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# STELLAR THEOLOGY AND MASONIC ASTRONOMY. 

## PART FIRST.

1. Introddction.-A Fyw Wozds to tez Mabomio Fraternity.
2. Tiz Ancient Mysterizs drgoribed.
ill. A Canpter of abtronomical Faotb.
IV. What the Ancients inew aboct Abtronowy.

## $I$.

## A BEW WORDS TO THE MASONIC FRATERNITY.

Tey writer of this work was for a long time in considerable doubt as to the propriety of its publication-not because he had any lack of faith in the truth of the theory it advocates, but from a fear that the revelations it contains might be thought unlawful according to a strict construction of the mzsonic obligation. But, after consulting with many conscientions as well as eminent members of the fraternity, the author was confirmed in his belief that nothing is said in the book which disclejes any of the essential secrets of the order.

The "essential secrets" of freemasonry are defined by Dr. Oliver, in his "Dictionary of Symbolical Masonry," as consisting of nothing more " than the signs, grips, pass-words, end tokens essential to the preservation of the society from the inriads of impostors, together with certain symbolical emblems, the technical terms appertaining to which serve as a sort of universal language ry which the members of the fraternity can distinguish earh other in all places and countries where lodges are instituted." Now, although in the fcllowing pages the masonic tradition as to the history of an impurtant masonic parsonage is freely alluded to, nowhere is there anything said, or even innplied,
by which any of the essential secrets of the craft are placed in peril ; nor is there a particle of information given which can be of use to inprincipled persons, however acute, who might desire to impose themselves upon the fraternity as having a right to its benefits and honors. The masonic reader should also bear in mind that many things $i=$ the following pages, which are to bim full of masonic significance, will appear to the uninitisted but an expression of some of the simplest facts in the science of astronomy, long established and kncwn to all.

Says Gadicke, a masonic writer of repate : " With the increase of enlightenment and rational refleition, it is admitted that a brother may both speak and write much upon the order without becoming a traitor to its secrets. . . . Inquiries into the history of the order, and the true meaning of its hieroglywhics and cerrmonics by learned brethren, can not be cousidered treason, for the order itself recommends the study of its history, ani that every brother should instruct his fellows as mach as possible. It is the same with the printed explanation of the moral principles and symbols of the order. We are recommended to study them incessantly, until we have made ourselves masters cf the valuable information they contain ; and, when our learned and cantious brethren pnblish the result of their inquiries, they ought to he most welcome to the craft." These remarks of

Gadicke ers quoted with approbation by Pr. Oliver, who himsclf says, in the introduction to ins "Landmarks":
"No typutnesis can be more untenabice than that which forebodes evil to the masonic institution from the publication of sc:en:ific treatises illustrative of itc philosophy and moral tendency. The lodge lectures, in their most ample and extended form. bowerer pleasing and instructive soever they may b6, are uasatisfactory and inconclusive. They are merely eiementary, and do not amply anc complexely illustrate any one peculiar doctrine. As tiney are usually delivered in nine tenths of our lodges, they are monotocous, and not perfectly adapted to the end for ainich they are framed, or for the effect they are intended to produce. For this reason it is that literary and scientific men, who have been tempted to join our ranks in the hope of opening a new source of intellectuai enjoyment, and of recziring an accession of novel ideas for their reflection and delight, so frequently retire; if not with disgust, at least with mired feelings of sorrow and regret, at the unaprofitable sacrifice of so much valuable time which might have been applied to a better purpose." He addis that, "if the authorized lectures of masonry .were amplified and illustrated, auch instances would not only rarely occur, but our lodges would become the resort of all the talent and intelligence in the country."

Dr. Mackey, wio in America holds the highest rank as a masonic writer, says: "The European unsecns are far more liberal in their views of the obligation of secrecy thas the English or Americane. There are few things, indeed, which a Firench or German masonic writer will refuse to discouss with the utmost frankness. It is now beginning to be very generally admitted-and Engtish and American writers are acting on the ad-mission-that the only real aporrheta (essential secrets) of freemasonry are the modes of recogniciop and the peculiar and distinctive ceremonies of the order, and to these last it is ciaimed that reference may be publically made for the purcose of acientifc investigation, prcviced thst the reference be made so as to be obecure to the p.ofane and intelligible only to the initissed." (Symbnl-ism-Synoptical Index, Apcrrheta.)

Lifany masone who do not make themselves familiar with the standard and authcized masonic authors, like Dr. Oliver in Eugland, and Pike, Mackes, and Morris in cimerica, are not aware bow freely many parts of our ritual are sioken of by brothers occupying the mest distingnished pcsitions in the iraternity.

In this wo:k "I have been scrupulously careful about the admission of a single sentence from the peculiar lectures of masonry which bas not aiready appeared in a printed forc in one or other of cur legitimate publications."

In speaking of the masonic traditions and legends, I bave used tio groater freeaiom than other masonic writers whose works are authorized by the highest masonic bodies in England, Germany, France, and America; and, in view of all these considerations, have come to the conclasion that it was not wise to permit an unnecessary and unrequired degree of cantion to longer delay the publication of truths which are, as I am persuaded, of great iraportance and in terest to the crait.

## II.

## the ANCIENT MISTERIES DESCRIBED.

- Tr we closely examine the elder forms of re ligious worship, we will find in most of them that God is worshiped under the symbol of the sun. This is not only true of those nations called pagan, but we also find in the Bible itself the sun alluded to as the most perfect and appropriate symbol of the creator. The sun is the most splendia anc glorious object in nature. The regularity of its course knows no change. It is "the same jesterday, to-day, snd for ever." It is the physioal and magnetic sourse of all life and motion. Its light is a tope of sternal truth; its warmth of univernal benevoience. It is therefore not strange that man in all ages has selectec the sun as the highest and nogs perfect emblem of God. There is a natuiral tendency, however, in the human mind, to corifound all syinbols with the person or thing which they were at first only intended ts illustrate. Ir the cource of sime we therefore find that most
nations forgot the worship of the true God, and began to adore the sun itself, which they thus deifed and personified. The sun thus personified was made the theme of allegorical histors, emblematic of his yearly passage through the twelve constellations.

The zodiac is the apparent path of the san among the stars. It was divided by the ancients into twelve equal parts, composed of clusters of stars, named after "living creatares," typical of the twelve months. This glittering belt of stars was therefore called the zodicc, that word meaning "living creatures," being derived from the Greek word zodiakos, which comes from 20-on, an animal. This latter word is compounded directly from the primitive Egyptian radicals, 20 , life, and on, a being.

The sun, as be pursued his way among these "living creatures" of the zodiac, was said, in allegorical language, either to assume the nature of or to triumph over the sign he entered. The sun thus became a Bull in Taurus, and was worshiped as such by the Egyptians under the name of Apis, and by the Assyrians as Lel, Baal, or Bul In Leo the sun becarne a Lion-slayer, Hercules, and an Archer in Sagitturius. In Pisces, the Fishes-he was a fish-Dagon, or Vishnu, the fish-god of the Philistines and Hindoos. When the sun enters Capricornus he reaches his lowest soùbern declination; afterward as he emerges from that sign the days become longer, and the Sun grows rapidly in light and heat; hence we are told in mythology that the Sun, or Jupiter, was suckled by a goat. The story of the twelve labors of Hercules is but an allegory of the paysage of the sun through the trelve signs of the zodiac, and past the constellations in proximity thereto.

The beautiful virgin of the zodiar, Firgo, together with the Moon, under a score of different names, furnishes the female element in these mythoiogical stories, the wonderful adventures of the gods. These fables -are most of them absupd enough if understood as real histories, but, the allegorical key being given, many of them are found to contain profound and sublime astrosomical traths. This key was religiously kept secret by the priests and philosophers, acd was
only imparted to those who were initiated into the Mysterirs. The profane and vuigar crowd were kept in darkness, and believed in and worshiped a real Hercules or Jupiter, whom they thought actually lived and performed all the exploits and underwent all the transformations of the mythology.

By these means the priests of Egypt ruled the peopie with a despotic nower. The fables of the mythology disclosed to them grand scientific truths, and to them oniy. The very stories themse'ves served to perpetuate those truths for the benefit of the initiated, and also formed an easy vehicle for their transmission. Books were not only rare and difficult of multiplication, but it is also probable that, in order that scientific knowledge might be concealed, it was considered unlawful to commit it to writing. If in special cases it became an absolute necessity to do so, the sacred hieroglyphs were employed. These were known only to the initiated; there was an-. other sort of written characters used by the common people. (Rawlinson's "Herodotus," Appendix to Book II, Chapter V.)

Science was thus for the most part orally transmitted from one hierophant to another. While an abstruse and difficult lecture is not easy, either to remember or to repeat, on the contrary, a mythological tale can with ease be retained in the meraory and communicated to another, together with the key for its interpretation. These fables, therefore, served a threefold purpose : 1. They kept the secrets of science from all but those who understood the key to them; 2. Being themselves easy to remember, they served, on the principle of the art of mnemonirs, or artificial memory, to keep alive the recollection of acientific facts which otherwise might be lost; 3. Being the means of keeping the people ir ignorance, by their use the priests were enabled to rule them through their superior kuowledge of the secrets of nature, whick gave them the power of working apparent miracles.

The science in which the Egyptian priesthood were most proficient, and which they most jealously guarded, was that of astronomy. The people worshiped the sun, moon, and stars as gods, and a knowledge of their true nature would have
at once put an end to the influence of the priests, Who were believed by the ignorant and superstitious crowd to be able to withhold or dispense, by prayers, invocations, and sacrifices, the divine favor. The priest of a pretended god, when once his god is exposed, stands before the world a convicted impostor. To deny the divinity of the sun, moon, and stars, or, what was the same thing, to permit science to disclose their true nature to the masses of the people, was consequently held by the priesthood of Egypt as the highest of crimes. By a knowledge of astronomy the prieste were able to calculate and to predict eclipses of the sun and moon, events beheld with superstitious awe and fear by the multitude. Seeing how certainly these predictions, when thus made, were fulfilled, the priests were credited with the power to foretell other events, and to look into the future generally. So.they cast horoscopes and assumed to be prophets.

Of course, a knowledge of astronomy diffused among the people would have been fatal to these pretensions. The facts of astronomy were therefore, for these reasons, mosi carefully hidden from the common people, and the priesthood only commanicated them to each other, veiled in allegorical fables, the key to which was disclosed to him only who had taken the highest degrees of the Mysteries, and given the most convincing proofs of his fidelity and zeal.

The names adder which the sun was personifiad were many, but the one great feature, most prolific of fables, was his great decline in light and heat during winter, and his renewal in glory and power at the vernal equinox and summer solstice, which gave rise to all that class of legends which represent the sun-god (under various names) as dying and being restored to life again.

Thus we are told, in the Egyptian sacred legenk, that Osiris, or the Sun, was slain by Typhon, a gigantic monster, typical of darkness and the ovil powers of nature. The body was placed in a chest, thrown into the Nile, and awept out to sea. Iais, or the Moon personified as a goddess, ransacks the whole earth in search of the body; which she finds horribly mutilated. She joins the dissevered parta, and raises him to life again.

In the Greek mythology we are told that

Adonis (the Lord, or sun-god) is slain, bat returns to life again for six months each year-thus dying in the fall and winter months and returning to life again during the spring and summer.

The ritual of the Mysteries in Egypt, India, and Greece, was founded upon this legend, in some form, of the death and resurrection of the personified sungod.'

The Egyptian Mysteries of Osiris and Isis were in the form of a mystic drama, representing the death-by violence of Osiris (the sun-god), the search for his body by Isis, the Moon, and its finding and being raised to life and power again. In the celebration of these Mysteries the neophyte was made to perform all the mysterious wanderings of the goddess amid the most frightful scenes. He.was guided by one of the initiated, who wore a mask representing a dog's head, in allusion to the bright star Sothis (Sirius, or the dog-star), so called because the rising of that star each year above the horizon just before day gave warning of the approaching inundation of the Nile. The word Sothis means the "barker," or "monitor."

The candidate was by this guide conducted through a dark and mysterious. labyrinth. With much pain he struggled through involved paths, over horrid chasms, in darbness and terror. At length he arrived at a stream of water, which he was direeted to pass. Suddenly, however, he was assaulted and arrested by three men, disguired in grotesque forms, who, taking a cup of water from the stream, forced the terrified candidate to first drink of it. This was the water of forgetfulness, by drinking which all his former crimes were to be forgotten, and his mind prepared to receive new instructions of virtue and trath.

The attack of Typhon, or the spirit of darkness, typical of the evil powers of nature, upon Osiris, who is slain, was also enacted as the initiation progressed, and amid the most terrible scenes, during which the "jurgment of the dead" was also represented, and the punishments of the wicked exhibited as realities to the candidate. The search for the body of Osiris, which was concealed in the mysterious chest or "ark," followed. The mutilated remains were at last found, and deposited amid loud cries of sorrow and do spair. The initiation closed with the return of

Osiris to life and power. The candidate now beheld, amid effulgent beams of light, the joyful mansions of the blessed, and the resplendent plains of paradise.
"I saw the sun at midnight" (says Apuleins, speaking of his own initiation into the Mysteries of Isis) "shining with its brilhant light, and I approached the presence of the gods beneath, and the gods of heaven, and stood near and worshiped them." (See "Metamorphoses.")

At this stage of the initiation, all was life, light, and joy. The candidate was himself figuratively considered to have risen to a new and more perfect life. The past was dead, with all its crimes and unhappiness. Henceforth the candidate was under the especial protection of Isis, to whose service be deilicated his new life. (See Apuleins.)

The sublime mysteries of religion and the profoundest teachings of science were now revealed to him, and satisfied his thirst for knowledge, while the possession of power as one of the hierarchy gratified his ambition.

The Mysteries of all the other nations of antiquity were quite similar to those of Egypt, and were no doubt derived from them.

In India the chief deity was trinne, and consisted of Brahma, the Creator, Dishnu, the Preserver, and Siva, the Destroyer. Brahma was the representative of the rising sun, and the others respectively of the meridian and the setting san. The aspirant having been sprinkled with water and divested of his shoes, was caused to circumambulate the altar three times.

At the east, west, and south points of the myatic circle were stationed triangularly the three representatives of the sun-god, denoting the rising, setting, and meridian sun. Each time the aspirant arrived in the south he was made to exclaim," I copy the example of the sun, and follow his benevolent course."

After further ceremonies, consisting in the main of solemn admonitions by-the chief Brahman to lead a life of purity and holiness, the aspirant was again placed in charge of his conductor, and enjoined to maintain strict silence under the peverest penalty ; told to summon up all his fortitrde and betray no aymptoms of cowardice.

Amid the gloom then began bewailings for the loss of the sun-god Sita, followed by ceremonies of fearful import, and scenic representations of a terrible nature. The candidate was made to personify Vishnu, and engaged in a contest with the powers of darkness, which, as the representative of the god, he subdued. This was followed by a dazzling display of light, and a view of Brahma exalted, glorified, and triumphant.

In Persia the candidate was prepared by numerous lustrations performed wihh water, fire, and honey. A prolonged fast for fifty days in a gloomy cavern followed, where in solitude be endured cold, hunger, and stripes. 'After this the candidate was introduced for initiation into another cavern, where be was received on the point of a sword presented to, and slightly wounding, his naked left breast. He wras next crownied with olive, anointed with the sacred oil, and clad in enchanted armor. He was then taken through the seven stages of his initiation. As he traversed the circuitous mazes of the gloomy cavern his fortitude was tried by fire and water, and by apparent combats with wild beasts and hideons forms, typical of the evil powers of nature, in the midst of darkness, relieved only by fiashes of lightning and the pealing of thonder. He was next made to behold the torments of the wioked in Hades. This was followed by a view of Elysium, and the initiation concluded by a display of divine light and the final triumph of Ormued, the sun-god, over all the powers of darkness.

In Greece the Mysteries were denominated the lesser and greater Mysteries. A chosen few only were admitted to the latter, and they were bound to secrecy by the most frightful oaths.

The Eleasinian Mysteries were performed by the Athenians at Eleusis every fifth year, sud were subsequentls introduced at Rome by Adrian. These Mysteries were the same as those of Orpheus. A magnificent temple of vast extent having been erected for their celebration at Eleasis, they subsequentiy became known as the Elensinian Mysteries. The principal officers who conducted the ceremonies were the Eierophant, the Torch-Bearer, the Priest, the Arohon, or King, and the Mystagogue.

The hierophant appeared seated upon a magnificent throne, adorned with gold. He was dressed in a royal robe; over his head a rainbow Tras arched, and there also the moon and seven stars were seen. Around his neek was suspended a gol?en glube. These expressive symbo's all point out the fact that the hierophant represented the sun. Before him werc twenty-four attendants, clad in white robes and wearing golden crowns. These represented the twentyfour ancient constellations of the upper hemisphere. Around him bursed with dazzling radiance seven lights, denoting the seven planets. The torch-bearer, whose duty it was to lead the procession when the wanderings of Rhea commenced in search of the body of the lost god, may have been intended to represent the fecbler light of the moon, since Rhea and Ceres were both identical, according to Herodotus, with the Egypcian Isis. The duty of the mystagogue was to impose silence on the assembly, and command the profane to withdraw. The priest officiated at the altar, and bore the symbol of the moon, being, like the Egyptian priests of lsis, devoted to her service.

The archon, or king, preserved order, offered also prayers and sacrifices, compelled all unworthy and uninitiated persons to retire at the order of the mystagogue, and punished all who presumed to disturb the sacred rites. The aspirant was required to pass through a period of probation, Juring which he prepared himself by chastity, fasting, prayer, and penitence. He was then uressed in sacred garments, crowned with myrtle, and blindfolded. After being thus "duly and truly prepared" he was delivered over to the Mystagogue, who began tue initiation by the prescribed proclamation :
"Eicas, exces, eate Bebeloi!"-("Depart bence, all ye profane!")
"The aspirant was then conducted on a long and painful pilgrimage through many dark and circuitous passages : sometimes it esemed to him as if he were ascending steep hills, walking over flinty ground, which tore his feet at every step, and again down deep valleys and through dense and difficult forests. Meanwhile as he advanced, sounds of terror surrounded him, and he heard
the fierce roar of wild beasts and the hissing of serpents. At length, the bandage being removed from nis eyes, he found himself in what seemed a wild and uncultivated country. The light of day never penetrated this gloomy region, and a pale and spectral glare just served to iight up the borrors of the secnc. Lions, tigers, byenas, and venomous serpent: menaced him at every point, while thunder, lightning, fire and water, tempest and earthquake, threatened the destruction of the entire world. He hardly recovers from his surprise and terror, his eyes no sooner become accustomed to the twilight of the place, than he discovers: before him a huge iron door, on which is this inscrijution : 'He who would attain to the highest and most perfect state, and rise to the sphere of absolute bliss, must be purified by fire, air, and irnter.' He had searcely read tbese words when the door turned on its hinges, and he was thrust into a vast apartment also slrouded in gloom " (Arnold).

Then began the wanderings of Rhea in search of the remains of Bacchus, her body begirt with a serpent, and a flaming torch in her hand, uttering as she goes wild and frantic shrieks and lamentations for her loss. Those already initiated join in, and mix their howlings with hers, blended with mournful music. By means of certain mechanical contrivances (see Salverti's "Philosophy of Magic," vol. i, Chapter X ; also, Brewster's "Natural Magic") the plains of Tartarus were presented as realities before his eyes. He bebald the flames amid which the wicked suffered the purification by fire. Behind him yawned a diamal and dark abyss, from which issued a burning wind and voices of voe and suffering. Approaching the brink he looks down, and sees some suspended on the sharp points of the rocks, and others impaled on a nuighty wheel, which turned without ceasing, thus working their way toward heaven through the purgatorial air. The parification by water was represented by the horrors of a gloomy lake, into which souls less guilty were planged. Apaleius also alludes to this purification by fire, air, and water. He says, "I approached the confines of death, and, having trod on the threahold of Proserpine, I returned therefrom, being borne through all the elements."

As the aspirant thus wanders among these startling scenes, surrounded by the wild cries and lamentations of the goddess and her train, at a


The god is representel cmblematically as a man with a hull's head, hiorompphikally denoting the sun in Taurus. In one haud he holdx the simbol of cternal life, in the other the coblicon of power, alove which appears the name of the gond in hieroglyphics, which, by $n$ sing̣ular cuincidunce, is composed almost entirely ot masonic embleus.
signal from the hierophant a sudden turn is given to their feelings. The gloom begins to disappear, and their cries of grief are changed to joyful and triumphant shouts of "Eutrehamicn, eurekamen !" ("We have found it!") The euresis, or discovery of the body, is then celebrated, and the mangled form of the murdered sun-god restored from death and darkness to life and light and power.

Another iron gate, heretofore conccaled, is now thrown open. The Orphic hymn is chanted, and a splendid spectacle of the Elysinn fields and the bliss of the purified presented. The four-andtwenty attendants of the hierophant prostrate themselves before him, and, amid strains of solemn music, the neophgte receives the benediction and instructions of the hierophant. (Sce Rev. A. C. Arnold's "History of Secret Societies"; Bishop Warburton on the "Mysteries"; Oliver's "History of Initiation"; Apuleins's
"Metamorphoses"; and Salverti's "History of Magic.")

