | 12 | 3 | 6 | 9 | equals 30 |  |
| .No. 1 | 23350 | A.D. | 78 | 78 | 78 | 78 | 312 |  |

The six months tropical range is given by subtracting A. E. from V. E. or S. S. from W. S., vice versa. The numbers produce an endless chain of combinations, THE TRUE CABALA, and aptly depict "THE ORDINANCES OF HEAVEN". The examples herewith given may be said to be only elementary. The Pythagorean Theorem (the 47th problem in Euclid) is demonstrated by the order of the numbers at the North Side of the Camp of the Children of Israel, to wit: 3, 4,5. The position of number 5 in the Camp is in juxtaposition with the hypotenuse of the right angled triangle, indicating its significance. 5, therefore, would signify the hypotenuse. Did Pythagoras discover the proof of the proposition that "the square of the hypotenuse of any right angle triangle is equal to the sum of," etc.
The number 312 (the sum of the four cardinal points of the Camp) x 4 equals 1248 (312 equals an Equinoctial Year, 25,000
years, as recorded by the precession of the Signs) plus 12 ( 12 Signs of the Zodiac) equals 1260 , which number frequently occurs in John's Revelations. The number 1260 therefore, would signify 4 equinoxial years of 25,000 years each. This would give 100,000 years, and offers an explanation of the number 1260 , which would stand for 100,000 years, the period of THE REVOLUTION OF THE APSIDES OF THE EARTH'S ORbI'T; the number 1260 being recorded cryptologically, that is, 312 ( 25,000 years) x 4 equals 1248 plus the 12 Signs, equals 1260 , or 100,000 years. The period of the Revolution of the Apsides of the Earth's Orbit to be exact, is, 108,000 years.

The Camp of Israel also gives the distance to the Sun, approximately, as $95,904,000$ miles, which Revelation has reference to in the 13th chapter and 18th verse: "Here is wisdom. Let him that hath understanding count the number of the beasts (Greek: Zoar, zodiac), for it is the number of a man, and his number is Six hundred threescore and six." That is, " 666 ", which number, the Camp of Israel gives a perfect example of (explanation and example in preceding chapter).

The philosophy of Pythagoras was taught orally-never written. The sacred numbers of the Pythagorean philosophy were 6,8 and 7 ; reading backward will give 78, the number recorded at each of the 4 Cardinal points of the Camp of Israel during an Equinoxial Year ( 25,000 years), and 6 would signify the unit of measure of the Bible. 6 palms equal 1 cubit; 6 cubits equal 1 reed, etc.; six sides to a cube, etc.

Pythagoras taught that "everything in the universe is number," referring to the Camp of Israel Calendar and System of Astronomy (the ancient Egyptian System, recorded by the "Stone Witness", the Great Pyramid) which demonstrates the universe by numbers. Pythagoras and Thales taught the heliocentric system, which is amplified and exemplified by the Camp of Israel. "The Pythagorean Philosopher's astronomical beliefs foreshadowed those of Copernicus, for they taught that the Sun
was a central fire around which the stars revolved". The wisdom of the ancients compared to that of the present era, makes our erudition nil. The Camp of Israel Calendar System will never need any changing, 'tis a pendulum that forever swings, "THE TRUE TABERNACLE WHICH THE LORD PITCHED, AND NOT MAN."

It unfolds the mightiest panorama that was ever spread before the mental vision of man!

## CHAPTER XIII.

THE ANCIENT SACRED CALENDAR SYSTEM.
THE LOST TRIBES OF ISRAEL FOUND AT LAST.
THE DIVINE TRUTH OF HOLY WRIT SPEAKS. "THE TRUE TABERNACLE WHICH THE LORD PITCHED AND NOT MAN."

The Camp of Israel Solar-lunar Calendar, Giving the Lunar Phase; The Sabbath Year- 7 Years- $7 x 7$ or 49 Years, and the Significance of the "Jubile" or Fiftieth Year (an intercalation correcting-synchronizing-solar-lunar time, and adjusting the differential of the synodic and sidereal revolutions of the moon). Explaining the Significance of Pentecost-50 days after Easter-An Excess of Lunar Time.

Using the old lunar reckoning the Israelites began their year with the first New Moon, on or after the vernal equinox, the moon passing through all the 12 Signs and gaining one sign, *each orbit (nearly), hence, we find the moon after one orbit at Cancer, after completing one lunation, or month, as indicated by the Camp of Israel-see Figures 1 and 2. (*Burritt's Astronomy, pp. 206-207, q. v.). The succeeding orbit of the moon and second month would be completed with the moon's transit of Leo-number 2; the third, with the transit of Virgo; the fourth, with the transit of Libra; the fifth, with the transit of Scorpio: the sixth, with the transit of Sagittarius; the seventh, with the transit of Capricorn; the eighth, with the transit of Aquarius; the ninth, with the transit of Pisces; the tenth, with the transit of Aries; the eleventh, with the transit of Taurus; the twelfth, with the transit of Gemini ; the thirteenth with the transit of

Cancer again, thus having gained nearly a Sign each month, and completing the Lunar year upon its transit of Cancer-number 1 -with the Levites counting the 13th month, the "Keepers of the Tabernacle, in the midst of the Camp"-its starting point at vernal equinox.

The origin of the Zodiac has been buried in antiquity and oblivion. The reason why certain constellations were chosen out of the original 48 constellations, or the many other groups, is thus apparently explained. It seems self-evident that each group, or constellation was chosen on account of its containing the correct number of chief stars, that is, stars of the first, second or third magnitude, that would correspond in numbers-or as near so as possible-with the position of the moon in its monthly orbits taking into consideration that the moon gained a Sign (nearly) each month. When the stars in the group or cluster did not exactly accord with the number of the lunar months, the stars of other constellations, in the same Signs were used, forming geometrical or symbolical figures, in addition to the animals or beasts, representing Chief Constellations of the stars in the zodiac.

They had to select a group of stars that would correspond with the position of the moon, each lunation, or lunar month; there being several constellations in each Sign, they naturally selected the constellations having not only the correct position, but the correct number of the stars also, as near as possible, that would indicate the moon's position monthly. The selection of groups of stars that would accord with their purpose, recording the monthly position of the moon, which was man's first counter of time, and which he adored and reverenced on account of its peculiar influence upon his existence, goes back to the dim realms of the past far anterior to the time when man had arranged a system of astronomy, in fact, must have been the very beginning of man's astronomical research. It was important that their Lunar reckoning should be recorded accurately, and
this arrangement of the constellations within the 30 degrees of each Sign, perfectly portrayed the position of the moon each lunation. By no other arrangement of the constellations in the Signs, was it possible to do so.

The beginning of the new year of the Children of Israel was at Vernal Equinox, the first day of the New Year being the New Moon, on or after the Sun's passage over the equator, or the new moon that occurred simultaneously with the equinox. Therefore, "Feast of the Passover" commemorated the beginning of the new year which began with the new moon at the equinox. The new moon was the first of the month. The first month of the year was the month of Abib, at which time was the "Feast of the Passover." (Deut. 16 c. 1st v.) "And Moses said unto the people, remember this day in which ye came out from Egypt, out of the house of bondage; for by strength of hand, the Lord brought you out of this place: there shall no leavened bread be eaten. This day came ye out in the month of Abib", (Exodus, 13 c. 3-4.) "This month shall be unto you the beginning of months; it shall be the first month of the year to you." (Author's italics.) (Exodus, 12 c. 2 d v.)

Moses established the 12 months year at this time. Prior to this time, the Children of Israel used a six months year, that is, a year of six lunations, or six moons. "In the first month, on the 14th day of the month at even (the Hebrew day began at sundown), ye shall eat unleavened bread until the one and twentieth day of the month at even." (Exodus, 12 c. 18th v.) This corresponds to March 21st, or the Vernal Equinox of our present calendar system. "In the first month, in the 14th day of the month, ye shall have the passover, a feast of seven days; unleavened bread shall be eaten." (Ezekiel, 45 c. 21 v.)

This corresponds with the Ides of March (Ides was the 15th day of March in the Roman calendar, but, at the time Julius Caesar corrected the calendar, Ides was ten days out of kelter). The 21st day of March is the Vernal Equinox. The "Feast of
the Passover" began on the 14th day of the month of Abib (the first month of the year), and continued seven days, or until the $21 s t$, corresponding with the vernal equinox.

The first of the month was the new moon: "Blow up the trumpet in the new moon, in the time appointed, on our solemn feast day. For this was a statute for Israel, and a law of the God of Jacob." (author's italics.) "This he ordained in Joseph for a testimony, when he went out through the land of Egypt." (Psalms, 81 c. $3-4-5$ vs.) (author's italics.)

Indeed it is a testimony in Joseph-through Ephraim, Joseph's son, for Ephraim in the Camp of Israel opens the New Year, at vernal equinox. At the vernal equinox the sun in its apparent passage through the zodiac-the ecliptic-begins to fructify mother earth and bring forth life.

The Israelites prior to their exodus used a six months year. This is verified by the position of the ensigns or symbols of the zodiac in the formation of the Camp of Israel. We find that the sun entered Taurus at the vernal equinox. The first year of six months ended with the ensign, or Sign of Sagittarius, that is, Benjamin, referred to by Jacob as "the son of my sorrow." Genesis, 35 c. 18th verse-referring to the sun crossing the Equator, at the autumnal equinox. Jacob also refers to Reuben as Winter Solstice: "Jacob's first born," referring to winter solstice, the first of the year, the sun being born again, etc.

Reuben, Simeon and Levy "were brethren", (Pisces), and Zebulun-the South Camp-were sons of Leah (one of Jacob's four wives, corresponding to the four seasons), as was also, Judah and Issachar (Genesis, 35 c. 22 to 26 v., q. v.). The story of Jacob and his four wives comprises a very beautiful allegory. The "House of Jacob", his twelve sons, the 12 Signs or constellations (Isaiah, 29 c. 22 v., q. v.; Gen. 49 c.), is demonstrated by the Camp of Israel in succeeding articles.

The second year of six months began with the sun entering
the Sign Sagittarius (Benjamin, 6), and ended with the beginning of the New Year at Taurus (Ephraim, 11) vernal equinox. The first year of six months, therefore, began at vernal equi-nox-Taurus-in the Spring (to leap, the sun at this points in the earth's orbit crosses the equator, leaps over, etc.) as the sun entered Leo-the Lion of the tribe of Judah-at the Summer Solstice-Ensign of Judah-in June (our month of June).

## J ACOBS CRYPTOGRAM. GHRONOLOGICAL ORDER OF THE BIRTHS OF THE SONS OF JACOB.



JACOB'S cryptogram (Chronological order of the births of the sons of Jacob) and its underlying mysteries are treated in the second volume of this work. Fig. 10.

The esoteric meaning of these allegories was zealously guarded. The Holy Scripture states: "And I went up by revelation, and communicated unto them that gospel which I preach among the Gentiles, but privately to them which were of reputation, etc. (author's italics). (Galatians, 2 c. 2 v.) Again: "Which things are an allegory; for these are the two covenants." (Galatians, 4 c. 24 v., q. v.) It is therefore specifically stated and admitted, that one version was given to those who did not know (agnostics), and another version to those who did know (gnostics), that is, "who were of reputation," and that "these things are an allegory"; we must accept the Holy Scripture, the word of God.

Taurus was the constellation at vernal equinox, 2450 B. C. E., hence, the first year began in March-March 21st, the vernal equinox-and ended with the sun in Scorpio-ensign of Danin September-September 23d, the autumnal equinox: six tribes, six Signs, six Moons (appropriately), and exactly six Solar Months.

The second six months year began as the sun entered the constellation of Sagittarius, the ensign of Benjamin. This was the old six months year of the Israelites, and though Moses founded the twelve months year, he allowed the old reckoning to continue, as it was better understood by the masses.

This explanation of the Children of Israel using a year of six months, corrects many apparent chronological errors, as instanced by the age of Abraham, Isaac and Jacob and many others during the period in which the six months years were used to reckon time. They also used prior to the adoption of the six month year, a year of 28 days ( $29.53+$ days), that is, one lunation, or one Moon. Each Moon represented a period of one year, as they reckoned time by this method, just as the American Indians counted by moons, or reckoned time by moons. This year of one Moon, or Lunar period-lunation-seems to explain the fabulous ages of Noah ( 950 years) and Methuselah,
who lived 969 years, according to the Holy Scriptures, e. g., 969 years divided by 12 (moon years), equals 80 years and 9 months. When computed by lunar periods, or moon years, the chronology corresponds to the normal period of longevity.

## CHAPTER XIV.

## THE SACRED LUNAR CALENDAR SYSTEM OF THE ISRAELITES.

(See Camp of Israel, page 49.)
As indicated by the Camp formation of the Children of Israel exemplifying the apparent passage of the sun, the sun at vernal equinox makes the transit of the Camp (that is, passes directly across the Camp on the equinoctial line), and describes the Equinoctial Line. Again, at autumnal equinox the sun describes the Solsticial Line, passing obliquely across the Camp to Capricorn (i. e., to winter solstice, constellation of Aquarius), and thus describes 12 isosceles triangles of 45 degrees each. That is, one for each of the 12 tribes-the 45 degrees symbolizing the ecliptic. The Camp formation exemplifies the four Seasons, and the seasons are indicated in the Camp as squares, and the apparent passage of the sun describes twelve triangles, one for each of the 12 months of the New Twelve Months Solar Year, established at that time by Moses. The astronomical era from which we base all our present day calculations was established 2450 B. C. E., with Taurus as the first sign. This is selfevident by referring to any treatise upon astronomy, instance: "Taurus is now the second Sign and third constellation of the Zodiac." (Burritt's Astronomy, p. 38, q. v.) How did Taurus thus become the second Sign if we are not basing upon Aries as the first Sign? No explanation is offered by the various authorities as to why they make Taurus the second Sign, unless perforce, they do so arbitrarily and without any reason. The reason that Taurus is called the second Sign (it is now the third constellation since Aries passed out as the Constellation at vernal equinox, and was succeeded by Pisces, in the year 1850, ap-


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MOSES' cryptogram ("The Majesty of God, the excellence of IS-RA-EL), and the "HIDDEN WISDOM," mysteries and allegories which it discloses are defined, amplified and exemplified in the second volume of this work. Fig. 11.
proximately) is, therefore, for the reason that we are basing upon "The Great System of Astronomical Science, etc., which was lost, the system as taught by the two great philosophers, Thales, 640 B. C. E., and Pythagoras, $580-510$, B. C. E.

It should be noted that the sun in its apparent passage through the Camp of the 13 tribes, never makes its transit of the Equinoctials without passing through the tabernacle. "The tabernacle of the Sun", frequently mentioned in the Bible; the sun, moon and stars in fact are the chief theme; they are the voice of nature singing a sweet refrain of praise to the almighty, Je-ho-vah, the Lord God of the hosts!

The earliest recorded full Jewish Year began at the Vernal Equinox, dating from the Exodus, and many eminent authorities have suggested "that it seems that Moses established the New Twelve Months Year at the time of the Exodus." The explanation herewith offered makes the fact self-evident. The sacred year of the Children of Israel began with the new moon, on or after the Vernal Equinox, and contained 13 months (Vide, Summary of Contents, Sunday School Teacher's Bible, p. 54. Copyrighted 1895 by J. R. Jones).
"And it came to pass on the twentieth day of the second month, in the second year, that the cloud was taken up from off the tabernacle of the testimony." (Numbers, 10 c .11 v .) While Moses established a 12 months year (solar year), he did not institute it arbitrarily. He allowed the old lunar reckoning to continue, which was the popular method of the Israelites. That is, he reckoned a year of 13 months of 28 days, equals 364 days. The last day of the year being a "double Sabbath", equals 365 days. Leap-year was provided for by another Sabbath every four years (thus throwing three Sabbaths together. vide, Leviticus, 23d chapter), equals $3651 / 4$ days-a simple intercalation providing for what we call Leap-year.

Thus we see the significance of having 13 tribes, with the Levites-"The Keepers of the Tabernacle"-in the center of the

Camp. They provided a counter for the THIRTEEN'IH LUNAR MONTH, and the quadrennial triple Sabbath. The calendar system of the Israelites could not have been completed without the Levites in the center. The FIRST DAY OF THE WEEK AND THE FIRST DAY OF THE MONTH, AND THE FIRST DAY OF THE YEAR, ALWAYS BEGAN ON SUNDAY. There being 13 months, there were 52 Sabbaths in each year, hence, every seventh year was a Sabbath year, as $52 \times 7$ equals 364 , the number of days in their 13 months Lunar Year (not including the intercalation or "double Sabbath"). The Sabbath Year of the Israelites was therefore every seventh year, and all their land was suffered to lie untilled (vide, Leviticus, 25 c . 1 st v.- 4 v. ; Exodus, $23 \mathrm{c} .10-17$ th v.). Seven "Sabbath years", that is, "seven times seven years"-the space of seven Sabbath years equals 49 years, and the Fiftieth year was the year of "Jubile." "Liberty was proclaimed throughout the land unto all the inhabitants thereof." (Leviticus, 25 c.)

In the year of "Jubile" all alienated land was returned to its original owners. "Every man unto his possessions; neither was there any sowing or reaping." (Ibid, 25 c. 13-20 verses.)

Moses here shows his great genius in retaining the moon or lunar reckoning of the early astronomers-combining the lunar year with the solar year-which he recorded by exemplifying the ecliptic and the monthly lunations by the Camp formation of the Children Israel. It may be especially noted that "On the first day of the week, which is still celebrated as Palm Sunday, Jesus made his triumphal entrance into Jerusalem." (The New Practical Reference Library, Vol. III, q. v.)

## ANCIENT LUNAR RECKONING OF THE CAMP OF ISRAEL ANALOGOUS TO "SOTHIC PERIOD."

By the Camp of Israel system they perfected a year of $3651 / \pm$ days. The Egyptian Pyramid Solar Year, which multiplied by a century equaled $36525 / 25$ days ( 25 inches represents the
pyramid cubit) equals 1461, the "Sothic Cycle". Therefore 1461 Israelite Lunar years equaled the Sothic Cycle, a period of 1461 years of 365 days, which period equals 1460 years of $3651 / 4$ days. There was also an important astronomical reason why these ancient cycles were recorded, as after 25 years of 365 days, the lunations (moons) again begin their cycles on the same days. This ancient Israelite method of reckoning time is the most scientific calender system that has ever existed in the history of the world, and there is no record of any Calendar or Astronomical System that will compare with its astounding, unparalleled simplicity and transcendental perfection (the Maya calendar system was more correct than the Gregorian). By this calendar system, they could have also recorded the Apsides of the Moon's orbit, a period of nine years, or about 40 degrees a year, and the Revolution of the Apsides of the Earth's Orbit, a period of 108,000 years ( 4 equinoctial years of $25,000+$ years, approximately). Under their calendar system, with their superior knowledge of astronomy, they could have also reckoned the retrograding westward of the Moon's Nodes, "making the complete circuit of the ecliptic once in about nineteen years."

The Israelite Calendar System was analogous, as shown by foregoing example, to the Egyptian Sothic Cycle, inasmuch as 1461 Lunar years (of 13 months of 28 days, equals 364 days, plus a double Sabbath equals 365 days-the quadrennial Sabbath not being included) equals 1461 years of 365 days, the Sothic Cycle. Again: 100 years of 365 days-Lunar years-equals 4 twenty-five year periods, that is, 4 Lunar Cycles. Or, it may be reckoned as follows: 1460 Israelite years of 13 months of 28 days equals 364 days, plus the double Sabbath, equals 365 days, plus the quadrennial Sabbath, equals 1460 Solar Years of $3651 / 4$ days, equals Egyptian Pyramid Year, equals 1461 years of 365 days, that is, the Sothic Cycle.

Sunday was the first day of the week as the Sabbath was the seventh day: "Even unto the morrow after the seventh Sab-
bath shall ye number 50 days." (Leviticus, 23 c. 16 th verse). It is clearly evident that $7 \times 7$ equals 49 days, plus "the morrow" equals " 50 days", hence, the Sabbath was the seventh day of their lunar calendar. Again: Sunday was the first day of the week, instance: "And upon the first day of the week, when the disciples came together to break bread, Paul preached unto them, ready to depart on the morrow;" (Acts, 20 c. 7th verse). The language wherein the Sabbath is referred to is specific, instance: "Fcr Moses of old time hath in every city them that preach him, being read in the synagogues every Sabbath day." (Author's italics.) (Acts, 15 c. 21st verse.) The first day of the week was the venerable day of the sun, as Constantine proclaimed at the Council of Nice, 321 A. D., and Sunday has erroneously been reckoned as the Sabbath day since that time.

The Israelites became a great and powerful nation; their prosperity and power, their wealth and influence, and the grandeur and oppulence of their kingdom was achieved primarily through their knowledge of astronomy. Gilgal was where the twelve stones were set up (Joshua, 4 c. 20 v.), representing the 12 Signs of the Zodiac. It was a national astronomical observatory, and the seat of government and priesthood of the Children of Israel, for more than 500 years. The location of Gilgal is significant, being upon N. Lat. 32 degrees, the same, minus 2 degrees, as the Great Pyramid. The Children of Israel possessed the Great Pyramid System of Astronomy, and frequent passages of the Holy Scripture show conclusively that they lost their time reckoning, as has been shown. Direct reference to the Pyramid is made in the Scriptures in many instances, some of which are quoted: "In that day shall there be an altar to the Lord in the midst of the land of Egypt, and a pillar at the border thereof to the Lord." Isaiah, 19 c. 19 v . Job also uses synonymous language, and the language in either case is readily understood when applied to the Great Pyramid, and utterly meaningless otherwise. "Where wast thou when I
laid the foundation of the earth? declare, if thou has understanding." "Who hast laid the measures thereof, if thou knowest? or who hast stretched the line upon it?" (Job, 38 c. 4-5 v.) They therefore measured it. It was something to be measured and built. "Whereupon are the foundations thereof fastened? or who laid the corner stone thereof: When the morning stars sang together (the Pleiades), and also the sons of God shouted for joy?" (ibid, 6-7 verse.) The pyramid represented the heavens and the earth and the knowledge of God's kingdom, therefore is synonymous therewith, hence the language is parallel and the evidence collateral. "And it shall be for a Sign and for a witness unto the Lord of hosts in the land of Egypt." (Isaiah, 19 c. 19-20-21 v.) "That walk to go down into Egypt, and have not asked at my mouth; to strengthen themselves in the strength of Pharaoh, and to trust in the shadow of Egypt" (author's italics). Isaiah, 30 c .2 d v . The language here is concise and refers to the Great Pyramid. "Therefore shall the strength of Pharaoh be your shame, and the trust in the shadow of Egypt your confusion." (Ibid, 30 c .3 d v.) Isaiah did not want the Children of IS-RA-EL to acquire the Pyramid knowledge of time reckoning, eclipses, etc., which Moses had handed down through the priests, saying: "The shadow shall be your confusion", meaning that they would stray off after "the flesh pots of Egypt" and again indulge in the licentious nature worship practiced by the Egyptians, thereby causing their confusion and destruction. Moses had taught them a higher plane of religion and a more idealistic life.
"I am the Alpha and Omega, the beginning and the end. The first shall be last, and the last shall be first." In the Lunar phase of the Calendar-number 1 is first, and in the Solar phase the number 12 is first, hence, "the first shall be last, and the last shall be first," in the Lunar and Solar phases of the Sacred Solar-lunar Calendar of the Camp of Israel. The Sabbath day was the seventh day, as previously cited, and the following
makes the evidence conclusive: "Six days shall work be done: but the seventh day is the sabbath of rest an, holy convocation." (author's italics.) (Lev. 23 c .3 d verse.)

THE CAMP OF ISRAEL CALENDAR RECORDS THE 25YEAR LUNAR CYCLE.
(See cut of Camp of Israel, Page 49.)
Beginning the first lunar year with the moon making its transit of Cancer as its first constellation, it completes its 13th revolution in the constellation of Cancer and counts, 1 lunar month, as previously demonstrated, etc. The second lunar year would begin with the moon making the transit of Leo, the Lion-number 2-as its first constellation of its first orbit. It completes its 13th revolution in the constellation of Leo, the Lion, and counts 2, minus 1 -the 1 Lunar year previously recorded-thus counting 1, the first Lunar month of the second year. The 3d year, Virgo would be the first constellation of its first orbit. It completes its 13th revolution in Virgo, and counts 3, minus 2--the 2 Lunar years previously recorded, thus counting 1 , the first Lunar month of the $3 d$ year.

The 4th year, Libra, would be the first constellation of its first orbit. It completes its 13 th revolution in the constellation of Libra, and counts 4 , minus 3 , the 3 Lunar years previously recorded, thus counting 1 , the first Lunar month of the 4 th year. The 5th year Scorpio would be the first constellation of its first orbit. It completes its 13 th revolution in the constellation of Scorpio, and counts 5 , minus 4 , the 4 Lunar years previously recorded, thus counting 1 , the first Lunar month of the 5th year. The sixth year Sagittarius would be the first constellation of its first orbit. It completes its 13 th revolution in the constellation of Sagittarius, and counts 6 , minus 5 , the 5 Lunar years previously recorded, thus counting 1 , the first Lunar month of the sixth year, etc. Therefore, in the 12th year, Gemini would be
the first constellation of its first orbit. It completes the 13th revolution in Gemini, and counts 12, minus 11. The 11 Lunar years previously recorded, thus counting 1, the first Lunar month of the 12th year. The thirteenth year would begin with Cancer as the first constellation of its first orbit, and the twelve years would be repeated and recorded in the same order as the previous twelve year period. Gemini again being the first constellation of its first orbit in the 24th year, hence, Cancer would be the first constellation of its first orbit in THE TWENTYFIFTH YEAR, THE LUNAR CYCLE, that is, twenty-five lunar years- 13 months of 28 days equals 364 days, plus the double Sabbath, equals 365 days-of 365 days, after which period, the lunations (moons) again begin their cycles on the same days. If there is any other method by which the moon records its own motions-synchronizing the Lunar with the Solar or tropical year-showing its position, any month, any year, any century, for a period of 100,000 or more years, the author has failed to find any record of the so much needed counter of the cycles of time. The Camp of Israel calendar system-co-ordinating Solar-lunar time-is without a peer, it being a simple matter to tell the week day of any month, in any year, for the next 100,000 years, within a moment's time (Friday always being the " $13 t h$ " dlay of the second week, etc.) a much needed innovation!

Beginning with Cancer, number 1 as the first constellation of the moon's first orbit, it completes its 13 th orbit in Cancer and counts 1 Lunar month, plus the opposite constellation, Gemini number 12, equals the 13 Lunar months of the Lunar year or 13 lunations, etc.; its second orbit would begin with Leo, number 2 as the first constellation and it would complete its 13 th orbit in the constellations in Leo and count 2 Lunar months, plus the opposite constellation, Taurus number 11, equals the 13 L.unar months of the Lunar year or 13 lunations, and so on and so on completely around the Zodiac-Camp of Israel-always counting thirteen.

Twenty-five years is therefore reckoned as a "Lunar Cycle" and was anciently known as such among the Egyptians inasmuch as it was an important astronomical measure or record of time, giving the position of the moon at the end of a cycle of 25 years of 365 days, and for the reason that 1461 years of 365 days equals 1460 years of $3651 / 4$ days, the "Sothic Cycle" of the Egyptians, thus combining the two great cycles of the Sun and Moon. "The 1461 Years is the great final Year or Time factor discovered by the pyramid priests, who, finding by close observation that 1461 of their public 365 day "Years" equalled 1460 Solar Years of $3651 / 4$ days, called $3651 / 4 \times 4$ equals 1461 years, the "Sothic Cycle", because in those later Egyptian Times the Year was gauged by the helical rising of the star Sothis, now called "Sirius", the Dog-Star. During that cycle the vague 365 -day Year again accorded with the Seasons, which in the 1461 Years of the "Sothic Period" had gradually drifted through every part of the vague Year." (Rational Almanac, p. 173, q. v.)

Within a period of 25 Lunar Years, there being 13 lunations each year, there would be 325 lunations, and in a century ( 25 years x 4 equals 100 years, hence, 325 lunations, 25 years x 4 equals 1300 lunations) there would be just 1300 lunations, thus we find the number 13 to be ubiquitous in the Sacred Lunar Calendar of the Children of IS-RA-EL.

The "Jubile" Year or "Fiftieth Year" was therefore equal to two 25-year periods, or two 25-year Lunar Cycles, and was reckoned by the Lunar calendar system of the Camp of Israel, which gives every period of time recorded in the Bible, and is therefore invaluable to theological students as well as astronomers. By this system the elements of astronomy can be amplified and exemplified in such a simple manner that a class of students fifteen years of age, can assimilate and retain the elementary principles of astronomy within a period of 60 days and retain the knowledge acquired, for life. An authority and offi-

cer in the United States Army-a graduate of West Point Military Academy-stated to the author, "that more students fail in their examinations on astronomy-precession and nutationthan in any other study, and that the Camp of Israel System was the most perfect method of any that had ever come under his observation, and should be taught in every school and University in America and England."

The week is the most convenient unit of social life; from time immemorial it has been used as a counter. The weekly progressions of the almanac in our yearly counting of time is the most practically known method. The quarter moon-weeks are frequently referred to in our literature, fortnight being derived from 14; the half-moon period, and sennight (7) from the quarter-moon periods.

Lord Tennyson, the late poet-laureate, wrote:
"My love for nature is as old as I;
"But thirty moons, one honeymoon to that,
"And three rich sennights more" (that is, 3 weeks or $3 / 4$ moon).

We find collateral evidence that the Lunar Months were one of the time-reckoning factors in that ancient apocryphal book, "The Wisdom of Solomon", chapter 7, v. 2, which reads: "And in the womb of a mother was I moulded into flesh in the time of TEN MONTHS." He refers to the 280 days, the pro-creative period, usually recorded by mothers, that is, the nine calendar months now spoken of by mothers.

## CHAPTER XV.

## THE CAMP OF ISRAEL SACRED SOLAR-LUNAR CALENDAR.

Explaining the significance of Pentecost-50 Days after Easter-An excess of Lunar Time. The Sabbath Year (7 Years) $7 \times 7$ or 49 Years, and the significance of the "Jubile" or Fiftieth Year (an intercalation correcting, synchronizing, Solar-lunar time, and adjusting the differential of the synodic and sidereal revolutions of the moon). "These are the feasts of the Lord, even holy convocations, which ye shall proclaim in their seasons." "In the fourteenth day of the first month at even is the Lord's passover" (the sun's passover, i. e., passing over the equator, that is, the equinoctial, the 21st day). "And on the fifteenth day of the same month is the feast of unleavened bread unto the Lord: seven days ye must eat unleavened bread." (The fifteenth day, inclusive, plus 7 days, six days besides the fifteenth, equals the 21st day, the equinoctial, corresponding to our 21st day of March). vide, Leviticus, 23 c. 5-6 verse. Beginning on the fifteenth day of the month the feast was continued. which corresponds to the twenty-first day of the month, that is, the 21st day of March, Vernal Equinox.
"This month shall be unto you the beginning of months: it shall be the first month of the year to you." (Exodus, 12th c. $2 d$ verse.) "In the first day ye shall have an holy convocation: ye shall do no servile work therein." That is, the first day was Sunday, the venerable day of the sun of the ancient Egyptians, the Acartians, and Babylonians, as "In the first day was an holy convocation, and no servile work was done therein." (Lev. 23 c. 7 v.)
"In the seventh day is an holy convocation: ye shall do no servile work therein." (ibid, 8th verse.) That is 7 th day was the Sabbath day, as verse 8 states: But the serenth day is the sabbath. "And ye shall count unto you from the morrow after the sabbath, from the day that ye brought the sheaf of the wave offering; seven sabbaths shall be complete." (Ibid, 15 v.) (author's italics.)
This reckoning of time and the periods recorded is significant as well as important, as "seven Sabbaths shall be complete" equals 49 days, equals 7 weeks. This is the number of days and weeks of the overplus of one week each year, in their Lunar calendar, as the moon in its orbit around the earth, repeated 13 times in their Lunar year according to their 13 Lunar months, traversed a total of 4796 degrees (that is, the solar time of the earth's orbits is 360 degrees), therefore 4796 degrees minus 4680 degrees (that is, 13 sidereal revolutions of the Moon, 13x 360 degrees equals 4680 degrees) leaves 116 degrees (nearly) which was the overplus of the 13 lunations of the moon (that is, orbits around the earth). The moon's daily motion castward is 13 degrees, 10 minutes and 35 seconds, hence 116 degrees (nearly) equals eight days (nearly), as $8 \times 13$ equals 104 degrees. Be it remembered that one of these days was added to their Lunar year at the end of the year, thus leaving a remainder of 7 days. Their 13 months of 28 days equaled 364 days to which they added a "double sabbath" at the end of the year, the last day of the month being on the sabbath day, plus the double sabbath at the end of the year, which double sabbath was taken from the moon's overplus of 8 days (nearly), that is, 116 degrees, of the true sidereal time which would leave an overplus of only 7 days and at the end of the period of Seven Years, they would have had an excess of 49 days, plus the double sabbath at the end of the year, thus filling out their 365 day year, and as the overplus of the moon equaled 8 days (nearly)-equals 116 degrees, this overplus at the end of the Seventh Year would be 8 days, one
day of which would be the "double sabbath" at the end of the year, but as the overplus of 8 days and the "double sabbath" at the end of the Seventh year were simultaneous, the units would be used synonymously, that is, for the dual purpose of the "double sabbath" and for the purpose of completing their $7 \times 7$ or seven weeks of the moon's overplus during the Seven years, equaled 49 days, total overplus of the moon, compared to the true sidereal time during the period of 7 Lunar years-a Sabbath year-as per their Lunar calendar.