The Mysteries of the C'ubiriu, or Kíabiri, of Samothrace, were to the same effect, and were derived from the same Egyptian source-the Mysteries of Osiris and Isis-which they perhaps fol. lowed more clusely. The candidate, after a term of probation, was purified by water and bloor, made to sacrifice a bull and a ram, and to drink of two fountains, the one callewl Lethe' (oblivion)

"Lsis was wife of Osiris and mother of Horus. She was originally the goddess of the earth, anil afterward of the moon. The Greeks identify her both with Demeter, or Ceres, and with Io."-Smith't "Clasgical Dictionary."
and the other Mnemosyne (memory), by which means he lost the recollection of all of his former orimea, and preserved the memory of his new instructions and vows. This is exactly similar to
the Egyptian Mysteries. The candidate was next conducted to a dark cavern, and thence through


DIONYBES, OR BACCHIS.
horrible scenes similar to those before described. The walls were clothed in black, and he was surrounded by all the emblems of decay and death. Terrible phantoms passed and repassed before

him. A bier rose up at his feet, and on it was a coffin and a dead body, representing the slain sun-god. A funeral dirge was chanted
by an invisible choir, and all the scenes of terror multiplied.

These fearful visions were brought to a close by a flood of dazzling light. All the emblems of death vanished. The dead body of the sun-god on the bier was raised and returned to life amid demonstratims of joy and triumph. The candidate was then instructed, sprinkled with water, and a new nume given him. This new name, together with a mystic token and sign, wras engraved upon a small white stone and presented to him.

The Mysteries of Dionysus were the same as the Eleusinian and those of Bacchus, Dionysus being but one of the names of Bacchus.
The Dionysiac Mysteries and those of the Kabiri prevailed in Asia Minor, and spread through all the cities of Syria. IIirum, King of Tyrc', was undoubtedly the high-priest of these


Firgo is the sign the sum enters in August, and was depicted in the zodiac holding in her handis the emblems of the harvest. The identity of Ceres, the goddess of the harvest, with the constellation Virgo, is yuite plain. This figure of the fruitful rirgin was placed in the zodiac as emblematic of the harvest season, because the sun is in those stars at that time. The word "Virgo" originally implied not pnly a virgin, but any virtuous matron. By an astronomical allegory this virgin of August became is goddess, who descended to the earth, presided over the harvest, taught mankind agriculture, and was worshiped under various names.

Mysteries at Tyre, and the institution continued to exist in Judea as late as the time of Christ, as a secret society known as the Essenes. ("History of Secret Societies," by Rev. Augustus C. Arnold.)

From the foregoing descriptions of the different Mysteries, it clearly appears that the main facts of the legend of the deeth of the sun-god and his return to life, as illustrated and celebrated in them all, are substantially the same, having been derived from the same source-the Mysteries of Osiris and Isis. The death of the sungod, whom the "aspirant". dramatically represented, was the main characteristic of them all. So intimately were the ideas of death and initiation connected, that in the Greek language the same word expressed both ideas, for teגevtav is to die, and reicioval to be initinted. (Warburton, " Div. Lg.," Book II, s. 4.) The names, however, by which the personified sun-god was known, varied with the language of the people:

> "Ogygia me Bacchum vocat; Osirir Egyptus putat; Mysi Planacem nominañt; Dionuson Indi existimant; Romana sacra Liberum; Arabica gens Adoneum."
> $\quad$-Ausosics, Epigram 80.

But, although the legend of initiation was thus suustantially the same in all the civilized nations of antiquity, yet it must be borne in mind that the allegory of the death and return to life of the sun-god was naturally and necessarily modified in its minor details so as to conform to the different conditions of climate and order of the seasons, which prevailed in the various countries, into which it was adopted from Egypt. The Egyptians divided the year into seasons peculiar to themselves, consequent upon the exceptional nature of their country, where all agricultnral parsaits were dependent upon and regulated by the yearly inundation of the Nile. They divided the year into three seasons of four months each: .the first was called the season of "Plants," and originally included November, December, January, and February; the second was termed the season of "Flowering," or "Harvest," and included Maroh, April, May, and June; the third was
known as the season of "Waters," or "Inundation," alluding to the overflow of the Nile, and originally consisted of July, August, September, and October. (Rawlinson's " Herodotus," vol ii, page 238.) If we inscribe an cquilateral triangla within the circle of the zodiac, placing Taurus on the vernal equinox, and Leo at the eummer solstice, as was the case when the Egyptian seasons were tirst difided, we will have a correct representation of the ancient Egyprian year.


But, in the course of time, owing to the want of a correct knowledge of the true length of the solar year, these seasons changed, and those of summer fell in winter. It was therefore found to be necessary to make a correction of the calendar, which was done by observations taken of the heliacal rising of the dog-star Sothis, or Sirius. In their sacred calendar, however, the Egyptian priests appear to have retained the "vague" or indefinite year of three hundred and sixty days, so that the festivals of the gods illustrating the legend of Osiris might pass through all the different seasons of the year. (Wilkinson's "Ancient. Egyptians," vol. ii, chapter viii.) ${ }^{\text { }}$ This ignorance of the true length of the Rolar year produced also a similar confusion in the times of celebrating the festival of the gods in other countries, so that a festival, originally intended (for instance) to celebrate the arrival of the sun at the summer solstice, with appropriate ceremonies, might come to fall in winter, when the nature of those ceremonies had no harmony with the season. In like
manner a festival, originally intended to celebrate the new birth of the sun at the winter solstice, would in process of time come to be held in the summer, and thus be in utter riolation of the solar allegory. This, of course, had the cffect to entirely hide, or greatly obscure, the original solar allusion of these festivals, and it was probably for this reason that the Egyptian priesthood retained the "vague" year in their sacered calenilur.

The neglect of the fraction of a year in the calendar does not appear to amount to much, but, owing to this canse alonc, the first of January in the time of Julius Cæsar had fallen back so as to nearly coincide with the autumnal equinox. Ciesar corrected the calcndar, but, in oriler to do so. was obliged to make an extraorinary year of four hundred and forty-five days; this was called "the year of confusion." This currection made by Cosar did not prevent the recurrence of the same evil, for in process of time it was found that the seasons aguin began to disugree with the almanac, and the religious festivals of the Christian Church, like those of its pagan predecersor, began to fall out of place. This led to the correction made l g Pope Gregory, and the sulnsequent adoption of our present method of keeping the calendar correct. The solar allegory, when it was introduced into countries north of Egypt, and whose agriculture was not regulated by the overflow of the Nile, was modified, as we have seen, in some particulars, in order to harmonize the allegory with the climate and order of seasons which prevailed in those countries; but any want of correspondence that subsequently existed between the festivals, originally intended to celcbrate the summer and winter solstices and the vernal and autumnal equinoxes, and the true tirue of the sun's arrival at those points, was due to an imperfect calendar, resulting from au ignorance of the true length of the solar year.

Another cause which had the effect to obscure the original astronomical signification of the mythological tales of antiquity is the phenomenon known as the "precession of the equinoxes," which has also changed the order of the seasons, so far as the same is marked by the entrance of the sun into particular constellations of the $20-$ diac, at certain periods of the year. As, for in-
stance, the advent of spring was anciently marked by the entrance of the sun among the stars of the constellation Tuurus, it is now marked by his appearauce among the stars of the constella. tion Pisecs. The nature of this phenomenon and the astronomical changes which it has produced will be more fully explained in the following chapter.

In our astronomical explanation of the masenic traditions, legends, and emblems. all these causes, thus tending to obscure and modify the original sslar allegors, will be taken into account, and the same astronomically alapted. for obvious reasons, to the astronomical conditions existing in countries north of the equator at the time of the building of King Solomon's temple, and some three or four hundred years immerliately hefore amd after.

Some of the manonic emblems, however, mast be referred to a perioul much carlier, and some to a much later datc, for it must be rememberel thitt the astronomical legrends and emblems of freemasoury did not all originate at the same period of time nor anong the same people. Ther all, however, harmonize in their allegurical nethoct. and strictly conform to the state of the heavens, and astronomical conditions, and the order of the seasons, as well as the degree of scientific knowledge of the era and country in which they respectively originated and became incorporated into that system of symbolical instruction then already existing, and now known as masonic.

It is the intention of this work to show-l. That the masonic tradition is but one of the numerous ancient allegorics of the yearly passage of the personitied Sun among the twelve constellations of the zodiac-being founded on a system of astronomical symbols and emblems employed for the jurpose of teaching and illustrating the two great truths, of the being of One spiritual, invisible, omnipresent, and omnipotent GoD, and the immortality of the soul of man. 2. That, while these two great doctrines were also originally taught in all the ancient Mystaries, by the use of the same astronomical allegories and symbols, freemasonry alone retained its primitive truth and purity, while the others degenerated into a corrupt system of solar worship. The sun, originally intended as a symbol only of the true
cion, was in time confounded with the person of God Limself, and thus itself worshiped as a god. In freemasonry, on the contrary, it would appear that the exact reverse of this process has taken place, for, while the idea of God as an invisible spiritual being has been reverently kept alive, on the other band, the original symbolism and primitive allegory relating to the sun as an illustration and emblem of the divine nature has been lost sight of, and the true meaning and profound scientific import of the masonic tradition, legends, and emblems thus almost forgotten. The Rev. Dr. Oliver, whose great learning will be disputed by none, says: "The poets, historians, and philosophers of freece, all of whom had been initiated into the Mysteries, unite in describing the Supreme Being as Ons single, divine, and unapproachable essence, who created and governs the world. And in India the Sapreme Deity is thas made to describe himself, in one of the sacred books, which has been preserved and transmitted from an unknown period: 'I was even at first not any other thing; that which exists; the supreme; and afterward I am that which is ; and he who must remain am I.'". ("Landmarks," Lecture XXI.)

In the notes to this lecture of Dr. Oliver's, much valuable information on this point is also collected and condensed. The following is from the celebrated anthem of "Orpheus":
"When the doors are carefully guarded to excludc the profane, I will communicate the Secret of Secrets to the aspirant perfectly initiated. Attend, therefore, to my words, for I shall reveal a soiemn and unexpected truth to your startled ears-a truth which wiil overturn all your preconceived opinions, and convey to your mind unallosed happiness. Let your soul be elevated to the contemplation of divinity. Adore Him, for He is the governor of the world. Know that He is One-that $\boldsymbol{H e}$ has no equal, and that to Him all things are indebted for their existence. He is everywhere present, though invisible, and all human thoughts are open to His inspection." (Note 27.)

On the temple of Sais, in Lower Egypt, was inseribed the following sentence relating to the Deity :
"I am all that hath been, and is, and shall be, And my veil no mortal bath get removed." (Note 29.)
In Note 32 to the same lecture, a translation is given of an extract from the Veda, which is deemed the oldest book in the world, except certain parts of the Bible. It is a translation made in 1656 by command of the Sultan Darah of an Oupanishat, a word meaning the secret thut is not to be revealed: "And what was this great mystery which was so carefully concealed in those ancient books? Like the secret of the Eigyptian and Grecian Mysteries, it was nothing less than the Unity of the Godhead, under the name of Ruder, which is thas explained in another of their sacred books:
"The angels having assembled themselves together in heaven before Ruder, made obeisance and asked him, ' 0 Ruder, what art thou?' Ruder replied : 'Were there any other, I would describe myself by a similitude. I alvays was, $I$ alwoys am, I always shall be. There is no other, so that I can say to you, I am like him. In this $M E$ is the inward essence and the exterior substance of all things. I am the primitive cause of all things in the east or west, or north or southabove or below, it is I. I am all. I am older than all. I am the King of kings. My attributes are transcendent. I am Truth. I am the spirit of creation. I am the Creator. I am Al mighty. I am Purity. I am the first, the midclle, and the end. I um Light.'"

Certainly no more sublime and comprehensive description of the eternal God was ever written.

Speaking of the antiquity of the Veda, Max Maller says: "It will be difficult to settle whether the Veda is the 'oldest of books,' and whether some portiors of the Old Testament may not be traced back to the same or even an earlier date than the oldest hymns of the Veda. But in the Aryan world the Veda is certainly the oldest book, and its preservation amounts almost to a marvel." (See "Lecture on the V.edas," at Leeds, 1865.) Maller in the same lecture fixes the date of the Vedas at "betwcan twelve and fifteen handred years before the Christian era." This is over three thousand jears ago.

Dr. Oliver, in Note 34 to his lectures before quoted, informs us that Zoroaster taught that "God is the firat-incorraptible, eternal, unmade,
invisible-most unlike everything-the leader or author of all good-unbribable-the best of the good-the wisest of the wise."

With all this evidence before him, and actually quoted in his writings, Dr. Oliver, strange as it may appear, is in the constant habit, in his works, of branding without distinction all the ancient Mysteries as "spurious freemasonry,", an epithet which he invente!, and which bas been adnpted by a few others. But, if the sublime views of God above quoted are "spurious," where shall we look for the genuine ones, for those taught in freemasonry to-day are the sanue?

Late discoveries make the fact, that the unity of God was taught in the ancient Egyptian Mysteries, beyond all doubt.
"The manifold forms of the Egyptian pantheon" (says the late E. Deutsch) "were hut religious masks of the sublime doctrine of the unity of the Deity communicated to the initiated in the Myateries." The gods of the Pantheon, says M. Pierrot, were "only manifestations of the One Being in various capacities." ("Dict. d'Arch. Egypt.," article " Religion," Paris, 1875.) M. Maspero and other scholars have arrived at the same conclusion. ("Hist. Anc. des Peuples de l'Orient," cap. i, Paris, 1876.)

The following hymn occurs in two papyri in the British Museum. It represents the thought prevalent in Egypt at the time of the Exodus, and is ihe work of Enna :
"Hail to thee, O Nile!
He causeth growth to fulfill all desires,
He never wearies of it.
He maketh his might a buckler ;
He is not graven in marble
As an inage bearing the donble crowns;
He is not beheld;
He hath peither ministrants por offerings;
He is not adored in sanctnaries,
His abode is not known.
No shrine is found with painted figures (of himi).
There is no building that can contain him:
Unkoown is his name in heaven.
He does not manifest his forms;
Vain are all representations of him."
And again we find the one God thus described : "He hath made the world with his hand, its war
ters, its atmosphere, its vegetation, all its flocks, and birds, and fish, and reptilcs, and beasts of the ficld." (Hymn to Osiris, translated by Chabas.)
"IIe made all the world contains, and hath given it light when there was yet no sun." (Melange's "Egypt," i, 118, 119 . Chabas.)
"Glory to thee who hast begestten all that exists, who bast made.man, and made the gods also, and all the beasts of the field! Thon makest men to lice. Thou hast no second to there. Thou givest the breath of life. Thou art the light of the worll." (Leeman, " Monuments du Musée des Paysi-l3as," ii, 3.)

But although God is the creator, yet he is himself " self-created."
" Ilis commencement is from the beginning. He. is the God who has existed from ald time. There is no Gor without him. No mother bore him, no father hath beugotten him. God-groddess created from himself." (Clanbas.)

In many of the hymns we find allusion made to the mirstury of his name, and its being bidden, secret, and unknown-ineffable, and not to be spokien.
" Vnknown is his name in heaven. Whose name is hidden from his creatures. His name which is Amen" (i. e., hidden secret). Thercfore the Egyptians neier syonke the unknown name, but used a phrase which expreased the self-existence of the eternal, "I am," "One lBeing," "I am one," "I am he roho I nm." (Ritual of the Dead.)

Says John Newenham Hoarc, in a late article in the "Nineteenth Century":
"The Egyptians tried to realize God by taking some natural object which should in itself convey to their minds some feature in God's nature. This became a necessity for the priests in the religious teaching of the people. Therefore in the sun they saw God manifested as the light of the world. The more fully they felt the infinite nature of God, the more would they seek in nature for symbols. . . . All the deities were regarded as manifestations of the one great Creator, the uncreated, the Father of the universe."

This is expressed in the following hymn: "Hail to the lord of the lapse of time, king of gods ! Thou of many names, of holy transformations, of mysterious forms."


#### Abstract

" Nevertheless, as in Greece and India, so also in ancient Egypt, the symbols became in the popular mind actual gods, and the people degenerated into gross idolatry. "' They changed the glory of the incorruptible Gud into an image mide like corruptible man, and to birds, and to four-footed beasts, and creeping things, . . . and they changed the truth of God into a lie, and worshiped and served the creature rather than the creator.' (Rom. $\mathrm{i}, 20 \mathrm{j}-2 \mathrm{i}$. "This is unfortunately the aspect in which the Egyptian Pantheon has presented itself to mankind for many centuries." "The conception of the unity of the Godhead did not prusent the Egyptians from thinking of


 (iud as rery near to them."He is their father, and they "sons beloved of their father." He is the " giver of life," "toucher of the hearts." "searcher of the inward parts is bis name."
"Erery one glorifies thy goodness; mild is thy love toward us; thy tenderness surrounds our bearts; great is thy love in all the souls of men."

One lamentation cries: "Let not thy face be turned away from us; the joy of our bearts is to contemplate thee. Cbase all anguish from our hearts. He wipes tears from off all faces. Hail to thee, Ra ! Lord of all truth, whose shrine is bidden."
"Lord of the gods, who listeneth to the poor in his distress, gentle of heart when we cry to thee. Deliverer of the timid man from the violent, judging the poor-the poor and oppressed. Lord of mercy, most loving; at whose coming men live, at whose goodness gods and men re-joice-sovereign of life, health, and strength." (" Records of the Past," ii, 98.)
"Speak nothing offensive of the Great Creator; if the words are spoken in secret, the heart of man is no secret to him that madc it." (lbid., ii, 131.) "He is present with thee though thou be alone."

As we might expect, from 80 lofty a conception of God, their hearts broke forth into joyous bymns of praise :

[^0]To the height of heaven, to the breadth of the earth,
To the depths of the sea,
The gods adore thy majesty.
The spirits thou hast made exalt thee,
Father of the father of all the gois,
Who raises the Leurens, who fires the earth.
Maker of beings, author of existences,
Sovereign of life. health, and strength,
Chief of the gods,
We worship thy spirit, erho alone hast made us.
We, whou thou hast made, thank thee that thoa hast given an birlh.
We give thee praises for thy
Merry toward as.'
-("Records of the Past," ii, 98.)
"Such was the idea of God and bis relations to man held by the ancient Egyptians, and, as we might expret, it drew forth in them 'lovely and pleasant lives.' The three cardinal requirements of Egyptian piety were-love to God, love of virtue, and love to man.
"The honor due to parents sprang naturally from the belief in God as 'Our Futher, which art in hearen.' Wo constantly find inscriptions on the tombs nuch as the following :- ' I honored my father and mother ; I loved my brothers; I tanght little children; I took care of orphans as though they had been my own children.'. In letters of excellent advice, addressed by an old man one bundred and ten jears of age to a young friend (which forms the most ancient book in the world, dating 3000 в. c.), he says: 'The obedience of a docilc son is a blessing. God loves obedience. Disobedience is hated by God. The obedience of a son maketh glad the heart of his father. A son teachable in God's service will be happy in consequence of his obedience. IIe will grow to be old, he will find favor.'"

That our ancient brothers of Egypt were not deficient in the masonic virtues of "Brotherly Love and Relief and̀ Pruth," appears from the following :
"On the tombs we find the common formula:
" ' I have given bread to the hangry, water to the thirsty, clothes to the naked, shelter to the stranger.' This tenderness for suffering humanity is characteristic of the nation.
"Gratefully does a man acknowledge in his autobiography ( $4000 \mathrm{~B} . \mathrm{c}$. ) that, ' $W$ andering, I
wandered and was hungry ; bread was set before me; I fled from the land naked; thare was given me ine linen.'" (Cbabas, "Les papyras Hieratiques de Berlin; revits d'il y a quatre mille Ans," 1863.)
"Love of truth and justice was also a distingaishing trait of the Egyptians. God is thus invoked, 'Rock of truth is thy name.' In an inscription at Sistrum a king addresses IIathor, goddess of truth, 'I offer to thee the truth, 0 goddess, for truth is thy work, and thou thyself art the truth.' Truthfuluess was an essential part of the Egyptian moral code, and in the Egyptian Ritual we are informed that, when after death the soul enters the hall of the Two Truths, or Perfect Justice, it repeats the words learned upon earth : ' $O$ thou great God, Lord of Truth, I bạve known thee, I have known thy name: Lord of Truth is thy name. I never told a lic at the tribunal of truth." (" Religion of the Ancient Egyptians," by John Newenham Hoare, a late article in the "Nineteenth Centary.")

But enough bas been advanced to establish the fact that the ancient Mysteries originally taught the unity of God, and also that their moral code was both pure and exalted.

That the ancient Mysteries, after the people became corrupt, became corrupt in their turn, there can be no doubt, but in their inception they were not so. The crowning secret was a knowledge of the true God, and the disclosure of the fact that the sun was only a symbol of the great Creator, and not itself a divine being. In the midst of an age where the worship of the sun was the established religion of all nationf, no one could with safety avow his disbelief in the divine nature of the heavenly bodies. To do, so would be instant destruction.

Before the great truth of the real nature and attributes of God could be communicated, the candidate was required to take all the degrees of the Mysteries, and give the strongest proofs of his fidelity and zeal.

A knowledge of the true God was, in the language of the Orphic hymn, "the secret of secrets," to be only communicated when the aspirant was "perfectly initiated," with "doors carefully grarded and the profane excluded." It
was even then, to those to whom it was thus communicated, "a solemn and unexpected truth," which "startled their ears" and " overturned all their preconceive"l opinions."

Taught from their eariest infancy to regard the sun, moon, and stars as actual divinities, and wandering in the durlness of a false system of religion, they were on their initiation into the Mysteries first brought to behold the true light, and there obtained for the first time a knowledge of the true God. This was the real Artopsy, or "bringing to light," of the candidate in the Mysteries. "It was difficult," says Plato, " to attain, and dangerous to publish, the knowledge of the true God."