This we find confirmed as follows: "And ye shall count unto you from the morrow after the sabbath; seven sabbaths shall be complete" (equals 49 days). "Even unto the morrow after the seventh sabbath shall ye number fifty days." (Leviticus, 23 c . 15th and 16th verses.) This coincides with the 8 days overplus of the moon, that is, 116 degrees (nearly) of the moon's overplus, during the 13 Lunar months of their Lunar calendar, compared with true solar time. One of these 8 days ( 116 degrees overplus equals 8 days, nearly), was utilized as a double sabbath at the end of their Lunar year, leaving 7 days each year however (that is, the seven years overplus of the 8 days) being at the end of the Lunar year, the intercalation of the double sabbath and the adjustment of solar and lunar time would occur simultaneously, there being six years, with an overplus of 7 days in the 13 lunar months, therefore, $6 \times 7$ equals 42 days, plus the 8 days overplus of the Seventh Year (that is, 116 degrees, nearly, of the moon's orbit) equals 50 days. This is confirmed as follows: "Even unto the morrow after the seventh Sabbath shall ye number (50) fifty days." Vide, Leviticus, 23 c. 16th verse.

And again, the purpose of the Seventh Year is evidenced as follows: "And six years thou shalt sow thy land, and shalt gather in the fruits thereof: But the seventh year thou shalt let it rest and lie still. (Exodus, 23 c. $10-11$ verses.)" It is therefore self-evident that the Seventh Year was a year of rest.

Why? Was the land tired that it needed rest? Or was the seventh year, "the year of rest" an intercalation for the purpose of adjusting their Solar-lunar calendar? T'he land lay idle to record the intercalation as a material record that it might be impressed upon the minds of the people. We find that the moon gained 116 degrees (nearly) on the orbit of the earth- 365 days, 5 hours, 48 minutes and 46 seconds, true solar time. During its 13 orbits around the earth, counting the 13 Lunar months of 28 days of their Lunar calendar. This would amount to just 56 days within a period of seven years, minus 6 double sabbaths, which had been applied to fill out their 364 day Lunar yearmaking a year of 365 days-leaving just 50 days at the end of a period of seven years of their Lunar calendar, e. g., 116 degrees annual overplus of the moon equals 8 days (nearly), as 8 x 13 degrees (the moon's daily motion eastward is 13 degrees 10 minutes and 35 seconds) equals 116 degrees, nearly. At the end of the period of seven Lunar years this overplus would equal 7 x 8 equals 56 days, minus 6 double sabbaths, leaving 50 days. Hence we have an explanation of "seven sabbaths shall be complete; even unto the morrow after the seventh day shall ye number fifty days." (Leviticus, 23 c. $15-16$ verses.)

And also we find an explanation as to the significance of the seventh year, at the end of which period the fifty days are fulfilled. As to how they utilized this fifty days, an explanation is offered as follows: "Three times thou shalt keep a feast unto me in the year," that is, the seventh year. (Exodus, 23 c. 14 verse.) "Thou shalt keep the feast of unleavened bread: and the feast of harvest; and the feast of ingathering, which is in the end of the year, when thou hast gathered in thy labours out of the field." Vide, Exodus, 23 c. $15-16$ verses. These three feasts were in addition to annual feasts of the Passover and Tabernacle, and probably consumed the fifty days.

That the Children of Israel used the intercalary day at the end of their Lunar year, that is, a double sabbath, and that they
had THREE SABBATHS in succession, that is, a triune sabbath as indicated by their Lunar calendar every fourth year, thus providing for the $1 / 4$ day period which we term Leap-year, is made self-evident by the following passages of the Holy Scripture: "Also in the fifteenth day of the seventh month, when ye have gathered in the fruit of the land (that is, the autumnal equinoctial period, the beginning of their civil year), ye shall keep a feast unto the Lord, seven days. On the first day shall be a sabbath, and on the eighth day shall be a sabbath. vide, Leviticus, 23 c. 39 verse. Thus we have a double sabbath. Again: "The fifteenth day of the seventh month shall be the feast of tabernacles for seven days unto the Lord." The fifteenth day plus seven days, plus the double sabbath (that is, the 8th day; "and on the eighth day shall be a sabbath," verses 34-39,) equals the 23d day of September, the Autumnal Equinox, the feast corresponding to our Thanksgiving period, that is, a feast of harvest. "In the seventh month in the first day of the month, shall ye have a sabbath, a memorial of blowing of trumpets, an holy convocation. Ye shall do no servile work therein." Vide, Leviticus, 23 c. 24-25 verses.

The first day of the month, a memorial of the seventh month, autumnal equinox, was the beginning of their civil year (not the solar year, however). Thus it would seem that their Solarlunar calendar system included three years, towit: A solar year from vernal equinox to vernal equinox, it being indubitably established that this was the beginning of the New Year, a true solar year, founded by Moses; a Lunar year of 13 months of 28 days, etc., that is, 13 lunations, which also began at or near the vernal equinox, and again, the year which began in the first day of the seventh month.

A commission of mathematicians has recently made the following deductions: that the Babylonian system is called the "Sexagesimal System" because of its use of the numbers 60, $600,6,000,60,000$, etc. There must be some scientific reason for
this, for so wise a nation of astronomers do not adopt a great system in their calculations without a very good and sufficient reason. Furthermore, "It would have been just as easy to divide the day into twelve hours of 100 minutes and 100 seconds, and it is certain that the Babylonians appreciated to the full all the facility of the use of decimals and the system dependent upom tens, but they felt and knew that 60 was a more convenient basis than any other for their mathematical system, and for this reason they divided the hour into 60 minutes and the minute into 60 seconds. This explanation of the value of the number 60 also explains the origin of our duodecimal system, counting by dozens and the gross." (Author's italics.)
Having drawn false deductions and made a mistake once, it is easy for one to continue making the same mistake, hence, the sooner false precepts are corrected, the better for all concerned. The duodecimal system was derived from doce-2-and deci10 - (ten having first been derived from the 10 digits, according to some authorities-taken with a grain of salt) equals twelve which was the basis of the ancient Egyptian system of astronomy, who taught the Babylonians much that they knew of the science of astronomy. The number 12 was derived from the 12 Signs or constellations, as well as its many uses in counting a dozen, gross, $12 \times 12$, etc. The table numbers, 1 to 12 , were derived from the same source, as previously explained.

The 12 hour divisions of the day and the 12 hour divisions of the night, as well as the subdivisions 60 seconds equal one minute, 60 minutes equal one hour (diurnal time) were derived from the 12 Signs of the Zodiac, inasmuch as 60 seconds equal one minute, 60 minutes equal one degree, 30 degrees equal one Sign (one of the 12 Signs) 12 Signs equal one circle, 360 degrees angular measure. The ratio of diurnal time to angular measure is 15 to one, i. e., 4 minutes diurnal time equals one degree, 60 minutes diurnal time equals 15 degrees-one hour-or one meridian line, hence it is self-evident that it would nọt have been
possible to have had 100 seconds in one minute of diurnal time, or 100 minutes in an hour. The numbers, 60, 10 and 6, were divisions derived from the 12 Signs or constellations, as shown by the arbiter, the Camp of Israel, "The Great System of Astronomical Science."

Viewing the results attained by the arrangement of the numbers of the Camp of Israel, it is readily apparent that this system of numbers is the true Cabala, and all other pretensions are merely meaningless masses of numbers, having no philosophical or scientific value, but only a makeshift for the agnostics-those who do not know-and all deductions made upon any other sys-tem-other than the Camp of Israel-are erroneous. The mathematics included in the Camp of Israel are profoundly interesting, embracing arithmetic, algebra, geometry and trigonometry, and many of the rules of calculation, methods of computation, etc., that have heretofore supposed to have been derived from other sources. It makes it necessary for us to unlearn a great deal that we thought we had learned.

In presenting this work to a critical world, the author hopes to stimulate thought, and to discourage biased or narrow ways of looking at things.

The Camp of Israel "The Great System of Astronomical Science," which has been buried for more than 2500 years, will settle many mooted questions.

Of all the discoveries of the antiquary among the relics of ancient Greece, the ruins of Palmyra, Nippur, the gigantic pyramids of Egypt, the temples of their gods, or the sepulchres of their kings, scarcely one has so aroused and riveted the interest of the learned, as the discovery of THE FORMATION OF THE CAMP OF THE CHILDREN OF ISRAEL. The Camp of Israel demonstrates the secret treatise of astronomy of the ancient priestcraft, who wrote the Bible through divine inspiration, augmented by astronomical instruments-telescopes that were far superior to the ones we now use-with which they per-
fected the most perfect, simplified and astounding system of astronomy, calendar system, etc., the world has ever known. Astronomy is the parent of chronology, therefore, the chronological order of the books of the Bible may now be placed with unerring exactness. It is to be hoped that the world will profit by the simplified calendar system that the Camp of Israel unfolds. Science faces a revolution when it confronts the Camp of lsrael! After 2500 years the world will again become rational. The Camp of Israel places the diadem of truth upon the brow of reason and enthrones wisdom amid the wrecks and ruins of superstition.

The people were left in gross ignorance insofar as calendar knowledge was concerned. As Baldwin (Baldwin's Pre-Historic Nations) aptly states, "mathematics and astronomy were the arcana of the priests." The people were required to attend the "holy convocations" that they might receive the dates of the "appointed feast days", the knowledge of when to sow and reap, the season for breeding, weaning and branding in respect to their herds and other secular matters. This information was announced at the convocations by the priests after the people present had paid their tithes and made their offerings. They were cut off from this knowledge unless they contributed according to the law. It therefore seems apparent that the "income tax" is quite an old institution, but in levying these taxes no favoritism was shown. The people paid according to what they actually had or produced. There were no bonds issued by an indulgent government for the specific purpose of protecting the income of capital-thus enslaving the people!

## CHAPTER XVI.

THE ANCIENT SACRED CALENDAR SYSTEM. THE LOST TRIBES OF ISRAEL FOUND AT LAST. THE DIVINE TRUTH OF HOLY WRIT SPEAKS. "THE TRUE TABERNACLE WHICH THE LORD PITCHED AND NOT MAN."
(See Cut Fig. A, Introductory.)
The Camp of Israel as a Shadowgraph or Sun Dial; Amplifying and Exemplifying the Four Divisions of the Day, the Third Hour; the Sixth Hour; the Ninth Hour and the Twelfth Hour. "The Three Watches": First Watch (Lam. ii. 19) till midnight; Middle Watch (Judg. vii. 19) till 3 a. m., and Morning Watch (Exod. xiv. 24) till 6 a. m. Night (Ancient).

Night (New Testament).
"First Watch, evening equals 6 to 9 p. m."
"Second Watch, midnight equals 9 to 12 p. m."
"Third Watch, cock-crow, equals 12 to 3 a . m."
"Fourth Watch, morning, equals 3 to 6 a. m."
Showing how these divisions of Time were obtained, for the first time within the history of the Christian world.

The Camp of Israel was a huge shadowgraph or sun dial, as well as a celestial atlas and Solar-lunar calendar, and in the last named, gives a perfect example of geometrical progression. As a shadowgraph, on the days of vernal and autumnal equinox the sun would rise directly over the center of the Camp of Issachar, at the East. By affixing a standard in front of and opposite the center of the Camp of Issachar (comprising the Camps of Issachar, Judah and Zebulun, "on the east side toward the rising of the sun") the Sun would denote diurnal time by the
shadous of the standards towit: At sunrise, 6 a. m., on the day of the equinox the shadow of the standard in front of the Camp of Manasseh would fall directly in the center of the Camp of Manasseh at $6 \mathrm{a} . \mathrm{m}$. At nine o'clock a. m., the shadow' of a standard affixed at the summer solstice setting point (shown in the Camp however, as the autumnal equinoctial line), would fall directly on the sun's summer setting point line. At 12 M., the shadow of a standard in front of the Camp of Asher would fall directly in the center of the Camp of Asher, whose ensign was Libra, the Balance, thereby equally dividing-bal-ancing-the day, at the noon elevation of the sun, that is, the shadow would record the half-day or noon period by falling upon the center of Libra, the Balance.

This is of striking significance as it denotes the hidden meaning of the emblem or ensign of Asher being placed in the center of the Camp at the North, thereby denoting the Balance or equal division of Time. This is self-evident as the emblem of the "Balance" denotes equipoise or equilibrium (a pair of scales for weighing commodities; "one of the simple powers in mechanics, for determining the equality or difference of weight in heavy bodies, and consequently their masses or quantity of matter"). The equal division or Balance of Time would continue every day in the year throughout the four seasons!

At 3 o'clock p. m., the shadow of a standard affixed on the line of summer solstice rising point would denote 3 o'clock p. m. At 6 o'clock p. m., the shadow of a standard in front of the Camp of Issachar at the East, would fall directly in the center of the Camp as the sun set in the West.

Thus we have a striking example of the significance of Libra, the "Balance" being placed in the center of the North side of the Camp. This division of the day as given by the Camp of Israel as a shadowgraph or sun-dial corresponds with the divisions of time as given by the Bible, the Holy Scriptures, towit:

3d Hour equals 6 to 9 a. m.
6th Hour equals 9 to $12 \cdot$ 'clock m.
9th Hour equals 12 m . to $3 \mathrm{p} . \mathrm{m}$.
12th Hour equals $3 \mathrm{p} . \mathrm{m}$. to 6 p . m.
Thus we have absolute confirmation of the correctness of the divisions of time, as demonstrated by the Camp of Israel, for the first time within the history of the Christian World!

## THE CAMP OF ISRAEL AS A SHADOWGRAPH OR MOON DIAL.

The Camp of Israel would indicate Night Time, that is, "The Three Watches"-Night (Ancient), had the standards been affixed in the Camp to demonstrate Time at night, which could have been done, and no doubt was. Example: Take 75 per cent of the age of the moon, and add to the time as indicated by the shadow of the standard-Gnomon-that is, should there be a new moon on the 18th, and the date upon which the time is to be indicated is the 30th of the month, the age of the moon would be 12 days, and each day of the moon's age equals one hour of time on the dial or shadowgraph-the Camp of Israel. By this method the Camp would indicate: "The Three Watches": (Night—Ancient—) First Watch, till midnight; Middle Watch, till 3 a. m., and Morning Watch, till $6 \mathrm{a} . \mathrm{m}$. ; and would also indicate "The Four Watches" of Night (New Testament) : First Watch, evening equals 6 to 9 p. m. Second Watch, midnight equals 9 to 12 p. m.; Third Watch, cock-crow equals 12 to 3 a. m., and the Fourth Watch, morning equals 3 to 6 a. m., which corresponds to the four divisions of the day: The Third Hour; The Sixth Hour ; The Ninth Hour, and The Twelfth Hour, q. v. Had it been possible to continue the divisions of the day (time) on around the Camp (as a sundial), the South half of the Camp would have repeated the same four divisions of the day of 3 hours each. This proves within itself that this division of the
day and night as given by the Bible was made at the Equinoctials (the beginning of their 12 month Solar Year and Sacred Lunar Year, as also the civil year beginning at the autumnal equinox), that is, when day and night were equal--12 hours day and 12 hours night, for it would not have been possible to have made four divisions of the day (and night also) of 3 hours each, at any other time (Equinox).

The following is self-evident: After $6 \mathrm{p} . \mathrm{m}$. (equinox), it was after sundown and therefore it was not possible to use the South half of the Camp as a sundial. However, the divisions of time would have been the same, to wit: Dialing the 12 hours of day (equinoctials) by the shadows of standards, the First Watch (Night-time) would be from 6 to $9 \mathrm{p} . \mathrm{m}$. ; the Second Watch, from 9 to 12 p . m.; the Third Watch, from 12 to 3 a . m., and the Fourth Watch, from 3 to 6 a. m.

Inasmuch as the day-light divisions of 3d hour, 6th hour, 9th hour and 12th hour, from 3 p. m. to 6 p. m., sundown (Equinox), occupied the major position-North half-of the Camp as a shadowgraph or sundial, there would be no number indicated as "third hour" Night-time, which is designated "First Watch", 6 to $9 \mathrm{p} . \mathrm{m}$., that is, beginning at sundown (the 12th hour of the four divisions of the day), this number, $3 d$ hour, would be omitted, as well as the 12th hour number-Night-time-3 a. m. to $6 \mathrm{a} . \mathrm{m}$. (which would be the 3 d hour of the day-time register), which is designated, "Fourth Watch," morning equals 3 to 6 a. m. These two numbers, $3 d$ hour and 12 th hour, being omitted, there would be only the 6th hour and the 9th hour indicated. The 6th hour would be indicated by the shadow of the standard aligning with the line which designates Autumnal Equinox in the Camp. The 12th hour would be indicated by the shadow of the standard aligning with the line which designates summer solstice in the Camp. Therefore there would be six numbers indicating the 24 hour divisions of the day, towit: 3 d hour, 6 th hour, 9th hour and 12th hour (sundown-Equinox) ; 6th hour,

Night-time (Second Watch, 9 to 12 p. m.) and 9th hour, Nighttime (Third Watch, cock-crow, 12 to $3 \mathrm{a} . \mathrm{m}$.), the sum of which equals 45 , towit: $3-6-9-12-6-9$, equals 45 .

Forty-five is the conspicuous factor of the Camp of Israel, inasmuch as the transit of the sun at vernal and autumnal equinox describes 12 right angle triangles of 45 degrees-each leg. The four divisions of the 12 -hour day (equinoctials) equals 3 hours each, i. e., equals 45 degrees (one degree equals 4 minutes of diurnal time, e. g.: 45 degrees $\times 4$ minutes equals 180 minutes, equals 3 hours), and the four divisions of 3 hours each equals 180 degrees, as 45 degrees $\times 4$ ( 4 divisions of the day) equals 180 degrees.

The four divisions of time of 3 hours each began at the "The Third Hour"-6 a. m.-(equinoctials), when the shadow of the standard exactly divided the Camp of Manasseh-(Sign, Gemini), and the "Third Hour" continued until the shādow had compassed the Camp of Benjamin (Sign, Sagittarius), that is, one and a half Signs. A Sign being 30 degrees, one and a half Signs equals 45 degrees, equals 3 hours. From the 6 th hour$9 \mathrm{a} . \mathrm{m}$. to 12 m ., the shadow would compass the Camp of Dan (Sign, Scorpio), and half of the Camp of Asher (Sign of Libra, the "Balance"), at exactly 12 o'clock m.; one and a half Signs equals 45 degrees, equals 3 hours. From the 9th hour, 12 m ., to 3 p. m., the shadow would compass half of the Sign of Libra, the "Balance", and the Camp of Naphtali (Sign of Virgo), one and a half Signs, equals 45 degrees, equals 3 hours. From the 12th hour, $3 \mathrm{p} . \mathrm{m}$. to 6 p . m., the shadow of the standard would compass the Camp of Judah (Sign of Leo, the Lion), and half of the Camp of Issachar (Sign of Cancer), one and a half Signs equals 45 degrees, equals 3 hours (sundown).

After compassing the Camp of Judah and Issachar, the sun sinks into darkness-just as it does in the ecliptic, that is, passing from Judah and Issachar (Tropic of Cancer) to its period of gradation-autumnal equinox, darkness, cold, evil and death.

This will be repeated on the South side of the Camp-Night-time-omitting the numbers of the third and ninth hours.
This wonderful conception of this ingenious arrangement is strikingly illustrated when we consider the position of Libra, the "Balance" which is the mid-day point of the shadow of the standard exactly dividing the day. The symbol used could not have been more appropriate, and in no other way could the division of the day have been depicted more significantly. Libra, the "Balance" signifying Noon-Mid-day-and Libra, the "Balance" had to be placed in the position it occupies to demonstrate the ecliptic, a celestial atlas and a solar-lunar calendar, co-ordinating Solar-lunar time, and as a sun-dial or shadowgraph indicating the four divisions of the day, as well as a moondial, denoting the Four Watches, Night-time (equinoctial). For Biblical records of the "four divisions of the day," Vide, Summary Teacher's Bible. University Press, Oxford, p. 59.

The 45 degree divisions of time, that is, 3 hours, makes it self-evident that the ancients had full knowledge of the 15 degree hour-Meridian lines-and that they had measured the circumference of the earth and the distance to the Sun, as given by examples of John's Revelation, towit: measuring the "city of heaven" with a reed and the distance to the Sun as given by the number " 666 " in rendering which he states: "Here is Wisdom." These two examples are given in the article, The Camp of Israel and Its Cabala (secret system of numbers) by which the ancient Jewish rabbins foretold future events, etc.

By the marvelous and amazing arrangement of numbers of the Camp of Israel-the Pythagorean System of Astronomydemonstrating that "everything in the universe is number," the moon denotes the number of the month (Lunar calendar), records the number of years-geometrical progression-counting or recording 25 Lunar Years (Lunar Cycle), and always indicates the constellation it (the moon) is in, concluding its wonderful performance by denoting diurnal time-Night-time.

The Camp of Israel records the accumulated knowledge of centuries upon centuries, knowledge that was zealously guarded by the priestcraft, and which has been lost to mankind since the destruction of the Alexandrian Library, or probably at the death of Pythagoras and his followers (many of whom were massacred). Will the world profit by this vast fund of information? Will it step forward now that it has been liberated from the night of ignorance, and once more take its place upon the plane of sane, or philosophical thought? The Camp of Israel is the greatest liberator ever given to a benighted world-Wonder of Wonders Unveiling the Mystery of Mysteries!

## CHAPTER XVII.

That there were two year periods besides the Lunar yearthe Sacred year-is evidenced by the following: "This month shall be unto you the beginning of months: It shall be the first month of the year to you." (Vide, Exodus, 12 c. 2d verse.) This has reference to the true Solar year.
"In the first month, on the fourteenth day of the month, at even, ye shall eat unleavened bread, until the one and twentieth day of the month at even." Vide, Exodus, 12 c. 18 th verse. This clearly means that the first month, "the beginning of months," of this Year began at the time of the Vernal Equinox, and the feasts were continued for a period of 21 days, etc. The corrupting of the calendar by the Roman Pontiffs finally caused Julius Caesar to attempt its correction, and he called into consultation Sosigenes, an astronomer from Alexandria, Egypt, who advised that no further efforts be made towards adjusting -co-ordinating-the Lunar to the Solar year (the true knowl-edge-the Camp of Israel System-having been lost, and they being unable to make the adjustment, all efforts of his predecessors having proven futile), but that the year be made to begin at the Winter Solstice period, which suggestion was accepted by Caesar, who issued an edict to that effect, 45 B. C. E., and our reckoning time from the winter solstice (the old "Yuletide Festival" of the Scandinavians, corresponding to the Bacchanalian festivities or "Feast of Bacchus"-the god of wine-of the Romans' dates from this period. Hence, we have an explanation of why our 21st of March, which corresponds with the Roman Ides, the 15th day of March, was the vernal equinox, though at the time of the correction by Caesar, it had drifted ten days out of kelter-corresponds with the vernal equinox.

They had lost their reckoning of time, having retained the knowledge only of the old Jewish Festival which under the true or correct calendar system occurred on the 21st day of their month. that is ended at that time. The first day of the month, the Jewish New Year, began on the vernal equinox and the "Feast of the Passover" ended on the TWENTY-FIRST DAY OF THE MONTH. Hence, when Caesar established his New Year, ostensibly at winter solstice, December the 22d, he made provision for the vernal equinox by making his New Year begin not at winter solstice, but ten days from that period, that is, the first day of his New Year began ten days from winter solstice proper, January (derived from the ancient two faced god, Janus, symbolizing the bidding of the old year adieu and saluting the new year, etc.) the first, which would make the vernal equinox occur on the 21st day of March, corresponding to the first day of the old Jewish Festival, which however ended on the 21st day. In the fourteenth day of the first month at even is the Lord's Passover. And on the fifteenth day of the same month is the feast of unleaven bread unto the Lord: "seven days ye must eat unleavened bread." This makes a total of 21 days, equal to the 21st day of the month. "In the first day ye shall have an holy convocation: ye shall do no servile work therein." vide, Leviticus, 23 c. 5-6-7 verses. "In the seventh day is an holy convocation: ye shall do no servile work therein." Ibid, 8th verse. The feast of unleavened bread, therefore, began on the 15th day of the month and continued for seven days, inclusive of the fifteenth day, which corresponds to the 21st day of the month. Thus we have unequivocal evidence of the establishing of a New Year at the vernal equinox. As the first of the month was the New Moon either on or after the vernal equinox, the feast of the "Passover" did not begin "until the 14th day of the month (Full Moon) ; the feast of unleaven bread continued until the one and twentieth day of the month at even" -3d and Last Quarter of the Moon. "Blow up the trumpet in
the new moon, in the time appointed. on our solemn feast day. For this was a statute of IS-RA-EL, and a law of the God of Jacob." This he ordained in Joseph for a testimony, when he went out through the land of Egypt: where I heard a language that I understood not." vide, Psalms, 81st c. 3-4-5 verses. It is also evident from the foregoing that they obtained the calendar knowledge from Egypt-the Pyramid system-(Camp of Israel system) -"where they heard a language that" they "understood not," and this calendar system "was a law of the God of Jacob" "ordained in Joseph for a testimony" and "was a statute for IS-RA-EL." (Author's italics.)
"And this day shall be unto you for a memorial; and ye shall keep it a feast to the Lord throughout your generations; ye shall keep it a feast by an ordinance forever." vide, Exodus, 12 c. 14 th verse (author's italics).

The twenty-third chapter of Leviticus renders an account of the feast of the Passover in about the same language, concluding with the statement: "It shall be a statute forever throughout your generations in all your dwellings." vide, 14 th verse. The first day of the seventh month was Tishri, the feast of the tabernacle, beginning on the fifteenth day of the seventh month, as indicated by the holy scriptures: "In the seventh month, in the first day of the month, shall ye have a sabbath, a memorial of blowing of trumpets, an holy convocation." vide, Leviticus, 23 c. 24th verse. "Ye shall do no manner of work. It shall be a statute forever throughout your generations, in all your dwellings." "It shall be unto you a Sabbath of rest, * * * in the ninth day of the month at even, from even unto even, shall ye celebrate your sabbath. ibid, verse 31-32-34.

In explanation of the ninth day of the month being a sabbath (the ninth day of their seventh month) the following evidence is offered towit: In the seventh month the moon begins its fifth orbit in Scorpio-Dan—number 5 as it began its first orbit in Cancer number 1. Number 5, however, was the seventh Solar
month, that is, the sun would have made the transit of Taurus (number 11, vernal equinox), 1st month; Gemini (number 12) $2 d$ month: Cancer (number 1) 3d month; Leo, the Lion (number 2) 4th month; Virgo (number 3) 5th month; Libra (number 4) 6th month and Scorpio (number 5) the seventh monthSeptem, from which September, the seventh month, was derived, counting from the Kalends of March, the first month, since the first of the month at vernal equinox, the fourteenth of which was the "Passover" and the "feast of unleavened bread beginning on the fifteenth day of the month and ending on the twenty-first day of the month, the Passover being on the Full Moon, and the end of the feast of unleavened bread on the third and last quarter, the feasts being controlled absolutely by the. moon.

Now the seventh month of their calendar corresponds to our September, as their first month corresponded to the Kalends of March—Roman calendar—therefore, March 1, April 2, May 3, June 4, July 5, August 6 and September 7, etc. In the first day of the seventh month they had "a memorial of blowing of trumpets", in which manner they heralded the first month of the year, and "in the ninth day a sabbath", (that is, a New Moon) and the feast corresponding to the "feast of ingathering" (Exodus, 23 c. 16th verse) began on the fifteenth day of the seventh month, continuing seven days and including the eighth day or until the twenty-third day, towit: "Also in the fifteenth day of the seventh month, when ye have gathered in the fruit of the land, ye shall keep a feast unto the Lord, seven days: on the first day shall be a sabbath, and on the eighth day shall be a sabbath." vide, Leviticus, 23 c. 39 verse. The ninth day being a new moon, the feast began on the fifteenth and continued until the 23d or Full Moon, as 9 (new moon) plus 14 days equals the full moon, that is, the twenty-third day of the seventh month, the day upon which their feast ended, which 23d day corresponds to the Autumnal Equinox of our calendar, the rea-
son being evidently the same which caused Caesar to make the 21st day of March correspond to the old Jewish feasts of the Passover and the feast of unleavened bread, ending on the twenty-first day of their first month; the twenty-third day of the ancient "feast of tabernacles"* being celebrated in their seventh month in which the autumnal equinox was the first day of the month of their solar year just as vernal equinox was the first day of the month of their solar year. We therefore have an explanation of why, in the adjusting of the calendar by Julius Caesar, the twenty-first day of March and the twenty-third day of September were made to accord to the vernal and autumnal equinoxes, as in the months of the ancient Jewish calendar in which the equinoxes were the first days of the months-March and September-there were two memorial feasts, one ending on the twenty-first day of the first month and the other on the twentythird day of the seventh month (the seventh month was the first month of their second six months Year).

This "feast of tabernacles" celebrated in the seventh month, in which a new moon occurred on the "ninth" which was a sabbath, was in the seventh month of their seventh year or "sabbath year," which is indicated as follows: "And ye shall count unto you from the morrow after the sabbath, from the day that ye brought the sheaf of the wave offering; seven sabbaths shall be complete: Even unto the morrow after the seventh Sabbath shall ye number fifty days. vide, Leviticus, 23 c. 15-16 verses. This fifty days was the excess of their 28 -day months compared with the sidereal or periodic revolutions of the moon as per the following example. Within the Sabbath year period-7 yearsthe moon's excess of sidereal time (that is, their 28 -day months, in excess of sidereal or periodic revolutions of the moon, 27 days, 7 hours, 43 minutes) amounted to 813 degrees, 26 min-

[^0]utes and 20 seconds, which equals 27 Signs (of 30 degrees each, through which the moon makes its transits at a mean rate of 13 degrees, 10 minutes and 35 seconds each day during its orbit eastward) 3 degrees, 26 minutes and 20 seconds, and would place the moon in the Sign Scorpio-the seventh month of the seventh year-at new moon on the ninth day of the seventh month as stated (Leviticus, 23 c. 32 verse, q. v.) and offers mathematical proof that the Camp of Israel calendar system does not err!
"Also on the tenth day of this seventh month there shall be a day of atonement: it shall be an holy convocation unto you." ibid, v. 27. "It shall be unto you a sabbath of rest." ibid, v. 32. "Also in the fifteenth day of the seventh month, when ye have gathered in the fruit of the land, ye shall keep a feast unto the LORD seven days. On the first day shall be a sabbath, and on the eighth day shall be a sabbath." ibid, v. 39. The seventh day was a normal Sabbath, thus we have a double Sabbath at the end of the seven days feast, the first day of the seven days feast being also a sabbath, which was, however, on the fifteenth of the month, as the fourteenth day of the month was a normal sabbath, the fifteenth day was a double sabbath, following the regular sabbath-14th day_-"and the fifteenth day of the seventh month, ye shall keep a feast unto the LORD seven days. On the first day (of the seven days feast, the fifteenth day of the month, however) shall be a sabbath, and on the eighth day shall be a sabbath." (ibid, verse 39.) The eighth day following the seven days feast, beginning on the fifteenth day of the month equals the 23d day of the month. Therefore in the seventh month, there was a sabbath in the ninth day of the month (the New Moon) at even, "from even unto even, shall ye celebrate your sabbath." (ibid, verse 32, author's italics.) This is one double sabbath. Again, "Also on the tenth day of this seventh month (meaning this particular seventh month, that is, the seventh month of the seventh year, the language al-
ways being adapted to signify just what was meant to be conveyed) there shall be a day of atonement: it shall be unto you a sabbath." (ibid, verse 27.) This is two double sabbaths, as "and on the ninth day shall be a sabbath." (ibid, verses $32-39$.) That is, the eighth day of the seven days feast, beginning on the fifteenth day (at even-sundown), both of which are designated double sabbaths." On the first day shall be a sabbath, and on the eighth day shall be a sabbath" (ibid, verse 39.) The first day, the fifteenth day of the month (the first day of the feast), was not A DOUBLE SABBATH, but was SUNDAY, THE FIRST DAY OF THE WEEK, normally. The eighth day of the feast could have been and was a double sabbath. The fifteenth day was Sunday following the normal Sabbath, the fourteenth day of the week, and it being a double sabbath would cause four (double) sabbaths to come together within a period of ten days, towit: The ninth day of the month, a sabbath, "also on the tenth day of this seventh month a sabbath (ibid, verse 27) ; and the twenty-third day of the seventh month, a sabbath (the eighth day of the seven days feast-"and on the eighth day shall be a sabbath"-beginning on the fifteenth day of the month), total, four sabbaths (two double Sabbaths), which represents the necessary intercalation in their Lunar calendar-the quadrennial period-and corresponds to autumnal equinox, Septem23d, plus one double sabbath (the fifteenth day being designated a double sabbath and the twenty-third a double sabbath). This extra double sabbath was probably an intercalation used to correct an overplus of 2.97894 days occurring within seven Sabbath Years.

Example: Their Lunar month had 28.00000 days; a sidereal revolution of the moon equals 27.32166 days, giving a difference of .67834 days overplus each month, multiplied by 13 (number of lunar months in their lunar year), equals 8.81842 days, $\mathbf{x} 7$ ( 7 Sabbath years) equals 61.72894 days, overplus within seven years, minus 7 double sabbaths (one each year), and seven
quarter-day periods (each year), equals 8.75 days. Therefore, 61.72894 (days overplus within a seven year period), minus 8.75 equals 52,97894 days, minus 50 DAYS (PENTECOST, q. v.) leaving a difference of 2.97894 days. This probably represents the extra double Sabbaths, as they used different intercalations when necessary, an explanation of which follows.
"The ancient Egyptians had a year determined by the changes of the "seasons, without reference to the changes of the moon, and containing 365 days," "divided into twelve months of 30 days each, with five supplementary days at the end of the year." The Jewish year consisted, in the earliest periods, as it still does, of twelve lunar months, a thirteenth being from time to time introduced, to accommodate it to the sun and seasons. This was also the case with the Syrians, Macedonians, etc. The Jewish months have alternately 29 and 30 days; and in a cycle of 19 years (corresponding to the Metonic Cycle) there are seven years having the intercalary month, some of these years having also one, and some two days more than others have, so that the length of the year varies from 354 to 385 days. The Greeks, in the most ancient periods, reckoned according to real lunar months (synodic lunar months, not sidereal), twelve making a year, and about 594 B. C., Solon introduced in Athens the mode of reckoning alternately 30 and 29 days to the month, accommodating this civil year of 354 days (lunar year) to the solar year, by occasional introduction of an intercalary month."

Here we again find evidence of the use of the quadrennial period, inasmuch as the difference between 354 days (lunar year) and 365 days is 11, and within eight years equals 88 days, plus 2 days (the quadrennial period of two days within 8 years) equals 90 days, that is, the "three months of 30 days" intercalated within a period of eight years, as follows:
"A change was afterwards made, by which three times in eight year's a month of 30 days was intercalated, making the av-
erage length of the year $3651 / 4$ days." vide, Calendar, Chambers Encyclopaedia. (author's italics.)

The explanations in parentheses is by the author, being deemed necessary to make the matter concise. Solon, the great philosopher, has been credited with being one of the "Seven Wise Men of the World," yet it seems that he did not possess the knowledge of the perfect calendar and the secret system of astronomy, else, he would not have attempted to co-ordinate Solar-lunar time by the mode of "reckoning alternately 30 and 29 days to the month, accommodating this civil year of 354 days ( 12 lunar months of 29.50 days equals 354 ) to the Solar year ( 12 months equaling $3651 / 4$ days), by occasional introductions of an intercalary month." Solon, it seems, therefore, did not possess the acme of astronomical knowledge, which however was possessed by his contemporary, Pythagoras, who taught that "everything in the universe is number." Pythagoras here referred to the Camp of Israel Calendar and System of Astronomy, which demonstrates "everything in the universe is number" by the system of numbers its formation produces.

There are many references in the Bible to the New Moon ceremonies, all of which, as has been shown had reference to the Lunar Calendar of the Children of Israel. "Blow up the trumpet in the new moon, in the time appointed on our solemn feast day. For this was a statute for IS-RA-EL, and a law of the God of Jacob." This he ordained in Joseph for a testimony, when he went out through the land of Egypt, "where I heard a language that I understood not."

Thus we see that the New Moon was an all important factor as it was "the time appointed", and also "a statute" and "a testimony" and a "law of the God of Jacob." The language conveys the meaning concisely, having reference to their Calendar System by which they recorded the days, the months, the seasons, the years and the time appointed for their feast days, etc.

This matter has not been fully understood heretofore, and
the author hopes to point the way to a clearer knowledge of Biblical chronology, and the measures of time as recorded in the Holy Scriptures. The ancient astronomers had full cognizance of the synodic revolutions of the moon as well as the sidereal or periodic revolutions. The apsides of the moon's orbit and the retrogression of the Nodes "which slide westward on the ecliptic just as the vernal equinox does (precession of the Signs, etc.) but much faster, completing their circuit in about 19 years instead of $25,762+$ years" (the time required for the period of precession, etc.). All of this the ancient astronomers understood full well, as demonstrated by the Great Pyramid Calendar, embracing their Lunar Calendar System, co-ordinating Solar-lunar time, that is, the lunar months with the tropical year. The "Great System of Astronomical Science which reached a high degree of perfection in the early ages of the world, and was lost," is demonstrated in all its amazing simplicity by the Camp of the Children of IS-RA-EL. This information or knowledge has been lost to the world for more than 2,500 years, the disaster probably occurring, as the evidence seems to show conclusively, at the destruction of the Alexandrian Library, it having been demonstrated by mathematics that Pythagoras possessed this system, in which "everything in the universe is number."

## CHAPTER XVIII.

## PENTECOST-50 DAYS AFTER EASTER-AND THE SIGNIFICANCE OF THE "JUBILE" OR FIFTIETH YEAR EXPLAINED.

As previously shown by examples, the moon's 28 -day months, compared with 27.32166 -the sidereal revolution of the moonplaced it in excess of sidereal time (which is the true month from the mechanical point of view) 8.81842 days each lunar year, minus 1 day (the intercalation at the end of their 364-day lunar year-a double sabbath) leaves 7.81842 days x 7 equals ( 7 years, their Sabbath year period) 54.72894 days, minus the quadrennial period- 7 quarter days of each year-of $13 / 4$ days, equals 52.97894 days, minus 50 days- 50 days after EasterPENTECOST, equals 2.97894 days, which probably represented the extra double sabbaths, as shown by previous examples, as they used different intercalations when necessary.

The 50 day period is recorded in the Holy Scripture as follows: "Seven sabbaths shall be complete: Even unto the morrow after the seventh sabbath shall ye number fifty days." "A statute forever." vide, Leviticus, 23 c. 15-16 verses; ibid, 41 verse. This excess of 50 days in their lunar calendar, in advance of vernal equinox or sidereal time, occurring every 7 yearstheir Sabbath year period-is celebrated in modern times as a Church Festival, known as Pentecost. Their Sabbath year period was a year of rest, the land lay idle-fallow-(vide. Leviticus, 25 c. 3-4-5-6-7-8-9 verses) and at this period of rest, the intercalation of the 50 days was effected to co-ordinate solarlunar time with vernal equinox, and to adjust their lunar time with the sidereal revolutions of the moon.

The priests instituted the Sabbath Year or year of rest, to correct the 50 days excess of sidereal time at vernal equinox, occurring every seven years, but this astronomical knowledge was not unfolded to the masses, who reckoned time by the 13 Lunar months of 28 days. The 50 days excess of the moon at vernal equinox, occurring every seven years in their lunar calendar, on account of the 13 months of 28 days exceeding the moon's sidereal revolution $66 / 100$ or $2 / 3$ of a day approximately, i. e., 67834 of a day) every month, was made a memorial and celebrated as a "harvest feast" or "ingathering" annually, with the possible exception of the "Sabbath Year," the year of rest, in which year they had no harvest, hence, no "wave offering" to bring to the priest, however, in this year, "Sabbath Year." In this year the priests made the calendar correction necessary to correspond with vernal equinox. The FIFTY DAYS CORRESPONDS TO THE MODERN "PENTECOST," "a Jewish festival, held on the fiftieth day after the 'Passover,' in celebration of the ingathering and in thanksgiving for the harvest. It was called the FEAST OF WEEKS, because it was celebrated seven weeks after the Passover. It is celebrated by the Christian Church fifty days after Easter, which, however, is a movable festival in the Christian Church" (governed by the moon).

It seems that the Jews have a correct idea as to the application of the fifty days which was a memorial feast, a "feast of ingathering", of their lunar calendar. The Christians made the descent of the Holy Ghost accord with it. The vernal equinox was the beginning of their solar and lunar year.

The immutable law of mathematics establishes conclusive evidence confirming the fact that the Camp of Israel Lunar Calendar, with its astronomical attributes, was based upon a sidereal revolution of the moon and not upon a synodic revolution, which however, was the basis of their popular 13 months year, that is, they made their 13 month lunar year accord with the tropical year. The 13 months lunar year calendar recorded
the Solar Year, plus 1 day at the end of the year, and plus 1 day every four years, providing for the $1 / 4$ day periorl, which we intercalate by means of our modern Leap-year. Thus their calendar of 13 lunar months equalled 364 days, plus a "double sabbath" at the end of the year, and plus another "double sabbath" every four years, equalled $3651 / 4$ days, co-ordinating solar and lunar time, and simplifying their lunar calendar so that the masses could count or reckon by it accurately.

While this synchronized their lunar calendar annually, the Moon's position in the Zodiac, based upon a sidereal revolution, that is, in line with a fixed star, completing a revolution of 360 degrees (which is the true lunar month from the mechanical point of vicu), would be 116 degrees (nearly) in excess of true lunar time, that is, sidereal or periodic revolutions of 360 degrees, as the 28 days lunar month (arbitrarily established) exceeded the sidereal revolution $66 / 100$ of a day each month (nearly), or as 28.00000 days is to 27.32166 days, the sidereal or periodic revolution of the moon, the difference being .67834 of a day, or as $66 / 100$ of a day (nearly) is to 13 degrees, 10 minutes and 35 seconds (the moon's daily motion eastward) and would cause the moon to be in excess 116 degrees (approximately) of its true position in the zodiac, compared with the point at which vernal equinox takes place or the point in the Zodiac where the sun is at Vernal Equinox; that is, the moon would be in advance or ahead of its true vernal equinoctial position in the zodiac, as they were making their lunar years correspond with the tropical year or true Solar Year. This excess of its sidereal revolution (periodic revolution of 360 degrees) would amount to just fifty days, after having deducted the double sabbaths, etc., within a period of seven years, their Sabbath Year period, namely, fifty days in advance or ahead of vernal equinox in the zodiac, through which the moon makes its transit during each lunation or orbit around the earth.

The "Fiftieth Year" or "Jubile" was an intercalation of their
lunar calendar and represented the excess of their 28-day months over sidereal time, the excess being just one year of SIDEREAL TIME (within a fraction) within a period of 49 years of 28 -day months of 13 months years, including the intercalary of one day at the end of each year and the intercalary of one day every four years, the quadrennial period, as per the following example: 49 years ( 7 x 7 years, their Sabbath Year) multiplied by 7.81842 days (the fractional excess of the moon's 28-day months over the sidereal revolution was 8.81842 days minus the "double Sabbath at the end of the year, gives 7.81842 days each year) equals 383.10258 days, minus 12 days (the 12 Leap-years occurring within 49 years) equals 371.10258 days at the end of 49 years. The succeeding year, the "Jubile" or Fiftieth Year, would, therefore, have contained 371.10258 days, plus the normal excess of 7.81842 days (occurring each year) the overplus of that year, as usual (counting the normal year of 364 days, plus a "double sabbath") or a total 378.92100 days, minus a probable "memorial" or feast of two weeks, leaving a balance of 364.92100 days in their "Jubile" or Fiftieth Year.

The overplus occurring every seven years as has been shown, amounted to 2.97894 days, which, as stated, probably represented the extra double sabbaths, as they used different intercalations when necessary, however, the number 2.97894 days occurring every seven years-Sabbath Year-multiplied by seven --seven Sabbath Years-equals 20.85258 days, which added to their Fiftieth Year or "Jubile" of 364.92100 days, would give 385.77358 days, which is the number of days, plus the two weeks feast or memorial (which is not only probable but permissible, as the "Jubile" was not a normal year) which is said to have been contained in some of their lunar years, instance: "and in a cycle of 19 years there are seven years having the intercalary month, some of these years having also one, and some two days more than others have, so that the length of the year varies from 354 to 385 days." vide, Calendar, Chambers Encyclopaedia.

The records, therefore, of their 385 -day year seems to have a very material basis, the Camp of Israel Calendar System, though the intercalation of the 385 days was not on account of a crude method as has been supposed!

The Jewish Year of 385 days occurred only once within a period of fifty years, their "Jubile," and was intercalated at this period to adjust the Lunar with the Solar Time, thus co-ordinating Solar-lunar time, which has been held to be incommensurable by our most erudite students and scholars. The (Great Pyramid) calendar is without a peer inasmuch as it accurately records the position of both the Sun and Moon and gives us both Solar and Lunar Time, both of which are very necessary. Its simplified method obviates the intricate calculations which any other system would require. It contains 13 months of 28 days, with an intercalary at the end of the year and an additional day intercalated every four years, thus giving a year of $3651 / 4$ days, the Solar year (minus 11 minutes and 12 seconds, as the Solar Year is 365 days, 5 hours, 48 minutes and 46 seconds).

That the ancients-2450 B. C. E. and probably much earlierpossessed the knowledge of the moon's sidereal revolution is palpably clear, therefore, their civilization was far superior and had reached a higher degree than that heretofore accorded to that era, and their unsurpassed knowledge of astronomy and mathematics proclaims a culture never before attained, excelling in wisdom and surpassing in philosophy-having been the authors of all we ever possessed-a thousandfold the succeeding generations whose mental plane, far from being superior, is almost incapable of conceiving the results of their genius, in its most simplified form-the "Great System of Astronomical Science," as taught by Pythagoras; whose philosophy proclaimed that "everything in the universe is number"-the Camp of Israel, achieved "in the days of the wisdom of the ancients."

The year 1912 in our calendar system corresponds with the Julian period 6625 . The year period of $3651 / 4$ days was in ex-
cess of true solar time-tropical year- 11 minutes and 12 seconds, a true solar year being 365 days, 5 hours, 48 minutes and 46 seconds. This descrepancy caused the vernal equinox to come continually earlier and earlier. To correct this excess Pope Gregory called into consultation an astronomer who advised him that the excess since the time of the Julian calendar, 45 B. C. E., amounted to, at that time (1582) ten days. He therefore ordered that ten days be subtracted from that year, 1582, thus placing vernal equinox-or rather the day on which it occurred-at its true position. Upon the advice of Clavius, the astronomer, he also ordered that every hundredth year, as 1600,1700 and 1800 , should be a common year and not a Leap Year, as in the old calendar (the Julian calendar 45 B. C. E.), but every fourth hundred, as 2000, 2400, 2800 and so on, should be a Leap Year. Clavius should be accorded the honor of thus providing for and adjusting our present calendar system, and establishing our Leap Year system, thus preventing any further displacement of vernal equinox. So it becomes evident that the period of vernal equinox has played an important part in establishing and recording the true year period.

From the time of Moses, who established the Camp of Israel calendar (probably), to the present time, vernal equinox has been the arbiter of time. The true formation of the Camp of the Children of Israel, divinely revealed to Moses (as corroborated by the Great Pyramid). "The true tabernacle which the Lord pitched and not man" (Hebrew, 8 c. 2-5 verses), gives to the world the most perfect calendar system ever devised, Solar and Lunar time being co-ordinated, and the ancient Biblical method of reckoning time re-established, with a simplified system of astronomy exemplifying that "everything in the universe is number." "The tribe of Judah hath prevailed to open the book, and loose the Seven Seals thereof." vide, Rev., 5 c. 5 verse. The "seven seals" having reference to their calendar system, towit: The 7 -day weeks; $4 \times 7$ or 28 -day months; seven
year periods-the Sabbath Year; Sabbath being derived from a Chaldean word, sabat, meaning seven, and seven times seven years (49 years), "seven sabbaths shall be complete" (Leviticus, 23 c. 15 verse). "And thou shalt number seven sabbaths of years unto thee, seven times seven years; and the space of the seven sabbaths of years shall be unto thee forty and nine years." vide, Leviticus, 25 c. 8 verse (author's italics).

Furthermore: Their system of astronomy embraced seven Planets, towit: Sun, 1; Mercury, 2; Venus, 3; Moon, 4; Mars, 5; Jupiter, 6 and Saturn, 7, comparing with their 7-day weeks, the sum of the number of the Planets equals 28 (or $4 \times 7$ days) comparing with their 28 -day months. "She that hath borne seven languisheth: she hath given up the ghost; her SUN is gone down while it was yet day." vide, Jeremiah, 15 c. 9 verse. The language here used is significant and conveys the meaning clearly. She, Israel derived from IS-RA-EL, hath perfected a system of astronomy embracing seven Planets, and probably had recorded the precession of seven Signs. She, Israel, specifically refers to her SUN, evidently intending to convey, that the SUN was the important factor. Thus we have an explanation of why the book, the Bible, had "Seven Seals," which the Lion of "the tribe of Judah" of the Camp of Israel Calendar System would "prevail to open the book and loose the seven seals thereof."

The author craves the pardon of the reader for the redundancy of the foregoing, but pleads extenuating circumstances, inasmuch as the whole matter was abstruse, and difficult of connection, without repetition, which privilege the author assumed in order to make the explanation concise.

The "Great System of Astronomical Science" included 7 Planets, no more, no less, for the reason that with this number for their purpose they perfected the marvelous and amazing system of numbers, exemplifying that "everything in the universe is number. By no other arrangement of numbers is it pos-
sible to produce the simplified system of the rules and methods of calculation, motions of the Sun (apparent motion) and Moon, the precession of the Signs for eternity and the Solar and Lunar cycles combined: Metonic Cycle, the cycle Saros of the Chaldeans, who discovered this grand cycle 2234 B. C. E.; Lunar Cycle (occurring every 25 years as explained) and Sothic Cycle of 1461 years of 365 days which equals 1460 years of $3651 / 4$ days, thereby reckoning or recording eclipses and the motions of the Sun, Moon and Earth for a period of 100,000 years accurately. They probably had discovered all the other planets, asteroids, etc., but considered them of minor importance, as they could not be visualized. The heavens are full of dark bodies today that the astronomers know nothing whatever of, nor do they attempt to explain the phenomena of the "runaway stars," etc. They have failed so far, to ascertain the dimensions of the sun, its distance, etc. The Pythagorean or Camp of Israel System gives distance to the sun as $95,904,000$ miles, the correctness of which remains to be disproven!

The Camp of the Children of Israel demonstrates the elements of astronomy in a simplified, clear and condensed manner, towit: The Tropics and the six months tropical range, which is denoted by the numbers of the constellations and Signs; the solstices and equinoxes; the ecliptic, or apparent passage of the sun, that is, the annual orbit of the earth; a solar calendar, or tropical year; a lunar calendar (denoting the lunations) co-ordinating Solarlunar time; a calendar system whereby the day of the week designates the day of the month, Sunday always being the first day of the month, and the 8th, 15th, and 22nd day of the month; the Sabbath being the 7th, 14th, 21st and 28th day of the month, and Friday the 6th, 13th (the so-called ill-fated "thirteenth" must have had its origin in this ancient calendar system) 20th, and 27 th day of the month. Friday would always fall on the "thirteenth" day of the month. The period termed Saros is readily recorded, that is, 223 lunations approximately, 18 years,

11 days, 7 hours, 42 minutes and 31 seconds, after which period, the cycle of eclipses again occur in regular order, 41 of the sun and 29 of the moon. The cycle of eclipses of 1388 years, that is, the period or cycle repeated 77 times, approximately; the "great Cycle of Eclipses" of 12,492 years, that is, $1388 \times 9$ equals 12,492 years. The precession of the equinoxes for and during the period of eternity (so far as earthly affairs are concerned) is recorded and demonstrated by the numbers of the constellations and Signs always denoting the six months tropical range of the solstices and equinoxes while recording an equinoctial year ( $25,762+$ years), which is recorded by the number 78 , the sum of the numbers of the Signs at each of the four Cardinal Points, as registered during the precession of the Signs; the recording of the period of the revolution of the Apsides of the Earth's Orbit, approximately, 108,000 years, that is, four equinoctial years, approximately, or 100,000 years; the distance to the sun, approximately $95,904,000$ miles, as given by the number " 666 " demonstrated by the Camp of the Children of Israel. Modern astronomers admit that the dimension and distance to the sun has not been accurately ascertained, and various estimates place it at $95,500,000$ miles.

The marvelous arrangement of the Camp of Israel system of astronomy makes it the most simplified, clear and condensed, and the elements of astronomy are more readily absorbed and retained through its methods than any of the systems devised by modern astronomers.

It is paradoxical, and in truth astounding, to consider that a "Great astronomical System" could be perfected "in the early ages of the world," and so interwoven with mythology, metaphysics, allegories and metaphors as to lose its identity; and that buried beneath intricate parables, portrayed in cryptological language, is a work on Physics-the phenomena of naturewithout a peer, in all the ages, and that this secret has been locked within the pages of a number of ancient manuscripts col-
lected together and incorporated into one book called the Bible, which has been accepted as divine revelations, or the direct word of God.

That the brilliant minds of the world, for centuries upon centuries, have not seen this palpably clear and demonstrated fact, is inconceivable. The disclosures are so evident and the exposition so apparent, when viewed in a physico-theological sense, that the whole matter resolves itself into one issue: a mathematical demonstration, which is self-evident, and needs no defense. "In fact, almost every discovery in science during recent times has been first evolved through the medium of mathematical formulas."

The priestcraft, prophets, astrologers, astronomers, scientists, et al., who wrote the book, or books, we call the Bible, have no peers in the annals of history. By their master genius they perpetrated a delusion which has been impenetrable to a misguided world for two thousand years.

The world may view the revelations as disclosed by the Camp of the Children of Israel with different degrees of interest, some with alarm and apprehension, others with intense satisfaction, now that the truth has come to light. The Bible, according to modern interpretation, is a travesty upon truth, yet, with its pages illumined by the light of reason, its myths, allegories, parables and metaphors are instructive, and in their true sense will help to mold a rational religion of ethics and morals. The change will gradually take place without any disaster, or deluge, and the world will move along in a progressive manner towards higher ideals.

There is no limit to man's mental development when he has the liberty to think, untrammeled by fear, superstition and ignorance.

Religion and mysticism have always been agglutinated, and among the ancients the mysteries consisted of explanations of the powers of nature, and were celebrated by religious rites.

Among the ancient Greeks, and subsequently, also among the Romans, the mysteries were celebrated by secret religious assemblies which no uninitiated person was permitted to approach, under penalty of death.

The origin of the mysteries dates back to a very early period and have been veiled in obscurity. Their object was of a dual nature-first, the perpetuating of traditions, legends and allegories concerning the divinities in whose honor they were celebrated; and secondly, of practicing and teaching religious rites, and demonstrating the powers of nature.

The chief mysteries of the Greeks were: The Eleusinian, the Dionysia, celebrated in honor of Bacchus or Dionysius, the Orphic and the Samothracian, celebrated in honor of the Cabiri. The Cabiri signifies great or mighty ones, certain deities greatly: venerated by the ancient pagans in Greece and Phoenicia.

Some authorities limit the number to four, while Sanchoniathon makes them to be eight (corresponding to the eight physical points of the compass). The mystic numbers of the Pythagorean philosophy, were six, eight and seven, and this philosophy taught "that everything in the universe is number." Pythagoras evidently possessed the knowledge of the secret system of astronomy of the Camp of the Children of Israel, a system of numbers.

The Cabiri were worshipped with particular honors in the Isle of Samothrace, and their worship and the mysteries are said to have been introduced into Greece by the Pelasgians. The worship of the Cabiri, "the great or mighty ones," four in number, corresponds with the four "Corner Keepers" or "Record Keepers"-the Genii of the Seasons-as taught in the ancient system of astrology-astronomy (obviously the term "Record Keepers" was used for the reason that the Signs recorded the numbers at the Cardinal Points during the order of precession of an equinoxial year-25.7624 years).

These were "the four great or mighty ones" as taught in the
ancient mysteries, which embraced the secret system of astronomy, astrology, of the Babylonians, Persians, Phoenicians and Egyptians, which preceded the mysteries of Greece, and upon which the Greek mysteries were based.

Philosophy is said to begin with the Milesian school, founded by Thales about 600 B. C. E., according to recorded history, though it is said that Thales first introduced higher mathematics and astronomy into Greece 640 B. C. E. He preceded Pythagoras, whose era was about 510 B. C. E., and it is only necessary to understand the system taught by Pythagoras (the heliocentric system) to have a clear comprehension of what the Greek Mysteries consisted of, that is, "the worship of the Powers of Nature"-"the four great or mighty ones"-the Cabiri. "The powers of nature" could not be portrayed otherwise than by astronomy, the science which investigates the motions, distances, magnitudes and various phenomena of the heavenly bodies; and describes the motions, figures, periods of revolution and other phenomena. Therefore, it becomes self-evident that the mysteries being secret, had something to conceal and as the "four great ones" were the chief divinities of the Greek Mysteries (Thales having introduced the true system of astronomv-heliocentric-which was secret), they correspond to the four "Corner Keepers," i. e., Vernal and Autumnal Equinox; Summer and Winter Solstice. The ritual of the rites celebrated in the Greek Mysteries demonstrating "the powers of nature" was of an astrological-astronomical-nature, for, in no other manner could the wonders and powers of nature be exemplified.

The secret system of astronomy which the Bible records, has been lost to the world and buried in obscurity, and like the Eleusinian Mysteries, was inexplicable, inasmuch as the mysteries were amplified and exemplified by the secret system of astronomy, which tradition speaks of as lost. Hence, the mysteries and what they consisted of were unexplainable.

The Camp of Israel system of astronomy represents "the

Great System of Astronomical Science, which reached a high degree of perfection in the early ages of the world, and was lost," and the mystic arrangement of the numbers as laid down by the Camp of Israel, constitutes the most marvelous examples of mathematical formulas when applied to astronomy, that the world has ever known. It demonstrates by mathematics that the Bible is a work on Physics-the phenomena of nature-and it is the sole means by which the Bible can be intelligently comprehended.

The "four great or mighty ones"-Cabiri-of the Greek mysteries have their similitudes in the four "Corner Keepers" or "Record Keepers"-genii of the Seasons-of the astrolotry of the Chaldeans, Phoenicians and Egyptians-the true system of the universe as taught by Pythagoras, and the cult or sect, the Israelites-(a synonymous term for "the Children of the Sun, a sect who preserved and taught the secret system of astronomy, and whose priests, prophets, astrologers-astronomers-made themselves "priests and kings unto God, to reign on earth").

The Camp of Israel system of astronomy was the transcendental glory of the ancient mysteries and its sublimity sheds light upon the mystery of mysteries of ancient and modern times -the Bible.

With the establishing of Christianity, the mysteries were conventionalized and made to fit the scheme of the Christ myth, and were taught during the Middle Ages. 'The mystery plays were one of the methods employed to give instruction to the people in religious matters and to strengthen the influence of the Church (author's italics). In later times these plays were usually exhibited in a connected series by the guilds of a town, and it sometimes took several days to perform a series." (The New Practical Reference Library, Vol. IV.)

Obviously the names, "Corner Keepers" or "Record Keepers" had reference to the Camp of Israel system of astronomy which consists of the zodiac squared, having four corners-the four
cardinal points-at which the Signs record by "numbers" during the order of precession, hence, the teaching of Pythagoras, "that everything in the universe is number." (author's italics.)

The "Corner Keepers," vernal and autumnal equinox, summer and winter solstice, were also the "record keepers" (referred to in the Bible as, "And I will smite the winter house with the summer house"; meaning winter and summer solstice), recording the numbers of the Signs or constellations at the cardinal points during an equinoctial year. (Amos, 3 c. 7 and 15 vs.; 5 c. 8 v.)

Frequent references are made in the Bible to the seven planets (in a cryptological manner), towit: "upon one stone shall be seven eyes; behold, I will engrave the graving thereof, saith the Lord of hosts (zodiac). For who hath despised the day of small things? for they shall rejoice and shall see the plummet in the hand of Zerubbabel with those seven; they are the eyes of the Lord, which run to and fro through the whole earth." (Zechariah, 3 c. 9 v.; 4 c. 10 v.)

## THE BIBLE (OLD TESTAMENT) AND THE ZODIAC, SYNONYMOUS, AND WERE COEVAL.

The 12 Signs of the Zodiac which are printed in the present day, in every almanac, are given little thought or regard by the masses, yet are considered synonymous with the almanac. Thousands of people never see an almanac during the entire year period, using a calendar instead. In fact, the almanar is treated as a joke by the "Smart set." Not using or seeing an almanac, the people as a rule, seldom, if ever, see the representations or symbols of the zodiac. This utter indifference is augmented by the daily newspapers, giving the "Weather reports," so thousands of so-called intelligent people would not recognize a Sign of the Zodiac were they shown the symbol. The zodiac therefore has become an unknown quantity to the "highly educated" of the present day, yet, the zodiac is the basis of astronomy, from which time is based, and without astronomy everything would become chaos. An anomalous condition, to say the least, but there was a reason!

To now find that the Zodiac and the Bible, the book of all books, are synonymous, and were coeval, is indeed refreshing!

The hosts (Mazzaroth-Zodiac) of heaven have been forgotten in the "hurly-burly" of the present time, yet, will come again into their own, and so history repeats itself, and the old earth smiles at the fatuous individuals who consider themselves wise. Along the paths of time many of the mileposts have fallen into decay and the students of philosophy, ancient history, astronomy (especially astronomy), comparative religion and chronol-
ogy, will no doubt find in the Camp of Israel the ARBITER they have been looking for. The marvelous arrangement of the Camp of Israel, its grandeur, and the amazing breadth of sub-ject-matter which it encompasses, can not help but impress manKind with the astounding wisdom of the ancients. "God moves in a mysterious way his wonders to perform."

THE WORLD-WIDE SYMBOL, THE SWASTIEA, INDICATED BY THE 4 SEASONS.

The books of the Bible bave a mathematical and arithmetical ratio comparing with the 36 divisions of the zodiac.


The ancient priests, prophets, astronomers, ot al., seemed to have been obsessed with the science of their cult. Writing as abstrusely as they might, and recording the esoteric philosophy in cryptologicol language, using synonyms, metaphors and allegorical terms, they were withal incapable of hiding their secret knowledge of God's kingdom. Hence it is highly proper that the word of Jehovah should contain some earmarks identifying it as an integral part of Jehovah, the Lord God of the Hosts (hosts-ZZodiac).