The light thus communicated under the strictest conditions of secrecy was to be kept, when so communicated, religiously hidden from the uninitiated, it being well known that a pablic profession of the great truth would be visited by the heary band of both the civil and religious authorities, and not only their own lives but that of all their kindred be thus sacrificed to the superatitious rage of the ignorant multitude, and the interested fury of the ministers of a false religion.

It is true that the priests themselves often took an active part in the Mrsteries, of which they had taken the higher degrees. The Mysteries served as a sort of theological and scientific seminary, in which they studied the truths of religion and science, and from the higher degrees of which the ranks of the priesthood and rulers were from time to time recruited. But these facts could be of no help to him who rashly made a public profession of his want of faith in the national solar gods.

The policy of secrecy, by which all trath, whether religious or scientific, was concentrated in and confined to the Mysteries, was a "state policy" long established and thought to be necessary for the well-being of society. It certainly was for the well-being of the few on whom it conferred power and wealth. To "reveal the Mybteries " was considered the very highest of crimes, and he who did ao could hope for no mercy. The very priests who perhaps had initiated him, and who did not themselves believe in the divinity of the sun, moon, and stars, would be the first it. denounce his alleged impiety and atheism, an
urge on his punishment. Nor would any of the brotherhood help him, as be would be considered by them as a perjured traitor, who had violated the most solemn obligations, and now scught to destroy the order itself .by exposing it to the superstitious wrath of the ignorant multitude. "The betrayers of the Mysteries were punished capitally and with merciless severity. Diagoras the Melian had revealed the Orphic and Elensinian Mysteries, on which account he passed with the people as. an atheist, and the city of Athens proscribed him and set a price on his head. The poet Aschylus had like to have been torn in pieces by the people, on the mere suspicion that in one of his scenes be had given a hint of something in the Mysteries" (Warburton). So long, however, as the initiated held their peace, they all might, at the solemn assemblies of the Mysterics, held under circumstances of profound secrecy and sanctioned by the government itself, worship the one true God without fear; indeed, such a worsbip was enjoined upon them. But, should they openly disclose their disbelief in the actual divinity of the sun, moon, and stars, their danger was immediate and their ruin certain. Thus all alike, from the most exalted hieropbant to the humblest of the initiated, were the slaves, and sometimes the victims, of a system of state policy which they all upheld and defended. It is true, however, that in the progress of many centuries the Mysteries became corrupt, and lost a knowledge of the true God, but in their original institution they not only taught the trath concerning the Deity, but protected his worshipers so long as they kept sacred their vows of secrecy. That the doctrine of immortality was also directly taught in the Mysteries, we are informed by Cicero, who had himself been initiated. (See "Tusculan Disputations," Book I, cxiii.) Among all the corruptions which at a later date prevailed, there, however, yet remained a "chosen band," who preserved the ancient teachings of the Mysteries in their purity. They were obliged for their own protection, however, to render their symbols yet more obscure, and make thicker and draw still closer the veil of allegory about the penetralia of divine truth. From these few and faithful ones the truth was handed down to following generations, and from
them all that is great, glorious, and ancient in modern frcemasonry was darived.

From these freemasonry received-its two great doctrines of the unity of God and the immortality of man ; and, together with those sublime traths, it also received that system of astronomical symbols, emblems, and allegories also peculiar to the Mysteries, which were used, anciently, bota to conceal and to illustrate those great truths. Dr. Mackey, in his "Symbolism of Freemasonry", says that those who seek for an astronomical explanation of the masonic ritual, "yield all that masonry has gained of religious development in past ages" (page 23?). For this broad assertion he gives no reasons Fhatever, and I can not but think that, had he considered the full import of his words, he never would have made any such remark. There is certainly nothing irreligious or atheistical in the employment of astronomical embiems to describe and illustrate, the nature and attributes of Deity. If so, the writers of the Bible have been guilty of a great sin, for that sacred volume is full of solar and astronomical illustrations of the glory and power of the creator. (Numb. xxiv, 17 ; Psalm xix; lxiriv, 11 ; Mal. iv, 2 ; Matt. ii, 2 ; xvii, 2 ; Judges $\nabla, 20$; Job xxv, 5 ; xxxviii, 7 ; Dan. xii, 3 ; Jude xiii; Rev. i, 16; x, 1, etc.) Freemasonry, says Dr. Mackey, quoting Dr. Hemming with approval, is a science of morality "veiled in allegory and illustrated by symbols." Is it to be inferred that the moral science taught in freemasonry is any the less true, pure, or elevated, because the allegoies and symbols employed to "reil and inastrate" it are astronomical in their character? Is it irreligious and atheistical to compare the great Creator to the noblest and most glorious of all his physical workg-the sun-and only orthodox and pious to compare his nature and attribates to a carpenter's rule or a stone-cutter's square? Certainly this is not what Dr. Mackey intends, yet such is the natural inference from his language.

Neither does it follow that those who give the masonic ritual an astronomical and scientific as well as a moral interpretation, deny to masonry the glorious distinction of having been in past ages the depository of a knowledge of the true God, and of the immortal nature of man. All that we
contend is, that those great truths were taught not only by allegory and symbol, but originally and mainly by astronomical symbol and allegory.

The more exalted and boly any doctrine is, the more elevated and sublime should be the symbols and emblems employed to teach and illustrate it.

As the being and attributes of God and the immortality of the soul are the two mosi exalted and sublime of all truths, so are the-sun, mocn, and stars the most glorious and suolime objects in nature. There are, therefore, a peculiar fitness and beauty in the employment of the latter to symbolically and emblematically illustrate the former. "The heavens declare the glory of God, and the firmament showeth his handiwork."

In this work no attempt will be made to identify the masonic emblems, traditions, and legends with the Mysteries of any particular nation. All the Mysteries were originally astronomical in their character, but differed in form and detail, as they were founded on different modifications of the Egyptian legend of the personified sun-god. Dr. Mackey, in strange contradiction to the words which we have above quoted from page 236 of his "Symbolism of Freemasonry," devotes a whole chapter of that interesting and learned work to prove that freemasonry was derived directly from, the Grecian Mysteries of Dionysus. He thinks it certain that the Tyrian artificer, Hiram, was a member of the Dionysiac fraternity, and that he, at the head of the Tyrian workmen at the time of the building of King Solomon's temple, introduced the Dionysiac Mysteries in a modified and purified form among the Ifebrerrs (Chapter VI). Dr. Oliver, who denies in all its details the astronnmical thency, with an equal inconsistency advocates the same idea. (See. his "Theocratic Philosophy of Freemasonry," Lecture VIII.) According to Dr. Mackey, and Dr. Oliver, also, freemssonry is therefore only a modified and puritied form of the Grecian Mysteries o: Dionysus.

It is true that, like the others, these Mysteries became corrupt, but it is equalls true that the Mysteries of Dionysus, like all the other Mysteries, were astronomical in their character. Dioriysus is but another name for Osiris, and is the
personified sun-god, the legend of whose death, the search for whose boriy, and its recovery, together with his subsequent " raising" from death and the grave to a new life, forms the theme of the ceremony of initiation; all of which the aspirant was caused to dramatically enact.
"One thing, at least," says Dr. Mackey, " is incapable of refutation; and that is, that we are indebted to the Tyrian masons for the introduction of the symbol of Hiram Abif. The idea of the symbol, though modified by the Jewish masons, is not Jewish in its inception. It was evidently borrowed from the pagan 'M.ysteries,' where Bacchus, Adonis, Proserpine, and a host of other apotheosized beings play the same role that Hiram does in the masonic Mysteries." ("Symbolism of Freeuasonry," Chapter I, page 20.)

This emphatic language of Dr. Mackey, therefore, not only admits, but declares "incapable of refutation," the following important particulars :

1. That IIiram Abif, as described in the ma--sonic legend, is a mystical heing, or "symbol" only, and not an historical person, any more than l3acchus, Adonis, or Proserpine.
2. That the whole legend of the third degree is an allegory and not a history.
3. That the allegory is the same as that of Bacchus, or Dionysus, and therefore identical with that of Osiris. (For proof that the Mysteries of Bacchns, or Dionysus, were the same as those of Osiris, see "Herodotus," Book II, Chapter LI, sections $40-00$; together with the notes to Rawlinson's edition. Also, as to the identity of Bacchus and Dionysus, see Oliver's "! History of Initiaticn," Lecture VI, and notes.)
4. That in this allegory Hiram "plays tho same role" as that of Bacchus, or Dionysus, and Osiris, and all the other personified san-gods in the various forms of the Mysteries.

Now what is this role? It is simply that of the personified sun-slain like Oairis; Bacchus, Adonis, or Dionysus, at the autumnal equinoz; lying dead during the winter months, being restored to life at the vernal equinox, and exalted in power and glory at the summer soletice.

These admiasions of Dr. Mackey cover the whole grouid, and sanction every pocition to be
taken in this work. It is not, however, my intention to trace the masonic traditions, legends, and emblems, like Dr. Mackey, to any one of the ancient Mysteries to the exclusion of the others, as masonry has features derived from each of them. It is, however, my design to show that it is of an astronomical nature, and had its origin, in common with all the ancient Mysteries, in a lofty system of astrononical allegorics, originally intended to teach the unity of God, the immortality of the soui, and an exalted code of norality; while at the same time, by the use of the same allegories and symbols, the leading facts of astronomical science were to be both illustrated and preserved-in other words, to show that freennasonry is a system of science as well as morality, veiled in an astronomical allegory, and illustrated by astrononical symbols.

It is also the intention of this work to unlock this allegory, and to show the true scientific and astronomical meaning, as well as moral application, not only of all the legends, but of all the emblems and synibols of freemasonry which have any claim to antiquity..

The real character and true origin of the peculiar symbolism of freemasonry and its allegories bave been a great puzzle to most members of the fraternity. The great moral truths which those symbols and allegories teach are plain enough; the only mystery is, how came those truths to be taught by those peculiar symbols and in that peculiar manner?

It is also worthy of remark that, while the moral truths which our emblems, symbols, and legends teach are still well understood, yet those great scientific truths, which they are equally said to illustrate and teach, are wholly lost, or at least their connection with them. This lost connection between our emblems, symbols, and legends, and manj of the profoundest truths of seience, will bo restored in the pages of this work.

Oliver and Hutchinson have both, with much labor, and the formcr with great learning, attempted to prove that the master-musun's degree is a Christian institation-nat in the sense of its being pervaded by the spirit of Christianity, which is trae, but a Christian institation in the same sense as the Church or the rite of baptism
is. Dr. Mackey correctly says they bave "fallen into a great error." The theory that our fraternity bad its origin in the building societies of the middle ages is sufficiently disproved by our ritual itself, which has many features that are totally inconsistent with any such theory, and point to a far more remote era; although many things relating to operative masonry were no doubt then ingrafted on it.

Dr. Mackey, Oliver, and others, will not accept the astronomical theory, and thas the whole matter remains, so far as they are concerned, a myatery. The asironomical theory is, however, the only correct one, as the following pages will sufficiently show.

The great difficulty is, that it has never been properly and at the same time fully presented. It has been advanced mainly by antimasons, who understood many other things much better than they did our ritual and the legends and symbolism of our order ; or by skeptics, endedvoring at the same time to tear down the Christian religion. The advocacy of the astronomical theory by this kind of writers, especially the latter, has doze much to render it unpopular, and induced many authors and thinkers to discard it without a due and fair examination. Many masons, like Dr. Oliver, seem to have an illogical and almost superstitious fear of having the astronomical character of our symbolism established. The fact is, however, that the great moral truths of freemasonry are indestryctible, and stand independent of the symbolism intended to illustrate them, and to conceal them, also, in past ages, when disclosure exposed the initiated to persecution and death, as an unbeliever in the actual divinity of the sun, moon, and stars. The great moral teachings of freemasonry will not suffer any danger of destruction or damage if it is fully established that the emblems by wiich they are illustrated, like the imagery of the Bible, are mainly eatronomical instead of meehanical.

The'following pages, it is beliered, contsin convincing proofs of the real character and origin of our symbolism. Portions of the masonic rituah, and.a few of the emblems, have in a general way been shown by several writers to be of astronomical origin, and the assertion has been frequently
made that the whole system has an astronomical significance. But it is believed that this work contains the only full and complece demonstration of the purely astrouonical and scientific import of the whole ritual, and all the details of the solar allegory, as applied to masonry-accompanied by a particular exposition of the astronomical import and origin of all of its aricient emblems, symbonls, and legencls, over seventy in number (see index), that has ever been made. The traditions and emblems of freemasonry have been made to speak for themselves, and they tell their own origin and meaning in a language which can not fail to convince any reader, who combines a knowledge of the lodge and chapter degrees with the main outlines and leading principles of satronomy and geometry. These sciences, so often alluded to in our ritual, are eminently masonic, and without some knowledge of them what is to follow will not be fully understood.

It is hoped that this work will also not be without interest to the uninitiated. They will, at least, be able to see, unfolded in its pages, a beautiful and impressive astronomical allegory, which, by the use of sublime and august emblems, teaches the unity of God and the immortality of the soul. The work also throws much light apon the religion of the ancient Egyptians, Greeks, and Romans, as well as mythology in general. How far the solar allegory may be truthfully applied to freemasonry they, of course, will not be able fully to determine for themselves, except in a general way and on minor points. As for the rest, they will be expected to be complacent enough to take the opinion of well-informed members of the fraternity.

## III.

## 4 CHAPTER OF ASTRONOMICAL FACTS.

In order to properly understand what is to follow, some knowledge of the leading facts of astronomy is required. The nature of the zodiac, and its dirision into signs and constellations; the phenomena attending the yearly passage of the sun among the stars; the solstitial and equinoc-
tial points, and the "precession of the equinoses," and its effect upon the relative position of the signs and constellations of the zodiac-as well as several other particulars of astronomy-must ie known to the resder, in order that he may fully uuderstand the astronomical allegory ahout to be unfolded and illustrated.

It has, therefore, been thought necessary to write an introductory chapter, giving a brief and popular exposition of the matters above enumerated. All technical terms will be discarded, as far as possible, and such as are used from absolute necessity will he defined. No attempt will be made to give the cause or philosophy of solar or sidereal movements-the sole object being to bring clearly before the mind the apparent annual path of the sun in the zodiac, and such other celestial phenomena as are required to properly understand the allegorical application which is to be made of the facts of astronomy to the masonic traditions, legends, emblems, and symbols. This chapter will serve to call the particular attention of those who are proficient in science to certain particular astronomical facts bearing directly upon our subject, and it is hoped will also contain enough to sufficiently instruct those who may have grown rusty in or never acquired a knowledge of the motions of the celestial bodies. On the opposite page is a diagram of the zodiac.

## THE ECLIPTIC.

The ecliptic is a great circle in the heavens surrounding the earth, and representing the apparent path of the sun each year among the stars.

## THE ZODIAC.

The zodiac is a beit of stars extending $8^{\circ}$ on each side of the imaginary circle called the ecliptic. The zodiac is therefore $16^{\circ}$ wide, and, being a complete circle, is $360^{\circ}$ in circumference. It is divided into twelve equal parts of $30^{\circ}$, each denoting the particular place which the sun occupies during each of the twelve months of the year. Each of these divisions of the zodiac, in the visible heavens, is marked and occupied by a.separate and distinct group or cluster of stars, called a constellation. These constellations are namad after certain "living crestures," suppoeed
to have been originally emblematic of the month in which the sun entered them.

## TIIE TWELVE CONSTELLATIONS.

The twelve constellations are called-

Arics, the Ram.
Tuurus, the Bull.
Gemini, the Twins.
Cancer, the Crab. Leo, the Lion.
Virgo, the Virgin. Libra, the Scales.
; Scorpio, the Scorpion. I Senjitterius, the Archer. C'upricornus, the Goat. -1quarics, the WaterBearer.
Pisces, the Fishes.

These, ranged in their appropriate places around the great zodiacal circle, are all represented in the foregoing diagram. The following is a bricf description of each of these constellations:

## Amies.

This was once the first constellation of the zodiac. It is now the second, by reason of the precession of the equinoxes, which will be subsequently explained. It is known by two loright stars, about $4^{\circ}$ apart, which are in the horms of the Ram. The hrightest of theace, culled diet ties, is used by navigators to compute longitule by the moon's distance. Most of the stars in this constellation are small. Aries, in the llobrew zodiac, is assigned to Simeon, or by sume to Gad.

## TALERLS.

This constellation is next to Aries in the zodiac, and is one of the most celebrated and splendid. The Pleiacles are in Teurus, and near it is the magnificent constellation Orion, called Orus by the Egyptians. In that sublinc chapter of the Old Testament, Job xxxviii, mention is made of these: "Canst thou bind the sweet influences of the Pleirdes, or loose the bands of Orion 9 " Taurus, once seen and recognized in connection with Orion, is never forgotten.

The Bull is represented as engaged in combat with Orion, and plunging torard him with threatening horns. The face of the Bull is designated by five bright stars in the shape of a letter $\nabla$, known as the Hyades, the most brilliant of which is Aldebaran, which is much used by navigators.

The tips of the horns of the Bull are marked by two bright stars at an appropriate distance above the face. The Plciades gleam brightly near the shoulder. Orion, who faces the Bull, is known by four bright stars, forming a large parallelogram, in the center of which is seen a diagonal row of stars, known as the belt of Orion, and called in Job the "bands of Orion." The four stars of the paralleluyram, respectively, indicate his shoulders and fect. A line of smaller stars form his sword, its handle ormamented by a wonderful nebula. Juse below Orion shines, with a splendor almust equal to Jupiter or Venus, that mighty sun-star Sirius, the deified Sothis of the Egyptians. . Farther cast and over him flashes that brilliant star known as Proceyon. These two, with Betelgeux, in the shoulder of Orion, form an equilateral triangle, whose sides are each $26^{\circ}$, which is so perfect and beantiful as almost to force itself opon our attention. Treurus, Orion, Siẹius, the Pleincles, and $U_{!}$(cull $x$, are all frequently alluded to by the proct Virgil in the "Georgics." This is, perhaps, the nust magnifcont and sublime quarter of the leavens north of the equater.

Teurus was held by the Eggytiany, and most of the nations of antiquity, as a sarrad constellation. Before the time of Abraham, or over four thousand years ago, it adurncrl and marked the vernal. equinox, and "for the space of two thousand jears the Bull was the prince and leader of the celestial host." The sun in Taurus was deified under the srmbol of a bull, anil worshiped in that form. The sacred figures found among the ruins of Egypt and Assyria, in the form of a bull with a human face, or a human shape with the face and horns of a bull, are emblematic of the sun in Taurus, at the vernal equinnx. In the Hebrew zodiac Taurus was ascribed to Joseph.

## GEMISI

Is the next constellation in the zodiac. Its prin-cipal-stars are two bright ones, called Castor and Pollux. They are about $4 \frac{1}{2}^{\circ}$ apart, and of the first and second mangitudes. In mythology, Castor and Pollux are said to be the twin sons of Jupiter by Leda. In the FIebrew rodiac this constellation is assigned to Benjamin.

## cancer.

This constellation is composed of small stars, the brightest of which are only of the third magnitude. It is of no especial importance, except from its position, of which more will be said subsequently. In some Eastern zodiacs this sign- is represented by the figure of two animals like asses, and by the Hebrews is assigned to Issachar.

## LEO.

This is another celebrated and beautiful constellation. It is easily known by five or six bright stars situated in the neck and head of the Lion, and arranged in the form of a sickle. Its two brightest stars are Regulus and Denebola, the former in the sickle and the latter near the tip of the tail. Regulus is a very bright star, and is situsted almost exactly in the ecliptic. It is, therefore, of great use to navigators in determining the longitude at sea. The constellation Leo is also celebrated as being the radial point from which the remarkable meteoric showers of November proceed. If this phenomenon was observed by the ancients, it must have greatly increased the veneration and awe with which this sacred constellation was viewed.

The constellation Leo is, for many reasons, full of significance to masons. - It once marked the summer solstice, and at the building of King Solomon's temple was much nearer. that point than now; this change of position, consequent upon the precession of the equinoxes, will be subsequently explained, together with the intimate connection between the constellation Leo and the masonic tradition. In the Hebrew zodiac Leo is the significator of the tribe of Judah. According to astrology, it is the " sole house of the sun."

## VIRGO.

This is the beautiful virgin of the zodiac. She is represented as holding a spear of ripe wheat in her left hand, marleed by a brilliant star, called Spica. In the Egyptian zodiac Isis supplies the place of Virgo, and is represented holding three ears of corn in her hand. Epica, together with Dencbola in Leo, and Areturus in Boötes, forms an equilateral triangle of grest beauty. Arctures
is also one of the stars mentioned by Job: "Canst thou bring forth Mascaroth in his season? or canst thou guide Arcturus with his sons?" Mazearoth signifies the twelve signs of the zodiac. Arcturus is also frequently alluded to by Virgil in the first book of the "Georgics." The rising and setting of this star were supposed to portend great tempests. In the time of Virgil it rose about the middle of September. The bright star Spica, in Virgo, lies within the path of the moon, and is of great use to navigators. In the Hebrew 20diac Virgo is assigned to Naphtali, whose standard was a tree bearing goodly branches.

## LIBRA.

This constellation is anciently represented by the figure of a man or woman bolding a pair of scales. The human figure is omitted in all Arsbian zodiacs, as it is beld unlawful by the believers in the Koran to make any representation of the human form. In our zodiac, also, the balance only is depicted, probably because we received the zodiac from the Arabians. This constellation may be distinguished by a quadrilateral of four stars, but it contains none of great brillisincy. In the Hebrew zodiac Libra is ascribed to Asher. This constellation formerly was on the autumnal equinox, and when the sun entered its stars the days and nights were equal. To this the Latin poet Virgil alludes :
"Libra die somnique pares nbi fecerit horas, Et medium laci atque umbris jam devidit orbem." -" Georgics," Book I.
"When Libra makes the hours of day and nipht equal, and now divides the globe in the middle, between light and shadea."