In its construction (the Bible) we find the mathematical ratios identifying it as part and parcel of the Zodiac. The Alexandrian version is not accepted by the Christians as it admitted many later writings forming what is known as the Apocrypha. The Septaugent version, the earliest and most famous, of the Old Testament, was the Greek translation executed by Alexandrian Greeks, probably about 130 B. C. E. This version was adopted by the early Christians-the early Christian churchand also by the Jews (who translated the Greek version into Hebrew) and has held an important place in the history and interpretation of the Bible.

Considering the King James translation we find the compact between God and the Jews, and the new compact between God and the human race. The Bible is, therefore, properly divisible into "the Writings of the Old and New Covenants."
"The books of the Old Testament received by the Jews were divided by them into three classes: 1st. The Law, contained in the Pentateuch; 2d. The Prophets, comprising Joshua, Judges, I and II, Samuel, I and II, Kings, Isaiah, Jeremiah, Ezekiel and the twelve minor prophets. 3rd. The Ketubim (holy writings), containing the Psalms, Proverbs and Job, in one division; Ruth, Lamentations, Ecclesiastes, Esther and the Song of Solomon in another division; Daniel, Ezra, Nehemiah, I and II Chronicles in a third."
"These books are extant in the Hebrew language. Others have been rejected from the canon as apocryphal by the Protestants, and are found only in Greek or Latin."

Therefore, the divisions of the Bible into three classes, and the number accorded to each class, was effected by the Jews (when they made the translation from the Greek-HebrewsIsraelites (derived from IS-RA-EL). The Pentateuch, the Book of Law, contained under this division, 5 books. This number, 5, compares with their 5 Planets. 2d, The greater prophets, comprising Joshua, Judges, Samuel (I and II-
one book), Kings (I and II-one book), Isaiah, Jeremiah and Ezekiel (comparing with the 5 planets, the sun and moon-7), and the twelve minor prophets (comparing with the 12 Signs of the Zodiac).

The five books of the Law compare with the 5 planets of their system of astronomy. The seven greater prophets comparing with their system of the universe, that is, the Sun, Moon and 5 Planets. The twelve minor prophets comparing with the 12 constellations would thus signify or symbolize their system of astronomy as demonstrated by the Camp of Israel, towit: The 5 planets equivalent to the 5 books of the Law; 7 greater prophets equivalent to Sun, Moon and 5 Planets. The 12 minor prophets equivalent to the 12 constellations-the hosts of heaven.

3d. The Ketubim (holy writings) containing the Psalms, Proverbs and Job, in one division, comparing with the trinity of their astronomical system, that is, the Sun, Moon and Earth.

4th. Ruth, Lamentations, Ecclesiastes, Esther and the Song of Solomon in another division; again comparing with their 5 planets.

5th. Daniel, Ezra, Nehemiah and Chronicles (I and II, one book) in the third division of the second class, equals 4 , comparing with the 4 Seasons- 4 Cardinal Points: summer and winter solstice, vernal and autumnal equinox-4 sides of the Camp, etc., the two last named being aptly depicted by Ezekiel, 1st chapter, and John's Revelation, 4th c. (q. v.).

The sum of the three divisions of the Ketubim equals 12, comparing with the 12 constellations of Jehovah, the Lord God of the hosts.

The sum of all the books of the Old Testament as divided by the Jews is 39, inclusive, however, of the three books comprising 1st and 2d, Samuel, 1st and 2d, Kings, and 1st and 2d, Chronicles, which should in each case, be treated as one book, the three books being divided into first and second parts so as to obscure
the significance of the number thirty-six, as the 39 books of the Old Testament, minus 3 (the second parts of Samuel, Kings and Chronicles) equals 36 , comparing with the 36 decans of the Zo-diac-hosts of heaven-the zodiac being divided into 36 divisions 2450 B. C. E., when Taurus, the Bull, was the constellation at the vernal equinox (and coincided with the Sign, Taurus). This division of the zodiac probably dates long before 2450 B. C. E., but the Camp of Israel is prima facie evidence of the division having been made at least that early. "He hath set his tabernacle in the sun." vide, Catholic Bible, Psalms, 18 c. 1-6 vs. This is made self-evident by the 39 books of Old Testa-ment-one-half of the Camp of Israel, in which is the tabernacle.

The whole number of the books of the Old Testament (inclusive of the three 2d, parts of the books, Samuel, Kings and Chronicles) equals 39 , which is half of the sum of the numbers of the Camp of Israel, that is, the sum of the numbers of the North and South Camps equals 39, and the sum of the numbers of the East and West Camps equals 39. (Total 78).

Rehoboam took 18 wives and threescore concubines, which is the sum of all the numbers of the Camp of Israel-78. (2d Chro. 11 c .21 v.$)$

The 39 books of the Old Testament divided into three divisions of 13 each (as shown in the table of contents, either by chance or design), compares with the 13 Lunar months of the sacred calendar system of the Children of IS-RA-EL, and also with the 13 constellations through which the moon passes during its orbit around the earth, that is, one lunation.

The divisions of the Camp beginning with the tribe of Judah (Judah always occupies the major position in the Camp, and is the key to the forming of the Camp) as numbered, and continuing on around the Camp as "the standards of the ensigns of their father's house" were placed by Moses, gives the sum of 26 (three times) which equals 2 lunations or lunar months (that is, 13 constellations through which the moon passes during each
lunation), e. g.: Beginning with Judah-Leo, Lion, Summer Solstice:

| 2 | 1 | 7 | (the 3 divisions of Judah). |
| ---: | ---: | ---: | :--- |
| 8 | 9 | 10 | (the 3 divisions of Reuben. |
| 11 | 12 | 6 | (the 3 divisions of Ephraim). |
| 5 | 4 | 3 | (the 3 divisions of Dan). |
| $\frac{5}{26}$ | $\frac{26}{26}$ | $\overline{26}$ | (the number 26 expresses the ineffable | name of God in Hebrew.) The sum of which is 78, the number of constellations through which the moon passes during 6 lunations or lunar months. The 13 constellations (nearly) of a lunar month, $x 6$ equals 78 or the number of constellations through which the moon passes (nearly) from vernal equinox to autumnal equinox-6 months tropical range.

Rehoboam "begat twenty and eight sons (comparing with the 28 -day months of their lunar calendar), and threescore daughters" (2d Chro. 11 c. 21 v.). His threescore concubines and threescore daughters equals 120 , comparing with a trine (in astrology, the aspect of planets distant from each other 120 degrees, or $1 / 3$ of the zodiac).

The 39 books of the Old Testament are divided into 3 divisions of 13 each, in the table of contents (by chance or design, though as every other division was made by design for the especial purpose of comparing with their lunar calendar, astronomical system, etc., we will accept the benefit of the doubt, and assume that the division of 39 into three parts of 13 each, was done for a purpose, giving the translators due credit for their acumen, etc.) ; comparing with the lunar phase of the calendar, as indicated by the Camp of Israel-"divinely revealed to Moses," corroborated by the Great Pyramid-as follows: There were 13 lunar months in their lunar year, and 13 constellations equals one lunar month (nearly), which number, $13 \times 3$ ( 3 divisions of the books of the Old Testament) equals 39, the number of books of the Old Testament. Three months equals, from vernal equinox to summer solstice. The ancient priests, proph-
ets, astronomers, et al., were adepts in constructing their allegories; their metaphors are divine.

The number 39, the sum of the books of the Old Testament, and the subdivisions thereof, which divisions were made by the Jews, gives some interesting collateral evidence as indicated by the Camp of Israel, the Astrological Key to the Bible-an Astrotheological work copied from the Astrolatry of the ancient Egyptians. Therefore, the table of contents of the Bible, numbering 39 books, is in perfect harmony with the contents, the record of the Camp of Israel-the ancient secret treatise of as-tronomy-divinely revealed to Moses. The Camp of Israel is fully corroborated by the Great Pyramid, which was built as an enduring record of this great system of astronomy, "which reached a high degree of perfection in the early ages of the world, and was lost." All that has been found in the Camp of Israel, calendar, year periods, astronomical units of measure, etc., will be found upon further investigation, to be contained in the Great Pyramid. (The "Stone Witness", Isaiah, 19 c. 19-2021 vs.)

To thus find unequivocal evidence of the significance of the numbers as given under this division of the Old Testament by the Jews is indeed gratifying, and we should be grateful to the ancient Jewish priests who so zealously guarded the functions and attributes of Jehovah, the Lord God of the hosts.

It is to be hoped that the evidence here offered, in still further confirming the doctrinal value of the Bible as a preceptor of the truth, will be highly esteemed by the Canons of the Church.

No one was better able to judge what books should be contained in the Bible, or those which should be debarred, than the Jews themselves, for they wrote it-or rather translated the Greek version into Hebrew, the Greeks having translated the original Egyptian version-that is, the Old Testament. The Jews were also the better judge of the ethical and technical value of these books, as contained in the Old Testament, and how
they should be arranged (into divisions giving the astronomical units, etc.). The Jews should be commended for their alertness in preserving the integrity of the Bible, and for their scholarly guardianship in maintaining the orderly arrangement so as not to impair the original meaning.

The cryptological language manifested in every book and chapter of the Old Testament, and the second covenant, the New Testament, regarding the life of the Son of God conforms in every instance or detail with the divine plan revealed to Mosesthat is, the Camp of Israel. Striking evidence of the use of cryptological language is recorded in Ezra, 2d chapter, 64-65-66 verses, and in Nehemiah, 7 chapter, 66-67-68 verses, which are verbatim. The last number given in verse 64, Ezra 2d chapter, and verse 66, Nehemiah 7th chapter, is, "three hundred and threescore," comparing with the 360 degrees of the ecliptic or zodiac. The second number given in verse 66, Ezra, 2d chapter. and verse 68, Nehemiah 7th chapter, is "thirty-six, comparing with the 36 divisions of the Zodiac (that is, $10^{\circ}$ each-decans). The last number given verse 66, Ezra, 2d chapter, and verse 68, Nehemiah, 7th chapter, is 45 , comparing with the 45 degrees of sun elevations from winter solstice to summer solstice-the ecliptic-apparent passage of the sun-the annual orbit of the earth around the sun in which the earth passes through the 12 signs of the zodiac. These three units, 36,45 and 360 as given by Ezra and Nehemiah, indicate in an unequivocal manner the annual orbit of the earth; the 4 cardinal points, vernal and autumnal equinox, summer and winter solstice. The 4 cardinal points are graphically described in John's Revelation, 4 c. 6-7-8 verses, and Ezekiel 1st, c. 9-10-11-12 verses, also, Ezekiel 10th, c. $9-10-11-12$ verses. The descriptions are amplified and exemplified by the Camp of Israel-divinely revealed to Moses"The true tabernacle which the Lord pitched and not man" (Heb., 8th c, 2-5 v.)
The divine plan of God in the ordinances of heaven, is evi-
dence of the divine plan of creation, and that God "moves in a mysterious way his wonders to perform.," the nebular hypothesis, for instance. vide, Mecanique Celeste, by Pierre Simon Laplace, 1796.


## CHAPTER XX.

## THE ASTRONOMY OF THE HOLY BIBLE. THE ASTRO-THEOLOGY OF THE ANCIENT EGYPTIANS.

Many passages in the Bible unquestionably refer to astronomy, for instance, Job states: "Canst thou bind the sweet influences of Pleiades, or loose the bands of Orion?" (Job, 38 c. $31-32-33$ vs.) The sweet influences of the Pleiades had reference to the sweet influences of spring. The Pleiades are in the constellation of Taurus, and are depicted upon the shoulder of the Bull-Taurus-( they are known to the laity as the "Seven Stars"), and the constellation Taurus, the Bull, was at the vernal equinox, 2450 B. C. E.; and prior to that period, being contemporaneous with the time of Job, 1520 B. C. E. Hence, Job meant, "Canst thou bind the sweet influences" of spring, that taketh away the evil of winter; "or loose the bands of Orion." This expression demonstrates Job's knowledge of astronomy in no uncertain manner, that is, his reference to "the bands of Orion," meaning Orion's belt, which is also called the "Yard and El," and "The Three Kings," that is, the three stars in Orion's Belt, in line, and measuring just 3 degrees in arc, between the two outside stars. The astronomical names of these stars are Mintaka, Anilam and Alnitak. Therefore it logically follows that Job possessed a knowledge of astronomy, as he referred to a well known ancient measure of arc. Think not that Job did not know the significance of "the bands of Orion," the "Yard and El," the "Three Kings," that is, 3 degrees in arc.

Again, "Canst thou bring forth Mazzaroth in his season? (Ibid, 32 v.) Evidently, Job had a knowledge of Seasons, that is, of days, of weeks, of months, of years and of cycles. Job,
then, had reference to the Season of Mazzaroth, hence, did not mean a day, or week, but some Season, year or cycle.

The Camp of Israel, a solar-lunar calendar, records the annual orbit of the Earth around the Sun-the earth's transit of the 12 Signs (or 12 constellations) the ecliptic. Job's language, therefore, denotes that he also possessed full knowledge of "The true tabernacle which the Lord pitched, and not man" (Hebrew, 8th c. 2-5 v.), as Mazzaroth was the Semitic word (early translation) expressing: 12 Constellations, or Zodiac-zodiac, derived from Greek, zoar, beast, that is, "Circle of Living Creatures."

The "beasts" are described by Ezekiel, 1st c., 9-10-11-12 verses, and 10th c. 9th to 16th verses, inclusive; Revelation, 4th c. $6-7-8$ verses. Again, Job, 38 c. 32 verse: "or canst thou guide Arcturus with his sons?" Arcturus is a star of the first magnitude, a sun, 1000 times larger than our sun. It is the chief star of the Constellation Bootes, "The Bear Hunter"; and his sons are Asterion and Chara, the two dogs driving the two bears. Ursa Major, the Greater Bear, "The Big Dipper," and Ursa Minor, the "Lesser Bear," "The Little Dipper," the first star in the handle of which is the pole star at the present time, and is called "Polaris"-Greek, Cynosure.

Lucan, a Latin poet, who was contemporaneous with our Savious, the Lord Jesus-the ideal man-thus refers to the practice of steering vessels by Cynosure:
"Unstable Tyre now knit to firmer ground
"With Sidon for her purple shell renown'd
"Safe in the Cynosure their glittering guide
"With well-directed navies stem the tide." (Rowe's Translation, B- III.)
"Of all yon multitude of golden stars,
"Which the wide rounding sphere incessant nears,
"The cautious mariner relies on none,
"But keeps him to the constant pole alone." (Lucan's Pharsalia, B VIII. V225.)
It will be noted that Lucan speaks of a sphere. Can it be possible that he knew that the earth was not square and flat?

Job states: "Knowest thou the ordinances of heaven?" The ordinances of heaven are the laws, the immutable laws of astronomy, and Job's questions indicate that he possessed this knowledge. These are only a few of many examples given by the Holy Scripture, of the astronomical wisdom of the ancient priests and scribes who wrote the secret record of their unsurpassed knowledge of astronomy. The most beneficent science and knowledge that mankind has ever achieved. The Bible is the greatest heritage that mankind has ever fallen heir to, and the Camp formation of the Children of Israel unfolds the mystery of mysteries, from Genesis to the Apocalypse. The Astrological Key to the Bible-an Astro-theological work-is given to the world in the Camp of the Children of IS-RA-EL (IS, derived from Isis; RA, derived from RA, the noon elevation of the Sun; EL, from Elohim, the Egyptian Sun-god, the sun in general. Isis was the Moon goddess, the wife of Osiris, the sun of the under-world).

The flags of many of the nations of the world bear the impress of "The Great System of Astronomical Science, that was lost (?) as part of their insignia. The flag of Norway is a perfect reproduction of the two Astronomical Crosses, that is, the Zodiacal Circle and the Square Zodiac-the Camp of Israelunited. The flags of Great Britain and Russia also depict the same symbol, except that they are elongated. This may be accounted for by the varying Latitudes (N. Lat's.) having been considered by their designers (not by accident), as: "The amplitudes increase towards the poles, and decrease in ratio towards the equator." Hence, by placing the sides of the British or Russian flag as the top and bottom, the increased amplitude of their N. Lat. (London E. C., N. Lat., $511 / 2^{\circ}$ ), is indi-
cated, approximately. An amplitude of $90^{\circ}$ would be indicated in N. Lat., $57^{\circ} 23^{\prime}$, approximately.

The device upon the flags of Norway, Russia and Great Britain had its origin in the secret system of astronomy, and is a conventionalized symbol of the Camp of Israel calendar and astronomical system. Russia has the "Bear"-Major Minor-Polaris-as her insignia (ensign); England, Leo, the Lionthe constellation at Summer Solstice, 2450 B. C. E., vide, Camp of Israel-and the six Lions-comparing with the six monthly steps of the sun-as the British Standard. The Arms of Egypt is the Sphinx (Virgo, which was the constellation at summer solstice, preceding the Lion, 2450 years, plus 2150 years) and Pyramid-the "Stone Witness" or record of the Great System of Astronomy-and aptly depict the secret system of astronomy; Papal Standard: 4 principles-comparing with the 4 genii of the Seasons-keys of heaven and the sign, x (which corresponds to the sign of the Camp of Israel). Japan and Argentine Republic, the Sun; China, the Dragon-a Draconis, in which constellation is the Pole star, Thuban, i. e., a Draconis, which was the Pole star 4900 B. C. E., and will again be the Pole star within about 21,000 years-as her National emblem. Ecuador has on her Arms the rising Sun and symbol of arc, two pillars(comparing with the "two witnesses" of John's Rev., that is, the equinoxes, the true witnesses of the length of the year) and seven stars-comparing with the 7 Planets-all of which are symbols of astronomy. The Russian and Austrian standard have the "double eagle" (comparing with Aquila). The German standard bears the Maltese Cross, symbol of Camp of IS-RA-EL.

Of what use is your brain if you do not think? If you do not use its power, cultivate the mind and rise above the plane of ignorance that surrounds the world of to-day like a pall, you might just as well have no brains!

The influence of the priestcraft is indicated in the designs of the flags, standards and arms of the Nations of the World, and
the reason why is pointedly given in the following passage or Holy Scripture:
"And the nations of them which are saved shall walk in the light of it: and the kings of the earth do bring their glory and honour into it." (Revelation, 21st c. 24th verse.) This language is significant, and clearly means the Camp of Israel. Thus have the Nations of the World "brought their glory and honour into it."

Why pay tribute to the fad of admiring the ancient art of Greece and Rome unless you comprehend its significance? Is not the philosophy and a true insight into the religion of that era of more vital importance, for with that knowledge as a preceptor, we gain an acquaintance with the mediums that molded our destiny to the present time!

In excavating at Ninevah Layard found a plano-convex lens of rock crystal amid the ruins, yet, this had no special significance, it seems, to the students and scholars. Man's earliest researches in astronomy probably reaches back 500,000 years, for astronomy is a science that required aeons upon aeons of time to develop and perfect.

Mathematics were developed through necessity, advancing step by step as astronomical investigations developed and the discoveries required higher mathematics. Arithmetic is the primary element of mathematics, and the four divisions of arithmetic were evolved or developed from the table numbers 1 to 12. We have been taught that our numeral system which we term the Arabic was given to us by the Arabs, yet investigations have proven, and it is now accepted that "the Hindus, represented especially by Aryabhatta and Brahmagupta, began the investigation of the theory of numbers, made considerable progress in algebra, arithmetic, geometry and trigonometry, and first developed the present system of notation" (about 500 B. C. E.). (We are now using $1 / 60$ th part of the Hindu formulation, i. e., " R 57.3 feet or degrees equals $1^{\circ}$ arc.")

It is obvious that the present system of notation was applied as early as 2450 B. C. E., in the Camp of Israel system of astronomy. The proof is self-evident in the Camp of Israel itself, and no other system of numbers could have been used likewise. The Camp of Israel system was perfected, no doubt, long prior to 2450 B. C. E., but they had to wait for the psychological moment, as we are wont to say, that is, they had to wait until the Signs-constellations-occupied the positions as represented by the Camp of Israel, that is, were at the right points, with Libra in the center of the Camp at the North, with Taurus at the Vernal Equinox and the Moon in Cancer, to perfect their system of numbers, as in no other way, nor at any other period could the marvelous system of astronomy have been effected, whereby, "Everything in the universe is number."

The constellations, numbered in their proper order in the Camp of IS-RA-EL, NOW (at this time) coincide with the months of the year and are the visible representatives or SIGNS of the month which they appear in, Cancer (constellation) being NUMBER 1, therefore representing January, the first month of the year, and rises first above the horizon in the evening, being upon the meridian at midnight, January 15th. This will continue for 2150 years, approximately. The constellations as well as the Signs of the zodiac have been turned around by the zealous compilers of the Bible, so as to make it improbable if not impossible to ever again arrange the constellations and the Signs in their proper or TRUE POSITIONS. This being accomplished it at once gave the key to the astro-theology (the Bible). New moons occur on January 1st, every 19 years, instance: In the years 1832, 1851, 1870 and 1889 ad infinitum (tropical years-not ecliptic years of 346.62 days-in consequence of the retrograde motion of moon's nodes). (vide, Gummeres Astronomy, part two, table 3, page 5.)

## "THE SOLSTICE PERIOD."

By Henry Lee Stoddard.
To Bishop William Montgomery Brown, who by his encouragement and loyalty to the author's work, has tempered his sacrifices and made his path less thorny, this poem is dedicated.

When the Earth is in shadow with darkness o'er spread, The face of all Nature seems silent and dead;
It is then that our ignorance calls out of the gloom
Keal pictures of goblins that haunt every room.
When the Lord has arisen, and Light brings us relief,
All our sorrows are shadows of impotent grief;
The existence of God is no longer a doubt, His radiance brings love and happiness about.

Satan is a dream that will never come true, While Nature smiles with her flowers and dew;
With sunshine, song, skies of azure blue, There is heaven in life here on earth for you.

Little Rock, Arkansas,
December 22nd, 12 p. m., 1913.

## CHAPTER XXI.

## REVISION OF THE CALENDAR.

A Solar Year of 13 Months of 28 Days Each, Plus One Day Intercalary.
THE GREAT PYRAMID CALENDAR SYSTEM.
(Copyrighted 1914, by Henry Lee Stoddard. All Rights
Reserved.)

| THE GREAT PYRAMI CALENDAR SYSTEM, A SOLAR YEAR OF I3 MONTHS OF 28DAYS (with an intercalation of one dor) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |
| Manths | Sunoar | Morar | Tuesoar | Weoresar | Tmussar | Friour | Satumar |
| 3 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 5 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 8 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 11 | 22 | 23 | 24 | 25 | 26 | 27 | 28 |

The intercalary, 13 timaouth, atthe endoof the year. Cheistmas Dat
acime the Intercalary day, zquals 365 auys.
vernel Equirax will accur (spring begina) April 5th
Surnmer Solstice willoccur(summerbagins) July 13th
Adtunnal Equnox will occer (autumn baging) Oct 23nd
WirterSolstice willoccur on Christmas Day
New Yenes car wil fall on hanuapy Firgt(The day following
SOLSTICE or "Christmas Day").
A vast amount of interest is being awakened in the matter of the adoption of a new calendar. The question is an international
one, and the first step towards taking conclusive action is about to be consummated by the assembly of a Commission of delegates from the various Nations interested in the problem, which is to meet at Rome, with Cardinal Mercier, as Chairman. April 1st of the present year, and several societies have been organized as calendar associations, under various titles, the object of which is to consider, formulate, and cause the adoption of a new calendar by an Act of Congress of the U. S. A.

The most popular idea set forth is a calendar of thirteen months of twenty-eight days each, plus an intercalary day at the end of the year, comprising 365 days, with the usual leapyear intercalation.

The first international conference was held in Switzerland in the year 1912, for the consideration of the adoption of a perpetual calendar. There are many varying opinions as to where the new thirteenth month should be placed, some suggesting that it should come in between July and August.

As a matter of public interest and as a means of conserving the best interests of all the nations concerned, the adjustment should be so arranged as to offer the least conflict with our present arrangement (Gregorian Calendar of 12 Solar months).

No greater heritage can be given to mankind than a perfect, perpetual calendar and of all knowledge handed down to us by history, legends and tradition, not anything is of more importance to human welfare than a comprehensive knowledge of a calendar that is absolutely correct.

Consider for a moment what might transpire were we suddenly bereft of our calendar knowledge. If we were to lose our calendar knowledge we would also lose our knowledge of astronomy and mathematics, in which case it would be impossible for us to navigate the seas, also the base line of our system of land measure would vanish like an apparition.

The vast volume of business produced by our export trade would be defunct and many factories thus being shut off from
world commerce would immediately close down causing millions of people to be thrown out of employment; vessels could not even enter the harbors inasmuch as they would have no means of determining the hours of high tide, caused by the position of the moon. There would be no means of executing a legal contract for the reason that a contract could not be correctly dated. All transfers of real property would cease and real estate sales would be moribund. Especially would this be so in the matter of locating and transferring parcels of land. The surveyor when called in would frankly tell you that having lost his base line it would be impossible for him to locate the land. Interoceanic navigation and communication with other continents having ceased, all continental travel via railways would be curtailed to a narrow margin, as we would not have any time or "timetables" (time being based upon the passage of a fixed star across the meridian at a given point, which is vernal equinox). The trains could only run one way, and in that event they would have to operate on double tracks. Not knowing the day of the month nor the month, our agricultural pursuits would likewise suffer. We might think that a warm sunshiny day in January, was April or May, and we would probably plant our gardens and sow our fields, but what would the harvest be? Crop failures would follow one another successively and the gaunt specter, famine, would devastate the land. We would have the desolate spectacle of maddening hordes sweeping over our peaceful hills and vales, seeking all they might devour. Civil and religious life would become a turmoil; mechanical and manufacturing production of all kinds would become, in a few generations, ancient history and engineering, architecture and navigation would become things of the past. Under such conditions man's chief concern would be self-preservation, and as an Irishman said, "Let the divil take the hindmost one."

Such a catastrophe is not so improbable as one might imagine, inasmuch as during the time of Julius Caeser, 46 B. C. E., the
calendar had become 85 days out of kelter (ahead 85 days) causing spring to come in the good old summer time.

These things should be given serious consideration, for the reason that the opulence, wealth, peace and prosperity of any nation is more dependent upon a calendar, wrought by a knowledge of astronomy and mathematics, than upon any other one thing. A man's birth, marriage and death are the three most important happenings of his brief life upon the sphere we call good, old mother earth. We should by all means have a chronology that is exact and dependable, recorded by a calendar that is as near perfect as human ingenuity can devise.

The Nations of the World in a convention at Berne, Switzerland, in the year 1912, proposed the adoption of a calendar of 13 months of 28 days each, etc.; the same to be ratified at a Congress of Nations which was to convene in the year 1915, that is, the calendar, when adopted, was to be effective January, the first, 1916. In the adoption of a calendar of 13 months of 28 days each, etc., the motions of the sun (the ecliptic-apparent motion), moon (moon's place in the constellations), and the precession of the Signs or constellations, can best be recorded by the Great Pyramid Calendar System. The week days of each month should fall upon the same days of the month for eternity and thereby prevent confusion and losses sustained by errors of the calendar. The first day of the week, the first day of the month and the first day of the year should always occur upon Sunday, inasmuch as it is generally accepted that Sunday is the first day of the week. The earth completes its orbit around the sun in 365 days, 5 hours, 48 minutes, 48 seconds (some authorities state 46.08 seconds), and at this point, in the earth's annual orbit, on the hour, minute and second of midnight the SOLSTICE occurs (winter solstice), and it is therefore expedient and proper to begin the year when the earth has thus completed its annual orbit around the sun-not ten days afterwards, as we do now under the Gregorian calendar.


NEW EALBAM STAMPS.
(From tho Pall Mall Gemoto.)
If wo may cretit the Mumehtos Nachrienten, one ofteone of the war whll he sorm vomarkablo poest age stantpe Ppoparntions are belace mate, we are 6ald, for the issee by the मilige of stamps the main Cratur of which whl be the same in own of . ha

The "fixed days" of the Church Festivals and anniversaries as heretofore, will, under the Great Pyramid Calendar System, remain fixed in the calendar of 13 months of 28 days each, plus SOLSTICE DAY or Christmas, but the movable feasts, anniversaries and festivals of the Church, being dependent upon the positions of the moon, will continue as heretofore to be calculated upon the positions and phases of the moon, in its monthly orbits around the earth, the annual orbit of the earth around. the sun, unless the Church decrees otherwise. On account of the solar years having a difference of 11 days, nearly ( 10.80 days), the lunar year, therefore, equals 354.36 days, and the solar year equals 365 days, 5 hours, 48 minutes, 48 seconds. This differential of solar and lunar time causes the phases of the moon (new moons and full moons) to vary in respect to the days of the month of the solar year, hence it is not practical or possible to devise a calendar by which the movable feasts, anniversaries, and festivals of the Church, dependent upon the new or full moons, can be arbitrarily fixed. One may just as well suppose that it is possible to consider or calculate a lunar month to equal 24 days or 14 days, as to contend that the "Movable Feasts," Anniversaries and Festivals of the Church, dependent upon the new and full moons, can be arbitrarily fixed.

Assuming the moon to be in the constellation of Leo, March 10th or 11th, 1922, it will occupy a different position in the Zodiac in the year 1923, that is, it will be in a different constellation (Virgo or Libra) on the same days of the month of the succeeding year. Navigators use the moon's position, and the fixed star which it may be near, to determine their latitude, longitude and the course they are sailing by. Their "bearings" are dependent largely upon the moon's true position in the constellations. The Harbor Master's rules for incoming or outgoing vessels vary on account of the moon's position daily, inasmuch as the moon controls the tides.

Misguided and uninformed people who are not well grounded in the science of astronomy, mathematics, navigation and arcane calendar systems, and who undertake to devise calendars or reform our present calendar are led into deep and grievous errors, ludicrous and lamentable. The brilliant idea of constructing an almanac or calendar that will never have to be changed, in respect to the moon's positions and phases (thus, as they claim, saving $\$ 40,000,000$ a year expense, incurred in printing almanacs and calendars, as suggested by some of the new calendar enthusiasts) at once becomes a mischievous and fanciful vagary. Under the calendar system of 13 months of 28 days each, plus Solstice Day or Christmas ( 365 days) the present year, 1924, will end at 12:00 o'clock midnight, December 22d, the day of the winter solstice (in the Gregorian calendar) and December 23d, the day following the winter solstice, will be the first day of the new year, 1925, "New Year's day", which will become Sunday, the first day of the week, first day of the month (January), and the first day of the year.

## HOW THE PERFECT CALENDAR OF 13 MONTHS IS CONSTRUCTED.

The length of the solar year, as near as it is possible for the human mind to determine, is 365 days, 5 hours, 48 minutes, 48 seconds (the value is also given as 46.08 seconds). A year of 13 months of 28 days each, plus one intercalary day equals 365 days, so at the end of the year, which occurs at winter solstice, the calendar would be behind 5 hours, 48 minutes, 48 seconds; at the end of 4 years the calendar would be behind 5 hours, 48 minutes, 48 seconds x 4, equals 23 hours, 15 minutes, 12 seconds, and after adding one extra day, for Leap-Year-Day, the calendar is ahead 44 minutes, 48 seconds. There being 1440 minutes in one day, therefore, in 128 years the calendar is ahead 1433 minutes, 36 seconds and after omitting one day ( 1440 minutes)

the calendar would be behind 6 minutes and 24 seconds. This cycle of 128 years is repeated 225 times, when we have $225 \times 128$ equals 28,800 years, as follows: In every period of 128 years, the calendar is behind 6 minutes, 24 seconds, which is contained exactly 225 times in 1440 minutes (one solar day, 24 hours, equals 1440 minutes) ; hence, 225 periods of 128 years each (the periods being 6 minutes and 24 seconds) equals 1440 minutes or exactly one day. Therefore, 128 years x 225 periods equals 28,800 years, after which time the calendar is behind 1440 minutes, NO SECONDS and one day is added. The calendar is then absolutely correct. The cycles and intercalations then repeat in the same order for eternity.