## sCORPIO.

This constellation has some resemblance, in the grouping of its stars, to the object after which it is named. . It is a very conspicuous object in the evening sky of July. In its general form it resembles a boy's bow kite, the tail of which forms that of the scorpion, and is composed of ten bright stars. The first of thesc, near the point of the triangle forming the body of the kite, is dutarps. It is a brilliant red star, resembling the planet Mars. In the Hebrew zodiac Scorpio is refer. 1 to Dan.

## 8AGITTABIUS.

The Archer follows Scorpio, and is represented as a monster, half horse and half man, in the act of shooting an arrow from a bow. Sugittarius is easily recognized by the figure of an inverted dipper, formed of several bright stars. The figure of Sagittarius appears in the ancient zodiacs of Egypt and India.

## CAPRICORNUS.

The Goat is composed of fifty-one visible stars, most of them small. It is of no particular importance, except from the connection of its sign with the winter solstice, of which more will be said hereafter. It was called by the ancient Oriental nations the southern gate of the sun.

## AQUARIUS AND PISCES.

These are the last two constellations of the zodiac. The former is represented by the figure of a man, pouring ont water from a jar, the latter by two fishes joined at a considerable distance by a loose cord. Aquarius in the Hebrew zodiac represents the tribe of Reuben, and the Fishes Simeon. The stars in both of these constellations are small and unimportant, except Fomal haut, in Aquarius, which is almost of the first magnitude, and is nsed by navigators. This concludes our description of the constellations of the zodiac.

## THE SIGNS OF THE ZODIAC.

The signs of the zodiac are twelve arbitrary signs, or characters, by whish the twelve constellations are designated. They are as follows:

These, without doubt, had their origin in the bieroglyphic or picture writing of the ancienus. In the sign Aries ( $\Phi$ ) we have a rude but yet remaining representation of the head and horns of the Ram. In. Taurus ( $\gamma$ ) of the iace and horns of a Bull. Gemini (II) denotes the Twins, seated side by side with embracing arms. The sncient statues of Castor and Yolluy consisted of two upright pieces of wood, joined together by two cross-pieces. Cancer ( 8 ; yet retains a resamblance to the clsws of the Crab. Leo ( $\Omega$ )
may be intended for a couching lion, or may be the outline of its principal stars-the group now called the Sickle, the stars of which, if joined by an imaginary line, would form a sigure not onlike the sign ( $\Omega$ ). In Virgo (叹) the resemblance seems to be lost. Libra ( $\sim$ ) is a plain picture of a scale-beam. The sign Scorpio ( m ) displays the sting of that venomous creature. Sagittarius, the Archer, is well represented by his arrow and part of his bow ( 7 ). In Capricornus ( 48 ) the resemblance is again lost ; but in Aquarius (m) we recognize the waves of the sea, denoting water. In Pisces ( $F$ ) the resemblance of two fishes joined is atill apparent.

It is quite easy to conceive how the original pictorial representations of the creatures emblematically denoting the various constellations, in process of time, from considerations of speed and convenience in writing them, grew' into these arbitrary signs like letters.

In the figare of the zodiac, opposite page 24, the pictorial representations of the twelve constellations are given, with the arbitrary signs denoting each placed against them. The san, moon, and planets were also designated by hieroglyphic astronomical signs by the ancients, as follows:

| Sun, | ©. |
| :--- | :--- |
| Moon, | O. |
| Mercury, | $\searrow$. |
| Mars, | $\delta$. |

> Venue, $\%$.
> Juppiter, 24.
> Scaturen, 5.

The planetary signs originated in the same manner as the zodiacal ones. The sign for the sun is "a point within a circle"-the point represents the earth, and the circle the ecliptic. The moon is appropriately pictured as a crescent. In the sign of Mercury we have the cadrceve of that god, composed of two serpents twisted about a rod. Mars is represented by his shield and spear. Venus is well denoted by the picture of an ancient hand-mirror. The origin of the planetary sign for Jupiter is not so clear. It does not in the least resemble an eaglc, as some suggest, nor is it any more like the initial letter of the Greek Zeus; besides, the hieroglyphs are alwaye representations of objects, not letters. This sign resembles more nearly the no leas ancient nu-
meral sign, the figure 4, and, as Jupiter is the fourth planet from the sun (if, like the ancients, we do not enumerate the earth), this resemblance may not be accidental. Saturn, lastly, is represented by lis scythe in its ancient form.

These arbitrary signs for the planets and constellations have come down to us from a remote antiquity. Their gencral use by all civilized nations is of great bencfit, as they form a kind of astronomical shert-hand, wbich, like the Arabian or Hindoo numerals. is equally well understood in all countries, no matter how much their language or ordinary written characters may differ, so that astronomical tables for the use of navigators and otbers are as well understood and as easily read in any one part of the civilized world as another. The great convenience of this is so apparent an io require no comment. The time when the zo. diac was divided into twelve constellations, and the zodiacal signs inrenterl, is lost in the dim distance of an extreme antiquity. The best opinion at present seems to be that the zodiac was derived from the IIincloos by the Egyptians, who gave it to the Arabians, who preserved it, and in turn transmitted it to us. Baldwin, in bis "Prehistoric Nations," however, proves that it is highly probahle that the ancient Arabians originated it in prebistoric times. When the signs of the 20diac first began to be used, or what ancient students of the starry skies invented them, is therefore unknown, save by conjecture.

The zodiac bas four principal points: thesc are the two solstitial and two equinoctial points, which, dividing the circle of the zodiac into four equal parts, are properly designated in the foregoing diagram. These four points were anciently marked by the stars Fomulhuzt, :Ildebaran, Regur lus, and Antares.

## THE SOLSTITIAL POINTS.

The solstitial points refer to the morement of the sun, north of the equator in summer and south of it in winter. They are the points marling the extreme northern and sonthern limits of this morement of the sun. The summer solstice, when the sun comes farthest north, is at present in Cancer, and the winter solstice, or his extreme southern limit, is in Cupricornus. The distance of the sun
north or south of the equator is called his nortbern or southern declinution. When the sun reaches either solstitial point, he begins to turn lack toward the other-at first very slowly, and for a short period seems to stand still. It is for this reason that these puints are called "solstitial," from the Latin words sol, the sun, aud sistere-stiti, to cause to stand. When, in June, the sun enters Caucer, aidel reaches his greatest northern declination, his rays, falling worc rertically, cause the change from winter and spring to summer in all countries nurth of the equator. This shifting of the sun from one solstitial point to the other is the c:ause of the change of the seasons.

TIIE ETZUTNOCTIAI. PUINTS.
These are the peints where the sun crusses the colastial epuator, whiceb lie neressarily dues twice in hiv yearly cirenit of the zonliac, at two opposite points, listait from ench other in space $180^{\circ}$, and in time six months. .The point where the sun crosses in spriug, (emming morth, is callerl the rem"rol or spring rupinox; and the other. whare he crosses six months aficrward, going south. is called the curtuininel erquinox. At these perionls the dare and nights are erpual, and that is the reason why thes are callend equinoctial points, from two Latin worrls, "Im"rs, rqual, and nox, night. 'Ihese two points are in the sigus Aries ( $F$ ) and Libra ( $\because$, and are so marked on the diagram of the zorliate.

The relative position of the equinoctial and solstitial points and the celestial equator will be better understouri from the following diagraw. Imagine a honp lying borizontally, and within this another hoop touching the first, and with one sile clovatcd above the other, as represented in the diugram : The horizontal hoop, marked $A B$, is the equitor; the other, and around which the signs of the zodiac are displayed, is the ccliptic, or apparent path of the sun. The earth is in the center, with its equator on the sarne plane with the celestial equator. The equator of the earth is marked $e e$. The line $f f$ is on the samc plane as the ecliptic. The two other lines, one above and one below the equator of the earth, and parallel to it, are the tropics of Cancer and Capricorn, parallel with the same lines
extended in the heavens, and marked as the tropics.

The only two points where the circle of the ecliptic and that of the equator can intersect are, of course, opposite to each other. These are the equinoctial points, marked Aries ( $P$ ) and Libra $(\approx)$. The solstitial points are those marked $\sigma$ and w. Now, it is evident that when the sun leaves ( $\varphi$ ) Aries, or the vernal equinox, his pathway is continually upward, and until be reaches (Э) Cancer, and there attains his highest point north of the celestial equator, as well as that of the earth ( $e e$ ). This is the summer solstice. Leaving Cancer the sun begins to decline towarc.
until the vcrnal aquinoer in agninitwiehed. These four cardinal points; the two ccicitinl, together with the vernal and ausumanal equitiox, are thiarefore indicative of the forr ceasons of the Jear; for when the enn resches the vernal equinor, spring begins; when he han adilaced to the tropic of Cancer, the summor begins His arrival at the other equinox marks the advent of autumen; and, when he at last reaches the tropic of Capricorn, wointer begins.

## TEE PRECEBBION OF THES EQUETOEN3.

This is a name that is given to agradual change of plase, which is constantly going om, an

the south, descending through ( $\Omega$ ) Leo and (m) Virgo until he reacies ( $\sim$ ) Litra, on the 23d of September, which is the artumnal equinox. From this point the sun continues to descend through (m) Scorpio and ( 1 ) Sagittarius until the winter solstice is reached, at (18) Capricornus, December 23d, where the sun has reached his lowest sonthern declination. He is now just as far south of the celestial equator as he-was north of it at the summer solstice.

From Capricornus ( 1 ) the sun begins to ascend through (mi) Aquarius and ( $\because$ ) Pisces
to the point where the sun each year crosees tine celestial equator. The sun does not cross at thi same place each year ; on the contrayy, each time When the sun completes the circnit of the sodiac, he crosses the equator at a point is small distance back of the place where he did so the previous year-in consequence of which the equinoctisl point is annually falling back at a nuiform rate. If you will refer to the above diagram of the rociacal points, and imagine the circle of the ecliptic being slowly turned around its center toward Cuncer (e), within the circle of the
equator, which remains fixed-the contact between the two circles being preserved, and no change made in the angle at which they intersect each olher-you will be able to gain a clear idea of the effect of this phenomenon. The point marked ( $P$ ) Uries would then slowly advance above the equator until the point marked $\because \underset{ }{\circ}$ was at the intersection of the two circles. The Fishes ( $\because$ ) would then be on the equinox, which is now the case. In time, this motion being continued, 쓴 would occupy that place, and so on.

The point where the sun crossed the equator was once in the constellation Aries, but in the long progress of centuries the place of the sun's crossing has fallen back $30^{\circ}$ from the first degree of that constellation, so that the vernal equinox is now really in the constellation Pisces, the Fishes; or, in other words, the sun enters the stars of the constellation Pisces on the 21st of March, and not those of the constellation Aries, as it did twenty-two centuries ago, as we are informed by Hipparchus. The place, however, where the sun crosses the celestial equator has continued to be, and still is, and will continue to be, marked by the sign ( $P$ ) Aries, so that the sign of Aries now marks the place in the zodiac of the constellation of the Fishes. The signs and the constellations are therefore no longer in the same places. Hence, in order to make our figure of the zodiac (opposite page 24) strictly correct, the sign Aries ( $\varphi$ ) sbould be placed against the constellation Pisces, the sign $\succ$ against the constellation Gemini, the sign II against the constellation Canccr, and so around the entire circle. It was only for the sake of simplicity and a greater ease of explanation that it was not so represented. When, therefore, it is said in astronomical language that the eummer solstice is in Cancer, it is the sign (厅) only which is intended, for the sun at shat period now really enters the stars of the constellation Gemini. In like manner the winter solstise is in the sign vs, bat in the constellation Sagittarius; the autumnal equinox in the sign $\bumpeq$, but in the constellation Virgo.

This precession of the equinozes is still going on, but the four cardinal points of the zodiac will always continue to be marked by the signs $\theta$ and
vs, and $\varphi$ and $\bumpeq$, withoat regard to the constellations which the sun actually enters at those periods. It is by this means that astronomers are able to register upon the face of the heavens this apparent movement of the stars. This phenomenon is called the precession of the equinoxes, although it is really a falling back of the equinoc. tial point ; however, as it causes the stars apparently to advance, it has been called a "precession."

The rate of this motion has been determined by long-continued observations, and is a little more than fifty and a quarter seconds ( $501^{\text {s }}$ ) of a degree each year. It therefore takes the equinoctial point about 2,140 years to fall back an entire sign, or $30^{\circ}$. In 25,791 years it will make a complete revolution of the whole circle of the zodiac. This period is called the Great Pratonic Year, because that philosopher taught that after it had elapsed the world would begin anew.

Hipparchus, who made the first catalogue of the stars known to us, and who is called the father of astronomy, was the first who observed this motion of the stars. He informs us that, in his time, twenty-two centuries ago, the equinoctial point was in the first degree of the constellation Aries. "The Hindoo astronomer, Varaha, says the southemn solstice was certainly once in the middle of Asleha (Leo); the northern in the first degree of Dhonishta (Aquarius). Since that time the solstitial as well as the equinoctial points have gone backward on the ecliptic $75^{\circ}$. This, divided by $50 t^{\prime}$, gives 5,373 years. Sir W. Jones says that $\nabla$ araba lived when the solstices were in the first degrees of Cancer and Capricorn, or about four hundred years before Christ " (Burritt).

A brief description of the yearly progress of the sun will belp much to the understanding of subsequent portions of this work. What follows will be better understood by again referring to the figare of the zodiac. The ancients began the year at the vernal equinox. If we start with the sun at that point and follow his progresa, it will be observed that, after leaving the aign Aries ( $\varphi$ ), in March, he next enters the signs Taurus and Gemini ( $\zeta$ and II), and that, as be
advances from the vernal equinox, the sun is daily increasing in light, heat, and magnetic power. On the 21st of June the summer solstice is reached, and summer begins. This is the longest day in the year, and the sun then attains his greatest brilliancy and dispenses the most light. All through the summer months his beat and power are at the greatest, but as he approaches the sign ( $\sim$ ) Libra, at the autumnal equinox, the days gradually shorten, and as be leaves Libra they grow dark and short with great rapidity. In October and November the sun enters the signs Scorpio and Sagittarius ( $\eta$ and $f$ ), and the cold and stormy winds begin to herald the approach of winter. The sun daily loses power, his rays grow rapidly more feeble and pallid, until Capricorn ( $v s$ ) is reached at the winter solstice. At this period occurs the shortest day of the year, and from that time forward the sun seems to lie dead in the cold embrace of winter, until, again approaching Aries ( $P$ ) and the vernal equinox, be begins to show symptoms of returning life. When Aries ( $P$ ) is reached, the sun begins to again manifest his power. The snow and ice melt away beneath his reviving rays, and vegetation begins to show itself.

After the vernal equinox the sun rapidly regains his vitality, and all nature with him springs from the torpidity and death of winter. The earth and the heavens, clothed once more in light and beauty, rejoice in \& new life. It was this succession of phenomena, marking the yearly progress of the sun in the zodiac, that led the ancients, in their poetical and allegorical language. to represent the sun as being slain in the autumn and winter, and being restored to life again in the spring and summer.

That part of the zodiac reaching from $\varphi$ to $\leadsto$, embracing the seasons of flowers and fruits, may well be described as the region of life, light, and beauty, while all that portion extending from the autumal equinox through the signs in, $f, v$, to the last point of $\begin{aligned} & \text {, is in like manner the do- }\end{aligned}$ main of darkness, wincer, and death.

## IV.

U'IAT THE ANCIENTS RNEW ABOLT' ASTRONOMT.
IT will be necessary to ascertain what the ancients knew about astronomy, as what is offered for consideration in the borly of this work presupposes they had made great progress in that science, not, indeed, equal to ours, but far greater than was thought to be the case before recent discoveries in Asia Minor and Egypt, or than is even now generally supposed by those who have not particularly inquired into. the matter.

Rawlinson, speaking of the Chaldeans, says, "We are informed by Simplicius that Callisthenes, who accompanied Alexander to Babylon, rent to Aristotle from that capital a series of astronomical observations, which he had found preserved there, extending back to a period of 1,903 years before Alexander's conquest of that city, or 2234 в. c." This would be over four thousand years ago. Ideler, quoted and indorsed by Humboldt, says, "The Chaldeans knew the mean motions of the moon with an exactness which induced the Greek astronomers to use their calculations for the foundations of a lunar theory." Ptolemy, also, used Chaldean observations which extended back 721 B. C. Diodorus Siculus says the Chaldeans attributed comets to natural canses, and could foretell their reappearance. He states that their recorded observations of the planets were very ancient and very exact. . According to Seneca, their theory of comets was quite as intelligent and correct as that of the moderns. He says they classed them with the planets, or moving stars, that had fixed orbits. (Baldwin's "Prehistoric Nations.")

The Egyptians also made great progress in astronomy, geometry, and otber sciences, in the time that preceded the accession of Menes, their first king, which takes us back to a period now over five thousand years ago. (Wilkiuson's "Ancient Egyptians.") Herodotus informs us (Book II, Chapter IV) that the Egyptians "were the first to discover the solar year, and to portion out its course into twelve parts." They "obtained this knowledge," be says, "from the stars." The Egyptians. were the inventors of what we call
tclescope, or something equivalent, and it seems necessary to believe that the ancients had sach aids to ejesight. Layard and others report the discovery of a lens of considerable power among the ruins of Babylon. Layard says this lens was found with two glass bowls in a chamber of ruins called Nimroud. It is plano-convex, an inch and a balf in diameter, and nine tenths of an inch thick. It gives a focus of four and a half inches from the piane side. Sir David Brewster says, 'It was intended to be used as a lens, either for magnifying or condensing the rays of the sun.'" (See Layard's " Nineveh and Babylon," pages 16 and 17, Chapter VIII.) This settles the fact that the ancients at a very remote period were familiar with all those laws of optics a knowledge of which is required to invent the telescope, and also with the manufacture of glass, so necessary for lenses designed for telescopic uses. That the art of making glass was known to the ancients-a fact once doubted-is proved also by discoveries in Egypt, where the whole process of blowing glass has been.found depicted on the ancient monuments. So great was the skill of the ancient Egyptians in making vases of various colored glass, that our best European workmen of modern times can not equal them. Glass was also one of the great exports of the Phœnicians. The Egyptians, however, surpassed all others, and some vases of brilliant colors, presented by an Egyptian priest to the Emperor Hadrian, were considered so valuable and curious that they werc never used except on grand occasions. Some of the details of Egyptian glass in mosaic-work (by a process common with that people more than three thousand years ago), such as the feathers of birds, are so fine as to be only made out ucith a lens, which means of magnifying must therefore have been known in Egypt at the remote period when this mosaic glass-work was made. This shows us that the use of the lens was not confined to Assyria at an early epoch, nor yet was a recent discovery there. (Wilkinson's, "Ancient Egyptians.")

Mr. Baldwin, in his work, continues as follows: "Even the Greeks and Romans, witb lower attainments in astronomy, had aids to eyesight. They are mentioned in 'De Placitas Phil,' lib.
iii, c. v, attributed to Plutarch, also in his 'Vita Marcelli,' and by Pliny, 'Eist. Natur.,' lib. yxuvii, o. $\nabla$, where be says that, in bis time, artificers used emeralds to assist the eye, and that they were concave, the better to collect the visual rays." He adds that Nero used such glasses when he watched the fights of the gladiatore.
"There is frequent mention of concsive and conver glasses used for optical purposes, and they evidently came from Egypt and tbe East. Iamblichus tells us, in his life of Pythagoras, that Pythagoras sought to contrive instruments that should aid hearing as effectually ar optic glasses and other contrivances aided sight. Plutarch speaks of mathematical instruments used by Archimedes 'to manifest to the eye the largeness of the sun.' Pythagoras and Archimedes both studied in Egypt and Phœnicia, and probably in Chaldea. Pythagoras, who lived in the sixth century before Christ, is said to have 'visited Egypt and many cocntries of the East' in pursuit of knowledge; and Archimedes, who lived after the time of Aleander, spent much time in Egypt, 'and visited many other countries.'.
"It appears that, in the time of Pythagoras, 'optic glasses,' contrived to increase the power of vision, were so common as not to be regarded as objects of curiosity, and there can be no reasonable doubts that they were first is vented by the great men who created that profound science of astronomy for which people of Cushitu origin
were everywhere so preēminen $\stackrel{1}{ }$ y distinguished, and which was so intimately connectad with religion." (Baldwin's "Prehistoric Nations," pagea 178, 179.)

The authorities above quoted, and the considerations advanced, render it certain that the ancients not only possessed the telescope, or its fall equivalent, but also had attained a proficiency in astronoms abundantly sufficient for them to have originated the philosopicical astronomical allegories ascribed to them in the course of this work. Their religion, says Mír. Baldwin, was intimately connected with astronomy.

Having thus disposed of matters which wers deemed to be necessary preliminaries to our suiject, the consideration of the connection between the astronomical ideas of the ancients and their religion, and the origin and true meaning of the masonic traditions, legends, symbols, and emblems, will no longer be delayed. What we have to say will be embodied in a series of questions and answers. This is a mode of instruction made familiar to all brothers of the fraternity by the masonic lectures pertaining to the varions degrees. It is therefore believed that this mode will be the most acceptable to masonic readers, and not displeasing to otbers. It has the additional merit of permitting a degree of condensation and brevity not inconsistent with clearness of explanation, which no other method possesses.