For the purpose of making the differentiations best adaptable to commensuration we have taken the length of the solar year to be 365 days, 5 hours, 48 minutes, 48 seconds, which is 1.92 seconds longer than "Newcomb's value," which is 365 days, 5 hours, 48 minutes, 46.08 seconds, which is the accepted length of the solar year according to the Ephemerides. Considering the value of the length of the solar year, used in constructing the calendar year, we would therefore have an over-plus of 1.92 sec onds each year. Compared with Newcomb's value, this overplus of 1.92 seconds amounts to exactly 1440 minutes (one solar day) within a period of 45,000 years. The calendar would then be ahead 1440 minutes, .0000 seconds and one day ("Leap-year Day") would be omitted, which would make the calendar absolutely correct, according to the value of the solar year given by the Ephemerides (U. S. Naval Observatory, Nautical Almanac), for a period of 500,000 years or until the next cataclysm occurs.

Under this arrangement of the calendar the intercalations would be as follows: (1) Every 4 years one day is added, that is, Leap-year Day; (2) Every 128 years one day is omitted ("Leap-year Day") ; (3) Every 28,800 years one day is added ("Leap-year Day") ; (4) Every 45,000 years one day is omitted ("Leap-year Day").

New Year's Day, in the Great Pyramid Calendar System, will fall on January first, which is the day following "SOLSTICE DAY" or Christmas Day, except in leap years, in which case it follows "Leap-Year Day." "SOLSTICE DAY" or Christmas Day is the 365th day of the solar year, but not the day of any week or the day of any month. Christmas Day ("Solstice Day") and New Year's Day are "fixed" days, not affected by intercalations, Leap-year Day being utilized for additions or omissions by intercalations.

From the first day of January to the 21st day of March, inclusive (vernal equinox), is only eighty days, in the Gregorian calendar, whereas from the first day of the year (solar year) to the vernal equinox the period should be a quadrant of the year, which is 90 plus days. This one fact proves that the solar year actually begins ten days earlier than January first, which would be December 23d, of the preceding year, in the Gregorian calendar. The solar year begins at the time of the winter solstice, that is, at midnight, civil time. In the Gregorian calendar, winter solstice is reckoned as $12: 00 \mathrm{p} . \mathrm{m}$., December 22d, the New Year begins immediately following this time.

The cycle of 28,800 years may be varied by using a cycle of 30,720 years, which value is obtained by using the 28,800 year cycle, plus fifteen of the 128 year cycles ( 128 years multiplied by 15 gives the product of 1920 years, which, when added to the 28,800 years equals 30,720 years). The characteristic of the Biblical units, " 144 ", " 144,000 ", etc., is brought out by multiplying the cycle 28,800 years by 5 , which equals 144,000 years. This constitutes another point-blank proof that the calendar, its cycles and other phases are identical with the ancient Egyptian calendar as grounded in the Holy Scripture. The Bible treats of physico-theology, the fountain-head of which, insofar as concerns the East, arose in ancient Egypt. The unit " 144 " and its multiple " 144,000 ", etc., is expressed many times, in numerous and various ways in the cryptological work, the Bible.

## THE ZODIAC; ITS PURPOSE AND SIGNIFICANCE.

The present system of astronomy is based wholly upon the zodiac. What do modern scholars know about the zodiac, especially for what purpose its inventors intended it to serve? The dean of the law school of a state university recently told the author that he had made it a custom of his classes to have five minute talks upon different impromptu subjects, and that when he asked for a five minute talk upon the zodiac, not one of his class responded, but several asked, what is the zodiac? Yet we call this an age of higher civilization!

The fountain-head of wisdom is astronomy; astronomy was born of the zodiac. Springing from the zodiac. astronomy caused mathematics to be developed. Yet further, as the astronomical science advanced it forced the development of geometry and trigonometry, yet, in this day and time the people ask, "what is the zodiac?"

The Round Zodiac, NUMBERED according to the position of the Signs (not constellations), which are fixed. The square zodiac. NUMBERED according to the position of the constellations (not Signs), co-ordinated with the months of the year (counting the months of the year), as the constellations now rise or first appear visible upon the horizon in the evening. The Signs and the constellations of the zodiac as they are indicated and NUMBERED in the SQUARE and ROUND ZODIAC indicate the time of the year (the months) correctly, shows the true position of the sun and earth in the SIGNS at the two solstices and the two equinoxes and establishes the correct base of

chronology (the sun in Taurus at the vernal equinox, 2450 B . C., at which time the Sign of Taurus and the constellation of Taurus-"the Bull"--coincided exactly).

Some have said that "the pyramids possess no beauty or usefulness." There is more real wisdom locked within and without the confines of the GREAT PYRAMID (JEEZEH) than is contained in all the libraries of the entire world!

In truth we may say, "we know not what a day may bring forth," inasmuch as many very important discoveries are being made by the thinking men of the world. It is almost a daily occurrence to have chronicled in the modern dispensers of knowledge, the newspapers, an account of another marvelous discovery in science or the mechanical world of invention. Many of these discoveries are of great benefit to human existence, and after we have become adapted to the use of the various appliances in our daily life, we find our efforts futile to attempt to
"get along" without them and wonder how we ever found life a pleasure before these useful and necessary things became a part of our existence.

The calendar system of the Great Pyramid is so perfect that when once it is adopted by the world, we will wonder why and how we were able to conduct our commercial and social life without its beneficent influences, and we will comprehend "How much better is it to get wisdom than gold!"

The statement of the United States Naval Observatory that "the Signs move with the solstices and equinoxes and the constellations are fixed," reads like fiction. It is the most consummate example of "professional" fatuity and indicates the appalling condition that exists in respect to modern astronomy, as now taught, a condition that leads to error. Sec. 437, Young's General Astronomy, admits, "the inadequacy of our present mathematical methods." Sec. 461 (ibid) admits, "the remaining discrepancies between the LUNAR TABLES AND THE OBSERVED PLACES OF OUR SATELLATE." The fact is, they do not know within what constellation the New and Full Moons occur and are in error from 15 to 45 degrees as to the moon's position and from six to forty-eight hours as to the time of the lunation. A most unhappy condition, to say the least, in respect to a science. Until their fallacies are exposed (not derided) we cannot expect, forsooth, an amelioration of the amentia, superinduced by ego, which the so-called astronomers seem to be obsessed with. It seems that the world has not changed much since the time of Galileo, instance: Galileo to Kepler. What is to be done? Shall we decide with Democritus or Heraclitus? I think, my Kepler, we will laugh at the extraordinary stupidity of the savants" (meaning the professors of Pisa, Florence, Bologna, Venice and Padua, who ridiculed Galileo's discoveries). The Library of Original Sources, Vol. V, pp. 292-293, q. v. Let us conclude with Job, 11 c. 12 v . "For vain man would be wise, though man be born like a wild ass's colt."


## CHAPTER XXII.

## THE GREAT PYRAMID CALENDAR SYSTEM.

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The twelve tribes of IS-RA-EL were the genii of the twelve Signs or constellations (of the zodiac). They were characterized as such in Jacob's prophecy, as recorded in the Book of Genesis, the 49 th chapter. The twelve tribes of Is-Ra-El, when properly placed and NUMBERED formed the ancient Israelite calendar and as reckoned in this calendar stood for the months of the year (a 12 months tropical year or true solar year), the "Sabbath Year, Jubile Year," etc.

The world has become convinced that a more perfect calendar is needed, one that affords the most simple method of reckoning time and one in which the days of the month and the days of the week will always fall upon the same days. A year of 13 months of 28 days each with an intercalation at the end of the year, and the other intercalations provided for as indicated gives the result sought for (the intercalary day at the end of the year). SOLSTICE DAY or "Christmas Day," followed by the first day of the new year-New Year's Day-will throw two holidays together, that is, a "DOUBLE SABBATH," and an intercalary every four years of one day, corresponding to the present "Leap-Year," will be another SABBATH, thus throwing three Sabbaths together (Vide, Leviticus, 23d chapter, which indicates just such an arrangement of the year period).

The Great Pyramid calendar develops and sets forth some interesting anomalies, instance: It gives an example of geometrical progression in the tropical range of the sun (by subtracting, beginning with the two tropics, Cancer and Capricorn (see example given in this chapter) as numbered. The moon in its monthly orbit around the earth compasses the 12 Signs and gains a Sign (nearly) thus a new moon on the first day of January, which happens every 19 years, would traverse all the twelve Signs and complete its orbit in the succeeding Sign. Therefore, begininng its orbit in Cancer it would complete its orbit in Leo (constellation of Leo, as the months of the year and the 12 constellations are now co-ordinated by the Great Pyramid calendar) and would thus count 2, that is, the second month. This continues in the same relative manner, the moon always COUNTING THE MON'THS OF THE YEAR, the period beginning with a new moon on the first day of January, etc.

The Great Pyramid SQUARES the zodiac circle (a joke on the "quadrature!"). It gives the approximate distance to the sun, $95,904,000$ miles, by "counting the number of the beasts" as directed by the Book of Revelation, 13 c .18 v . ("Beasts" referring to the beasts of the zodiac; the word "zodiac" is derived from Greek, Zoar, which means beast, etc. See example in this chapter.)

Many writers have surmised that the "lost tribes of Israel" bore certain insignia upon their standards" and other authorities have held that their "armorial bearings" were symbols of the twelve Signs or constellations, yet they have proven to be an impenetrable mystery for more than 2000 years (that is, prior to the time of recorded history, not profane history).

To now find that the twelve tribes of Israel still survive the waste of time and are now with us in a material sense (the 12 constellations and the 12 months of the year), the ancient Israelite calendar, will intensify the curious as well as the eru-
dite, verifying the ancient axiom, "There is nothing new under the sun." The attention of the whole world is now centered upon a new calendar and the nations of the world realizing the necessity for a uniform calendar, called a convention at Berne, Switzerland, in the year 1912, for the purpose of submitting plans and suggestions toward effecting a universal calendar. After considering various and numerous examples, designed to fit the necessity, offered by students and scholars, a calendar of 13 months of 28 days each, with an intercalary of one day (the intercalary month being placed between the months of July and August!) and an additional day intercalated every four years, was adopted as the most feasible, and the delegates of the different nations represented were instructed to work for its adoption at a Congress of Nations to meet in the year 1916. The author's calendar was perfected in the year 1911, copyrighted April 6th, 1912.
The author's computations respecting a PERFECT CALENDAR were completed and his copyrights were secured on the Great Pyramid calendar before the "International Conference" which was held in Switzerland during the summer of 1912. An article was published by Harper's Weekly giving a brief outline of the Berne, Switzerland conference and the results and decisions of the Convention. This article is reproduced to show the kind of calendar the Berne convention approved of and recommended. The convention did not, it seems, take into consideration what effect a " 28 -day month" would have in respect to reckoning the phases and eclipses of the moon. As a matter of fact the lunations (new moons) cannot be normally counted or reckoned in a month of 28 days, because the period of time between each new moon requires 29.53 days (to be exact, 29.535588 days). Therefore, a calendar that will answer the purpose of counting or recording the new moons must be a calendar having 30 -day months, inasmuch as the oscillating period
of the moon must have a latitude of not less than 30 days (as the new moon period is, as stated, 29.535588 days).

The adoption of a new calendar is to be reckoned as an important or momentous event in the history of the world. The vicissitudes of the calendar have been numerous and full of inaccuracies. Only the most thorough analysts, astronomers and mathematicians should be named in a commission to readjust and perfect the calendar. To consider the question of changing the calendar until all of the intricate problems which enter into the matter have been solved would be a travesty. If a new calendar is ever adopted by the nations of the world it must, perforce, include both the solar and the lunar year, that is, reckon the true solar year ( 365 days, 5 hours, 48 minutes and 46 seconds-some authorities give " 48 seconds"), the weeks and the days of the month and must also accord with the moon's motion around the earth, monthly, called a lunation, a period of 29 days, 12 hours, 44 minutes and 3 seconds (in which time the moon revolves in an elliptical orbit around the earth). There are many important things dependent upon the motions of the sun and moon in respect to Feast Days, Church Festivals, the breeding of herds and animals in general, dehorning of cattle, castrating animals, the proper time of weaning, mating, etc., the tides (the hours appointed by the Harbor Master for allowing incoming vessels to dock being dependent upon the position of the moon) and if observancies were made accurately and without prejudice it would be found that the position of the moon largely governs the time of planting as well as reaping (that is, the New and the Full moons). It is paramount that a calendar, if entitled to the name, must constitute an accurate reckoning of the solar as well as the lunar year (a period of 354.36 days, that is, a synodic lunar year).

The following is quoted from the Elements of Astronomy, by Charles A. Young, Ph. D., LL.D.: "Number of Eclipses in a

Year.-The least possible number is two, both of the sun; the largest seven, five solar and two lunar. The most usual number of eclipses is four. The eclipses of a given year always take place at two opposite seasons (which may be called the "eclipse month" of the year), near the times when the sun crosses the nodes of the moon's orbit. Since the nodes move westward around the ecliptic once in about 19 years, the time occupied by the sun in passing from a node to the same node again is only 346.62 days, which is sometimes called the "eclipse year."

In an eclipse year there can be but two lunar eclipses, since twice the maximum lunar ecliptic limit ( $2 \times 12^{\circ} 15^{\prime}$ ) is less than the distance the sun moves along the ecliptic in a synodic month ( $29^{\circ} 6^{\prime}$ ). The sun, therefore, cannot possibly be near enough the node at both of two successive full moons. On the other hand, it is possible for a year to pass without any lunar eclipse, the sun being too far from the node at all four of the full moons which occur nearest to the time of its node-passage. In a calendar year (of $3651 / 4$ days) it is, however, possible to have three lunar eclipses. If one of the moon's nodes is passed by the sun in January (a new moon occurs on the first day of January every 19 years-author's comment), it will be reached again in December, the other node having been passed in the latter part of June, and there may be a lunar eclipse at or near each of these three node-passages. This actually occurred in 1852, and will happen again in 1889. (A Saros cycle closed in the year 1889-therefore all of the Nautical Almanacs state "until 1900," etc.-plus this year, 1889, ten years, inclusive, the year 1900 and it then becomes apparent that we are dependent upon the "Saros cycle" for a base by which to reckon chronology. Our Saviour was born one year after the Saros cycle began! Therefore plus one year in computing the "Golden Number".
"As to the solar eclipses, it is sufficient to say that the solar ecliptic limits are so much larger than the lunar, there must be at least one solar eclipse at each node-passage of the year, at
the new moon next before or next after it; and there may be two, thus making four in the eclipse year. (When there are two solar eclipses at the same node, there will always be a lunar eclipse at the full moon between them.) In the calendar year, a fifth solar eclipse may come in if the first eclipse month falls in January" (a new moon occurs on the first of January every 19 years —author's commentation). "Since a year with five solar. eclipses in it is sure to have two lunar eclipses in addition, they will make up seven in the calendar year, as has been already stated." (Referring to the ancient Israelite calendar it will be found that the ubiquitous " 7 " makes up an important part of the calendar, the "Sabbath Year," being every seven years and the "seven times seven," a total of 49 years, followed by their "year of Jubilee," instance: "A Jubilee shall the fiftieth year be unto you." Lev., 25 c. 11 verse. "Jubilee, a time of shouting, "Yobel").
"Recurrence of Eclipses, the SAROS. It was known to the Chaldeans, even in prehistoric times, that eclipses occur at a regular interval of 18 years, $111 / 3$ days ( $101 / 3$ days if there happen to be five leap years in the interval). They named this period the "Saros." It consists of 223 synodic months, containing 6585.32 days, while 19 "eclipse years" contain 6585.78 days. The difference is only about 11 hours, in which time the sun moves on the ecliptic about 28'. If, therefore, a solar eclipse should occur to-day with the sun exactly at one of the moon's nodes, at the end of 223 months the new moon will find the sun again close to the node ( $28^{\prime}$ west of it), and a very similar eclipse will occur again; but the track of this new eclipse will lie about 8 hours of longitude further west on the earth, on account of the odd .32 of a day in the Saros. The usual number of eclipses in a Saros is a little over 70, varying two or three eclipses one way or the other."
"Oppolzer, the Viennese astronomer, lately deceased, published a few years ago a remarkable book entitled "The Canon
of Eclipses," containing the elements of all eclipses ( 8,000 solar and 5,200 lunar) occurring between the year 1207 B. C., and 2162 A. D., with maps showing the approximate track of the moon's shadow on the earth." Vide, Elements of Astronomy, by Charles A. Young, Ph. D. LL.D., pp. 167-168-169.

As explained in detail in another chapter, IS (the Egyptian equivalent of "Isis," the moon goddess), RA (the Egyptian equivalent of the sun, at its NOON elevation), and EL (the Egyptian name, "Elohim" signifying "the sun anywhere," that is, above or below the horizon-"Osiris", being the name of the sun below the horizon) makes up the complex, composite name "Is-Ra-El," signifying the CHILDREN OF THE SUN AND MOON. Is it not natural, therefore, to find that the Camp of Is-Ra-El is a calendar, constituting a calendar in ALI OF ITS PHASES AND ATTRIBUTES? The Holy Writ makes clear the arcane sense of the scriptures, when the Camp of the "Children of Is-Ra-El is applied," instance: "But we speak the WISDOM of God in a mystery, even the HIDDEN WISDOM, which God ordained before the world unto our glory." 1st Corinthians, 2 c. 7 verse. "Now to him that is of POWER to stablish you according to my gospel, and the preaching of Jesus Christ, according to the REVELATION OF THE MYSTERY, which was kept SECRET SINCE THE WORLD BEGAN." Romans, 16 c. 25 verse. "But in the days of the voice of the seventh angel, when he shall begin to sound, THE MYSTERY OF GOD should be FINISHED, as he hath declared to his servants the prophets." Revelation, 10 c. 7 verse. The key to forming the Camp of Is-Ra-El is NUMBER TWO (2) the ensign upon the standard of Judah, viz.: "And one of the elders saith unto me, Weep not: behold the Lion of the tribe of Judah, the Root of David (David was a personification of the sun-just another sun myth), hath PREVAILED TO OPEN THE BOOK, and to LOOSE THE SEVEN SEALS THEREOF." Revelation, 5 c. 5 verse.

It is clear enough, the language is unequivocal, but the mystery is now finished. Did you ever try to read the Bible backward? You would probably get the true SENSE just as readily as you would by reading it forward, unless you are well grounded in the cabala. The Camp of IS-RA-EL developes the calendar and when it is correctly NUMBERED constitutes the KABBALLAH. The following citations are commended to the reader's attention: 1st. Cor., 3c. 18 v.; 6 c. 5 v.; 8 c. 2 v.; Galatians, 2 c. 2 v.; 4 c. 10-24-25 vs.; 6 c. 2-3-4th verses.

## CHAPTER XXIII.

## THE ORIGIN OF THE ZODIAC; ITS PURPOSE AND SIGNIFICANCE.

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The zodiac was designed for a purpose: to "mark the seasons, the months, the days and the years." It, and its system (the Great Pyramid) is perfect. To use the zodiac, or attempt to use it, in, or as a part of a system of astronomy, and yet, not use THE TRUE SYSTEM OF NUMBERS, is an anomaly; more than that, an absurdity. As an example, we quote the following: "Thus the zodiac was divided into 12 equal portions, corresponding to the 12 months of the year, commencing at the vernal equinox. Each of these portions served as the visible representative or Sign of the month it appeared in.-Burritt's Astronomy, p. 29, q. v. The language is unequivocal and means just what it states, i. e., that the province of the constellations was to represent the month which they appeared in as "the visible representative or Sign of the month." The Signs had no other province, nor have they now except to remain FIXED, and thereby establish a base to record the precession of the constellations. Instance: Sec. 17. Pisces.-"Immediately south of Andromeda lies Pisces, the first of the zodiacal constellations, though now occupying (in consequence of precession) the sign of Aries."-Elements of Astronomy, by Charles A. Young, Ph.D., LL.D.; Uranography, p. 16, q. v. NOTE: The U. S. Naval Observatory's Staff Officers, however, hold that "the signs move with the solstices and equinoxes, and that the constellations
are fixed"* (as per their letter dated March 7th, 1914, paragraph 5.

Now, it is self-evident that a year of 13 months of 28 days each (equals 364 days, plus the SOLSTICE or Christmas day, equals 365 days) equals 364 days, with an intercalary of one day at the end of the year equals 365 days, is absolutely correct, as is evidenced by the following: "I grant that a year beginning at the winter solstice and consisting of 13 months of 28 days each would have some advantages over the present style."Excerpt of letter from U. S. Naval Observatory, dated March 7th, 1914, paragraph 9. There are many other rational reasons why "a year beginning at the winter solstice and consisting of 13 months of 28 days each would have some advantages over the present style," towit:

1st. The week days of each month fall upon the same days of the month for eternity, and thereby prevents confusion.

2d. The earth completes its orbit around the sun at the end of the 365th day (plus 5 hours, 48 minutes, 48 seconds-some authorities state 46 seconds), and at this point, on the hour and minute of mid-night, the SOLSTICE occurs, and the proper place to begin the year is when the earth has completed its orbit around the sun (and not 10 days afterwards, as we do under the so-called Gregorian system). 3d. What were the stars made for? "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."

Now, the great minds which perfected the GREAT PYRAMID CALENDAR SYSTEM, wrought according to their purpose. They could have had 14 or 28 SIGNS just as well as 12, or

[^1]
any other number for that matter, but it would not have answered their purpose, namely: a system of astronomical science, whereby "everything in the universe is number"; or "the whole heaven to be an harmony and number"; or" "the entire heaven is composed of mumbers," as was taught Pythagoras by Oenuphis, "a priest of On, in Egrpt" (pyramid priest), from whom "Pythagoras received the TRUE SYSTEM" (of the universe). --Vide, Burvitt's Astronomy p. 86.
th. Now, let us consider what the 12 SIGNS stood for: The Grat Pyramid and the mathematical evidence it records regarding "the your at 1 ? months of 28 days cach" (and for this purpose as well as a "WITNESS" of many other great truths, the (freat phramid- TEEZEH-wns builo): The following exam-
ples are offered as only a few of the mathematical and arithmetical ratios of the great pyramid calendar system-a solar "year" of 13 months of 28 days each, plus an intercalary day."

The moon moves through 13 Signs (constellations) nearly, that is, makes its transit, each month (synodic), and its daily motion eastward is 13 degrees, plus ( $10^{\prime}$ and $35^{\prime \prime}$ ), and there are 13 months. Therefore, the square of 13 months ( $13 \times 13$ ) equals 169, or the number of constellations which the moon moves through, approximately, during the 13 months year. The summer solstice occurs on July 13th (this is significant, inasmuch as the ancient Egyptian year began on July 13th), and at 12 o'clock (civil time) mid-night the day of the winter solstice, and on the last day of the year and the last day of the 13th month, the earth completes its orbit around the sun. Thus, it seems, the sun, moon and earth have to do with the number 13, and still further evidence is offered that "everything in the universe is number."

5 th. The sum of the numbers contained within the 28 -day month equals 406 , which number, minus the number of the days of the month-28-and the number of the months of the year13 -added, totals 41 , which number subtracted from 406 leaves a remainder of 365 , or the number of days contained in the 13 months year (including the intercalary day), as well as the number of days in the Lunar calendar year- 365 days of the 25 year Lunar Cycle which has to do with eclipses as recorded by the "grand period," said to have been discovered by the Chaldeans, called Saros. The great pyramid calendar system includes a dual calendar, that is, a Solar and a Lunar calendar combined, co-ordinating solar and lunar TIME, which our modern scholars have held to be incommensurable, but, there is a great deal relative to astronomical science that our "modern scholars" do not know, nor do they know that they do not know. The best teacher, by which they may unlearn some of their vagaries, is the great pyramid and its marvelous astronomical system, geometry, etc.

6th. The pyramid numbers are 4 and 25 and are found occupying the significant positions, the apex and the centre of the base of the 28 day month diagram, q. v. ( 13 months of 28 days each, plus an intercalary day-SOLSTICE, or Christmas, as one may prefer). The Great Sothic Cycle of the ancient Egyptians was 1461 Lunar years as compared to 1460 Solar years. The lunar years consisting of 365 days and the solar years consisting of $3651 / 4$ ( 365.25 ) ; example: 365.25 divided by 25 equals 1461 (years). The number 25 being one of the pyramid numbers for the reason that the great pyramid was built upon a scale of a 25-inch cubit. (According to some authorities.) Again: 365.25x4 (the other pyramid number, and the apex number of the 28 -day month diagram) equals 1461 , or the number of Lunar years contained in the Sothic Cycle. The 365 days of the lunar year x 4 equals 1460 , or the number of years contained in the Sothic Cycle as reckoned by the TRUE SOLAR YEAR : 365.25 days, etc. (As computed, with intercalaries, etc., by the ancient Egyptians. See article on calendar, as quoted from Professor P. Montet, Egyptologist of the Faculty of the University of Strasbourg: "L'Illustration.")

## THE GREAT PYRAMID CALENDAR SYSTEM; THE SOLAR YEAR.

The day upon which the Vernal Equinox occurs is April 5th, which added to Summer Solstice, July 13th, and the day of the Autumnal Equinox, October 23d, equals 41. This number added to the 365 -days of the year-equals 406 which is the sum of the numbers on the diagram of the 28 -day month, that is, the numbers of 1 to 28 added together, equals 406).

The vernal equinox occurs on April 5th; summer solstice on July 13th, and autumnal equinox on October 23d, and by placing a right-angled triangle on the diagram of the 28-day month with the apex pointing to number 5 (Vernal Equinox), the 45
degree angles of the triangle intersect the numbers 23 and 13, the lines of the angles thus forming a true pyramid, and the number 5-vernal equinox-is indicated by the 90 degrees angle, which is the declination of the sun at vernal equinox.

Again: The vernal equinox being indicated by 90 degrees declination, and it being just 90 degrees or three months to Summer Solstice (daily movement of the earth approx. $1^{\circ}$ daily). the same is indicated by the angles of 45 degrees each formed by the numbers 13 and 23-the angles of the triangle intersecting these two numbers-which two numbers stand for Summer Solstice and Autumnal Equinox; from vernal equinox to autumnal equinox the sun describes 180 degrees ( 184 days to be exact), approximately, which is indicated thus: Vernal equinox as 90 degrees, plus 45 degrees of angle number 13 , and 45 degrees of angle number 23 , which three numbers added, to wit: 90 plus 45 , plus 45 , equals 180 degrees, the distance described by the sun from vernal to autumnal equinox, approximately, or one-half of the ecliptic.

The three numbers of the constellations in which the vernal equinox, summer solstice and autumnal equinox occurs, gives the following examples: Libra, number 4 (vernal equinox), Capricornus, 7 (summer solstice) and Aries, 10 (autumnal equinox), thus, $4 x 7$ equals 28 , to which number the first number of the month being affixed (Cancer), i. e., 1, would read 128. The calendar is ahead after 128 years $1433^{\mathrm{mI}}$ and 36 seconds, hence, minus one day after 128 years, and after omitting one day, is behind $6^{\mathrm{m}}, 24^{\mathrm{s}}$; and after 28800 years calendar is behind $1440^{\mathrm{m}}, 0^{\mathrm{s}}$, and after adding one day, correct (the United States Naval Observatory states "absolutely correct"). The number $10 \times 10$ equals $100 ; 4 \times 7 \times 10$ equals $280 \times 100$, equals 28,000 , or the number of years, plus 800 , which amounts to $1440^{\mathrm{m}}, 0^{3}$. The analogies and ratios are endless, it seems, "everything in the universe is number."

7th. The sum of the numbers of the first (top) column of
the diagram of the 28 day month equals 28 , the number of days contained in the month of 28 days. The sum of the numbers of the second or succeeding column (from the top column), 8 to 14, equals, 77 , the number of the series of eclipses approximately. Example: 18 years, 11 days, 7 hours, plus (the Chaldean Cycle termed Saros), x 77 equals 1388 years, a cycle of eclipses. The great cycle of eclipses is $1388 \times 9$ equals 12,492 years, after which period the series of eclipses begin over again and are repeated.

8th. The days of the synodic month (29.530588) may be counted as follows: 28 plus the opposite corner number, 1, equals 29; 22 plus the opposite corner number, 7 , equals 29. Continuing and alternating, 15 and 14 equals $29 ; 23$ and 6 equals 29; 27 and 2 equals $29 ; 24$ and 5 equals $29 ; 26$ and 3 equals 29 ; 25 and 4 equals $29 ; 18$ and 11 equals $29 ; 16$ and 13 equals 29 ; 20 and 9 equals $29 ; 17$ and 12 equals 29 and 19 and 10 equals 29 . This gives just 13 combinations of numbers.

9th. Referring again to the zodiac, we quote: "Each of these portions served as the visible representative or SIGN of the month it appeared in." More than that, the 12 Signs- 12 great constellations, the chief constellations that are contained within the 12 Signs-as is shown by the succeeding table, contains the exact number of stars that there are days in the 13 months of 28 days, towit: 364 :

| Virgo | 39 | Pisces | 18 |
| :--- | :--- | :--- | :--- |
| Libra | 23 | Aries | 17 |
| Scorpio | 34 | Taurus | 58 |
| Sagittarius | 38 | Gemini | 28 |
| Capricorn | 22 | Cancer | 15 |
| Aquarius | 25 | Leo | 47 |
|  |  |  |  |

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This example shows for the first time within the recorded history of the world this significance and use of the zodiac and the purpose its inventors intended it to serve. It also indicates the "hidden meaning" of Genesis, 1st c. 14th verse.

## THE DISTANCE TO THE SUN NOT KNOWN.

Our modern scholars admit that they do not know the true distance to the sun, instance: "The problem of the determination of the distance of the sun is, in some respects at least, the most fundamental in the whole range of astronomy, for the number which represents it is involved in almost any calculation of distances and masses, of sizes and densities, either of planets or their satellites or of the stars. The distance of the sun bears somewhat the same relation to other problems of celestial surveying as the size and shape of the earth bears to terrestrial. It may not always appear on the surface, but it is generally concealed somewhere in the depths of the calculations. And I am compelled to confess that in one respect the earth measures have the advantages over astronomers. The utmost that the astronomer can do is to show that the distance of the sun is so many times the radius of the earth. But ask him to put it into miles and he is powerless to do so until the geodesists have told him how large the earth is; and it is there that, in the very nature of the case, we are compelled to depend in the end upon the scientific labors of your corps."-Lecture delivered at the Royal Engineers' Institute on February 9, 1905, by A. R. Hinks, M. A. (Annual Rpt., Smithsonian Inst., 1905 q. v.).
The astronomers not knowing the origin of the zodiac or the purpose for which its "inventors" intended that it should be used, may find in it-the zodiac-a solution of the problem that confronts them in regard to "the distance to the sun," instance:

The SQUARE AND NUMBERED ZODIAC gives the following example, which demonstrates "the distance to the sun," approximately, and until these figures are disproven they will have to stand, for the reason that the zodiac was made for a purpose by its "inventors," and "everything in the universe is number," as Oenuphis told his student, Pythagoras. By counting the numbers of the "BEASTS" (Greek, zoar=beast; zodiac, a circle of beasts or "Living Creatures") towit: $1 \times 2$ equals $2 \times 3$
equals $6 \times 4$ equals $24 \times 5$ equals $120 \times 6$ equals 720. Beginning at the opposite corner (the point of winter solstice at that time, 2450 B. C. E.) and continuing: $7 \times 8$ equals $56 \times 9$ equals 504 $\times 10$ equals $5040 \times 11$ equals $55440 \times 12$ equals 665280 , plus the 720 equals 666000 . This number multiplied by the square of the 12 SIGNS equals $95,904,000$ (e. g.: $12 \times 12$ equals 144 , x 666,000 equals $95,904,000$ ), the approximate distance to the sun, and probably more correct than any other figure, for in those days the people were wise and understood astronomy. The origin of the zodiac has been an impenetrable problem and has puzzled mankind for centuries upon centuries. From archaic times have descended to us many contradictory accounts. That a sane solution is now offered, and further proven by mathematics, will no doubt interest all intelligent people, instance:
"Some of the most learned antiquarians of Europe have searched every page of heathen mythology, and ransacked all the legends of poetry and fable for the purpose of rescuing this subject from that impermeable mist which rests upon it, and they have only been able to assure us, in general terms, that they are Chaldean or Egyptian hieroglyphics, intended to perpetuate, by means of an imperishable record, the memory of the times in which their inventors lived, their religion and manners, their achievements in the arts, and whatever in their history was most worthy of being commemorated. There was, at least, a moral grandeur in this idea; for an event thus registered, a custom thus canonized, or thus enrolled among the stars, must needs survive all other traditions of men, and stand forth in perpetual characters to the end of time. They ascend to times of which no other record exists; and are destined to remain when all others shall be lost. Fragments of history, curious dates and documents relating to chronology, geography and languages, are here preserved in imperishable characters."-Burritt's Astronomy, p. 144-145-147, q. v.

As the subject has been a much mooted one, and it seems that
each faction or school has been cocksure that their particular theories were absolutely correct, the author has quoted at length in order to show how little one knows when one thinks one knows, and in order to cite creditable and accepted authorities. The author indulges in the hope that the discovery will aid honest investigations and that it will shed light upon obscure chapters of the world's history. Someone once said "there is nothing new under the sun," and it seems that the GREAT PYRAMID and its system of astronomical science will bring back into use many golden truths and much knowledge that was lost; knowledge that is of inestimable value. That the world will profit by it is his earnest wish.

The diagram of the 28 day month is peculiarly adapted toward an endless combination of numbers. This, in itself, would not be significant, but when it is considered what these combinations of numbers set forth in respect to giving exact units that coincide with the Great Sothic cycle of the ancient Egyptian calendar, then their meaning conveys conclusive evidence that the "Great Pyramid calendar" which the author presents is none other than the ancient Egyptian calendar. There are too many earmarks existing in the Great Pyramid calendar that indicate its correlation with the ancient Egyptian calendar for it to be said that "it just happened so." The author's research and mathematical deductions were born primarily from his studies of the Holy Writ. This calendar is recorded with absolute accuracy in the Holy Writ, but not so one may see it without the key. The Bible is a cryptological work, consisting of morals and dogma, a spiritual theme or dissertation upon metaphysics as well as metaphors, Messianic and Solar allegories, but its chief burden is mathematics and astronomy. It records, cryptologically, the "Great System of Astronomical Science," which is said to be LOST (buried deep in the debris of ages, but buried by design; that is to say-plainly, buried with countless other things that contribute toward human progress, materially and
otherwise, buried by the priestcraft for the same reason that the fictitious and fraudulent chronology was foisted upon a credulous world or would it be apropos to say, a fatuous world!). The Messianic allegory as recounted in the Bible is identical with the allegories, recounting similar myths, of all the ancient nations of which there is any record. The "Preserver" or "Saviour" allegories were included in the religious system throughout the ancient world, including North and South America. Its identity is indicated as follows: "When the equinoctial sun in Aries (Agnus Deus, that is, "Lamb of God") opened the year, it was denominated the Preserver or Saviour (Deliverer) by the idolaters of the East. On this account, according to Pausanius, the sun was worshipped at Eleusis, under the name of the Preserver or Saviour." Vide, Burritt's Astronomy, p. 34.

This modern calendar, that is, produced in the present time, is the counterpart of the ancient, sacred Israelite Calendar, as well as the ancient "Hebrew Zodiac", so-called (but miscalled, inasmuch as the Jews obtained the knowledge, if they ever possessed it, from the ancient Egyptians, which goes to show that certain parts of the Holy Writ are purely Egyptian). The "Hebrew Zodiac" was not Hebrew any more than it was Irish, yet a great deal of emphasis is given by many writers to this delusion. The SQUARE ZODIAC or "Camp of the twelve tribes of Is-Ra-El," as set forth in the Book of NUMBERS (inasmuch as it treats of numbers, the name is apropos, indeed!) 2 d and 10th chapters, simply coordinates the 12 Signs (as well as the 12 constellations, which precede, therefore "precession of the constellations") with the personifications thereof, the 12 Tribes of Is-Ra-El. There is not anything strange about identifying the 12 tribes of Is-Ra-El with the 12 Signs or constellations. Evidently the 12 Signs and constellations existed first. All that is necessary for one to get a viewpoint that is clear and conclusive is to READ THE HOLY WRIT, its language is unequivocal.

The physico-theology of the Bible is so apparent that it becomes point-blank. Attention is directed to the following enlightening passages: Genesis, 1st c. 14th to 19th verses, inclusive; 49th chapter (in which Jacob compares or likens his sons to the 12 constellations) ; 37th chapter (in which Joseph "dreamed a dream," that "the sun and the moon and the eleven stars (Joseph himself personifying one of the stars-constellations or groups of stars) made obeisance to me." Why did Joseph speak of just "ELEVEN" other stars? The answer is, because he had in mind the 12 constellations! Job also contributes his knowledge of astronomy in very beautiful language, instance: Job, 38 c. 31-32-33 verses. The book of Psalms is resplendent in astronomical lore, and taken in connection with the other chapters and passages, as designated, the following verses of the Psalms offer concise testimony that the Bible records numerous sun myths, solar allegories, and the sciences of astronomy and geometry: Psalms, 19 c. 1st to 6th verse, inclusive; $76 \mathrm{c} .1-2$ and 6 th verses (this specifically refers to the sun chariot of Apollo, his "annual race," etc.) ; 74 c. $4-9$ vs.; 78 c. 12-43-67-68 and 69th vs.; 80 c. 3 v.; 81 c. 3 v.; 84 c. 8-9-10-11 vs.; 104 c .19 verse; 147 c .4 th verse. Also, in conclusion, James, 1st c. 17th verse, offers a benediction that is pregnant with meaning. So, before taking issue or offering any criticism of this work, "get understanding", that is to say, become wellgrounded in the principles that it treats of and defines, amplifies and exemplifies-then, anathemas and animadversion!

The "Great Pyramid calendar," the name given by the author to the calendar which he has contrived, consists of 13 months of 28 days each (with intercalaries, etc.). This calendar coincides with the year period of the ancient Hebrews, whose calendar consisted of a year period divided into 13 months (it naturally follows that the months were " 28 " day months, inasmuch as such a division of a year period into 13 months would have been the only rational method to use in devising any such calendar).

The "Theban" year period of the ancient Egyptians consisted of a year of 365 days, plus or minus intercalary, as the occasion required.

The Hebrew calendar was based upon the following scheme: The names of the months of the Jewish calendar were as follows (their year beginning at the vernal equinox) :

Ancient Jewish Calendar.

1. Abib or Nisan ("Nisan," the name of a Chaldean month).
2. Ivar or Zif.
3. Sivan.
4. Tammuz. ("Behold, there sat women weeping for Tammuz," the Greek Adonis. The women were looking toward the NORTH. Summer solstice occurs June 21st, and the sun is crucified upon the astronomical cross). Ezekiel, 8 c. 14 verse.
5. Ab.
6. Elul.
7. Tisri (also called Etha-nim).
8. Bul.
9. Chisleu (name of Chaldean month).
10. Tebeth. (Gemini, the visible 10. December 12th representative or Sign of the month; winter solstice).
11. Shebat (Cancer, the visible repre- 11. January 1st sentative, etc.)
12. Adar. (Leo, the visible repre- 12. February 2d sentative, etc.)
13. Ve-Adar (Intercalary or 13th 13. SOLSTICE month).
The 12 constellations ("the visible representatives or Signs of the month, which each of the constellations appeared in") of the zodiac each indicate one of the months of the year as reckoned in the Great Pyramid calendar; the 12 constellations, the 12 tribes of Is-Ra-El and the 12 months of the year were agglutinative; that is, the recondite significance was, they stood for one and the same thing (anciently). The twelve tribes were
said to be "lost," meaning that the calendar and the "Great System of astronomical science" were LOST-buried by design to prevent the symbolic religious significance from ever being uncovered and understood. However, the TRUTH still lives and will never become extinct; it is unextinguishable.

The adoration of the Deity was practiced by all of the ancient nations; the forms and ceremonies varied, but the underlying thought was the same. The worship was the expression of deep reverence under different forms, that is, either by gesture, action, signs, voice, dress, accompanied by visible symbols of one or more of the exact mathematical formulations, geometrical formulations or NUMERAL COMBINATIONS, pertaining to the system or known method of measuring the works of the Deity. A conclusion of Sir William Drummond, in Edipus Judicus, seemingly favors this view, namely: "The priests of Egypt and of Chaldea," he says, "had made a progress in the science of astronomy which will be found more astonishing the more it is examined. Their cycles were calculated with extraordinary precision and their knowledge of the most important parts of astronomy must appear evident to all who candidly consider the question. But the people appear to have been purposely left in gross ignorance on this subject. Their vague and their rural years were neither of them correct."
"The festivals were fixed according to calendars made for the people, and the religious institutions were only calculated to confirm the errors of the ignorant. The truths of science were the arcana of the priests" (because they were the sources of religious cultus). Thus ritualism was an intelligible rite, one to understand in all of its parts and ramifications; one in which there was no possible deception as to the use of a symbol, to those who could read the symbol" (correctly, not theoretically). The symbol merely put forth the underlying thought just as our modern conception of religion causes us to utilize the shekina,
the crucifix, the virgin Mary, representations of angels (Rev. 2 c. 2 -8th verses; 11 c. 8 v.) ; the angelus and Mona Lisa.

The Great Pyramid calendar shows summer solstice occurring (summer begins ) July 13th, which date falls on Friday. This probably indicates the superstition, anciently handed down, about "Friday, the thirteenth" being an unlucky day as well as an unlucky number, which, to the meticulous was all sufficient to cause "goose-flesh" and a creepy sensation along their spinal columns. This "doctrine" broadcasted among the ignorant precluded any possibility of why "Friday, the 13th," was thought to be a day of bad omen. In the year of 13 months of 28 days each, as reckoned by the Great Pyramid Calendar, Friday will always fall on the 13th day of the month. This particular point is noteworthy inasmuch as the ancient Egyptian year cycle was so constituted that their year began on the thirteenth day of July (that is, as that day is reckoned by our present modern calendar). It is therefore self-evident that the Great Pyramid calendar coincides with the ancient Egyptian. Confirmation of this specific fact is not wanting, if any confirmation were required. The author quotes Professor P. Montet, Egyptologist of the faculty of the University of Strasbourg, in a current number of L'lllustration, as follows: "Astronomy is a valuable ally of the historian. The Egyptian year counted 365 days. In principle it began on July 13, when the waters of the Nile spread over the valley, and when Sirius, after having been invisible for a long time, appeared in the east in the morning sky. But the year was too short, and four years after the standardization of the calendar the New Year's Day fell on the day before the appearance of Sirius, and eight years later two days before. The count went on gaining. A time came when the season which was called the Time of the Inundation coincided with the lowest water. After 1,461 vague years the calendar became normal again for a space of four years. We know that in the year 140 after Christ, the feast of the rising of the star, Sirius, fell upon
the same day as the first of the year. The same coincidence occurred in 1320,2780 and 4240 B. C. Each time that a text indicates a date in this vague year of the feast of Sirius it is possible to determine the date within four years by reference to the above dates." This elucidating information helps to determine whether the Great Pyramid calendar, as it is reckoned, is correlated with the ancient Egyptian calendar, as set forth in the foregoing. The periods 1461 years and 1460 years constituted the "Sothic cycle" of the ancient Egyptians and an explanation covering the matter is given in this chapter (the "Sothic cycle" was a solar-lunar cycle, one year period being 1460 years and the other year period being 1461. Example: A year of 365 days x 4 equals 1460 and a year period reckoned as 365.25 days x 4 equals 1461 days, etc.).

Where did the Hebrews get their idea of their myth of the twelve tribes? Inasmuch as history and traditional lore shows in most instances that the Hebrews acquired their knowledge from other nations by adopting the ideas that were best adapted to their purpose or needs, we must therefore look further for the probable origin of the "twelve tribe" myth. The ancient Cushites (Arabians) were, it seems, first in the field with a "twelve tribe" allegory, which, inasmuch as they had made great progress in the science of astronomy was APPLIED TO THE TWELVE SIGNS OR CONSTELLATIONS, months of the year, etc. The Hebrew version was of a much later period. The ancient Cushites (Arabians) were far advanced in the sciences of mathematics and astronomy, probably, as the evidence indicates, 500,000 years before there were any Hebrew shepherds. Is it not apparent that the Hebrew adaptation of "twelve tribes" had its origin in ancient Arabia? The author quotes "PreHistoric Nations, by John D. Baldwin, A. M., as follows: "According to Arabian tradition, the old race, or the Cushites, consisted originally of twelve tribes, with the following designations: Ad, Thamoud, Tasm, Djadis, Amlik, Oumayim, Abil,

Djourhoum, Wabar, Jasm, Antem, and Hashen. Some writers mention only nine ancient tribes of pure, unmixed Arabians; others mention more than twelve." Where did the Hebrews (Israelites) obtain their myth?

## CHAPTER XXIV.

Read: Psalms, 19 c. 1 st to 6 th verses; Rev., 12 c. 1 st to 4 th verse; Amos, 5 c. 8 th v.; Psalms, 83 c. 18 v.; 84 c. 8-9-10-11 vs.

The following article was quoted from my work-Solomon's Temple Discovered, by permission, by John G. Keplinger in an article by him, entitled "THE SIGNIFICANCE OF THE GEOMETRICAL EARTHWORKS OF THE MOUND BUILDERS." The New Age Magazine, December, 1922. Vol. XXX, No. 12.
"Another possible explanation is taken from the writings of Henry Lee Stoddard who states that "about 2450 years B. C. when the sign Taurus, at the vernal equinox, passed out and Aries opened the vernal equinox, another division of the zodiac occurred-to wit: Each of the 12 signs were divided into three parts of ten degrees each, designated decans, among which the seven planets were apportioned. The domicile of the Sun was in Leo, and the domicile of the Moon was in Cancer, each of the other planets was possessed of two signs; Mercury possessed Gemini and Virgo; Venus, Taurus and Libra; Mars, Aries and Scorpio; Jupiter, Pisces and Sagittarius, and Saturn, Aquarius and Capricornus. Each planet had an equal number of decans except the first, Mars, who opened and closed the series of planets, repeated five times, and therefore had one more decan than the others. The subdivision of the zodiac was not perfected until after Aries became the sign at the vernal equinox, and as Aries passed out and Pisces opened the vernal equinox in the year 1850, this subdivision of the Zodiac occurred between the years 300 B. C. and 2450 B. C. As the domicile or Mars was in Aries-the beginning-he therefore opens the series of decans and closes it; the planets following each jther in succes-
sion, FIVE times in the order following, Mars, Sun, Venus, Mercury, Moon, Saturn, Jupiter, and Mars again."

According to Squier there were six or seven hollow squares in Ohio as shown in Fig. 4. These measured 1,080 feet on each side. The significance of these squares escaped all but Mr. Henry Lee Stoddard of Little Rock, Arkansas, who shows beyond all doubt that these squares were the perfect unit of mensuration


Fig. 4.
laid down by that Master Builder and Architect, the Sun. Mr. Stoddard's paper on "The Problems Respecting Angles, Areas, Linear and Square Measure, Angular Measure and Diurnal Time Demonstrated" is so wonderful that we will quote it in its entirety.

The 54 degree angle times 60 minutes times 60 seconds equals 194400 divided by 4 equals 48600 , divided by 100 equals 486 , which is the vertical height of the Great Pyramid- 486 plus feet (plus .26 feet, which plus is probably an error due to the method employed in measuring its height, that is with instrumentsnot mathematically). The vertical height of the Great Pyramid used as a radius, describes a circumference of equal perimeter
to the 4 side base lines of the square, 763.67 plus feet. In the building of the Great Pyramid the radius which would give a circumference of equal perimeter to side-base lines of the square to be constructed, was the first and most important factor to be determined; the engineers had to know this radius in order to determine the vertical height of the pyramid to be built. This they determined, by one method, by taking 45 per cent of the unit 1080 ( 45 being characteristic of "the path of the sun" during its annual course) which equals 486 feet; the rise of angle which the Great Pyramid had to give was determined first by plane geometry, that is, the "Problems of Intersecting Circles" as well as by the lines projected to "the eight stations," within the 1080 foot embankment square, as indicated in Figure 5. The architects of the Great Pyramid possessed a superior knowledge of astronomy and mathematics and it was patent to them that the rise-of-angle of the Great Pyramid had to be 51 degrees 51 minutes 14.3 seconds in order to produce a perfect pi pyramid


Fig. 5.
in the N. Latitude and East Longitude where the Great Pyramid is built, which location and rise-of-angle made it fit the solar
system, as a huge shadowgraph and astronomical observatory, in like manner as the 1080 foot embankment square of North America had to be constructed in the exact north latitude where it was located at the time of its construction. As previously stated, the 54 degree angle formed on the 1080 foot embankment square, taken collectively with the unit 1080, constituted the elemental factors of the marvelous astronomical and mathematical system which the ancient people of the North American continent perfected to a degree and upon a plane which was transcendental, and of such magnitude that is beyond our power of conception; their system, as perfected, was so far superior to our haphazard, cumbersome methods of the present day (largely theoretical, except the fragments handed down and incorporated in our so-called system of mathematics and astronomy) that a comparison would be odious.

The 54 degree angle, as previously indicated, gives the vertical height of the Great Pyramid. By laying out a diagonal line 1080 feet in length, and taking 45 per cent of 1080 for the vertical height, then bisecting the diagonal line, the two first and most important initial steps towards the construction of the Great Pyramid were achieved. Relative to the 1080 foot square, 27 and 54 degree angles, and areas of 6.66 plus, 13.33 plus and 26.6 b plus acres, the measure, 1 link ( 7.92 inches), the measure, 1 mile ( 5280 feet), angular measure and diurnal time and their proportion to one another; the following examples give an exposition of their ancient origin and use.

Considering the 1080 foot square embankment, we find that the rising sun at the summer solstice projects and describes lines upon the square which form an angle of 54 degrees. (See Figure 6.) The 1080 foot embankment square divided into two parallelograms by an equatorial line east and west, shows the angle to be 27 degrees on each parallelogram so formed. The angle of 54 degrees times 4 (minutes of diurnal time), thus converting angular measure into diurnal time, equals 216 (minutes)
times 60 (seconds) equals 12960 seconds, corresponding exactly with the number of inches contained in 1080 feet, to wit: 1080 feet times 12 (inches) equals 12960 inches; thus it is patent that the 54 degree angle converted into diurnal time (day and night time) contains the exact number of seconds that there are inches in 1080 feet, that is, one side of the 1080 foot embankment

square. The unit 12960 is characteristic of the number (seconds of angular measure) contained in 360 degrees. For instance: 360 (degrees) times 60 minutes equals 21600 minutes times 60 seconds equals 1296000 seconds (a complete circle-orbit of the
earth, etc.) ; therefore 12960 equals $1 / 100$ of 1296000. Again, 27 degrees (one-half of the 54 degree angle) times 60 minutes equals 1620 minutes times 60 seconds equals 97200 seconds; 1296000 seconds divided by 97200 seconds equals 13.33 plus, which is characteristic of the area described by the 54 degree angle on the 1080 foot square.

Again 54 degrees times 60 minutes times 60 seconds equals 194400 seconds; $1,296,000$ seconds divided by 194400 equals 6.66 plus, which is characteristic of the area of the two triangles formed by the 27 degree angle in each parallelogram of the 1080 foot square. It is therefore evident that the unit of 1080 feet formed into a square, the angles described by the sun thereon, the area contained in the triangles formed on the square and the two parallelograms, angular measure, linear measure, diurnal time, are convertible one into the other in no other latitude except the one in which the 1080 foot embankment square is located and UPON NO OTHER SIZE SQUARE does this amazing harmony of the solar system coordinated with measure and TIME exist, that is, proportionate and convertible one into the other.

Furthermore, the 54 degree angle gives the length of the day in that exact north latitude (in which the square is located) at summer and winter solstice. (See Figure 6.) For instance: 54 degrees times 4 minutes equals 216 minutes or 3 hours and 36 minutes, plus 12 hours-the length of the day at the equatorequals 15 hours and 36 minutes, which is the length of the day at summer solstice in that exact north latitude; the length of the day at winter solstice is determined in like manner by the 216 minutes of the 54 degree angle, that is, 12 hour day at the equator minus 3 hours and 36 minutes equals a day of 8 hours and 24 minutes.

Inches and feet being convertible into angular measure, diurnal time, etc., it therefore follows that other linear measures are also convertible into angular measure, diurnal time, etc., as
an instance: 1 mile equals 5280 feet times 12 inches equals 63360 inches. Divide this by 7.92 ( 1 link) equals 8000 . Example: $7.92: 63360:: 162: 1,296,000$ ( 162 seconds equals 2.7 minutes angular measure, equals $1 / 600$ th part of 27 degrees or $1 / 1200$ th part of the 54 degree angle formed upon the 1080 foot embankment square, bears the same proportion to 360 degrees ( $1,296,000$ seconds) as 7.92 inches ( 1 link) $1 / 100$ part of a chain, equals 66 feet or 4 rods, etc.), does to 63360 inches which equals 5280 feet, equals 1 mile.

These ratios and proportions are not obtainable by any other size angle or square except the 54 degree angle and the 1080 foot square. That this harmonious relationship existed between angular measure, linear measure, diurnal time, area and angles (which themselves are characteristic of the areas described, diurnal time, linear measure, equal in inches to the number of seconds contained in the number of the degrees of the angle, minutes and seconds of angular measure, corresponding to the angle described etc.), is, so far as recorded history indicates, a new mathematical function; yet its origin is so remote, considering the ages that have swept away the high civilization contemporaneous with the system of mathematics which they applied in the construction of the 1080 foot square in North America, and the Great Pyramid of Egypt, as to appall the mind that attempts to visualize the ancient people who rose to so high a plane of science-mathematical, astronomical and engineering.

Verily, "the ruins of a great system of astronomical science."
This chapter is reproduced from the author's work entitled "SOLOMON'S TEMPLE DISCOVERED." The facts set forth indicate, incidentally, that the age of man extends to pre-Biblical times in America.

## CHAPTER XXV.

## MAN'S HISTORY UPON THE AMERICAN CONTINENT.

The footprints of time leave traces of many vexing problems and one often wonders what secret lies hidden beneath some of the mile stones that, fallen into decay, yet point the way to the dawn of human endeavor and early civilizations. When we begin a scientific investigation of man's place in the universe, the cradle of humanity, and the achievement, step by step, of our present cultus status by a process of analysis and reason; when we attempt to connect the broken chain of evidence we may learn much from the marvels wrought by the ancient people of North America, called, for want of a better name, the Mound Builders; and things not conceived of in the present era are brought to our attention-things that warrant our careful consideration.

In this day of wonders of mechanical and inventive genius, engineering and hydrographic science, we are inclined to discredit any claim set forth which proposes a greater era than the present. In fact, such a claim would probably be received with ridicule and skepticism. With all our skill and knowledge, made possible by mathematics and astronomy and the mental progress these sciences have wrought, we have not conceived the astounding limitations of ancient American mathematicians and engineers who constructed marvels that are unsurpassed in any age of the world. From these ancient ruins, the outlines of which are extant and the surveys of which are of official record, we may learn the true source or origin of our unit of measure, the so-called "British inch" (and foot). Fur-
ther, that the people who constructed these ancient ruins possessed the knowledge of the unit of measure now in common use, to measure angular distance, "R-57.3 ft. equals $1^{\prime}$ of arc." 2d. How angles may determine the North latitude and the length of the day of that latitude (determined by a ray of light projected by the rising sun). 3d. How to convert square measure or area into angular measure, linear measure and diurnal time. 4th. How we may convert area into radius, diameter and circumference, by an entirely new method, without using Pi. 5th. How we may convert the degrees of arc into diurnal time, hours, minutes and seconds, thence into a proportion of the area of an inscribed square (showing a relationship between diurnal time and area). 6th. How we may construct a square and circle, in conjunction, of a dimension that, by their area, angles and orientation, taken separately and collectively accords with the phenomena of the solar system, that is, indicates mathematical characteristics of solar phenomena. These things when demonstrated seem to open an entire new field of applied mathematics and constitute self-evident proof that the ancient American Mound Builders wrought physical works that illustrate a mathematical conception which entitles them to the homage and admiration of succeeding generations.

The history of ancient civilizations of India, Egypt, Babylon, Greece and Africa have shed a flood of light upon the dim and hoary past. Now comes recent archaeological discoveries in America which offer further enlightenment upon the vexed question-the cradle of humanity. Much time and money are being expended by the French at Delphi and Delos, the Americans at Argos, Corinth, Athens and Sardes and the Greeks at Epidaurus. Scientific expeditions are busily engaged in Central America and Mexico, while North America is passed by as not being worthwhile-America, the key note to the entire problem.

Recent discoveries in North America in respect to its ancient ruins offer evidence, by the exact science of mathematics, that the highest civilization yet indicated anywhere upon the face of the earth flourished in North America while Asia, India, Egypt and Babylon were in their infancy. While this may be considered preposterous by some students and scholars who have settled the matter of ancient American culture by dogmatically stating that the ancient Americans never progressed beyond the


Fig. 3.
Ancient embankment square and circle, near Circleville, Ohio.
status of rude and crude barbarism, such statements have not been borne out by even the color of scientific facts, but merely represent the theories of self-imposed authorities who prevent: further investigation by ridicule and by muzzling the press.

No one mentally well balanced will attempt to ridicule mathematical evidence. The unprejudiced mind will readily observe that the evidence set forth to substantiate these claims of ancient American civilization lacks not anything, but is replete in every detail. A new field of mathematical science and engineering is opened by the evidence disclosed and a broad scope of investigation is offered in the study of these ancient embankment squares and circles. We should not turn aside from the truth when it is presented and proven, but accept that which enlightens and works towards progress. The knowledge which these ancient ruins disclose will set us forward quite a pace. The mathematical formulas and engineering feats of the ancient American Mound Builders are marvels to which even the Cheops of Egypt may pay homage, yet, as will be shown, one and the same system of mathematics were used by these far separated peoples in the construction of their solar observatories, the square and circle of North America being the prototype of the Great Pyramid of Egypt. With the knowledge unfolded by the 1080 feet embankment square, in conjunction with the embankment circle, we probably have the means of determining, approximately, the time of the last cataclysm.

In the state of Ohio, near Circleville, there exists the outlines of a system of embankments representing squares and circles, octagons, ellipses, squares circumscribed by circles, half-circles within circles, and in the state of Wisconsin, a perfect pentagon, circumscribed by a circle. These earthworks, numbering several thousand, have had five official surveys, referring to which, we quote only one: "Lord Avebury also refers to five or six figures which were "exact" squares, each side of which measured 1080 feet-"a coincidence which," he says, "could not have been
accidental and which must possess some significance. The circles also, in spite of their great size, are so nearly round, that the American archaeologists consider themselves justified in concluding that the Mound Builders must have had some standard of measurement, and had some means of determining angles." Vol. 12, No. 1, p. 45, Journal of the Illinois State Historical Society, q. v. (See Figs. 1 and 2.)


Fig. 1.
The embankment square and circle, Circleville, Ohio, U. S. A.; the mathematical wonder, astronomical observatory and SUN TEMPLE of the ancient inhabitants of the American continent.

A fact which cannot be successfully denied and yet may meet with the skepticism of modern students and scholars, is, that this 1080 feet square of Circleville, Ohio, is seemingly, the prototype of the Great Pyramid of Egypt, inasmuch as it sets forth the same mathematical ratios, examples and astronomical units demonstrated by the Great Pyramid and by the same methodstheir dimensions being proportionate, instance: The diagonal-base-line of the Great Pyramid is exactly 1080 English feet,


Fig. 2.
Ancient embankment squares and circle, noar Marietta, Ohic
which is precisely the length of each side of the embankment square. It cannot be argued that this is a coincidence for the reason that there are too many mathematical ratios existing in their dimensions and measurements which are common to both. The Great Pyramid, according to its dimensions, which are of record, as any mathematical student will discern, will exactly inscribe diagonally within the 1080 feet square. The area of the Great Pyramid ( 13.33 plus acres) is exactly one-half of the area of the 1080 feet embankment square ( 26.66 plus acres). The mathematical harmony is perfectly carried out in every detail; the relationship of the Great Pyramid and the 1080 feet square is mathematically defined in a concrete form by a comparison of their dimensions, towit: The diagonal-base-line of the Great Pyramid gives a base-side-length of 763.67 feet, which is onehalf of the diagonal line of the 1080 feet square ( 1527.34 p)us feet) ; the two diagonal lines of the 1080 feet square (1527.34 plus feet $\times 2$, equals 3004.68 plus feet) equals the perimeter of
the Great Pyramid. The area of the Great Pyramid ( 13.33 plus acres) is one-half of the area of the 1080 feet square ( 26.66 plus acres). Lines projected from the N. E. corner and the S. E. corner of the 1080 feet square to intersect in the middle of the west side of the square form an angle of 54 degrees, approximately (it is clear to a mathematician that the angle would be a little less than 54 degrees, but 54 degrees is the practical angle for integral calculations). The area enclosed by the 54 degree angle on the square is exactly equal to the area of the Great Pyramid ( 13.33 plus acres). The line projected from the N. E. corner of the square to the middle of the west side was described by a ray of light from the rising sun on the day of the summer solstice, the same angle being projected from the S. E. corner of the square by the rising sun at winter solstice; each angle was respectively 27 degrees, approximately. In order for a ray of light from the rising sun to describe an angle of 27 degrees on the square, the square would have to be perfectly orientated. Further, the square would have to be located in the N. Lat., where the sun's rising point would be 27 degrees north of due east point for an observer. This would require the 1080 feet square to be located in N. Lat. $29^{\circ} 50^{\prime}$ plus, which is the same N. Lat., in which the Great Pyramid is located. Considering the perfect mathematical harmony existing between the Great Pyramid and the 1080 feet embankment square and the evident purpose for which they were built, we may say with impunity that the 1080 feet square was originally constructed in N. Lat., $29^{\circ} 50^{\prime}$ plus, for in no other N. Lat. would its perfect mathematical relationship with the Great Pyramid function in accordance with its angles and dimensions.

The vertical height of the Great. Pyramid, 486.2 (Prof. Smyth's computation) x Pi (Hindu Pi, 3.14136) equals 1527.329 feet, which equals the diagonal line of the 1080 feet square, 1527.34 plus; the vertical height of the Great Pyramid x Play-
fair's Pi (3.14159) equals 1527.441, the difference according to the two values of Pi being .112, that is, 1.35 inches.

It seems strange yet significant that the rising sun on the day of summer solstice and the day of winter solstice projects a ray of light which, if described upon a square, will form an angle (triangle) the lines of which enclose an area exactly equal to the area of the base of the Great Pyramid. These angles, considered separately, as rays of light from the rising sun, will determine the $N$. Lat. of that place and also give the length of the day at that place, which in this instance is the 1080 feet square upon the North American continent in N. Lat., $29^{\circ}$ plus. The triangle thus formed upon the 1080 feet embankment square has an arc of 54 degrees, the width of the angle on the EAST side of the square being 1080 feet, which x 12 inches equals 12,960 inches; the angle, 54 degrees, x 4 ( 4 minutes equals $1^{\prime}$ ) equals 216 minutes $\times 60$ (seconds) equals 12,960 seconds, corresponding exactly with the number of inches contained within 1080 feet, one side of the square. Again: 12,960 x 4 (the four sides of the square) equals 51,840 , which is the characteristic value, proportionately, of one solar day reduced to thirds, inasmuch as one solar day reduced to thirds equals $5,184,000$ thirds (computed as diurnal time). Now, treating the angle of 54 degrees by angular measure, we have: 54 degrees $x$ $60^{\prime}$ equals $3240^{\prime} \times 60^{\prime \prime}$ equals $194,400^{\prime \prime}$, which multiplied by the basic factor 6 (Hindu formulation), equals $1,166,400$, which equals the number of square feet contained in the 1080 feet square, to wit: $1080 \times 1080$ equals $1,166,400$ square feet. Let it be stated that no other size angle and no other size square will give these amazing results.