## PART SECOND.

I. Mabonio Abtronomt.<br>II. Tif Ahlegory of the Death and Reguregction of the Son.<br>Arranged in the Form of a Kasonic Lectura, and illuatrated by a Zodiacal Diagram.

## I. <br> MASONIC ASTRONOMY. <br> NAME OF THE ORDER.

Q. By what name were masons anciently known?
A. Long before the building of King Solomon's temple, masons were known as the "Suns of Light." Masonry was practiced by the ancients under the name of Lux (Light), or its equivalent, in the various languages of antiquity.
Q. What is said to be the origin of the word "masonry"?
A. We are informed by several distinguished writers that it is a corruption of the Greek word mesouraneo, which signifies "I am in the midst of heaven," allniting to the sun, which, being "in the midst of heaven," is the great source of light. Others derive it directly from the ancient Egyptian Phre, the sun, and Mas, a child : Phre-Mas-sen-i. e., Children of the Sun, or, Sons of Light.

ASTRONOMT AND GEOMETRY.
Q. What two sciences have always been held in especial reverence by masons?
A. Astronomy and geometiy, the latter because it is the foundation of the former.

TIEE LODGE.
Q. How ought every lodge to be situated ?
A. Due east and west.
Q. Why so?
A. Because, in the language of Dr. Hemming,
a distinguished brother and masonic writer, "the san, the glory of the Lord, rises in the east and sets in the west."
Q. What are the dimensions and covering of a lodge?
A. Its dimensions are without limit, and "its covering no less than the clouded canopy or starry decked heavens." In the language of Oliver, "Boundless is the extent of a mason's lodge -in height to the topmost heaven-in depth to the central abyss-in length from east to westir breadth from north to sonth."
Q. How many lights bas a lodge?
A. According to Dr. Oliver, in his "Dictionary of Symbolical Masonry," a lodge has three lights-one in the east, another in the west, and another in the south.
Q. Why are they so situated?
A. Dr. Oliver, in his work jast named (aee page 163, "Lesser Lights"), says they are so situated " in allusion to the sun, which, rising in the east, gains the meridian in the sonth, and disappears in the west." These luminaries, says Dr. Oliver, in the same place, "represent, emblematically, the sun, the moon, and the master of the lodge." The same authority informs us that a loage has no light in the north, because the san darts no rays from thence." (See page 109, " Fixed Lights.")
Q. Of what is a lodge therefore emblematic ?
A. The whole earth illnminated by the san, shining from the east, south, and wcst; covered by day with a "clonded canopy" and at night by "the starry-decked heavens." Says Hutchineon,
a standard masonic author, "The lodge, when revealed to an entering mason, discovers to him the representation of the world."

## THE OFFICERS' STATIONS.

Q. Why stands the Junior Warden in the south, the Senior Warden in the roest, and the Master in the east?
A. Because the sun rises in the east to open and govern the day, and sets in the woest to close the labors of the same; while the sun in the south admonishes the weary workman of his mid-day meal, and calls him from labor to refreshment. Dr. Oliver informs us, in his dictionary, that "the pedestal, with the volume of the sacred laws, is placed in the eastern part of the lodge, to signify that as the sun rises in the east, to open and enliven the day, so is the Worshipful Master placed in the east to open the lodge, and to employ and instruct the brethren in masonry." (See article " East.") Gadicke, another masonic uriter, says, "The sun rises in the east, and in the east is the place for the Worshipful Mester "; and, finally, Dr. Hemming, speaking of the three principal officers of the lodge, says: "The sun rises in the east to open the day, and dispenses life and nourishment to the whole creation. This is well represented by the Worshipful Master, who is placed in the east to open the lodge, and who imparts light, knowledge, and instruction to all under his direction. When it arrives at its greatest altitude in the south, where its beams are most piercing, and the cool shade most refreshing, it is then also well represented by the Junior Warden, who is placed in the south to observe its approach to meridian, and at the hour of noon to call the brethren from labor to refreshment. Still pursuing its course to the wost, the sun at length closes the day and lulls all nature to repose; it is then fitiy represented by the Senior Warden, who is placed in the west to close the lodge, by command of the Worshipful Master, after having rendered to every one the just reward of his labor."

It is thus apparent that not only the position, form, dimensions, lights, and furniture of the lndge, but also its principal officers, their respective stations and duties there, all have reference
to the sun. The several quotations made from the public and authorized writings of distinguished members of the craft render this plain to unmasonic readers. All members of the fraternity will find this fact more fully confirmed in their minds from their own knowledge of the particulars of the ritual itself.

## THE MASONIC JOURNET.

Q. In what direction are masons instructed to travei?
A. Toward the east, in search of light.
Q. Why so?
A. Because the sun riscs in the east, and is the great source of light. .

## MASONTC WORDS AND NAMES,

Q. What does the word of an E. A. M. signify?
$\therefore$ A. It has more than one collateral meaning, pronounced or written cither forward or backward, but if divided into the radicals of which it is composed it will be found to signify the Fire-God, or Quickening Fire-i. c., the sun.
Q. What daces the word of a F.C.M. signify?
A. This word, if divided into its radicals. means the moon.
Q. What does the word of a M. M. signify?
A. The roots of which it is composed signify the Benevolent God of Fire-i. e., the sun ; and, as it was by the aid of fire that metals were first brought into a state fit for the use of man, this divinity was named Vulcan by the Romans, and worshiped by them.
Q. What does the name of O. G. M. H. A. signify?
A. It is derived from two roots, which signify the origin or manifestation of light; also he who was and is.
Q. What, then, does the whole name signify?
A. The source of eternal light-i. e., the sun -taken as an emblem of Deity.
Q. Whom, therefore, does O. G. M. H. A. represent?
A. The great source of light-the san.

THE ROYAL $\triangle$ RCH
Q. What is the Royal Arch?
A. It may be defined in nearly the same words as the lodge, and is no less than the starry vanlt
of heaven, or great zodiacal arch, reaching from the vernal to the autumoal equinox.
Q. How is the Royal Arch supported?
A. By three of the cardinal points of the 20 diac: being the equinoctial points at the base and sclstitial point at the summit.
Q. Of what are these three points emblematic?
A. Like the three pillars of the lodge, they are emblematic of Wisdoy, Strengin, and Beauty. Dr. Oliver, in his "Dictionary of Symbolical Masonry," informs us that "the lodge is supported by three pillars, which are called Wisdom, Strength, and Beanty ; because no piece of architecture can be termed perfect unless it hare wisdom to contrive, strength to support, and beauty to adorn."
Q. Why are the three great zodiacal points which support the Royal Arch of heaven also emblematic of wisdom, strength, and beauty?
A. At the sime of the building of King Solomon's temple, or about 1004 в. c., the celestial equator cut the ecliptic at about $10^{\circ}$ of the constellation Aries. At that period tha constellation Leo was therefore near the solstitial point, and summit of the zodiacal arch. Now, as the lion is the strongest of beasts, and because the summit or key of an arch is its strongest point, and the ann, when he reaches that point, has the greatest glory and power, it being the aummer solstice, when the day is the longest-that point is emblematic of strength. The vernal equinox siguifies benuty, because it marks the opening of spring, which is the season of beauty, and adorns both the hesvens with light and the earch with flowers. The autumnal equinox denotes wisdom, because it is the season of maturity. Near tinat point is also seen the constellation of the Serpent, in all ages typical of wisdom, and in many ancient zodiacs this point is designated by the figure of a serpent.
Q. How may the truth and beanty of this be more strongly impressed apon the mind ?
A. By contemplating the Royal Arch itself as it actually appears in the heavens.
Q. What is required in order to be able tc do so?
A. A sufficient knowledge of the constellations and a favorable time of observation.
Q. What is the most favorable time to observe the Royal Arch?
A. If we wish to observc the constellations as they were at the summer solstice at the time of the building of King Solomon's temple, we should view the heavens about the 1st of August, but as the sun in the south at high twelve, by its overpowering light, prevents the proper stars beigg seen, it will be necessary to defer our observations for six months, or until abcat the 5th of February, at which time the same stars are visible at midnight. "Low twelve," about the 5th of February, is, therefore, the best time to view the Royal Arch.

If we then take our station, looking sonth, and lift our eyes to the vast arch of heaven, the spectacle will be one of unsurpassed magnificence, and to an intelligent mason eloquent with the truths of his profession. Far up the blue concave, and within less than $30^{\circ}$ of the summit of the arch, will be seen the constellation Leo, typical of Strangta; on either side will be seen the constellations Aries and Libra, which anciently marked the equinoctial points, and upon which the whole majestic arch seems to rest.

Libra, the Balance, is typical of that Wisdow which, in the scales of Reason, duly weighs and considers all things; while Aries, marking the ancient place of the vernal equinox, is typical of Beavtr, and also gives a sure token that the sun, which lies dead in the cold arms of Night and Winter, will arise again in the springtime, clothed with new life and power. The vernal equinox, or sign Aries, is therefore also the symbol of immortality, and teaches that the soui of man will rise in glory from the darkness of the grave. It also reminds masons of the lamb, "which has in all ages bean considered an emblem of innocence," and admonishes him " of that purity of life and conduct which is so essentially necessary to his gaining admisaion into the celestial lodge above, where the Supreme Architect of the aniverse presides."

In the east, in close proximity to Libra, stands the beantiful virgin of the zodiac, the constellation Virgo. In her left hand gleams the bright star Spica, while not far away toward the north Arcturus shines in splendor. In the west Taurus is seen with the Pleiadis. Orion also lifts his giant
form along the sk!, sublime in his natiesty and beauty. still lower down, and ne:u the horizon, blaze the great sum-atar birims. Jioryon also shines with ahmost "unal slory higher up the sky.
tremini, tow, the twin hrothers (instar and Pollex. offepring of the mithtig. Jove, atom the heaveus. In tive morth ${ }^{-}$(issia,", sits in her

 rla bound to the rock with whins. The polar star, emblem of etemal constane $y$, shine with a steady light; while around the pole the sealy Dragon enils his glittering folds. N"anwhile, as we continue to observe the midnight meridian, other constellations, as they rise, light up the gleaming arch, earlh teaching a different lesson, and all-
"Fur ever sinying, as they shine,
The hand that made us: is disine."
The accompanying diagram of the Royal Arch is but a geometrical projection, and, therefore, wives nothing more than the relative positions of the various constellations and signs of the Royal Arch. The summer solstice is represented as the key-ctone of the arch, and has the astronomical sign of the sun inscribed upon it, showing that on the 21 st of June the sun is exalted to the summit of the arch. It was formerly thought that the ancient Egyptians were not acquainted with "arch" in architecture, but late discoveries show that it was known to them at least 2100 в. c. (See Wilkinson's "Egyptians of the Time of the Pharaohs," page 137.)

## KING SOLOMON'S TEMPLE.

Q. Of what was King Solomon's temple emblematic?
A. That ternple not marla with hamls, cecraal in the heavens.
(). Has thr nerd "tomplu" :at" meaning kignific:ant of this:
 cated to the wowiij) of the. sun and the other celestial orbs, whow airuit the hearens ach year was emblematioally repren nteri in the details of their construction and arnaments. The rood
 from tempers, and the word "temple" is therefore synonymons with tri..jes. timu, or the year.

Q. By whom is time-i. c., the temple-each year beautified and adorned!
A. By the sun, who, from March to October, is continually engaged in beautifying the heavens and the earth.
Q. Wher was the building of the temple commenced ?
A. On the 2d day of Zif, or about the 21st of April.
Q. When was the temple finished?
A. On the 4th day of Bul, or about the 21st of October.
Q. Have these dates any astronomical significance?
A. They have. On the 21st of April the sun
enters Taurus, and the plowing and planting begin. On the 21st of October the sun enters Scorpio; "the summer is over and the barvest is inished." It was, therefore, that the sun, in his passage through the seven signs (typical of years), from Aries to Scorpio, was said, emblematically, to raise the Royal Arch, beautify and adorn the heavens, and bring forth the bountiful fraits of the earth.
Q. $I_{s}$ it, therefore, to be understood that the whole account of the building of King Solomon's temple, as given in the masonic tradition, is an astronomical myth?
A. By no means, for there is no fact more certain than the building of King Solomon's temple, as both sacred and profane history testify. It is nevertheless true that the masonic tradition reepecting it is one of mystical import. It contains within itself not only the history in part of the building of an actual earthly and material temple, but also an emblematic description of the heavens and the earth, as well as of the particulars of the annual passage of the sun among the twelve signs of the zodiac. There is also good reason for believing the temple itself was expressly built, so as to be in its various parts emblematic of the whole order of natare.

Josephus (most learned of Jews) directly informs us that the tabernacle, which was a prototype of the temple, was thus emblematic in its construction. • He says, speaking of the tabernacle and vestmenis of the high-priest, that, "if any one, without prejudice and with judgment, look upon these things, he will find they were every one nade in way of imitation and representation of the universe. When Moses distinguished the tabernacle into three parts, and allowed two of them to the priests, as a place accessible and cornmon, he denoted the land and the sea, these being of general access to all ; bnt ie set apart the third division for God, becanse heaven is inaccessible to men. And when he ordered twelve loaves to be set upon the table, he denoteă the year as distinguished into so many months. By branching out the candlestick into seventy parts, he secretly intimated the Decani, or seventy divisions of the planets; and as to the seven lamps apon the can-
dlesticks, they referred to the course of the planets, of which that is the number. The veils, too; which were composed of four things, they declare the four elements; for the fine linen was proper to signify the earth, because the fiax grows out of the earth. The purple signifies the sea, because that color is dyed by the blood of a sea shell-fish ; the blue is fit to signify the air, and the scarlet will naturally be an indication of fire. Now, the vestment of the high-priest, being made of linen, signified the earth ; the blue denotes the sky, being like lightning in its pomegranates, and in the noise of the bells resembling thander. And for the ephod, it showed that God had made the universe of four (elements); and as for the gold interwoven, I suppose it related to the splendor, by which all things are enlightened. He also appointed the breastplate to be placed in the middle of the ephod to resemble the earth, for that was the very middle place of the world. Lnd the girdle which encompassed the high-priest round signified the ocean, for that goes round about, and includes the universe. Each of the sardonyxes declares to us the sun and moonthose, I mean, which were in the nature of buttons on the high-priest's shoulders. And as for the twelve stones, whether we anderstand by them the months, or whether we understand the like number of the signs of that circle which the Greeks call the zodiac; we shall not be mistaken in their meaning. As for the mitre, which was of blue color, it seums to me it means heaven, for how otherwise could the zame of God be inscribed upon it? That it was also illustrated with a crown, and that of gold also, is because of that splendor with which God is pleased. Let this explanation suffice at present." ("Antiquities," Book III, Chapter VII, 7.)

The concluding sentence of this quotation conveya a clear intimation that many other emblematic particulars in the construction of the tabernacle might be poisted out. Now, as the "holy place," and veils, candlesticks, lamps, vestments, and other particulars of the tabernacle were specifically reproduced in the temple, we may safely conclude that the teruple itself was so built as to be also emblematic, in its several parts, of the universe. Nor when we refect that the designs
for the temple, as well as the tabernacie, are said to have been given by God himself, need we be surprised at this, for what more reasonable than to suppose that, when the great Creator of all things revealed the designs for a temple to be dedicated to himself, it should. thus be made in all its parts emblematic of the sum of all his otber works-the entire universe? The lodge, according to all masonic writers, is emblematic of King Solomon's temple ; it is therefore easy to see why it is also emblematic of the heavens and the earth. It could not be the one without being also the other. It also naturally follows that the masonic tradition is thus possessed of a threefold character:

1. It is in part an actual history of the bailding of King Solomon's temple.
2. It is an emblematic description of the heavens and the earth.
3. By a system of allegorical and astronomical symbols it is the depository of a high code of morals.

In its triane aspect it is, therefore, mistorions, sciemtific, and yoral. In it the two accounts of the building of the actual and the mystical temple, the earthly and the beavenly one, are curiously interwoven and permeate each other. Yet, the astronomical key being given, they may be separated, and each contemplated by itself.

## HARAM ABIF.

In them Hiram Abif appears both as an anthentic and a mystical personage. He is not only the cunning craftsman employed by King Solomon to beautify and adorn the actual temple, but also an emblematic being, representing the sun, who, by bis magnetic power, raises the Royal Arch of heaven, and beantifiss and acorns the terrestrial and celestial spheres, for which reason his name bas a twofold meaning, significant of both characters.

It is also true that to some extent the life and conduct of the real personage is emblematic of the mystical one, $y \in t$ they differ in several important particulars:

1. The mystical Hiram is represented in the masonic tradition as being an architect, superintending the building and drawing out the plans for the temple.

The real Hiram, as mentioned in history, was, according to the Bible, and also Josephus, no architect at all, and drew out none of the designs for the temple.
2. The mystical Hiram, according to masonic tradition, is represented as having lost his life suddenly before the completion of the temple, in the midst of his labors, and with many of his designs unfinished.

On the contrary, the historical Hiram, as we are expressly informed in the sacred Scriptares, lived to finish all his labors in and about the temple, and for King Solomon.

For the benefit of unmasonic readers, we will give the substance of the masonic tradition relating to Hiram Abiff, which is taken word for word from Dr. Oliver's "Dictionary of Symbolical Masonry," a work authorized by the highest masonic bodies in England and America. Says Dr. Oliver: "We bave an old tradition delivered down, orally, that it was the duty of Hiram Abiff to superintend the workmen, and that the reports of the officers were always examined with the most scrupulous exactness. At the opening of the day, when the sun was rising in the east, it was his constant custom, before the commencement of labor, to enter the temple and offer ap his prayers to Jehovah for a blessing on the work. And in like manner, when the sun set in ihe west and the labors of the dny were closed, and the workmen had departed, he returned his thanks to the Great Architect of the universe for the harmonious protection of the day. Not content with this devout expression of his feelings, morning and tvening, he always went into the temple at the hour of high twelve, when the men were called from lubor to refreshment, to inspect the progress of the work, to araw fresh designs upon the trac-ing-board, if such mere necessary, and to perform other scientific labors, not forgetting to consecrate his duties by solern prayer. These religious customs were faithfully performed for the first sir years in the secret recesses of his lodge, and for the last year in the precincts of the most holy place. At length, on the very day appointed for celebrating the cap-stone of the building, he retired as usual, according to our tradition, at the hour of high twelve, and did not return alive."
(See article "Higb Twelve.") Some further particulars of the masonic legend are given in the same book, under the article " Burial-Place":
"The burial-place," says Dr. Oliver, "of a master mason, is under the Holy of Hulies, with the following legend delincated on the monument : A virgin weeping over a broken column. with a book open before her. In her right hand a sprig of cassia, in her left an urn. Time standing behind her with bis hands enfulded in the ringlets of ber hair. The wecpiug virgin denotes the unfinisbed atate of the temple; the broken column, that one of the principial supporters of masonry (H. A. D.) bad fallen; the opren book implies that his memury is reerrded in every mason's heart ; the sprig of eassin refers to the: discovery of his remains; and the urn shows that his ashes bave theen carefully collected; anl Time, standing behind her, implies that time, patience, and perseverance will accomplish all things."

Dr. Oliver also, in his ninth lecture, on the "Tbeocratic Philosophy of Frecmasonry," speaking of Hiram Abif, sars: "The legend of bis death it will be unnecessary to repreat, but there are some circumstances connected with it which may be interesting. His illustrious consort, whose memory is dear to every true mason, was so sincerely attached to him that, at his deatio, slie became inconsolable, and, refusing to be comforted, she spent the greater part of her time in lamentation and mourning over the tomb which contained his vencrated ashes. The monument crected to his memory was peculiarly splendid, having been curiously constructed of black and white marble, from plans furnisbed by the Grand Warden, on the purest masonic principles, and occupied an honorable situation in the private garden belonging to the rocal palace."

The foregoing authorized publication of the main facts of the masouic legend respecting the death of Hiram Abiff, contains all the particulars necessary for the illustration of our subject to unmasonic readers. To members of the fraternity, ail the details of the tragic tradition are of course familiar, and many things designedly made obscure to all others will be clear to them.

The masonic tradition respecting Hiram, it
rill thus be seen, speaks of him as being the chief architect of the temple, superintending the workmen and drawing out designs for the construction of the temple.

The historimal Hiram, mentioned in the lible and by dusephus, is a different personage from the traditional one. That lliram, who was actually sent to King Solomon, bat nothing to do with furnishing the ilesigns for the temple. We are expressly informed that the designs, form, and dimensions of the temple were all given by divine command (2 Chron. iii): Tos bave altered or moolified theon in the snalleet particular would therefore have heena sin. which would have called down the instant and terrible displeasure and punishment of .lvhwah. Ifiram is nowhere mentioned or describell in the bible as leing an architect, or aren a builher. In 1 Kinge vii. 14, he is described as being "fillell with wisilum, and unilerstanding, and cunning tu urwik all weorks in brass." In .! Chron. ii, 1 , the futlier uf llirum is described as "skillfal to work in gold, and in silver, in brass. in iron, in stonce and in timber, in purple, in blue, and in tine limeno and in crinsun; also to grave any mamer of graving." From this it is evident that the father of lliram, who was a man of Tyre, was be profexsion a deerorative artist and sculptor. It is proballe that lliram followed the profession of his father, acenrding to the custon of the times, otherwise lliram, King of Tyrr, would not have thus particularly spoken oi the profession of his father in deseriling the areomplishments of Hi ram Aliff himself. King Hiram speaks of Hiram Abiff simply as "a cuncing man, endued with understanding" (verse 13). Josephas also mentions IIfram, and uses the following language respecting him : "This man was skillful in all sorts of work, but his chief skill lay in working in gold, silver, and bruss, by whom were made all the mechanical works about the temple, according to the will of Solomon." ("Antiquities," Book VIII, Chapter III, 4.)