The origin of certain mathematical units now in common use will be demonstrated to have been derived from the Hindu formulation, outlining which the author quotes the following authority: "A very remarkable blending of all these systems can be given, arising from the actual method used by the Hindus
for the calculation of sines, tangents, cosines, cotangents, etc., which belong to their most ancient system of astronomical calculations. This method is given by Mr. John Bentley in his "Historical View of the Hindu Astronomy" (Sec. 3, p. 165). He is giving the various values for the computations of the value of Pi, one after the other, until coming to one very nearly approximating the true relation, he says: "But Argabhatta in the 17 th chapter, in speaking of the orbits of the planets, gives us a nearer approach to the truth, for he there states the proportion as 191 to 600 , or as $1: 3.14136$, which gives the circumference a small matter less than the proportion of Bhaskara, in the Lilavati. This, however, is not the invention of Argabhatta; for it is employed in the Brahma Siddhanta, Surga Siddhanta, and by all astronomers before the time of Argabhatta, as well as since, for computing the tables of sines, etc., though not immediately apparent. Thus, in computing the sines, they take the radius at $3438^{\prime}$, and the circumference they divide into $21600^{\prime}$. The diameter is therefore 6876; hence, the proportion is 6876: 21600. Reduce these numbers to their last terms by dividing them by 36 , the result will be $191: 600$, as stated by Argabhatta. Mr. Bentley, greatly familiar with Hindu astronomical and mathematical knowledge, not as a foreigner studying the reach of a nation in such matters, but as a resident in Hindustan of some fifty years. This statement of his may then be taken as authentic. The same remarkable trait, among so many Eastern and ancient nations, of sedulously concealing the arcana of this kind of knowledge, is a marked one among the Hindus. That which was given to be popularly taught, and be exposed to popular inspection, was but the approximation of a more exact but hidden knowledge. And this very formulation of Mr. Bentley's will strangely exemplify the assertion; and explained, will show that it was derived from a system exact beyond the European one, in which Mr. Bentley himself, of course, trusted as far in advance of the Hindu knowledge, at any time, in any generation,

This Hindu formulation is the taking of a radius of 3438 to obtain a circumference to be divided into 21600 equal parts. The diameter would be 6876, and the reduction of this by 36 would be 191. Now, 216 is $6 \times 6 \times 6$, or $36 \times 6$, which shows use of a system founded on a multiple of which 6 is the basic factor." The Great Pyramid Jeezeh, by McCarty, pp. 268-69, q. v.

The builders of the 1080 feet embankment square evidently possessed a system of mathematics, which indicates a high degree of knowledge. They applied this system in the construction of the 1080 feet square and used a formulation that had a Pi (Hindu Pi ) ratio. This method developed the dimensions which give the marvelous mathematical results that are characteristic of or proportionate to astronomical phenomena. Insofar as concerns the formulation or unit of mensuration, "R-57, 3 feet equal $1^{\circ}$ arc," that is, arc being $1^{\circ}$ then the radius equals $57.3^{\circ}$, we find that the builders of the 1080 feet embankment square used this unit and applied the pi ratio to feet and inches (measures which we call feet and inches).

The following examples are given to indicate the significance and importance of 1080 as a unit of measure and to demonstrate that it is an elemental factor of the "Hindu formulation."


Fig. 7.
The Great Pyramid of Egypt. An ancient Solar Observatory. The diagonal base line is 1080 English feet. The dimensions, angles and area are proportionate to the 1080 feet square of the North American continent. These two physical configurations are perfectly correlated mathematically with the dimensions of Solomon's temple,-a figurative Solar temple.

[^2]1st. $1080,000,000$ equals .314136 , that is, $1 / 10$ of Hindu pi.
20 ${ }^{3438}$ (Hindu radius)
2d. $360^{\circ}$ equals 114.6 (diameter) equals 57.3 radius. 3.14136 (Hindu pi) 2

It has been stated by Flammarion, Burritt and other authorities on astronomy that while the moon's diameter is given as 2162 miles, that in "round numbers," allowing for parallax and refraction the diameter of the moon is 2160 miles, thus giving a radius of 1080 miles. The "Hindu formulation" seems to have had its origin from the radius and diameter of the moon when viewed at an angle of 180 degrees in its orbit (Full moon= $10800^{\prime}$ ).
(Fig. 4)
3d. 2160 (diameter) x 10 equals 21600 , Hindu circumference.

1080 (radius) x 10 equals 10800, equals 3.14136 (Hindu pi).

3438 (Hindu radius)
4th. 21600 (circumference) :1080 (circumference : : 3438 (radius) : 171.9 (radius) ; therefore $171.9 \times 2$ equals 343.8 , diameter of a circle, the circumference of which is 1080 . The diameter of a circle having a circumference of 1080 feet, being 343.8 therefore equals $1 / 10$ of Hindu radius (3438).

5th. Radius $57.3 \times 2$, equals 114.6 (diameter). The circumference of the circle equals $360^{\circ}$ or feet, which x 3 equals 1080. Hence 1080 divided by 3, equals 360 , which divided by 3.14136 (Hindu pi) equals 114.6 (diameter) divided by 2, equals 57.3 radius. It is therefore apparent that the formulation " 57.3 (feet or degrees) equals $1^{\circ}$ arc," is $1 / 60$ th part of the Hindu formulation.
6th. The diagonal line of the 1080 feet square, 1527.34 plus feet, divided by 3.14159 (pi) equals 486.16 plus, which as the radius of a circle gives circumference of 3054.68 , equals the perimeter of Great Pyramid (perimeter of an inscribed square obtained from the diagonal line of a circumscribing square).

As a matter of interest by comparison we find that the Pythagorean numbers, 3-4-5 bear a proportionate relationship to 1080 feet square:

360 (degrees or feet) x 3, equals 1080, one side of the square. 1080 (degrees or feet) x 4 , equals 4320 , perimeter of the square.

4320 (degrees or feet) x 5 , equals 21600 , Hindu circumference.

Near Chillicothe, Ohio, there are some fine examples of embankment squares and circles, one of them is in the form of $a$ perfect square circumscribed by a circle. We have no official survey of the circle in conjunction with the 1080 feet square, but from all the data at hand and from a careful scrutiny of the numerous drawings or diagrams made by the surveyors, some of which show a scale of rods, etc., the circle shows itself to be a circumscribing circle (measuring the inside of the squarethe actual area-and the outside of the circle), that is, the circle circumscribing the actual area of the square; in which case the circle would have a circumference of 4798.27 plus feet.
We may be sure that the people who wrought an embankment square having a perfect mathematical relationship with the Great Pyramid of Egypt, would naturally not fail to carry out the mathematical ratios in constructing the circle, in conjunction with the 1080 feet square. The diameter of the circle, if a circumscribing circle, as all diagrams extant indicate it to be, would be 1527.34 plus feet, that is, equal to the diagonal line of the 1080 feet square.

The sun was the great architect and builder who laid down the lines, dimensions and angles of the 1080 feet embankment square, which had to be originally constructed in the exact N . Lat., $29^{\circ} 50^{\prime}$ plus, in order to function mathematically with the solar system and give the mathematical ratios, angles and dimensions which co-ordinates it with the Great Pyramid.

This mammoth ruin of the ancient sun temple and astronomical observatory consisted of earthworks in the form of a perfect square and circle in conjunction, the square being towards the east with a circle on the west side of the square. The circle consists of a double embankment, with a vallum between, some twenty feet in depth. The base of the two embankments measured about seventy feet, their height being, approximately,
twenty feet. The base width of the embankment forming the square was about forty feet and the height thereof, approximately, twenty feet. The square was orientated perfectly at the time of its construction and measured 1080 feet square, the diagonal line of the square being 1527.34 plus feet.

The questionable theory heretofore set forth (without any evidence to bear it out) that the mounds, embankment squares circumscribed by embankment circles, embankment squares of 1080 feet with circles in conjunction were built by the American Indians for purposes of defense and designated "Indian fortifications" by the self-imposed authorities who fathered the idea, should, in view of the negative evidence herein set forth, be accepted with a grain of salt. In what possible way would a square embankment circumscribed by a circle embankment be of advantage as a means of defense. On the other hand, they are physical configurations embodying the principal elements of mathematics. If we admit that these squares and circles were built by the American Indians, then we must assume that the construction of the embankments was by the crude, slow and laborious method of carrying the dirt by hand-baskets, according to the improbable theory set forth. There are some two or three thousand of these geometrical earthworks; many of these embankments enclose an area of several square miles, the construction of which would have required the continuous labor of about $1,000,000$ people for a period of 100 years. While the people were thus occupied in building their system of defenses, against ferocious hordes of savages, we are, it seems, to infer that an armistice of 100 years was declared in order that they would have ample time to complete their system of fortifications!

## CHAPTER XXVI.

## WERE THE MOUND BUILDERS HINDUS?

The evidence offered by the geometrical earthworks of the ancient American continent seems to warrant the conclusion that the people who constructed these square and circle embankments were of the same cult as the Hindus, inasmuch as their mathematical formulations were the same; whether they were of the same race or descendants of some other race is problematical.

The embankment square and circle in conjunction is now located in N. Lat., about $391 / 2^{\circ}$ and this seems to indicate a change of latitude or "shift of pole" of about $10^{\circ}$ since the time when the square and circle were constructed; the present orientation bears this out. This shift of pole and latitude may have been caused by a cataclysm that destroyed the high civilization which previously had existed upon the North American continent. We have collateral evidence which seems to bear out this conclusion, inasmuch as we find that the Hindus today are using the mathematical formulation evidenced in the construction of the 1080 feet square embankment; and we have authentic records that the Hindus have used this mathematical formulation from the most ancient times recorded in their history. Admitting a civilization upon the ancient North American continent, as evidenced by the engineering works which show the Hindu formulation in their construction, then it naturally follows that the ancient North Americans and the Hindus and their antecedents as well as the people who constructed the Great Pyramid, all used the same system of mathematics.

That this ancient civilization existed upon the North American continent is borne out by the evidence, which may be demonstrated by the ancient ruins. That this civilization must have been destroyed by some catastrophe seems certain. If we admit that the destruction of the ancient people and their high civilization was caused by a cataclysm, then we need look no further for a solution of the problem. We need not assume that the Hindus are of the same genealogical stem inasmuch as the correlated mathematics speak for themselves. The mathematical system, therefore, would survive in India even though it may have been destroyed upon the North American continent by a cataclysm. After the destruction of the ancient Americans by a cataclysm, it seems natural that a people who still survived and who possessed the mathematical formulation and knowledge of engineering would preserve this knowledge by building a monumental record which would, as near as possible, be indestructible. This they did by building the Great Pyramid of Egypt, using the same mathematical conceptions.

The Hindu records bear out the conclusion that they received their mathematical and scientific knowledge from another country, which they refer to as "The Land of the West," where they obtained their great learning. Their records further state that all communication with this country, "The Land of the West," was broken off about twelve thousand years ago on account of a cataclysm.

The evidence set forth seems to open a vista of wonderful possibilities and gives a viewpoint of the fountain-head of ancient lore, traditions and myths. A new chronological base is seemingly established by the change of latitude, which the square and circle embankment (considered in respect to its original orientation and location) indicates, when compared with the N. Lat., and the orientation of the square and circle at the present time.

The glacial age and many other side-lights of geology indicate
that a change of latitude has occurred. The problem is, when did it occur and what caused it? The author has, among the specimens of his collection, two silicified specimens of the paleozoic palms (two different types), which he found in the Ozark mountains of Arkansas, near Wilcoxson, Arkansas, He also uncovered in the limestone cliffs, near Wilcoxson, Arkansas, specimens of the remains of the tapir, saber-tooth tiger, rhinoceros and five-toed horse. He advised the Museum of Natural History New York, N. Y., of the find and upon receipt of the information the museum sent an expedition to investigate the limestone cliffs, near Wilcoxson, Arkansas. The report of this expedition confirmed the identification of the specimens as named. This evidence certainly indicates that a change of latitude has taken place.

A great deal has been written about prehistoric man in Europe as well as North and South America. Some of the authors seem to lack a sense of humor or else deem it improbable that other people have this attribute-especially does this apply to those who have designated the 1080 feet squares of the North American continent, "Indian fortifications."

The reason so much time and effort are expended in the study of the remains of prehistoric man is, to ascertain or determine as near as possible the state of culture of ancient man.

We pursue with avidity the study of examples of ceramic art, the contour, the color and blending of colors, the design as indicated, the peculiar glaze or finish (never saying anything about the well known symbols, which are prolific in every field) and by comparison we thus determine the habits and mode of living of the people who wrought the ancient relics, etc. We thus justify our conclusions as to the era which the specimens show themselves to be contemporaneous of and thereby form our convictions and classify the specimens accordingly.

We treat the implements of the ancient people and other specimens indicating their cultus status in like manner and by this
process we attempt to connect the broken chain of evidence relating to the remote past. In many instances convictions are based upon theories and enthusiasm takes the place of logic. -Any evidence that seemingly controverts the theory that, in many instances, was formed by a gross misconception of obvious facts, is cast aside or ignored. Under the sway of this process of logic our progress is naturally slow.

Is it less important to consider the mathematical formulations and feats of engineering, evidenced by the works of ancient man, as a means of determining the civilization that actually (not theoretically) prevailed upon the North American continent?

The unit 1080 bears a proportionate mathematical relationship to the movements of the sun (apparent motion), the earth and the moon, daily as well as annual and is, it seems, the unit of mensuration that expresses the coordination of the sun and moon in respect to the solar and lunar year, that is to say, 1080 is the true epact (epact: defined by Webster's Dictionary as follows, "the excess of the solar over the lunar month, about or nearly 11 days in the year-meaning "Tropical Year").

The attributes of 1080 as a solar unit is epitomized as follows: Considering the new moon that occurs on January first every 19 years, as for instance, January 1st, 1832-1851-1870-1889-1908, and the next time that it will occur, 1927, the moon will complete its 12 lunar months ( 29.535588 days or 29 days, 12 hours, 44 min . 3 seconds equals one lunar month) of 354.36 days while the earth, which it was in conjunction with (syzyjy) January 1st will lack 10.80 days of having accomplished its annual orbit, 365 days, 5 hours, 48 min . 48 seconds (some authorities give 46 seconds).

We find that 1080 applies as a unit to denote the difference between solar and lunar time in respect to a sun-dial WHEN USED AS A MOON-DIAL, towit: the true epact equals 1080/100 days ( 10.80 days), that is, the exact difference between the solar and lunar year (representing the annual orbital motion
of the earth and moon-the lunar year compared with the solar year, tropical year or mean solar year). Considering the rotary motion of the earth (upon its axis, the daily revolution of the earth, which at the equator equals 24000 miles in 24 hours or about 1000 miles per hour. Towards the poles or in the northern latitudes the motion is slowed down, it being zero at the poleN. or S. pole-while at Omaha, Nebraska, 6000 miles from the north pole the rotation of the earth upon its axis equals 750 miles per hour, approximately) in the instance of determining time by a sun-dial when used as a moon-dial, the time indicated by a shadow cast by the gnomon on the dial by the moon is too slow, compared with sun-dial time. The following is the ancient Babylonian rule governing the time indicated, as stated, by the moon. Each day of the moon's age is reckoned as 1 hour of time and considering the moon's age as being 12 days old (considering the new moon as being on the 18th of the month and the night when the time is to be dialed as the 30th day of the month) then 25 per cent of the hours reckoned by the moon's age- 12 days equals 12 hours-is subtracted and the remainder, $75 \%$, is added to the time indicated on the dial; that is, 12 hours (moon's age 12 days equals 12 hours) minus 3 hours ( $1 / 4$ or .25 of 12 hours) equals 9 hours, which is added to the time indicated and the result is CORRECT SUN TIME. We therefore find that the taking of $75 \%$ of the moon's age, reckoned as each day equals one hour, is equivalent to taking $75 \%$ of 1440 min utes ( 1440 minutes equals 1 day of 24 hours) and that $75 \%$ of 1440 minutes equals 1080 minutes ( $1440 \mathrm{~m} \times .75$ equals 1080 ). This example is repeated for the reason that its importance should be kept in mind and for the reason also that the following example expresses the perfect harmony of the solar system, measured by the unit 1080. The author hesitates to offer any opinion as to why this is so except to state that it seems to be an immutable law of our solar system.

There is nothing uncanny or weird about the unit 1080 ; it is
the unit that seems to fit the solar system, possessing a perfect mathematical harmony. A striking example of its harmony as an elemental solar unit is set forth as follows: The mean solar year (tropical year) equals 365 days (omitting fractional parts of days, that is, 5 hours, 48 min ., 48 seconds-some authorities state 46 seconds) x 1440 m . equals $525,600 \mathrm{~min}$. divided by 1080 gives a quotient of 486.6 , which quotient is characteristic of the height of the Great Pyramid of Egypt, the height of the Great Pyramid being 486.2-some authorities give 486.26, others .16. In this instance the angular measure of the earth's orbit $525,600^{\prime}$ is divided by the unit 1080 ( 1080 feet of the 1080 feet square) and the result gives a quotient which is characteristic of pyramid height in feet and fractional parts of a foot. It therefore follows that the length of the solar year, $526,600^{\prime}$ ( 365 days), the unit 1080 and the height of the Great Pyramid -486.6 feet-have a remarkable mathematical relationship (the height of the Great Pyramid, 486.6 feet gives a rise-of-angle of $51^{\circ} 51^{\prime} 14.3^{\prime \prime}$, which in N. Lat. 30, causes the sun on the day of the spring equinox to bathe the north side of the great pyramid in light for about four minutes; vice versa at the autumnal equinox, causing the shadow to appear, thus denoting the equinoxes, when day and night are equal. This would occur at high noon on the day of the equinoxes).

We read from the book of Revelation, 13 c. 18th verse: "Here is wisdom. Let him that hath understanding count the number of the beast; for it is the NUMBER of a man; and his NUMBER is Six hundred threescore and six." The NUMBER should be written thus:

$$
600
$$

60
6 Multiplying the figures of the
hypotenuse-6-6-6, thus: $6 \times 6$ equals $36 \times 6$ equals 216, which equals the number of minutes (diurnal time) contained in the angle $54^{\circ}$ (as indicated by the angle $54^{\circ}$ formed on the

1080 feet embankment square). By enclosing the three numbers with lines, one of which is drawn at right angles, we produce a right-angled triangle, each leg of which indicates 45 degrees, which equals the "PATH OF THE SUN" from the Tropic of Capricorn to the Tropic of Cancer, that is, the sun's annual journey from winter solstice to summer solstice and back again ( $45^{\circ}$ period of elevation and $45^{\circ}$ period of gradation, corresponding to the two legs of triangle). The right angle of triangle indicates $90^{\circ}$, that is, the position of the sun at HIGH NOON on the equator, at the equinox. Now, by multiplying 60 x 6 we have 360 , which is the number of degrees in a circle or the annual revolution of the earth round the sun (Vide, Psalms, 19 c. $1-6$ th vs.). By multiplying $360 \times 60$ we have 21,600 , which is the number of minutes contained in $360^{\circ}$ (that is, $21,600^{\prime}$ angular measure). The process may be continued interminably, instance: $21,600^{\prime} \times 600$ equals $12,960,000$, divided by 10 , equals $1,296,000^{\prime \prime}$-angular measure-equals $360^{\circ}$ (characteristic of 12960 inches contained in 1080 feet or the angle $54^{\circ}$ reduced to TIME, instance: $54^{\circ} \times 4-4$ minutes equals $1^{\circ}$ -equals $216 \mathrm{~m} . \times 60 \mathrm{~s}$. equals 12960 seconds. Suffice to state, the numbers 600,60 and 6 constitute a COMPOSITE ASTRONOMICAL UNIT and suggests the method of "factoring by 6," which method or system was used by the Hindus, Egyptians and Babylonians (Chaldees).

The following example carries out John's instructions to "count the number of the beast." We get the distance to the sun, towit: The Greek word, ZOAR, means BEAST; the word zodiac is derived from zoar; zodiac means a circle of beasts, that is, the zodiac is a circle of beasts, with one exception, LIBRA, the Balance. We count as follows: $2 \times 1$ are $2 ; 3 \times 2$ are $6 ; 4 \times$ 6 are $24 ; 5 \times 24$ are 120 and $120 \times 6$ equals 720 (see diagram of the Camp of IS-RA-EL, NUMBERED in its proper order). Inasmuch as the "Tabernacle" is said to be holy, we are not permitted to pass through it, but must begin in the MANGER

OF THE GOAT and count again in the same order. Beginning with Capricorn, number 7, we proceed: $7 \times 8$ are $56 ; 9 \times 56$ are $504 ; 10 \times 504$ are $5040 ; 11 \times 5040$ are 55,$440 ; 12 \times 55,440$ are 665,280 . plus the first product 720 , equals 666,000 . This number, 666,000 , multiplied by the square of the Camp of IS-RA-EL ( $12 \times 12$ equals 144 ), 144 gives $95,904,000$, THE NUMBER OF MILES TO THE SUN (aphelion distance), according to the statements of the modern text-books on astronomy.

In considering the solar allegories of the Bible we must keep in mind the fact that the language is cryptological, that is, written with a veil. It is, therefore, permissible to uncover the meaning by utilizing mathematical variants, that is, different units, when the subject matter under consideration has to do with astronomy or solar allegories recounting solar phenomena. The three integral numbers,

$$
600
$$

60
6
were set forth to indicate to initiates the method of factoring by " 6 " (as indicated by the Hindu formulation, q. v.), and to suggest the numbers that are characteristic of the phenomena of the solar system. John's Revelation is a revelation indeed, in all that the name implies, when understood in its proper sense. We find by referring to 1 st Kings, 6 c . (the number of the verse is frequently significant in respect to the matter that follows, instance: Rev. 21st chapter, describing the "new Jerusalem, coming down from God out of heaven." That is to say, the firmament, rendered by the allegory-the Camp Formation of the Children of IS-RA-EL, which typifies the phenomena of the solar system, especially the sun, moon and earth in respect to their movements, etc.) the dimensions of Solomon's temple: And the house which King Solomon built for the Lord, the length thereof was threescore (60) cubits, and the breadth thereof twenty (20) cubits, and the height thereof thirty (30) cubits." A table is given in this chapter which shows conclusively that
the cubit of 18 inches was used by the Babylonians, the Greeks and other ancient nations. This measure was also set forth by royal edict under a law enacted during the reign of King Henry, III, q. v. No other cubit is to be considered in the solution of the Biblical measures; the so-called "Biblical cubit" of 21 plus inches is a makeshift and was incorporated solely to confuse. It does not fit anything; nor will it apply in a mathematical manner to any of the beautiful solar allegories recounted by the Holy Writ. The 18 -inch cubit fits every measure recorded in the Bible, therefore FITS THE BIBLE. It gives sense instead of nonsense. The following example indicates whether the 18 -inch cubit applies to Biblical solar allegories:

The width of Solomon's temple: 20 cubits ( 18 -inch cubits) equals 360 inches; the length 60 cubits equals 1080 inches; the height 30 cubits, equals 540 inches. Cubed as follows:

360 (inches wide) multiplied by 1080
equals . . . . . . . . . . 388,800 multiplied by height, 540 inches, 540
equals
$209,952,000$ cubic contents in inches.
This number $209,952,000 \div$ by

$$
1080=194,400 \div \text { by }
$$

$$
60=3240 \div \text { by }
$$

$$
60=54
$$

which is characteristic of the $54^{\circ}$ formed on the 1080 feet embankment square, and as has been indicated the $54^{\circ}$ angle is a marvelous mathematical unit having to do with solar phenomena, etc. It will be noted that all of the divisors of the examples here shown are astronomical units- 1080 the unit of mensuration, $60^{\prime \prime}$ equals $1^{\prime}$ angular measure; $60^{\prime}$ equals $1^{\circ}$, etc.

Again: The number, $194,400 \times 6$ (the factor of this system) equals $1,166,400$, which is exactly the number of feet contained
in the embankment square of 1080 feet, towit: $1080 \times 1080$ equals $1,166,000$ square feet.

The width of Solomon's temple, 20 cubits, equals 360 inches, which is characteristic of the earth's annual orbit around the sun, that is, $360^{\circ}$. The height, 30 cubits or 45 feet, is characteristic of the sun's annual journey (sun's apparent passageecliptic), that is, $45^{\circ}$ from the tropic of Capricorn to the tropic of Cancer (approximately $45^{\circ}$ ). The height, considered as inches, 45 feet x 12 equals 540 inches indicates the azimuth points of the sun at summer solstice, $225^{\circ}$ and at winter solstice, $315^{\circ}$, which added, equals 540 . So Solomon's temple could not be any higher, and yet correspond, by its height, to the sun's azimuth points (on the horizon) at summer and winter solstice. The solar allegory is without a flaw and its mathematical ratios are perfect.

The length of Solomon's temple, 60 cubits ( 18 -inch cubits) equals 90 feet x 12 inches, equals 1080 inches; this unit, 1080, indicates the true epact ( 10.80 days) or difference between solar and lunar time-the lunar year compared with the solar yearand sets forth to initiates the UNIT OF MENSURATION. The two pillars (columns), Jachin and Boaz, are said to have been 18 cubits high, each; and as a cubit equals 18 inches, therefore 18 cubits equal 324 inches or 27 feet in height, each. These two numbers, 324 and 27 , are indicated in numerous examples respecting the 1080 feet square. That is, the two 27 -degree angles formed by the sun on the day of summer solstice and on the day of winter solstice, as previously demonstrated. The two $27^{\circ}$ angles form an arc of $54^{\circ} \times 60^{\prime}$ equals $3240^{\prime} \times 60^{\prime \prime}$ equals 194,400 . The two pillars were symbolic in many other ways, but the height of the two pillars indicated certain mathematical ratios. As previously illustrated, the number 194,400 is derived by dividing the cubic contents of Solomon's temple expressed in inches, $209,952,000$ by the unit 1080 , which gives 194,400 . (Jachin and Boax, 1st Kings, 7 c. 15-21 vs.)

These various units produce significant mathematical ratios that are proportionate and which are characteristic of solar phenomena. They further indicate that the dimensions of Solomon's temple express mathematical ratios that are correlated with the Great Pyramid and the 1080 feet embankment square (of Circleville, Ohio, U. S. A.). Each of the physical structures, the Great Pyramid of Egypt and the 1080 feet embankment square, as well as the figurative Solomon's temple, were embodiments of the solar system, constituting mathematical records expressing dimensions, angles and units that are characteristic of phenomena of the solar system. Compare 1st Kings, 6 c. 1st to 38 th verses and diagram and description of the Great Pyramid.

This subject-matter, among many other discoveries, will be amplified and conclusively demonstrated by diagrams and mathematics in a succeeding volume, entitled, SOLOMON'S TEMPLE DISCOVERED; ITS PURPOSE AND SIGNIFICANCE.

## CHAPTER XXVII.

ORIGIN OF COMMON MEASURES OF LENGTH.
"The origin of our measures of length can be traced back into the furthest antiquity, before there were yardsticks or inch rules, and those of a workman's own body-the (width of the) palm, the (length of the) foot, the cubit or the distance from elbow to tip of middle finger, and the inch or diameter of the thumb (cubit, derived from latin, cubo, q. v.).

In an exhaustive and fascinating discussion of measures of length used in English-speaking countries, contributed to the Journal of the Royal Society of Arts and reproduced in the Scientific American Supplement, Colonel Sir Charles M. Watson thus describes the origin of our commonest measures: "The English scale, as authorized by statute, may be summarized as follows: 1 inch; 12 inches, 1 foot; 3 feet, 1 yard; $51 / 2$ yards, 1 rod, pole or perch; 4 perches, 1 chain; 10 chains, 1 furlong and 8 furlongs, 1 English statute mile.

Of these units the inch is derived from the Roman system, being one-twelfth of the foot, but the foot, on the other hand, is equal approximately to the Greek foot, while the yard, which is simply a DOUBLE CUBIT, comes from the Babylonian system (author's italics), being approximately a double geographical cubit. The perch is the English representative of the Babylonian gar, and the furlong occupies a similar place to the stadium, while the mile is composed of eight stadia, apparently in imitation of the division of the Roman mile. For use at sea, however, the geographical mile, divided into ten stadia, or as we call them, cable lengths ( 660 feet), has been retained, as no other mile can be used for purposes of navigation.

In order to fully understand the connection between the English measures and the ancient measures of length, it is necessary to write the scale in a somewhat different manner and to introduce some other units which are no longer used. The revised scale is as follows: One (1) barleycorn; 3 barleycorns, 1 inch; 3 inches, 1 palm; 4 palms, 1 foot; 6 palms, 1 cubit ( 18 inches) ; 12 palms, 1 DOUBLE CUBIT or yard; 11 cubits, 1 perch ( $161 / 2$ feet); 440 cubits, 1 cables breadth or chain; 10 chains, 1 acre's length or furlong; 8 furlongs, 1 English mile; 10 cables, 1 geographical or sea mile.

The English inch is equal in length to 3 barleycorns set end to end, or to the width of 8 barleycorns set side by side. The barleycorn, as a measure, is forgotten (the author begs to cite Rev., 6 c .6 verse, which mentions "three measures of barley for a penny); but the inch on carpenters' rulers is still divided into eight parts, while on a shoemaker's tape the sizes of boots and shoes increase by a barleycorn or one-third inch for every size. For example: Size No. 8 of a man's boot measures 11 inches; size No. 9, $111 / 3$ inches; size No. $10,11 / 3$ inches, and so on. One would have thought that the sizes would increase by onequarter of an inch at a time, but the barleycorn has held its place to the present day.

The palm, which was originally composed of digits or finger breadths, and since the time of the Romans, of 3 inches or thumb breadths, is no longer used in England, and its place has to a certain extent been taken by a measure called the hand, composed of 4 inches and employed in measuring the height of horses. The change may have been due to the fact that the number 4 was more convenient for division than 3 , and that when the digit gave way to the inch the palm of 4 digits was replaced by the hand of 4 inches.

Prior to the thirteenth century the length of the foot in England was uncertain, and there appear to have been several measures in use, varying from the Roman foot of 11.66 English
inches to the Belgic foot, 18.12 English inches. But, by the ordinance known as the statute for measuring land, enacted in the reign of King Henry III, the relations of the inch, the foot and the cubit to one another were definitely fixed, and have never since been altered. The cubit of this statute is the DOUBLE CUBIT, afterward called the yard. A translation of the Latin word of the statute, describing the different measures, is as follows: "It is ordained that 3 grains of barley, dry and round, make an inch; 12 inches make a foot; 3 feet make a cubit; $51 / 2$ cubits make a perch ( $161 / 2$ feet); 40 perches in length and 4 perches in breadth make an acre ( 43,560 square feet).

And it is to be remembered that the iron cubit of our Lord, the King, contains 3 feet and no more; and the foot must contain 12 inches, measured by the correct measure of this kind of cubit; that is to say, one-thirty-sixth part of the said cubit makes one inch, neither more nor less. And $51 / 2$ cubits or $161 / 2$ feet make one perch, in accordance with the above described iron cubit of our Lord, the King."

The word "yard" to signify the English DOUBLE CUBIT, occurs for the first time in the laws of England in a statute of 1483, written in French."

The area of the 1080 Feet Square equals $6.66 \times 4$ ( 26.66 plus acres), the square being divided by an equinoctial line, extending east and west, produces two perfect parallelograms. Each of these parallelograms are divided into 2 right angle triangles, the diagonal line of which coincides with a ray of light projected from the rising sun on the day of summer solstice and the day of winter solstice which forms an angle on each parallelogram of $27^{\circ}$ (approximately), from a point due east of the observer, in North Latitude, $29^{\circ}$ plus, the observer's position being in the middle of the west side of the 1080 feet square. The area of the 2 triangles formed on the 2 parallelograms, as indicated in the foregoing, is, 6.66 plus acres each, which is characteristic of the ancient measure of one acre, towit:

40 perches long by 4 perches wide equals one acre (perch equals $161 / 2$ feet or one rod) ; example:

$$
\begin{aligned}
& 161 / 2 \times 40 \text { equals } 660 \text { feet. } \\
& 161 / 2 \times 4 \text { equals } 66 \text { feet. }
\end{aligned}
$$

$660 \times 66$ equals 43,560 square feet, equals 1 acre. It is obvious that the unit " 6.66 " as expressed mathematically on the 1080 feet square bespeaks volumes and clearly indicates that the above system of measures are parcel and part of the system of factoring by 6. That is to say, the ancient American, the Hindu and Babylonian systems and of course we find it evidenced in the Bible, the records of which insofar as concerns mathematics but reflects its true source, from whence the knowledge of numbers recorded therein came, as well as its solar allegories.