Not a word about his having anything to do with the building of the temple itself. But, as if to put this question at rest, not only Josephus, but the Bible also, mentions just what these "mechanical works" were. In 1 Kings vii, is a complete list and description of them, and of all the
works done about the temple and for its use by Hiram. This list of the works of Hiram is also given in 2 Chron. iv, 11-19. The same list is also given by Josephns. From these authorities we learn that Hira:n made for King Solomon-

The tioo pillars of brass, called Jachin and Boaz, together with their ornaments.

The molten sea of brass, with twelve. oxen under it; a work of great artistic beauty, but calling for the genius of a Benvenuto Cellini, rather than of a Sir Christopher Wren.

Also, ten brazen lavers and their bases, and many pots, shovels, flesh-hooks, and other altarfurniture, to be used in and about the sacrifices.

All of the foregoing articles were made of bright brass, and they were cast in clay molds, in the plaiss of Jordan, betioeen Succoth and Zaredathah (2 Chron. iv; i Kings vii, 45, 46). Succoth means "booths," and was so named becsuse Jgcob built him a house there, and " made booths for his cattle" (Gen. rxxiii, 17). It is ffty miles, at least, in an air-line, north by east of Jerasalem, beyond Jordan, between Peniel, near the ford of the torrent Jabbok and Shechem; while Zaredathah, or Zarthan, as it is called in Kings, is still farther north than Succoth. The words "between Succoth and Zaredathah," therefore, denotes that the place where the brass foundries were situated and these castings were made, was yet farther from Jerasalem than Succoth. The modern name of the torrent Jabbok is Wady Zurka. (See Smith's "Dictionary of the Bible," and maps of the Holy Land at the time of David and Christ.)

As the distance in an air-line from Jerusalem to Succoth was at least fifty miles, it is to be pre: sumed that the distance by the traveled route was considerably more. It may be said that the clay only was procured at this distant place (distant when we consider the slow means of travel in those days), and that it was brought to Jerusslem, to be there used by the artist in making the molds for his castings. But the sacred text expressly says that the casting was done on the spot.

The scene of the labors of Hiram must, therefore, have been considerably over fifty miles from Jercasalem, or more than two days' journey, at the mallest caloolation; twenty miles being an ordi-
nary day's journey in those times and that country. Smith, in his Bible Dictionsry, says fifteen.

Besides this, the making of the molds and patterns for them would require the personal attention if not labor of Hiram himself. The casting of large pieces, such as were required for the brazen sea, the lavers and their bases, and the pillars Jachin add Boaz, which were eighteen cabits, or about thirty-two feet in height, mast have demanded his constant care and watchful attention. (See Cellini's account of the casting of his bronze Perseas, "Memoirs," vol ii, c. xli.) These facts, taken in connection with the great number of different pieces of work, render it evident that Hiram must have been kept the greater part of his time at the distant scene of his labors, where the clay required could alone be found. It is impossible, under the circumstancee, that he could have visited the temple in Jerusalem, from fifty to sixty miles distant, three times a day, or even once a day, daring the seven years that the temple was being built.

Besides these works in brass, we are sold that Hiram made for Solomon of pure gold ten candlesticks for the oracle, with flowers, lampe, and tongs; aiso bonols, snuffers, basins, and censers, and hinges of gold, for the holy place and for the doors of the temple. All this work, it wil be seen, is that of a "cunning worker in metels" and a decorative artist, none of it that of an architect or builder.

The other decorative wrorks done in and on the temple proper. consisting of carvinga on the walle of figures of chesabim and palm-trees, also the golden cherubim which were set up in the boly place, are not any of them included in the list of the works of Hiram, nor, indeed, named in the same chapter.

The mystical Hiram of the masonic tradition, we are also told, met with a sudden death, the particulars of which are known to all members of the fraternity, before the completion of the temple. Had any such accident befallen the actual Hiram (leading, as we are told, to the suicide, from grief, of his wife), certainly the importance of the tragic event, and the consequent delay and confusion it would naturally cause, would have led to its being recorded either in Kings or Chron-
icles, or both of them, but no such occurrence is anywhere mentioned in the sacred narrative, which, respecting the building and dedication of the temple, is particular and minute; dor does Josephus mention any such event. This negative teatimony is almost conclasive, but we are not left to rely on that alone, for both in Kinge and Chronicies we are directly informed that the hiatorical Hiram, anlike the mystical one of the masonic tradition, lived to finish all his labors. We read in 2 Chron. iv, "So Hiram made an end of doing all the work that he had made King Solomon for the house of the Lord."

After the temple was finished we are told that Solomon built him a house for himself, which was, like the temple, splendidly ornamented by decorations and carvings in gold, silver, and wood. Mantiou is also made in Cbronicles of a magnifcent ivory throne, surrounded by carved figures or atatues of lions. The building and ornamentation of this house occupied thirteen years after the temple was finished ( 1 Kings vii, 1). Now, if Hiram was also employed by the king to decorate his own house, he must have lived at least thirteen years after the completion of the temple. That Hiram was also employed about the "king's house" is almost a certainty; for, although the list of his works, as given, makes no mention of the ivory throne, the lions, or any work done for the "king's house," yet as that list professes to be a list only of the work done by Hiram for the temple (see verse 40 , also 2 Chron. iv, 11), we have no right to expect to find it including any of the other work of the artist done for the palace of Solomon. The fourteenth verse of the seventh chapter of 1- Kings directly says that Hiram "wrought all of King Solomon's work." Besides this, the seren years occupied in building the temple and the thirteen in luilding the king's house make up the whole inventy years of the contract which Solomon had with the King of Tyre for materials and skilleci workmen, the principal among whom was Hiram, the great artist and sculptor; and it becomes an almost conclusive fresumption that Solomon•kept him and the other skilled workmen the whole twenty years during which he required their aid.

As to the nature of this contract of King

Solomou's with Hiram, King of Tyre, see 1 Kings v; 2 Chron. ii; as to its duration being twenty yeare, see 1 Kings ix, 10 ; and Josephus on both points. The proof is therefore positive that Hiram lived to finish all his labors in and about the temple, aud also highly presumptive that ke continued his labors for King Solomon thirteen years afterward.

It is also just as clearly prored by history, both sacred and profane, that he was not the chief architect of, and furnished no designs for, the temple. According to holy writ, the designs for the temple were not only furnished by God himself, but the whole work was directed by the inspiration of the great Architect of the universe. If, then, the historical Eiram was no architect, hut a decorative artist and sculptor only, and was not called upon to suffer a sudden death before the completion of the temple, it follows, therefore, that it is the mystical Hiramrepresenting the sun-who meets with that sad fate near the completion of the emblematic temple, and not the real one. The claim that the masonic tradition is historically true in all repects can not be maintained, as it is in most of its main features in direct conflict with holy writ. If, however, we consider it in its allegorical character, as our ancient bretbren no doubt did, if we regard it in its twofold nature, as being in part emblematic as well as historical, as before explained, all difficulties at once vanish. The entire integrity of the masonic tradition is thus fully maintained. The whole legend not only becomes the venerated depository of the most sublime astronomical facts, but is illuminated by a twofold beauty and truth.

The answer to the last question has of necessity been a somewhat lengthy one. Having disposed of it, let us renew our explanation of the astronomical allegories of the masonic tradition where we left off.

## II.

TRUE KEANTNG OF THE LEGEND OF EIRAM, $A S$
ILLUSTRATED BY THR ALLEGORP OP TELE DEATE OF THE SCIN.
Q. Explains more fully in what manner the sun is said by an astronomical allegory to be slain.
A. According to all the ancient astronomical legends, the sun is said to be slain by the three sutumnal months-September, October, and November, represented as assaulting him in succession.
Q. When is the sun said to be slain?
A. Near the completion of the temple, as before explained.
Q. Explain more fully by whom, and how the sun is said to be slain.
A. The sun is slain by September, October, and November, or the three autumnal signs, $\approx$, $m$, and $f$, anciently $\pi, f$, and $V$, whom be encounters in succession in his passage around the rodiac toward the winter solstice, or "southern gate of the zodiac"; so called in the poetical language of the old Greeks, because at that point the sun has reached his lowest southern declination.

The summer sun, glowing with light and beat as he reaches the autumnal equinox, enters Libra on the 21 st of September. All through that month, and until the 21st of October, he declines in light and heat, but emerges from Libra ( $\sim$ ) without any serious harm from the attack of September. The assault of October is far more serious; and the sun when he leaves the venomous sign of the Scorpion (m), on the 2lst of November, is deprived of the greater part of his power and shorn of more than half his glory. He continues his way toward the sonthern tropic, and in November encounters the deadly dart of Sagittarius ( $\ddagger$ ), which proves fatal ; for when the sun leaves the third autumnal sign, on the 23d of December, he lies desd at the winter solstice.
Q. Why is the third attack, or that of November, said to be more fatal than that of September.or Ociober?
A. Because when the ann emerges from under the Aominion of Begittarios, the raling sign of

November, on the 23d of December, he enters Cappricorn, and reaches his lowest declination. That is the shortest day of the year.

In June, at the sammer solstice, the bright and glorious days were over fifteen hours long. Now the pale sun rises above the gloomy horizon of December bui a little more than half as long, and his feeble rays can hardly penetrate the dark and stormy clouds that obscure the sky. The sun now seems to be quite overcome by "the sharpness of the winter of death.". Amid the universal mortality that reigns in the vegetable kingdom, the sun, deprived of light, heat, and power, appears dead also.
Q. Does the ancient art of astrology throw any further light upon this subject ?:
A. This science was much cultivated by the ancients under the name oi the "divine art." According to the teachings of astrology, Capricorn was the "bouse of Saturn," the most evil and wicked in his influence of all the planeta. He is called the "great infortme," and all that part of the zodiac within the signs of Capricornus and Aquarius was under his dominion. Saturn was also known as Kronos, or Time, which dostruys all things; and, in the poetical and allegorical language of mythology, devours even his own children. The figure of Satum with his scythe is to this day an emblem of decay and death. The sun, therefore, when he eutered Capricorn, passed into the house and under the dominion of Satarn, or Death.
Q. After the sun is slain, what, in allegorical language, is said to become of the body?
A. It is carried a westerly course, at night, by the three wintry signs.
Q. Why so?
A. Because, as the sud continues his course in the rodiac, be appears to be carried west by the wintry signs. This seems to be done at night, becanse, the sun then being invisible, his change of position is only discovered by the stars which precode his rise at daybreal.
Q. What disposition is finally made of the body?
A. It is seemingly buried beneath the withered fraits and flowers-the "rubbish" of the dead regotation of aummer-in the midst of which,
however, yet blooms the hardy evergreen, emblematic of the vernal equinox, giving a sure token that the sun will yet arise from the cold embrace of winter and regain all his former power and glory.

## Q. What follows?

A. Accoraing to the Egyptian sacrel legend .of the death of Osiris, the goddess Isis zansacks the whole forr quarters of the earth in search of his body, which she finally discovers indirectly by the aid of a certain plant or shrub, and causes it to be regularly buried, with sacred rites and great honor. According to the legend of Hiram, it was twelve fellow-crafts-emblematically representing the three eastern, three western, three northern, and three southern signs of the zodiac -who made the search for the body. It was somewhere among the twelve constellations that the lost sun was certainly to be found.
Q. By whom was the body found ?
A. By Aries ( $P$ ), one of the three western signs, typical of those who pursued a westerly course. In going from the winter solstice to the vernal equinox, we of necessity pass Aquarius (miv), the Waterman, who was also known as a fisherman and a seafaring man.
Q. Where was the body found ?
A. At the verual equinox, typical of the " bsow of a hill." As we pass from the winter solstice in Capricorn to the vernal equinox, we are constantly climbing upward; this point is therefore emblematic of the brow of a hill, and there also blooms the evergreen, typical of the approaching spring and return of nature to life.

The following is a poetical version of the foregoing portion of the solar allegory :

## A MASONIC ALLEGORY.

Part I.-The Death of the Sun.
Wuas down the rodiacal arch
g] The summer sus resumes his march, Deacending from the summit high With eager step he hastens by
$\Omega$ The "lordly lion" of July. And clasps the virgin in his arma.

Through all the golden Auguat days The sun the ardent lover playm,

叹 A captive to her dazzling charms.
But when the harvest time is o'er, When gathered grapes perfume tie air And raddy wine begins to pour, The god resumes his way once more; And, weeping in her wild despair, He leaves the royal virgin there. What cares he now for Virgo's woes, As down the starry path he goes With scornful step, natil, at last, The equinoctial gate is passed P

Two misty columns black with storms,
While overhead there hangs betwean A larid thander clood, which forms The frowring arch was of the gate-
$\leadsto$ The gloomy equinoctial gate, An evil place for travelers late, Where enrious Libra lurks unseen; And near the portal lies in wait September, filled with deadly hate.

With stately step the god druws nigh, Yet, such is his majestic mien, That whether be shall strike or Eg , The trembling ruffian hardly koows, As Pheebus through the gateway goes.

But, as the shining form came near, The wretch's hate subdned his fear, And, nerring up his arm at length, He aimed a blow with all his strength Fall at the god as he went by. In anger Phœbbus turned his headAway the trembling coward fied.

The god, though smarting with the blow,
Disiains to follow up his foe; And down the zodiacal path Pursues his gloomy way in $\pi$ rath.

Still blacker tarn the antumn skies, And red Antares, evil star, Points out the place, more iatal far, Where fell October ambughed lies. The Sos, as if he scorned hia foes,
Il In pride and glory onward goes. Not he from deadly Scorpio flien, Nor panses he, nor bacteward tarna, Though redder jet Antare barne, And darker yet his pathway growe.
Yosnwhile October, from his hir, Oif Phombar rusbes unaware,

His murderous purpose now confessed, And amites the aun-god in the brenst. A ghastly wound the villain makesWith borrid joy his weapon shakes; And, as be sees the god depart, His hand upon his bosorn pressed, Believes the blow has reached the heart.

Along his way the sur-god goes, Unmindful where the path may lead, While from his breast the life-blood Hows.
The clouds around him gather now,
The crown of light fades from his brow.
$f$ And sonn, advancing 'mid the night, The Archer on his pallid steed,
With bended bow, appears in sight.
November, bolder than the rest, Hides not belind the gloomy west; But, striding right across the path, Defies the god and scorns his wrath; And, raising high his frowning crest, These baughty words to him addressed:
"Soptember and October, both, You have escaped and still survive;
But I have sworn a ceadly oath, By me you can not pass alive.
That which I promise I perfurm, For I am he who, 'unid the storm, Hides on then pallid horse of death."

While even thus the specter spoke, He drew his arrow to the lieadThe god received the fatal stroke, And at the Archer's feet fell dead.

Soon as the sun's expiring breath Had vanished in the ether dim,
1s December came and looked on him;
And looking, not a word be saith, But o'er the dcad doth gently throw A spangled winding sbeet of snow.

And when the winding sheet was piaced,
мu Comes evil Janus, doable-faced, A monster like those seen in sleep.
An old "seafaring man" is he,
As many others understand,
Who carries water from the deep And pours it out upon the land.

## Now Fobruary next app,eara,

 With frozen looks and ioy tears, A apectar cruel, cold, and dumb, From poinr regione newly come.These three by turns the body bear At nigtt along the west, to where A flickering gleam above the snows A dim electric radiance throws, A nebular magnetic light, Which, flashing apward through the niglit, Reveals the eernal equinox, And him whise potent spell unlocks The gates of spring.

An evergreen
Close by this spot is blooming seen.
'Tis there they halt amid the snow-
Onlawful 'tis to farther go-
And, baving left their burden there, They vanish in the midnight air.

Tet on this very night next jear Will this same coil three appear, And bring along amid the gloom Another body for the tomb. But still the eqergreen shall wave Above the dark and dismal grara, For ever there $n$ token sure That, long as Nature shall endure, Despite of all the wicked powers That rale the rintry midnight hours, The sun shall from the grave arise, And tread again the summer skies.

The foregoing allegory may be fully illustrated by the figure of the zodiac opposite page 47. Place the image of the sun-which is on the bluo circle-at the summer solstice, and then tarn the circle slowly around toward the autumnal equinox, so that the image of the san will pass successively by $\Omega, \Omega$, 仅, $\bumpeq, f$, and so on until the vernal equinox is reached.

THE RAISING OF OSIRIS, AN ALLEGORT OF THE RESCRRECTION OF TEE SUN.
Q. By what means and by whom was the sun released from the grave of winter, and finally rostored to life and power?
A. By the vernal signs Taurus ( $\searrow$ ) and Gemini (ㅍ), and the first summer one, Cancer (๗), sided by the second one, Leo ( $\Omega$ ); or, in other words, by April, May, and June, aided by July.
Q. Explair this more fully.
A. When the sun arrives at the vernal equizox, he first gives unequivocal tokens of a retarn
to life and power. In April he enters Titurus ( ४), and in May Gemini (II). During these two months he greatly revives in light and heat, and the days rapidly lengthen. The stin, bowever, does not attain the summit of the zodiaral arch until the summer solstice, in June, when he enters Cancer ( $二$ ), the first summer sign and the third from the vernal equinos. Sor dow he regain all of his energy and power until he enters Leo ( $\Omega$ ), in Iuly.

On the 21st of June, when the sun arrive ar the summer solstice, the constellation $S$ co-beingr but $30^{\circ}$ in adrance of the sun-uppear to be leading the way, and to aid by hic puwertul jaw in lifting the sun up to the summit of the zon!i-
sun was in that sign. "The lion was adored in the East and the W'est by the Egyptians and the Mexicans. 'The chief Druid of Britain was styled a liom. The national banner of the ancient Persians bore the device of the sum in Leo. A lion couchant with the sun rising at his back was sculptured on their palaces." ("Signs and Symbuls" of Dr. (Hirur. Who seems, however, to bave eutirely werlowhed the true reason for this wide-- bread adviration of the lion.)

The andient ilevice of the Persians is an astronomical allegory. It might well be adopted as ath a tro-masunic emblam by us.

After the sun leaves Leo, the days begin to arow unequivorally shorter as the sim declines toward the autumnal equinox, to be again slain by the thire autumnal months, lie dead throtysh the three winter ones, and loe raised again by the thice vernal ones. Eitch rear the great tragrity is repeated, and the chorious resurertion take place.

Thus, as long as this allegory is remombereth, the leading truths of astronomy will be perpetuaterl, and the sublime dowetrine of the imunortal nature of man, anil other thas mate to teach, will heillustrated and preeerved.

The diagram opponite page 47 is inteniled, lis a figure of the zodiac, to illusfrate the yearly progress of the sun amons: the trelve signs, with especial reference
acal arch. April and May are therefore sail to fail in their attempt to raise the sun; June alone succeeds, br the aid of Leo. When, at a more remote period, the summer solstice was ill Jen, and the sun accually entered the stars of that constellation at the time of his exaltation, the connection was more intimate, and the alegory still more perfect.

This visille connection between the constellation Leo and the return of the sun to his place of power and glory, at the summit of the Rinyal Arch of heaven, was the principal reason why that constellation was beld in such high esteem and reverence by the ancients. The astrologers distinguished Leo as the "sole bouse of the cun," and taught that the world was created when the
to the allegory of his death and return to life, as explained in the preceding pages. In this figure of the zodiac the vernal equinox is represented as being somewhere between the constellations Aries and Finerns, and the summer solstice between Cancer and Leo. Such was the case at the period of the building of King Solomon's temple, and for a long period before that; only; the farther back we go in time, the nearer Leo will be to the summer solstice, in consequence of the precession of the equinoxes, as has been explained in a preceding chapter.

In order to iully illustrate the allegory by means of the diagram, bring the image of the sun, on the blue circle, to the summer solstice, immediatcly under the key-stone, and figure of the
personified sun-god, at the top of the red circle; then slowly turn the bluce circle toward the autumnal equinox, so that the image of the sun in the bluc circle will pass sucecossively by the constellations from Leo to the winter solstice at the buttom of the red circle. This clowes the first jart of the allegory. Continue to turn the lilue cirele until the verual equinox is ruached, and then on through Tamrus, Fremini, and Cancer ( $£$, IJ, and © $)^{\prime}$ ), until the point of the sun's exaltation is once more att:ined. 'This will give a correct renresentation of the annual passacre of the sun among the twelve signs of the zodiac as it acetually appears in nature, and also illustrate the whole course of the solar allegory:

The folloning is a poetic version of the second part of the solar alleurory :

## 

I'urt IJ.-The Resuerertion of lhe .iven.
Is silence with arerted lisad
By nizhit the "eril thro" have hed. And cold and atit the hanly licbeneath the elowny. winter skiou. Yet, hat you luex a wather phere.
That dismal nisit ho side the de::al. Ilad yout that mizhe heeos kne line fhere:
Beside the dead in te:ars and pras er.
Tou mipht have sern. amid the air, A aickering, dizn. atrroral lizit.
Which hovercd on the miluizh air, And, seeines in the erhomy sks This mysti", strun:e ce colestial lipht Contending with the powers of sight. You nuight have tuken hope thereloy.

There was, alas! no matiher threre To mark this sadiance in the air, To gaze with earnest tearfill rye Opon this sadiance in the sky. There was no watcher there. alas!
To ask in anxious whispers lnw,
"Will not this light still brighter grow.
O: will it from the heaveus pass
And leave me plunged in deuper gloom
Beside ihis culd and lonely tomb?"
Meanwhile the light increascd-ulthough
Beside the grave no mourner stoui
Amid the lonesome solitudo-
And as with tints of blue and gold,
And flashes of priamatic flame.

It lighted up the midaight cold, Along the plain in benuty came A slining and majestic form, And as it came the winter's storm, As if abashed, its fury checked. Niu more alouve and round the path, licneath the wiud's tempestaous wrath, The snowy billows heare and toss; A sacred calm as he draws nigh Pervades at once.the earth and sky. llis rube was blue, its borders decked With evergreen and scarlet.inoss; Ilis hands upon each other rest, Die north and south, due east and west ; The ofun palins together pressed A. if engaged in silent prayer. He chus had formed with pious care The holy symbol of the cross. A lamb doth cluse beside bim go, Whose whiter thecee rebukes the snow: These things safficiently proclaim ilin mystic office and his name. liwide the grave he comes and stands, -till prayiut the re with fulded hands; I lul. while he prays, see drawing near Inotloer shining form appear, llis risht hand on his bosum pressed, A. if ly bitter grinf distressed, The other puinting to the skies. Amb, as lie neeppr, each radiant tear, That frum his sad and carnest ejes l:alls cill Hac carth, is transformed there To rincts blue and blossoms fair, That sucertly perfume all the air.* A thiri une now appears in sight, A rrupind in royal robes of light, More horious far; and at his side A - Jurdly tion " walks in pride. And h: wiluc came in glory last Between the others gently passed, Anl, looking down upon the dead, With level. open palms outspread, A huly benediction said.

This done, the first one, by command, liic doud god inketh by the hand: At once through all the body fies The aame warm flush thnt marks the akies,
The shrunken fatures, cold and white, A noment shine with life and light. A moment only-'tis in vain: Unconguered Death resumès his reign.

[^1]So doth a solitary wave
Leap up amid the lonely night, And catch a gleam of life and light, And then sink helpless in its grave. To raise the god the first thas failed-
The pcwers of darkness yet prevailed:
So to the second he gives place, Who, like the first one, by cominand,
The sun-god taketh by the hand, And, looking downward in his face
With plending voice and earnest eyes, On Plicebus calls and bids him rise. Though at his touch the blood unbound.
With rapid current red and warm
Rans swittly through the prostrate form,
Yet ailent on the frozen ground
The god lies in a trance profound, Devoid of untion, deal to sound.


#### Abstract

Alas ! alas! what doth remain ! Shall death and darkneas ever reign, And night eternal hide the day? Then said the third one, "Let us pray." And full of faith and atrong intent, His prayer to IH. VA․ upward went. "Amen" was said-_" $s 0$ mote it be!" And then the last one of the three . Arose, and stretching forth his hand, Calls on the dead, and gives command In IE. VAB.'S name to rise and stand.

Then up rose Phoebus in his pride, With the "lordly lion" by his side, And earth and sky with his glory shone As again he sat on his golden throne, For the voice of God is nature's law, dnd strong was the grip of the lion's paw.


## APPENDIX TO PART SECOND.



Since Part I of this work was written, I find in the "Masonic Newspaper," of March 6, 1880, the above emblematic drawing, concerning which Brother William S. Paterson (thirty-second degree) says: "This emblem was found in the sarcophagus of one of the great kings of Egypt, entombed in the pyramid erected to his everlasting remembrance. It brings to mind the representation of the king's induction into those greater Mysteries of Osiris, held to be the highest aim of the wise and devont Egyptian." Brother Paterson also says in the same article that "the

Hebrews were probably instructer in the legend of Osiris, and afterward changed the whole to accord with the wonderful and wise Solomon and his master-architect Hiram"; and adds that "the discoveries now going on an Egypt may lead to the key of these mysteriefs". Brother Paterson makes no sttempt to explain the hidden meaning of this ancient Egyptian emblem; but, if the theory advanced in this work is correct, the reader will have no great difficulty in nnderstanding it, for the same astronomical key which unlocke the


Hiram will also fully explain this ancient eroblem, while the fact that this emblem so graphically and perfectly illustrates our astronomical solution of the legend is strong corroborative proof of its correctness.

The emblem may be thus explained: The form that lies dead before the altar is that of Osiris, the personifed sum-gol, whom the candidite represonts in the drama of initiation, lying deat at the winter solstice. 'llbe cross upos his breant refers to the great eclestial cross, or intersection of the celestial equatior by the ecliptic. The ligure of the lion graspinis the ilead sun-god be the hand allades to the comstellation Leo and the summer solstice, at which point the sun is raised to lifir and glory, as has beeil just cexplained in the allegory of the resureection of the sun, and denotes that the candidate is about to be raised from a symbolic:al death-to lffe and pown by the grip of the lion's patr. 'Ihris is matule clearly manifest frosn the façt that the liun hulio in his uther jatw the ancient Fegeptian symbol of erternal life, or the Eions: Ausute, a tull deseription of which and its true meaning are given in: L'an't Thirll (see page (0)). The tallet at the feet of the cundidate biss inscribed upon it in hioroglyphics the sacred names of Amon and of Mut, the wife of Amon Rat, and probably that of the rural capdidate. The figure erect at the altar is that of the Grand IIierophant, attired as Isis, with the vacant throne upon her heidl, emblematic of the departed snn-god. She has her hand raised in an attitude of command, her arm forming a right augle ; ber ejes are fixed upon the emblematic lion as she gives the sign of command that the candidate be raised from death and darkness to light and life. The objects on the altar are two of those peculiarshaped glass jars, with pointed bases, in which wine was kept (See Wilkimson's "Egyptians of the 'Time of the Pharaohs," page 86, woodeut 62), ind which, the same author says, "always had their place on the altar of the gods" (page 13). The emblem placed between the votive jars of wine is more obscure. It may be the thyrsus, but is more probably a. Horal offering. (See "Ancient Egyptians," vol. i, woodout 260, No. 5.) There can be no doubt. but that the whole device is a symbolical picture of the initiation of some
important person into the Mysteries, nut of ()siris, however, as [brother Paterson thinks, but of lsis, who, reprenented by the Grand Iliaropitant, stamels hehimi the altar, giving the command to raise hrom death ( Miris, who lies beforr it. This anciont figgptian dratwing is as strong atml startling tontimony of the entire corrorthess of the astronomical zolution of the leqend al (Waris and that ul Tlitam, as given in the forrorning pages. It is. indecel, alumest impossibin to mabe an embblematic dran wing whiel would he in nuore perfect harmony with it.

Tlle Jriviyent af the bexa.
Is the julgment of the deal, or Julgment of .1 menti, formed a grart off the Myinurios of lsis, it should be properly mentioned in that connection. Although this coremong was part of the Mysterices, yut it was well known to all, as it was founded upon the puruliar funeral rites of the Egyptians. From this jurgment in this world no Egrytian was cexempt, no matter how exalted his position; and.apon this trial depended the right to an honorable burial. 'All whom the deceased person hiul wrongsil, ind all who knew of his evil deeds, were permitted to testify over his dead body, while his fricuils and kindred loudIs proclaimed his virtues. The derieision followed the weight of the evidener ; ind eren a king who bad led a bad and wicked lif( might be excluded from burial in'his orn sepulchre. "And the "assessors" at the funcral were allowed to pronounce a condemnation, which all agreed would also be received in a future state. This trial of the dead in this world was typical of the judgment of Amenti, where Osiris presided in the invisible world, and which the devout Egyptian believerl took place there at the same time. From this peculiar custom of the Egyptians arose a part of the geremonies of initiation into the Mysteries of Isis; for, as in initiation, the sandidate died symbolically, so also he underwent the Judgment of the dead, to ascertsin if he was worthy to receive the higher and more important secrets, by being raised and brought to light, typical of the allunission of the good intc the. "mansiuns of the blessed." The last judgment is one of the principal subjects found depicted upon the walls of tumbs and in the
"Book of the Dead," sometimes referring to the actual trial, at others to its representation as enacted in the Mysteries. This judgment of the dead was peculiar to the national customs and funeral rites of the Egyptians, and does not appear to have prevailed in other countries. It was therefore naturally discontinued as a part of the Mysteries when they were introduced into other countries under other names." The Greeks, however, introduced it into their mythology-the Greek Themis being derived from the Egyptian Themei, or goddess of Justice; "while Minos and Khad-amanthus, the Grecian judges of the dead in Hades, show their connection with Amenti, the Egyptian Hades, or region of darkness. The transport of the body over the sacred lake in the baris, or boat, in the funeral procession of the Egyptians, in like manner, gave rise to the Acherusian lake, the ferry-boat of Charon, and the passage of the Styx, in the Grecian mythology. There is nothing in the ancient masonic degrees in the least analogous to the Judgment of Amenti, that portion of the Mysteries of Isis not having been adopted into the Mysteries as celebrated in other lands and at a later age. The following representation of the scene, taken from the "Book
he holds the flail and crook, emblems of majesty and dominion. The deeds of the deceased, or of the candidate, typified by a vase containing his heart, are being weighed in the scales of justice by Anubis and Horus against an ostrich-feather, emblem of truth, in the opposite scale. The ostrich-feather, as the emblem of truth, is thus depicted in the hienoglyphics: Thoth (Hermes, Mercury, or the Divine Intellect) preserrts the result, to Osiris: Close' by is Cerberus, guardian of the gates. At the right the candidate is seen attended by the goddesses of Truth and Justice ; the goddess of Truth holds in her hand the emblem of eterial life,


EMBLEM 07 and both wear upon their heads the emblem of truth. Close to Osiris is seen the thyrsus bound with a fillet, to which the spotted skin of a leopard is suspended. It is the same that the high-priest, clad -in the leopard-skin dress, carries in the processions, and which gave rise to the nebris and thyrsus of Bacchus, to whom Osiris corresponds in Greek mythology (Wilkinson). The lotus-flower, the emblem of a new birth, is represented just before the thyrşus. If, on being tried, the candidate is rejected, having been "weighed and


THE JUDGMENT OP AMENTI.
of the Dead," will, however, be interesting to all readers, and members of the fraternity will not fail to recognize in it certain masonic featurea which we may not particularize. The figure seated on the throne is Osiris, or judge of the dead; found wanting," Osiris inclines his scepter in token of condemation. If, on the contrary, when the sum of his deeds has been recorded, his virtues so far preponderate as to entitle him to admission, Horus, taking in his hand the tablet of Thoth, introduces him to the preserice of Osiris. In the initiation, those who represented Thoth, Anubis, and Horus wore symbolical masks, as represented in the drawing. (See Kendrick, Wilkinson, and also Arnold's "Philosophical History of Secret Societies," from which last work the above drawing is taken.)

## PART THIRD.

## I. Abtronojagal Exphatation of the Eibremb, Sybbola, and Legends of the Mratzrde,  II. Conolubion.

## I.

Having explained the solar allegory which is embodied in the legend of Hiram, as well as the solar symbolism attaching.to the officers of the lodge, their several "stations" and duties, and the " lights, covering, and supports of the lodge," it now remains to consider the varions'emblems and other legends of freemasonry. If it can be shown that all of them (which are at all ancient) have also a solar and astronomical allusion, in perfect harmony with each other and with the main central legend which they are intended to illustrate, the fact that the whole system is founded on an astronomical allegory will be irresistibly forced upon us. The various emblems, symbols, and legends dependent on that of Hiram, and intended to illustrate it, will therefore next claim attention. In this examination the same method of question and answer will be pursued, as being best adapted to the object in view :
Q. Have all the ancient signs, symbols, emblems, and legends of the Mysteries, both ancient. and modern, an astronomical allusion?
A. They have. As the whole aystem has an ancient astronomical foundation, it could not be otherwise.
Q. Has the astronomical allusion of many of the emblems, symbols, and legends been lost? $\because$
A. It has ; as to some, entirely, and as to others, in part. The allusion is, however, so perfeot in most cases, that it may be restored by the use of the key already furnished to the main cen-
tral allegory, to which they are all harmoniously related

THE SEVET GTABS
Q. To what does the masonic emblem of the seven stars allude?
A. To the Pleiades, or seven" stafs in Taurues. These stars were called by the Romans Vergivic, or Virgins of Spring.- The constellation Taurus was anciently at the vernal equinor, and the year formerly then began. Thus Virgil, referring to a remoter age, in the "Georgics," Book I, says: ..

> "Cavdidas auratis aperit camm Coraibus annum taurres."
"When the bright ball with gilded horns opens the year."
Job speaks of the Pleiades, also, as exerting "a sweet influence," expressive of the balmy air of apring which accompanies the approach of the sun to the constellation Taurus and the "seven stars." This masonic emblem, therefore, hus a direct allusion to the vernal equinox, and thus becomes a beautiful symbol of immortality, reminding us, also, of that starry home beyond the grave to which the soul of man aspires. It whe for these reasons that, of all the "hosts of hearon," the Pleisdes were selected as an emblem by our ancient brethren.

## THE LADDER OF̈' SEVEN ROTNDS.

Q. What is the true meauing of this ancient emblem?
A. The ladder of seven rounds, says the Lon-
don "Freemasons' Magazine," has been a symbol in many ages and countrics. "Among the ancients every round was cousilered to be represented by a motal increasing in purity, from the lowest to the highent, and thene were again characterized by the names of the seren planets as follows: The tirst ruand is the lowest ; therofore they will read from the bottom to the top: 7. Gold-the Sun ; 6. Silver-the Menon; i. •IrunMars ; 4. Tin-Jupiter ; :3. Quicksilver-Mercury ; 2. Copper-Venus: 1. Lead-S:aturn."

This planctary signitication given to the sevion rounds of the ladder, as stated by tie writer of the abuve, is in perfect harmony with the religious ideas of the ancients who worshiped the sum and planets, and the several allegorical legenils which they funderl unon the facts of astronomiral science.

Near the site of aneiont Dabylion are the ruins of the great 'l'emple uf the siven Spheres, which for a long time was thought to be identical with the great Temple of Belus, deseribed by LIeroilotus, situated in Ibahylon, and which it closely, though not exactly, resembles. The builder of this temple is unknown, and the late of its original structure is also uncertain. It was, however, restored and carefully renovated by Nebuchatnezzar, whose name is still lexuible on the bricks and cylinders deposited at the angles. The account which the royal restorcr gives of his work has been likewise found in the iuscriptions among the ruins. The following particulars as to this great temple, which is a type of the plan and character of all the Babslonian sacred build: ings, is taken from Rawlinson's Appendix to lionk III of IIerodotus. The ruins were carefully and completely explored by Sir II. Ravlinson himself bit a few years ago. Like the great Temple of Belus at l3abylor, as described by IMerodotus, the Temple of the Seven Spheres.was a building of seven receding stages. On the top of the seventh stage was placed the ark, or tabernacle, which seems to have been fifteen feet high. The ornamentation of the building was almost nolely by color. "The seven stages were colored so as to represent the secen planetary sphercs, according to the tints regarded by the Sabæans as appropriate to the seven luminaries, the basement being
black, the hue assignel to Saturu; the next an orange, the luce of Jupiter; the third a bright real, the hue of Mars; the fourth the golden bue of the Sun; the.fifit a pale yellow, the hue of Vents: the sixth dark blue, the lane of Mercury ; the serenth silver, the hae of the Moon."

From the fact that the seven etages hy which the summit of the tomple was reicherl were thus dedicateal. to the acoull planefo. it is criblent that the symberism of the seren steps of the ladder, and the seven aserniling stages of the temple. is the same. The oroler in whirh the phancts are arranged $i$, . Jnwerves, mot exactly the same ns that oi the steps of the ladider, as given by the " Fremanopus Maseizine" of Tondon. The latter surems to lo furnakil mostly on the supposed order of the metals as pop purity. That the order of the planets, as applied to the seven stages of the temple, is the most corvect aceording to the auciont symbolism of whe Bahylenians and other "riental nations. can wot lee doulterd, for the ruins of the a demphe itsolf place that leyennd question. It is :ase crinally wevilent, from the description of liarewhello, that the symbinisur of the serven stages of the 'Tumple of the serern Spheren is the same as that of the gereal Tomple of Belus itself at Babylom. One of the prianipal emblemis of the ancient Mreveries, luth in I'ereia and Inlia, wias a ladder of soveln rouncls or steps, and it may be traced back to the very builiters of these temples. In attempting to ascortain the true meaning of this cmblem, we must not forget that the llabylonians and Sabieans were worshipers of the plancts. It is alsn equially important to remember that they were allepts in astronome, and believed in and practived astrology. This is evident from sacred history. We rual in Inanid ii that Nebuchadnezzar (the same who rebuilt or restored this very Temple of the Seven Spheres) was troubled by a dream, which he commanded "the magicians, the astroloycrs, and the sorcerers, and the Chaldeans," to interpret for him." (See also 7, 7, and many otber passages of Scripture.) "The Cbaldeans were a branch of the great Hamite race of $A k$ Krul, which inhabited Babylonia from the carliest times: With them originated the art of writing, the building of citics, the institution of religions systems, the cultivation of all science,
but that of astronomy in particular" (H. C. Rawlinson).

The sciences of astronomy and astrology will, therefore, no doubt furnisb the key to the symbolism of not only the seven stages of the temple, but the seven rounds of the ladder also. In truth, the reference in both to the seven planets points us earnestly in that direction.

The sun on the 21st of December is at his lowest point of declination below the equator, and the days are. the darkest and the nights the longest, while all nature lies dead, locked in the arms of winter. On the 21st of March the san reaches the vernal equinox. Spring begins, and nature revives from the death of winter. On the 21 st of June the sun reaches the summer solstice, when the days are the longest, and the sun seems for the first time to have regained all his former power and glory. Now, it will be observed, by looking at any celestial globe, that the progress of the sun from its lowest to its highest declinatiou is divided into seven equal parts by the seven. signs of the zodiac, through which he passes, or in which he is, while mounting upward from the winter to the summei solstice. The sun, starting in Capricornus, passes successively through Aquarius, Pisces, Arics, Tuurus, and Gemini, until be reaches the summer solstice, or summit of the $20-$ diacal arch, on the 21st of June.'. If the reader will take the trouble to trace this ascending path of the sun along the ecliptic on a celestial globe, its symbolical significance will be impressively illustrated. It must, however, be remembered that the winter and summer solstice were anciently is Aquarius and Leo, and not in Capricornus and Cancer, as they now are, owing to the precession of the equinozes. The Hindoo astronomer, Varaha, says," Certainly the southern solstice was once in the middle of Aslena (Leo), and the northern in Dhanishia (Aquarius)." Modern astronomers all declare the same thing. A study of the various astronomical myths of antiquity shows that the most of them originated when the summer solstice was either in Leo or between Leo and Cancer. In the days, therefore, when planetary worship had its rise, the sun, in his passage from the winter to the summer solstice, started in Aquarius and ascended successively through
the signs Pisces, Aries, Taurus, $G_{\text {cmini, }}$ and Cancer, $30^{\circ}$ each, and entered Leo at the summit of the zodiacal arch on the 21st of June. These seven signs are therefore symbolical of seven aocending stages or steps, and, according to the science of astrology, these seven signs, following each other in this exact order, are the houses of the seven planets (which they rule and signify) in exactly this order: Saturn, Jupiter, Mars, Venus, Mercury, the Moon, and the Sun.

But by a strange correspondence this is the exact order in which the planets are arranged as ruling the seven ascending stages of the Tomple of the Seren Spheres, with but one exception. The moon, whose house is Cancer, and which sign she rules (aceording to astrology), is at the top of the sevep stages, while the sun is placed in the center, between Mars and Venus, who rule the vernal signs Aries and Taurus. This is, however, in perfect harmony with the ancient allegory above given, for anciently the vernal equinox was between Aries and Taurus, the summer solstice being between Leo and Cancer. The base of the temple, therefore, symbolized the winter solstice-the appropriate color of which was black, and its significator Suturn or Time, which destroys all things. It referred to the sun at his lowest point of declination, and when Nature is desolate and dead.

The central stage, ruled by the sign Aries and Taurus, between which the sun was emblematically represented by his color, was typical of that luminary raised to life again at the vernal equinox, when the sun entered those signs in the spring. The seventh stage, or summit of the temple, was in like manner typical of the summer solstice, anciently between Cancer and Leo. Cancer is ruled by the moon, and Leo is the sole house of the sun (according to the teaching of astrology).

The top and last stage was therefore represtnted to be of the color of the moon, denoting that the sun was now approaching the highest point of his journey, and was about to be exalted to the summit of the rodiacal arch. The colors, as given by Herodotus, are also in exact harmony with the science of astrology, and so also is the rule of the seven metals by their respective planets, as given by the "Freemasons' Magacine" (see

Ptolemy, Placidus, Lilly, and Zadkiel's "Grammar of Astrology," for the teachings of astrology on these points; also, as to the bouses of the planets and their rule). We should be pleased to follow this subject still further, but enough has been said to show the close connection letween the seven ascending stuges of the great Teraple of Belus and the Temple of the Seven Spheres at Babylon, with the emblem of the-ladder of seven steps as exhibited in the Persian Mysteries, and, indeed, all of the Oriental Mysteries. Nor can there be much doubt of the fact that our masopic emblem was adopted from these anciept sources, while it is equally certain that the explanation which refers it to "the ladder Jacob saw in his vision," although beautiful, is the invention of Preston, Cross, or some other recent writer, who had no idea of its true meaning or ancient origin.