Other side-lights of interest, bearing upon this matter, are worth while considering. The author quotes the following from Harper's Weekly: Among the recent archaeological discoveries in Egypt is that of a roll of papyrus in an excellent state of preservation and dating from the year 1700 B . C. The roll has a long title, part of which reads, "Instructions to enable one to know the Dark Things," and the gist of it suggests that the Egyptians were good at mathematics. In the papyrus are found equations, for example: "Ten measures of barley are divided between ten persons in such a way that each succeeding person receives an eighth less than the person immediately preceding him. What proportion does each one get? Another problem is: "There are seven men, each one of which has seven cats; each cat has eaten seven rats; each rat has eaten seven grains of barley; each grain of barley must have produced seven measures of grain. How much grain has been lost? The papyrus contains also the calculation as to the area of a circle, THE QUADRATURE OF A CIRCLE, and the cubic measurement of the pyramids."
(Note: The author calls attention to the omission of the example of "the quadrature of a circle," which would have been
very enlightening; but it is always thus, the savant of the present day will not allow anything to "get by" [excuse the slang] that in any way discredits his pose of erudition. He is so learned that it positively hurts him!)

## CHAPTER XXVIII.

## ANCIENT AMERICA, INDIA AND EGYPT, THE SEAT OF ANCIENT LEARNING.

Most of the Greek philosophers, including Thales and Pythagoras, received their instructions in mathematics, astronomy, mythology, symbolism and philosophy in Egypt and India, so history records, but no one, it seems, wishes to admit it. The Greeks improvised, embellished and developed their knowledge from what they learned from the priests of On, in Egypt, and the philosophers of India (Hindustan).

A great many people are under the impression that the Bible, as a book, was originally written in Greek-which is far from being true. The Bible allegories were laid and had their foundation in ancient America, India, Egypt and Babylon, and it seems from all the evidence at hand, in the order named. These allegories recounted marvelous mathematical and astronomical knowledge coming down through the ages from peoples that have passed away and who lived upon a continent that sunk many ages ago, according to traditions among the Hindus as well as the Greeks (meaning that the American continent was at one time engulfed as well as the traditional continent of Atlantis. Whether Atlantis ever existed or not does not matter, inasmuch as the evidence set forth by the ancient ruins on the American continent will suffice to establish this potential fact).

The following excerpts point the way to the facts concerning the language in which the Bible was originally written: "CHALDEE LANGUAGE: A name often given to the Aramean language, one of the principal varieties of the ancient Semitic. Chaldee literature is usually arranged in TWO DIVI-

SIONS: The Biblical Chaldee, or THOSE PORTIONS OF THE OLD TESTAMENT WHICH ARE WRITTEN IN CHALDEE, namely, certain chapters in Daniel, Ezra and Jeremiah; and the Chaldee of the Targums and other later Jewish writings. Chaldee was presumably the language of Abraham before his migration to Palestine. BOOK OF NUMBERS: The fourth book of the Pentateuch. It takes its name from THE RECORDS WHICH IT CONTAINS OF THE NUMBERING OF THE ISRAELITES," (the 12 tribes of IS-RA-EL personifying the 12 Signs of the zodiac-the Camp Formation of the 12 Tribes, Numbers, 2 c . and 10 c ., the basis of the Biblical allegories) "the first given in chapters 1 and 4 , and the second given in chapter 26. It gives a narrative of the journeyings of the Israelites from the time of their leaving Sinai to their arrival at the plains of Moab, besides portions of the Mosaic Law." (It will be noted that the two most important chapters are entirely overlooked, in this account, instance: Numbers, 2 d c., the forming of the Camp of IS-RA-EL-THE ORDER OF THE TRIBES, etc. Numbers, 10 th c., which gives the numbering of the tribes and THE ORDER OF THEIR MARCH. Referring to 2 c. 17th verse: "As they encamp, so shall they set forward, every man in his place by their standards." Which was also the order of their march.)
"Formerly the authorship was attributed to Moses, but some modern scholars claim the book is made up of several parts, each of which has a separate author." Vide, Practical Reference Library, towit: Aramaic, Chaldee Language; and Numbers, Book of; Hebrew, etc. Vols. 1 and 4.

The Bible story, Astro-theology, the story of God, Lord God of the hosts, Jehovah, Yaveh, El-elohe-Israel-God, the God of IS-RA-EL-Elohim (the Egyptian appellation for the Sun anywhere), as recounted by the STARS, synonymous term for zodiac, was originally written in Aramaic (not Greek or Hebrew), the Chaldee version being obtained from the Egyptians, in-
stance: "Aramaic, a branch of the Semitic language, nearly allied to the Hebrew and Phoenician, anciently spoken in Syria and Palestine, and eastward to the Euphrates and Tigris. It was the official language of this region under the Persian domination. In Palestine it supplanted HEBREW, and it was the tongue of the Jews in the TIME OF CHRIST. Parts of Daniel and Ezra are written in Aramaic, or, as this form of it is often named, CHALDEE. An important Aramaic dialect is the Syriac, in which there is an extensive Christian literature."Ibid.
RENE DESCARTES; FIFTH MEDITATION (1596-1650).
Descartes puts forth the idea that a knowledge of the existence of God" may be obtained by a "SYSTEM," "NUMBERS," "A KNOWLEDGE OF THE UNIVERSE," "RIGHT-ANGLED TRIANGLES," "RECTILINEAL FIGURES COMPOSED OF ONLY THREE ANGLES," "QUADRILATERAL FIGURES," "SQUARE, FIGURES, the CIRCLE, etc. Evidently meaning the SQUARE and CIRCLE, which gives all of these figures, and to which he adds last, "PURE MATHEMATICS."

This does not seem strange, but rather significant when one considers that he obtained his education from the universities of France. He evidently possessed a knowledge of the mysteries, as set forth by hermetic philosophy. He was master of his destiny inasmuch as he knew the TRUTH and how it was to be obtained, respecting the existence of God. This is the substance which he amplifies in his "Fifth Meditation."

He states: "As for example, I imagine a triangle, although there is not perhaps and never was in any place in the universe apart from my thought, ONE SUCH FIGURE." Now, it is self-evident that he, in this instance, attempts to mislead, inasmuch as there are in the heaven hundreds of right-angled triangles, formed by GROUPS OF STARS; he evidently knew this to be true.

Again: "And although the right conception of this truth has
cost me much close thinking, nevertheless at present I feel not only as assured of it as of what I deem certain, but I remark further that the certitude of all other truths is so absolutely dependent on it, that WITHOUT THIS KNOWLEDGE IT IS IMPOSSIBLE EVER TO KNOW ANYTHING PERFECTLY."

Descartes, here frankly puts forth the admission that it-the "SYSTEM," "NUMBERS," "RIGHT-ANGLED TRIANGLES," "THE SQUARE and CIRCLE," "A KNOWLEDGE OF THE UNIVERSE" and "PURE MATHEMATICS," is the sole means of knowing anything to be true.

The evidence which he sets forth is chiefly "pure mathematics," and the principle upon which his argument is grounded is, "the universe," a "system," "numbers," 'the right-angle triangle," the "square and circle," and "PURE MATHEMATICS," which taken collectively, he says, "gives the knowledge of the existence of God."

The last paragraph of his "Fifth Meditation" states: "And thus I very clearly see that the certitude and truth of ALL SCIENCE DEPENDS ON THE KNOWLEDGE ALONE OF THE TRUE GOD, inasmuch that, before I KNEW HIM, I could have no PERFECT knowledge of any other thing. And now that I know him, I possess the means of acquiring a PERFECT KNOWLEDGE respecting innumerable matters, as well relative to God himself and other intellectual objects as to corporeal nature (physical), insofar as it is the object of pure mathematics." (Author's italics.)
RENE DESCARTES MEDITATIONS-MEDITATION V. Translated by John Veitch, LL.D. Crown Masterpieces of Literature, pp. 1357-1358-1359, q. v.

The world today, in so far as concerns rationalism as a medium to mould thought, is about the same as it was in the days of Galileo; relatively the same conditions exist now as then. The fanaticism which pooh-poohed Galileo and said, O piffle, to his discoveries is just as prevalent in the present era. Intol-
erance, stupidity, egotism, envy and arrogance romp together in their mad dance with the world as a stage. Something must be done to bring the world to its senses. Christianity has utterly failed in its mission, if it ever had one, which is doubtful, considering its influence in respect to preventing a world of carnage, blood-lust, hatred, malice, selfishness, corrupt governments and everything that is sordid, including a low degree of morality and a high percentage of murder-a fine condition to contemplate! Why shut our eyes to the truth? When a man is sick 'tis best to tell him so.

## GALILEO TO KEPLER.

"I count myself happy, in the search after truth, to have so great an ally as yourself, and one who is so great a friend of the truth itself. It is really pitiful that there are so few who seek truth, and who do not pursue a perverse method of philosophising. This is not the place to mourn over the miseries of our times, but to congratulate you on your splendid discoveries in confirmation of truth. I shall read your book to the end, sure of finding much that is excellent in it. I shall do so with more pleasure, because I have been for many years an adherent of the Copernican system, and it explains to me the causes of many of the appearances of nature which are quite unintelligible on the commonly accepted hypothesis.

I have collected many arguments for the purpose of refuting the latter, but I do not venture to bring them to the light of publicity, for the fear of sharing the fate of our master, Copernicus, who, although he has earned immortal fame, with some, yet with very many-SO GREAT IS THE NUMBER OF FOOLShas become an object of ridicule and scorn. I should venture to publish my speculations if there were more people like you. But this not being the case, I refrain from such an undertaking.

You are the first and almost the only person who, even after
but a cursory investigation has, such is your openness of mind and lofty genius, given entire credit to my statements. We will not trouble ourselves about the abuses of the multitude, for against Jupiter even giants, to say nothing of Pigmies, fight in vain. Let Jupiter stand in the heavens, and let the sycophants bark at him as they will. * * * In Pisa, Florence, Bologna, Venice and Padua many have seen the planets, but all are silent on the subject and undecided, for the greater number recognize neither Jupiter nor Mars and scarcely the moon as planets.

At Venice one man spoke against me, boasting that he knew for certain that my satellites of Jupiter, which he had several times observed, were not planets because they were always to be seen with Jupiter, and either all or some of them now followed and now preceded him. What is to be done? Shall we decide with Democritus or Heraclitus? I think, my Kepler, we will laugh at the extraordinary stupidity of the multitude. What do you say to the leading philosophers of the faculty here, to whom I have offered a thousand times of my own accord to show my studies, but who with the lazy obstinacy of a serpent who has eaten his fill have never consented to look at planets, nor moon, nor telescope? Verily, just as serpents close their ears, so do these men close their eyes to the light of the truth. These are great matters; yet they do not occasion me any surprise. People of this sort think that philosophy is a kind of book like the Aeneid, or the Odyssey, and that the truth is to be sought, not in the universe, nor in nature, but (I use their own words) BY COMPARING TEXTS! How you would laugh if you heard the things the first philosopher of the faculty at Pisa brought against me in the presence of the grand duke, for he tried, now with logical arguments, now with magical adjuration, to tear down and to argue the new planets out of heaven."-Library of Original Sources, Vol. v., pp. 292-293, q. v.

## FINALE:


#### Abstract

"For it is THE DAY OF THE LORD'S VENGEANCE, and THE YEAR OF RECOMPENSES FOR THE CONTROVERSY OF ZION."--Isaiah, 34 c. 8 verse (meaning, ZION: the highplace of the sun, that is, summer solstice; synonymous with "mountain or high-place"). "Woe to Ariel"; Isaiah, 29 c. 1st verse (meaning, "Ariel": "the Lion of God"; see annotations: James, KING OF GREAT BRITAIN, FRANCE and IRELAND, translation. "The Lion of God": apotheosis of Leo, the Lion, the Sign of the zodiac of that name. Thus, the Lion and God are indissoluble). "For thus HATH THE LORD SPOKEN UNTO ME, Like as the lion and the young lion roaring on his prey"; Isaiah, 31st c. 4th verse.


Read: Isaiah, twenty-nine, thirtieth and thirty-first chapters.
"These are the things that ye shall do: Speak ye every man the TRUTH to his neighbour; execute the judgment of TRUTH and PEACE in your gates: And let none of you imagine EVIL in your hearts against his neighbour; and love no FALSE OATH: for all these are things that I hate, saith the Lord." Zechariah, $8 \mathrm{c} .16-17$ th verses. (It may be well for zealots to read the entire chapter; then recall, "consistency, thou art a jewel"!).

The author does not hate anyone, nor does he wish to persecute anyone. This may not be religion, according to the manner or the way it is practiced in the present day, but it is good enough to live and die by. All the venom or hate in the world will not hurt the TRUTH-nor will it hurt the author. We should remember that "A soft answer turneth away wrath" and keep our minds (if we have a faculty) free from hate, inasmuch as the Bible admonishes: "He that is void of wisdom despiseth his neighbour: but a man of understanding holdeth his peace." Proverbs, 11 c. 12th verse.

## DICTIONARY OF ASTRONOMICAL TERMS:

ZODIAC: A broad circle in the heavens about sixteen degrees in width containing the 12 Signs, through which the sun passes in its annual course. Within this circle the planets appear to revolve. The annual path of the sun inscribes a central line through the zodiac which is termed the ecliptic. The plane of the ecliptic intersects the equator at an angle of about 23 degrees and 27 minutes, which is called "the obliquity of the ecliptic." The ancient astronomers divided the zodiac into 360 degrees. "The Zodiac was divided into 12 equal portions, corresponding to the 12 months of the year, commencing at the vernal equinox. Each of these portions SERVED AS THE VISIBLE REPRESENTATIVE OR Sign OF THE MONTH IT APPEARED IN." (Vide, Burritt's Astronomy, p. 29.) The twelve constellations coincided with the 12 Signs, 2450 B. C. E., and the 12 constellations, taken collectively, including the SUN (the chief star) contain the EXACT NUMBER OF STARS that there are days in a tropical year (365).

ASTRONOMY: From aster, a star, and nomes, a law; the knowledge of the motions, magnitude, and distances of the heavenly bodies.

EQUATOR: The name of an imaginary line that passes around the earth from east to west, at equal distances from the poles. It is the line which the SUN describes in his annual journey at the equinoxes (March 21st and September 23d, the day of the equinoxes).

EQUINOXES: The two opposite points in the earth's orbit when it CROSSES THE CELESTIAL EQUATOR, which is the terrestrial equator projected.

DECLINATION: The distance of any celestial object north or south of the equator.

SOLSTICES: The declination of the sun, north or south of the equator, or points north and south where he reaches his HIGHEST and LOWEST ELEVATION. Hence the name
solstice derived from SOL, sun; stice, stay, that is, sun-strandstill (apparently). The solstices occur on the 21st of June and 22d of December. Hence the sun is BORN AGAIN annually THREE DAYS AFTER SOLSTICE (the sun appearing to stand still for three days at the CARDINAI. POINTS), meaning winter solstice or Christ-mas (Christ's mass).

IATITUDE: On the earth, is the distance from the equator, north or south. Celestial Latitude: The distance north or south of the ecliptic and paralleled to it.

IOONGITUDE: On the earth, is the distance east or west, from a given place, taken as the first meridian, as Greenwich, in England. Celestial Longitude: Is the distance eastward from the point of the vernal equinox, or the first point of Aries, measured on the ecliptic (should be measured from the first point of Taurus, which is the correct Sign at the vernal equinox; Aries having been put for the Sign at the vernal equinox in order that it might stand for "Agnus Deus, the LAMB OF GOD or sun in Aries, according to Pausanius, q. v., vide, Burritt's Astronomy, page 34).

MERIDIAN: The meridian is an imaginary line running north and south at right angles to the EQUATOR, and passing through the poles. They are located 15 degrees apart and represent the HOUR CIRCLES inasmuch as a degree-angular measure-is 4 minutes of diurnal time (one degree equals $60^{\prime}$ angular measure; 360 degrees equals 1440 minutes or 24 hours).

THE ECLIPTIC: Is the plane of the earth's orbit or PATH, indefinitely extended. If the earth's orbit be represented by a circle inscribed upon a table, the surface of the table will represent the plane of the ecliptic.

SIGN: Is a mark or symbol used to represent a thing, and recall it to the mind; as, the Signs of the Zodiac: "Each of these portions served as the VISIBLE REPRESENTATIVE OR Sign of the Month it appeared in." (This was the original purpose of the 12 Signs or constellations, when they coincided. This
province of the constellations has been LOST through nonusage!)

ORBIT: A path described by the PERIODIC REVOLUTION of the planets or heavenly bodies (around the SUN, so far as concerns our solar system).

ELLIPSE: Is an oblong or lengthened circular figure, having two foci or centres.

ELLIPTICAL: Is what pertains to an ellipse, as the elliptical orbit of the planets.

APHELION: The position of a planet or comet, in its orbit, when most remote from the sun.

PERIHELION: The position of a planet or comet, in its orbit, when nearest the sun.

APOGEE: The position of the moon, in its orbit, when most remote from the earth.

PERIGEE: The position of the moon, in its orbit, when nearest the earth.

ECLIPSE: A total or partial obscuration of the LIGHT OF THE SUN OR MOON.

TRANSIT: The passage of a planet over the disc or face of the sun (Mercury and Venus are the only planets that make a visible transit for us).

OCCULTATION: The obscuring of a star or planet, by the moon or some other planet (the moon really should be considered as a satellite).

OPPOSITION: The aspect of stars or planets 180 degrees distance from each other.

CONJUNCTION: The aspect of stars or planets when in line with one another-as seen from the earth, instance: SYZYCY: "A common name for the period both of New and Full Moon, when the Sun, the Moon and the Earth, are in one line").

CYCLE: A period of time, years or revolutions as described by heavenly bodies, in which the same changes or phe-
nomena repeat themselves again. Instance: A cycle of the moon or PRIME NUMBER, is a period of nineteen years (eclipse years of 346.62 days, and NOT SOLAR YEARS, which is the common conception), which being completed, the new and full moon return on the same days of the month (et seq., "The Pythagorean Lunar Table"-3d volume).

CYCLE OF THE SUN: A revolution of twenty-eight years, after which every month begins on the same day of the week (as given by the so-called Gregorian calendar, which is very confusing and misleading; the Pyramid calendar eliminates these vagaries. It is scientifically correct, according to the U.S. Naval Observatory, which confirmed the calculations).

INDICTION: In chronology, a cycle of fifteen years, instituted by Constantine, the Great. They began January, the first, A. D. 313, originally a period of taxation.

NODES: The point in the plane of the ecliptic through which the orbit of the planet passes. These points are two in number; that where a planet crosses the plane of the ecliptic from south to north is called the ascending node, or dragon's head; that where a planet crosses it from north to south, is called the descending node, or dragon's tail.

ARC: A PART OF THE CIRCUMFERENCE OF A CIRCLE ("The Ark-arc-of the Covenant"-et seq., volume two).

ASPECT: Situation of the stars with respect to one another, or the planets.

PHASES: The appearances of the ILLUMINATED PARTS of the moon or planets.

GIBBOUS: The enlightened part of the moon from the first quarter to the full, and from the full to the third quarter. (After the moon is defined as a HALF moon or FULL moon, it then becomes "gibbous").

THE HORIZON: The sensible horizon or "apparent" horizon, is the circle which terminates our view, where the earth
and sky appear to meet. To a person standing on a plane, this circle is but a few miles in diameter. If the point of vision be elevated six feet the radius of the sensible horizon will be just three miles. Rational horizon: An imaginary great circle, whose plane, passing through the centre of the earth, divides the heavens into two hemispheres, of which the upper is called the visible hemisphere, and the lower one, the invisible hemisphere. It is the plane of this circle which determines the rising and setting of the heavenly bodies.

TROPICS: Two circles parallel to the equator, and 23 degrees, 27 minutes + , distant on each side of it. They are named Cancer on the north, and Capricorn on the south.
YEAR: The Tropical year, the time which the sun takes to pass from one tropic till it returns to the same again, and is 365 days, 5 hours, 48 minutes, and 48 seconds (approximately).

Year: (Sidereal), the time which the earth takes to pass from any fixed star to the same again, and is 366 one-fourth days, as against 365 one-fourth solar days (a sidereal year equals 365.25636042 plus 0.00000000 II (till-1900). There must be 366 sidereal days in a year; the number of sidereal days will always exceed the number of solar days by one. Let that number be what it may, one revolution being always lost in the course of an annual revolution (Vide, Burritt's Astronomy, page 199).

ZENITH: That point of the heavens immediately overhead.
NADIR: The point beneath the zenith.
ZODIACAL: Relating to the Zodiac, great circle of the sphere, Signs, etc.

ZONE: A division of the sphere between two parallels of latitude. There are five zones: one torrid, two temperate, and two frigid.

EPOCH: A fixed point of time from which dates are numbered. It is the beginning of an era.

ERA: The space of time from an epoch. The Christian Era,
for instance, began with the epoch of the birth of Christ (according to the teachings of the Agnostics-those who do not know).

JULIAN PERIOD: A division of time consisting of 7980 years (the so-called "Julian Year" was derived from the THEBAN YEAR of the ancient Egyptian calendar, both years consisting of 365 one-fourth days, etc.). This number is obtained by multiplying 28 (the solar cycle, q. v.) by the "Saros," of the Chaldeans (a Lunar Cycle of 19 years (eclipse years of 346.62 days) and by 15 (the Roman Indiction, a period of 15 years, q. v.) the cycles of the sun, the cycles of the moon, and the cycles of the Indiction. (Example: 28x19x15 gives the product, 7,980 (years of the Julian Period, which is not an anachronism!)

EPACT: The excess of the solar month beyond lunar, that is, the excess of solar year as against a lunar year. There are 354.36 days contained within a lunar year- 12 lunations of 29.53 days equals 354.36 days-hence the difference between a solar year and a lunar year is 11 plus days. These 11 days are called the EPACT. (The Pythagorean Lunar Table, 3d vol., demonstrates this period of time in a comprehensive manner. Under the head of "Chronological Eras" the modern almanac gives: Dominical Letters; Lunar Cycle or GOLDEN NUMBER, Prime number of the Saros is thus designated by the Catholic Church; Epact; Solar Cycle; Roman Indiction and Julian Period. To the proletariat or layman, this is all Greek (only initiates comprehend!)

## SIGNS OF THE ZODIAC:

The great Circle of the Zodiac is divided into twelve equal parts, called Signs. They are symbols of constellations of stars (at that time when the Signs and constellations coincided, 2450 B. C. E., or anterior thereto, one or more complete Equinoctial

Years, a period of 25,762 plus years-one precessional cycle or revolution of all the Signs), and are as follows:

SPRING SIGNS: Symbol:
Aries, or the Ram..................... $r$
Taurus, the Bull....................... ૪
Gemini, the Twins......................... II
SUMMER SIGNS:
Cancer, the Crab${ }_{\sigma}$

Leo, the Lion.............................. $\Omega$
Virgo, the Virgin.......................... m
AUTUMN SIGNS:
Libra, the Balance. . . . . . . . . . . . . . . . . $\bumpeq$
Scorpio, the Scorpion....................
Sagittarius, the Archer................. $f$
WINTER SIGNS:
Capricornus, the Goat...............vs
Aquarius, the Waterman................w
Pisces, the Fishes..................... .
The Signs of the Zodiac are thus placed by the modern system of astronomy, which is an error of 30 degrees. To make this table correct the Bull, Taurus, should be placed where the Ram, Aries, is, that is, SPRING BEGINS when the Sun is in Taurus, the Bull, the Sign thereof, and Aries should precede Pisces, the Fishes, the Sign thereof, inasmuch as Taurus is the Sign at the vernal equinox.

## SELECTIONS:

To Ascertain the Length of the Day and Night: At any time of the year, add 12 hours to the time of the Sun's setting, and from the sum subtract the time of rising, for the length of the day.

Subtract the time of setting from 12 hours, and to the remainder add the time of rising next morning, for the length of the night. These rules are equally true for "apparent" time.
"Suppose an observer standing upon the Earth, and viewing the pole star from the 45 degrees of North latitude; it would, of course, appear elevated 45 degrees above his visible horizon.

But let him recede southward, and as he passed over a degree of latitude, the pole star would settle one degree towards the horizon, or more properly, his northern horizon would be elevated one degree towards the pole star, till at length, as he crossed the equator, the North star would sink below the horizon, and become invisible. Whence we derive the general rule, that the altitude of one pole, or the depression of the other, at any place on the Earth's surface, is equal to the latitude of that place. Consequently, at the equator, the pole star would appear just visible on the northern horizon, without any elevation. Should the person now travel one degree toward the north, he would see one degree below the star, and he would think it had risen one degree." (Burritt's Astronomy, pp. 194-97).
"TO FIND THE HEIGHT OF AN OBJECT WHEN THE DISTANCE IS GIVEN: Rule. Find the square of the distance in miles, and take two-thirds of that number for the height in feet.

TO FIND THE DISTANCE WHEN THE HEIGHT IS GIVEN: Rule: Increase the height in feet one-half, and extract the square root, for the distance in miles.

TO FIND THE CURVATURE OF THE EARTH WHEN IT EXCEEDS A MILE: Rule. Multiply the square of the distance by .000126." (Ibid, p. 195, q. v.) "The curvature of the Earth for one mile is 8 inches; and this curvature increases with the square of the distance. From this general law it will be easy to calculate the distance at which any object whose height is given, may be seen, or to determine the height of an object when the distance is known." Ibid, p. 195.

A traveller, as he passed through a large and thick wood, saw a part of a huge oak which appeared misshapen, and almost seemed to spoil the scenery.
"If," said he, "I were the owner of this forest, I would cut down that tree." But when he had ascended the hill and taken

A FULL VIEW of the forest, this same tree appeared the most beautiful part of the whole landscape. "How erroneously," said he, "have I judged, when I SAW ONLY A PART."
'This plain tale," says De Olin, "illustrates the plans of God. We now SEE BUT IN PART. THE FULL VIEW, the harmony and proportion of things, are all necessary to clear up our judgment."

The Hindu astronomer, Varaha, is reputed to have said: "To realize the efficiency of other people, whom we may desire to criticise or extol, it is only necessary to consider our own incapacity to do likewise, or to improve upon the things we condemn or criticise." Unless one can improve upon that which one glibly criticises, one assumes an attitude of utter ridiculousness! To refuse to face the truth is cowardly.

ZODIACAL BOUNDARY: The question is often asked by the ignorant or uninformed, "Of what use is the Zodiac?" The zodiac is the fundamental principle of astronomy-"OPERATIVE ART." From the Zodiac the 12 "table numbers" were derived. This entire WORK is chiefly about the Zodiac, that is to say, the CAMP OF IS-RA-EL, the twelve Signs of the Zodiac, hence any explanation herewith offered must necessarily be abridged.

One of the purposes of the zodiac is to bound the field or fir-mament-the heavens-of our solar system. Within the field bounded by the zodiac the phenomena of the solar system occurs, hence, the Zodiac is the limit of our field so far as the heavens are concerned, instance: "But the COURT which is without the temple LEAVE OUT, and MEASURE IT NOT." (Revelation, 11 c .2 d verse.) Meaning that insofar as concerns OUR FIELD or firmament the "COURT" could not be measured. Solomon's temple is bounded by the 12 Signs, which are symbolized by the twelve tribes of IS-RA-EL, that is, "The CAMP OF IS-RA-EL."

Were one to have domain over landed property, a boundary or
limit would necessarily have to be established, otherwise one's knowledge of one's domain would be quite limited. This is the case relative to OUR HEAVENLY FIELD. We must have a boundary, which is the zodiac it may also be said to consist of our BOUNDARY insofar as concerns KNOWLEDGE and WISDOM. It is not possible for one to think clearly until one has a rudimentary knowledge respecting the zodiac, instance: "The heavens declare the glory of God; and the FIRMAMENT sheweth his handy-WORK." Psalms, 19 c. 1st verse. Again: "THEY BUILD TOO LOW, WHO BUILD BENEATH THE STARS."

## PLANISPHERE.

(The Planisphere is contained in the pocket of the back case.)
Directions: The inside zodiac represents the twelve constellations and the outside zodiac represents the twelve Signs of the Zodiac. The "Four Fixed Signs," the Signs at the four cardinal points, viz.: Winter solstice, vernal equinox, summer solstice and autumnal equinox, and are indicated as follows: Aquarius, the water-man, winter solstice; Taurus, the Bull, vernal equinox; Leo, the Lion, summer solstice and Scorpio (Aquila or "The Flying Eagle"-"Altair," which was put for Scorpio by the ancient priestcraft), the fixed Sign at the autumnal equinox.

The constellations at the "Four cardinal points" coincided with the Signs of the same name 2450 B. C. E. To compute chronology according to the precession of the constellations, turn the constellation (the inside disc) to coincide with a given era, instance, the time when the sun was born in Virgo, the woman, or "Virgin" of the zodiac; that is, the sun being born at the winter solstice when the constellation Virgo was in the Sign of Aquarius. This time is evidenced by the Holy Writ recounting the allegory of "the man child being born of a woman, who was
clothed with the sun, and the moon under her feet, and upon her head a crown of twelve stars" (the twelve constellations were thus referred to in unequivocal language). The allegory is aptly described in Revelation, 12 c. 1st to 17 th verses, q. v. This allegory recounts a new moon in Virgo at the winter solstice, when the sun, "the man child" was born. The great red dragon referred to, still occupies the northern heaven at the time of the winter solstice and the red star, "Thuban," the third star in the dragon's tail, was the pole star 2170 B. C. E. By turning the constellation Virgo to coincide with winter solstice (the Sign Aquarius), then revolving to the right-EASTWARD -until Virgo occupies its present position, the constellation in the Sign of the Scorpion at autumnal equinox, we find that the constellation Virgo has gone forward until it has compassed three quadrants, that is, 270 degrees or nine Signs of thirty degrees each. As it requires 2150 years, approximately, for a constellation to pass through a Sign, westward, we thus have $2150 \times 9$, equals 19,350 years since the constellation Virgo was at the winter solstice (in the Sign of Aquarius).

Of course, there may have been one or more precessional cycles since the time when Virgo was the constellation at the winter solstice, plus 19,350 years, but the time could not have been less than 19,350 years; we must accept the chronology of the stars as the last word in recording time, inasmuch as the revolving heaven is a great clock which needs no winding or correcting; its synchronism is without error!

A precessional cycle represents a period of time of $\mathbf{2 5 , 7 6 2}$ plus years, that is, a complete revolution of all the constellations of the zodiac through the Signs, until the constellations coincide with the Signs of the same name.

The Sphinx is represented as a couched lion with a woman's head and it will be noted by referring to the zodiac that the symbols of the constellations, Leo, the Lion and Virgo, the Woman (the "heavenly virgin") are in juxtaposition-just
where they should be, as a matter of fact and history. History is chaos without correct chronology, therefore chronology is the parent of history. The Sphinx, the lion with the woman's head, stands for Virgo, the constellation at the summer solstice, in the lion, Leo, the Sign in which the summer solstice occurs; since that time Virgo has moved through three Signs (being now in Scorpio at the autumnal equinox). This represents a period of only $3 \times 2150$ years or a total of 6450 years; it therefore seems obvious that this time is far too short to correctly record the age of the Sphinx; we are therefore licensed to add one or more precessional cycles to this 6450 years, inasmuch as it is accepted by all authorities that the Sphinx antedates the Great Pyramid of Egypt, which is conceded to be more than 50,000 years old.

Note: Precession should be termed "recession of the constellations" as the movement of the constellations is a retrograding one. The movement is only apparent, caused by the "nodding" or swinging of the earth's pole.


[^0]:    * Note. "Tabernacles" is used, not tabernacle; the plural tabernacles for the reason that the Sun had made the transit of "the tabernacle in the midst of the Camp" scven times within scven years.

[^1]:    * Which of these "expert" (?) authorities are correct; one says that the Signs move (the U. S. Naval Observatory-see letter to that effect) the other "expert" (?) authority, Young's General Astronomy, says that the constellations move (the movement is only apparent however, caused by "nutation"-"nodding of the earth's pole," but the constellations seem to move). These conflicting statements are very confusing to students.

[^2]:    Foot-note: To reduce English acres to Pyramid acres multiple by the fraction .99589 ; thus 1080 by 1080 feet equals 26.77685 acres, multiplied by .99589 equals 26.666 plus acres. An English acre, like our Pi, is too big.