## TERE MASONIC LADDER OF THREE ROUNDS.

Q. What is the signification of the Iadder.of three rounds, and why is it represented as leading up to the "seven stars," or Pleiades?
A. This emblem is clearly but a modification: of the ladder of the Mysteries, consisting, as we have seen, of seven rounds-and is of the same general astronomical meaning. The.sun, when ascending from the winter: solstice to the vernal equinox, the constellation Taurus ( $~()$, and the Pleiadea, or seven stars, situated therein, passes successively through three signs of the zodiac, to

wit, Aquarius ( $m$ ) , Pisces ( $(\ldots$ ), and Ariea ( $\varphi$ ). These theee signs are therefore emblematically represented by a ladder of three priccipal rounds, by means of which the sun climbs up from the point of his lowest southern declination to the
vernal equinoz and the "seven stars" in Tauran. The foregoing is the emblem of the masonic ladder as generally represented (see Monitors).

The diagram following will show how per. fectly the explanation of its meaning, as given ahove $e_{2}$ agrees with all the facts of astronomy, and how significant and beautiful the emblem is when thus considered.

## this zodiacal ládder.

Thé emblematic meaning now attached to the masonic ladder, which refers it to the one "Jacob saw in his vision," is neither lost nor macri-

ficed, even if we admit the probable origin of the emblem in that of the ancient mysteries. Its symbolism is, however, thus made more extended and impressive, so that we gain rather than lose by so referring it.

- The initiation into all the ancient mysteries, it will be remembered, was a drama founded upon the astronomical allegory of the death and resurrection of the acn, and was intended to, and did, impress upon the mind of the candidate, in the strongest manner possible, the two great doctrines of the unity of God and the immortality of man.
$\therefore$ These are to-day the two great fundamental principles of Freemasonry, and are illnstrated and taught in a similar manner in the ritual of the third degree.

The solar allegory and emblems of the ancient mysteries have, however, a twofold meaning:

1. Being founded, as before stated, on the pas-
sage of the sun among the twelve constellations of the zodiac-his overthrow by the three antumnal months, his return to life at the vernal equinox, and his exaltation at the summer solsticethey therefore taught and illustrated all the leading principles of astronomy, and thus had an im.portant scientific value to the initiated.
2. By personifying the sun, and requiring the candidate to represent him, the whole solar phenomena were exhibited in an allegorical manreer, and became symbolical of the unity of God and the immortality of the soul. . The ladder of the Mysteries, being but an emblem intended to illustrate the main solar'allegory, had the same twofold symbolism:

When fully explained to the initiated, it fixed upon the mind certain great facts in astronomical science. It taught the order and position of the signs of the zodiac ; the ascent of the sun from the point of his lowest declination below the equator to that of bis highest above it, by seven equal graduated steps. It also taught the duration and order of the seasons, the length of the solar year, and many other particulars of the greatest importance to agriculture, as well as to science and art generally.

The emblem, riewed in an allegorical sense, also taught, by solar analogy, the unity of God and the life everlasting. The-ladder in this sense was the emblem of the ascent into heaven from the lower hemisphere-the underworld of darkness, winter, and death. This mystic ladder. leads to the "seven stars," or Pleiades, shining in the constellation Taurus, at the golden gates of spring. It mounted still onward and upward, to the summit of the Royal Arch of heaven, thus emblematically teaching us that by the ladder of virtue the soul of man will at last pierce the "clondy canopy,", and mount to the highest circle of "the starry-decked heavens," to dwell for ever trinmphant over death and the grave.

It will thus be seen that our masonic emblem loses none of its significance by. its' probable origin in the astronomical symbolism of the ancient mysteries, but, on the contrary, has given it a much more extended and beautiful aignification, being clothed with a scientific as well as a moral meaning.

PAITE, HOPE, $A T D$ CHNRTIX.
Q. Why may the three principal rounds of this ladder be also said to emblematically represent "faith, hope, and charity"?
A. When the sun bas reached his lowest southern declination, and begins to ascend toward the vernal equinox;, we have nothing but faith in the goodness of God and the immutability of the laws of nature to sustain our belief that the sun will once more "unluck the golden gates of spring "; but, when the sun enters Pisces ( $F$ ) and ascends the second round of the ladder, hope is added to our faith, for the san is seen álready to have climbed up two thirds of the distance required to reach the yernal equinox; and when, at last, on the 2lst of March, he moupts the third round of the ladder and enters Aries ( $\varphi$ ), the " sweet infuences of the Pleiades" are once more felt, while beneath the warm rays of the vernal sun the snows dissolve, and the earth begins again "to put on her beautiful attire." "For lo! the winter is past, and the ilowers appear on the earth, and the time of the singing of birds is come, and the voice of the turtle is beard in the land." The third and last round of the zodiacal ladder is therefore emblematic of charily, or that divine love and henevolence which each year cause the spring-tirnc to come in due season. So ought we all to have faith in God, bope in a blessed immortality (umblematically represented by the vernal erfuinox), and charity to all mankind.

## TIIE TIIBYE GTEMS.

The three stc. ${ }^{24}$ slclincated on the master's carpet have an ohvious reference to the three steps, or degrees, by which the initiated becomes a master masoin. Tho:y are, however, capable of an astronomical explanation also, and may be said to allude to the threte nigns, Taurus, Gemini, and Cancer (criblemaric: of thrce steps), hy means of which the sun (harirgy alrcady reached the vernal equinox by means of the zodiacal ladder) ascends to the summit of the Royal Arch at the aummer solstice, which point is, as alreads explained, emblematic of the master's degree.

## THE WINDING ETEPS.

Q. According to the legend of the " middle chamber" of the fellow-craft's degree, the workmen were paid their wages in the middle chamber of King Solomon's temple, which was approached by a certain flight of " woinding steps." This staircase is said to have consisted of "three, five, and seven steps" (according to our lecture), and was reached by entering in at the front door of the temple, passing between the pillars of the porch. (See Mackey's "Symbolism," Chapter XXVI.) What is the astronomical import and real meaning of this legend?
A. The only allusion to these " winding stairs" in the Bible is found in the sixth chapter of 1 Kings. In the fifth verse we are informed that King Solomon "built chambers round about against the walls of the house." The sixth verse continues as follows: "The nethermost chamber was five cubits broad, and the middle chamber was six cubits broad, and the third was seven cubits broad, for without in the walls of the house he made narrow rests round about, that the beanis should not be fastened in the walls of the house." The eighth verse informs us that the "door for the middle chamber was on the right side" (Hebrew, "shoulder") "of the bouse, and they went up with winding stairs into the middle chamber, and out of the midst of the middle into the third." The only information which Josephus gives may be found in Chapter III, Book VIII, of his "Antiquities," and is as follows: "He [Solomon] also built about the temple thirty small rooms, whicb might include" (i. e., surround) "the whole temple by their closeness one to another, and by their number and outroard position round it. He also made passages through them, that they might come into one through another. Every one of these rooms had fire cubits in breadth, and the same in length, but in height twenty. Abore these were other rooms, and others above them, equal both in their measures and numbers, so that these reached to a height equal to the lower part of the house, for the upper part bad no buildings about it. The roof that was over the house was of cedar; and, truly, every one of these rooms had a roof of ite own that wos not connected

20ith the other rooms, bat for the othor parts there was a covered roof common to them all. . . . The king had also a fine contrivance for an ascent to the upper room over the temple, and that was by steps cut in the thickness of the woll, for it had no large door on the east end, as the lower house had, but the entrances were by the sides through very small doors."

The above extracts comprise all the information which reliable history, either sacred or profane, furnishes in regard to the " midllle chamber" and the "roinding. stairs" by which it was reached. It is evident, both from the Bible and from Josephus, that the "middle chamber" was no part of the temple proper; nor, indeed, was it permitted to be fastened to the sacred walls. (See 1 Kings vi, $\mathbf{v}$, just quoted.) All the chambers were built around the outside of the walls, and were reached from the side, so that in going up to the "middle chamber" a person not only did not pass between the pillars of the porch, but did not enter in or pass through any portion whatever of the temple itself. The steps, according to Josepbus, were "cut in the thickness of the wall outside." In view of these authorities, although be'does not quote them, Dr. Mackey may well say "that the historical facts and the architectural details alike forbid us for a moment to suppose that the legend" (of the winding stairs), "as it is rehearsed in the second degree of masonry, is anything more than a magnificent philosophical myth." ("Symbolism," Chapter XXVI.)

But if it is a "philosophical myth" it must have a symbolical meaning; and be emblematic in its character. The rery essence of symbolical teaching consists of the method of selecting some fact or some real object in nature, art, or science, and by investing it with an emblematic significance through comparison, thus tesching and illustrating some moral or political doctrine. The anchor is thus made an emblem and illustration of hope, the beebive of industry, the scythe of time or death. A real anchor, beehire, or seythe is, however, required as a foundation for this allogorical teaching. If, therefore, the "legend of the winding stairs" is a "philosophical myth," either the actual or the emblematic stairs muat
have a real existence somewhere, or they could not have been selected or used for the purpose of conveying a philosophical, symbolical, or allegorical lesson. The "winding steps," as described in the masonic legend, did not exist in the temple of King Solomon, as we have shown, not only by Josephus, but the Bille itself. We must, therethere, look elsewhere for them. Now, as all the other leading emblems of masonry have an astronomical origin, it is but reasonable to suppose that these very same " winding steps," leading to the place where the wages of the craft are paid, will be found in that otber "temple not made with hands, eternal in the heavens." Aṣ they are not to be found in the actual temple, let ns look for them in the emllematic one.

But, before doing so, it will be necessary to determine more exactly the proper number of these emhlematic steps, for their stated number seems to have varied at different perinds and according to different versions of the legend. Dr. Oliver mentions an old " racing-board," published in 1745, in which the steps are semicircular, and are but scven in number. Dr. Mackey says, on page 221 of his "Symbolism," that "tracingboards of the last century have been found in which only five steps are delineated, and others in which they amount to seven. The Prestonian lectures used in England in the beginning of this century gave the whole number as thirty-six, divided into series of one, three, five, seven, nine, and eleven. . . . The Hemming lectures, adopted by the union of the two.grand lodges of England, struck out the eleven. . . . In the United States the number was still further reduced to fifleen, divided into three series of tirree, five, and seven.".

It thus appears that there has been considerable confusion as to the correct number of these symbolical steps. The most ancient versions of the legend make the number either five or seven. Now it is a very safe rule to adopt as to all traditions, including those of masonry, that the older the version the more correct it probably is, for the further back we. trace any legend the nearer we will approach the time of its origin, and, consequently, its primitive and uncorrapted form. Applying this rule to the case under consideration, we may safely conclude that the proper
number of steps in these "winding stairs" is either five or seven. If, however, we succeed in finding the steps themselves propurly lucated in the emblematic temple, and leading to the very place where the craft recerive their wages, we shall be able to determine their cxact number by actual coun.

The building of the temple, represented emblematically by the Royal Arch of heaven, was commenced in the spring and finished in the autumn. It was, therefore, said to he seren years in building, as has been previously explained. The apring signs, during which the plowing and planting are done, are typical of the E. A degree; the summer monthx, when the growing grain requires constant carc for its protection, of the F. C. degree; and the senson in which the harvests are gathered and stored anay;, of the M. M. degree, and those akilled worknen who wrought at the completion of the temple.

Daring the progress of the suit from the vernal equinox to the summer solstire, the husbandman is engaged in preparing the soil and sowing his seeds; during the passage of the san from the summer solstíce to the antumnal equinoz, he is employed in protecting his maturing crops. In July and August the corn ripens and is iarvested, and in the autumn the oil and vine also reward him for his labors.

The wages of the faithful craftsmen, we are told, are "corn, oil, ant rine." The seven signs of the zodiac, from the rernal equinor to the first point of Scorpio, " winding" in a glittering carre about the heavens, may in a like manner be said to be embleraatic of seven winding steps, leading to the place where
CORN, OIL, AND KINE
are brought forth to reward the labors of the busbandmän. The sun arrives at Aries on the 21st of March, and reaches Scorpio about the 21 st of October, passing. sụccessively through $\varphi, \gamma, \Pi$, ๒,$\Omega$, 収, and $\bumpeq$. The number of these emblematic steps is therefore seven, thus corresponding with the more ancient versions of the fellow-craft legend; and it will also be observed; that they are really semisircular in form. This perfectly harmonizes with the "seven semicircular steps"
of the ancient "tracing-board" mentioned by Dr. Oliver. 'It is also worthy of notice that, jast as that part of the year embraced within these seven signs may be divided into three periods-1. That of plowing and planting ; '2. That of growing and mataring ;- and, 3. That of Jarivesting and storing -so these emblemàtic steps may also be divided into three groups, which find an' appropriate expression in the numbers 3, 5, and 7. The first three signs, Aries, Taurus, and Gemini, dennte the season of plowing and plantirg. The inext.two, Cancer and Leo, making five from the vernal equinox, denote the period during which the crops ripen and mature; and the last two, Virgo and Libra, making seven in all, rule the harvest-sea-soi-and the storing away of the coirn, oil, and wine, with which the solar bountr has rewarded the labors of the faithful husbandman.

The American 山ivision of the steps into three groups, expressive of the numbers $3 ; 5$, and 7 ; is therefore correct, but the total number of steps is sevien, and not fifteen. It is easy, to see how this latter error, as to the mystic import of the numbers 3,5 and 7 was made, in consequence of the true nature of the symbolism of the seven steps being lost.

The legend of the "winding stairs" informs us that they condncted between the two pillars of the porch. Dr. Oliver, in his "Landmarks" (note 19 to Lecture XVI), says that " the equinoctial points are called pillars, because the great semicircle, or ajper hemisphere, neems to rest upon them." If this symobolism be correct, then, the "winding stairs" do, in fact, lead past and between these celestial pillars, in perfect harmony with the allegory of the legend. .Thus explained, the legend of the "winding stairs," leading to the place where "corn, oil, and winc" are. delivered as a reward to the faithful laborer in the vineyard, is a most beantiful and gignificant astronomical allegory. . Like all the : other. astronomical' allegories and symbols of Freemasonry, it not only (when properly understood) reveals important-and valuable seientïfic facts respectivg the movements of the heavenly bodies, but at one and the same time inculcates; in a sublime and impressive manner, great moral truths. It teaches us, among other things, that industry
hot only deserves but receives its due reward. It'also displays the benerolence of the Great Creator, who canses the earth to bring forth her fruits in due season :
"He watereth the hills from above; The earth is filled with the troit of his works; - He bringeth forth thie grass for the cattle, And the green herb for the service of man: That he may bring forth frait out of the earth; And ioine, that makieth glad the heart of man; And oil, to make him a cheerful conntenance; And bread, tQ strengthen man's head."
fyom civ, 13-15.
It reminds us also of the cove,1:nt which God made with Noah in the olden time: "That he would no more curse the ground for man's sake; but that while the earth remained seed-time and harvest should not cease" (Genesis viii, 21, 22). These and many other important lessons are taught by the astro-masonic symbol of the "winding stairs "; and those lessons are made still more impressive from the fact that the Archetype of these "winding stairs" is not to be found in any transitory, earthly mansion, but far above, set in the eternal majesty of the starry firmament.

## THE BLAZLIG STAR

Q. To what does the masonic emblem of the Blazing Star allude?

A. To the sun in the midst of heaven, as a aymbol of Deity. Even Dr. Oliver, who has no sympathy with the astromomical theory of the origin of Frecmasonrs, says: "The $\leq$ Blazing Star'must not be considered merely as the creature which heralded the appearance of T. G. A.O.T. U., bat the expressive aymbol of that Great Being himself, who is described by the magnificent appel-
lations of the Day-Spring, or Rising Sun, the Morning Star, and the bright and Blazing Star. This, then, is the supernal reference of the Blazing Star of: Masonry, attached to a science which,


AxరBIe. like the religion it em. bodies, is universal and applicable to all times and seasons, and to every people that ever did or ever will exist on oür ephemeral globe of earth." Other writers identify the Blazing Star. with Sirius, the miost splendid and glori--ous of all the stars. The rising of Sirius just before the sun, each year, gave the ancient Egyptians warning of the approaching inundation of the Nile; hence they -compared it to a faithful dog; whose bark gives warning of approaching danger, and named it Sothis, Anubis, and Thotes, the barker, or monitor: This brilliant and beautiful-star thus early became known as the "dog-star." The Egyptians deified it under the name of Anubis, and this god was emblematically represented by the figure of a man with the head of a dog.

Both these explanations show the masonic Blazing Star to be an astronomical emblem. The latter one is probably the more correct, às it appertains to the Egyptian Mysteries. .
the bite of, circemanbulation.
Q. To what does this masonic rite allude?
A. The word "circumambalition". is derived from two Latin words (circuin, around, and ambulare, to walk), and therefore means to'walk around, that is, around the altar, or sonae sacred skrine. The rite of circamambulation formed a leading part of the ceremonies of the Mysteries, and of solar worship in all countriea. This rite had a direct solar allusion, as it was always performed from right to laft, in imitation of the apparent
course of the sun from east to west by way of the south. In the Mysteries of Indis the candidate went thus about the altar three fimes, and, whenever he arrived in the south, was taught to exclaim, "I copy the example of the sain, and follow his benevolent path!" "This sacred march was generally, in all the Mysteries, accompanied by the singing or chanting of an ode or hymn to the sun-god. Among the Druids it partook of the nature of a mystio, darice. The candidate, in peiforming the rite of circumambulation, it will be seen, reprcsented the 'san,"or rather the parsonified sun, or sun-god, which-he continued to do through the entire ceremony, from the moment of his introduction up to his symbolical death-Euresis and raising or restoration to life. Dr. Mackey says, in' his "Symbolism of Freemasonry," Chapter XXI, that "the masonic rite of circumambulation strictly agrees with the ancient one," aud that, as "the circumambulation is made around the lodge just as the sun was supposed to move around the earth, we àre brought back to the original symbolism" of the sun's apparent course about the earth.

The direct derivation of this masonic rite from the solar mysteries of the ancients is too plain to be for a moment denied; and it is absnrd to sup-pose-that any such rite could have be.n invented by the traveling operative niasonic associations of the middle ages. And this absurdity will attach to the whole ceremony of which this rite is but a part (in fact, almost the initial step), fur the saine solar significance characterizes thl whole ritual, all parts of which are in perfect harm. with the symbolism admitted to be coinnt. with the rite of circumambulation, If Treema. sonrs, therefore, originated with the travelin: masons of the middie ages, they must have borrowed these soiar ceremonies from some far more ancient pource, or association, to which those who instituted modern Freemasonry belonged. Had thes : invented a ritual, its ceremonies would.never have bad any such solar significance or symbolism: a symbolism which has no harmony or correspondence with the rales and prindiples of architecture. On the other hand, if, for peculiar reasons, these operative masons and architects really became the last and sole custodians of the rites and ceremonies
of the ancient mysteries, we call quite easily see how they have been handed down to us in a more or less corrupted form by them.

What those circumstances wי.י. that thus connected the architecets of the midllle ages with the ancient mysteries will be treated of more at length in subsequent pages; and the link which thus united the temple-builders of Fgypt, Greece, and Rome with the catbedral-builders of Europe under the reign of C.hristianity will be pointed out.

## THE SQEARE.

Q. Whence was the square, as a naṣonic emblem, derived?
A. It is a gencral impression, among masons and others, that the square, or right angle, as an emblem, was derived wholly from operative masonry, and is but one of the working-tools of a mechanical art adopted as an emblem by speculative masons. This illea is countenanced by Cross in his "American Chart," who says, "The square is an instrument made use of loy operitive masons to square their mork," and then proceeds to moralize upon it. This idea has also found its way into all the monifors. The square, or right angle, as an emblem is, howerer, geometrical and not mechanical in its origin, and dates back to the ancient Egrptians, in whose solemn processions the Stolistes carried the cubit of justice ( ) by which perpendic. ulars, right angles, and squares might be laid out, its form being that of one arm of a square; with the inner end cut to an angle of $40^{\circ}$, or one half of a right angle. The square was in Egypt an emblern of justice, because being a right angle it deviated in no respect from a true horizontal joined to a perfect perpendicular. The close analogy betreen justice and that which is perfectiy upright is so obvious, in fact, as to have become universal. The terms "an upright man" and a "just mas"are in nearly all languages synonymous, hence the Scriptural phrases: "The way of the just is uprightness: thou, most upright, dost weigh the path of the just" (Isa. xrvi, 7); "He that walketh uprightly" (Psalm xv, 2) ; and the admonition "to walk uprightly before God and man." Besides this, the square was used in Egypt
to redetermine the boundarics of each man's possessions when, as frequently bappened, the landmarks were swept awiay by the inundation of the Nile, thus recovering to every man his just rights. The Egyptian land-measure itself was an croura, or a oqucrere, containing one hundrud cubits. (Hilkinson's" Egypt.")
"The square, or right angle, represents $90^{\circ}$, or the fourth part of a circle, and has a direct allusion to division of the ecliptic und celestial equaxtor into four equal jiarts, indicative of the solstitial and equinoctial points, and the division of the year into four seasons. By it we are also enabled to divide the circle of the horizon into quadrants, and by the aid of the sun in the south to correctly mark. out the four cardinal points of the compass. In not ouly geometry, but astronomis also, the use of the right angle is indispensable; and, as :its:use was thus connected not only with the loftiest prolitems of neience, but with religion also, it soou became universally adopted by the ancients as a sacred emblem, not only of justice, but of rectitude of conduct. As cvery perpendicular forms a right angle with its base, and is a straight line, so the primitive roots of the words .right and rerong mean straight and crooked, or oblique.

## MASONIC FESTIVALS.

Q. What was the origin of the tro great masonic festivals, held furmerly on the 2tth of June and 27th of December in each jear?
A. The celebration of those days was purely astronomical in its origin, and refers to the summer and winter solstice. The summer solstice, on the 21sl of June, was celebrated as a great solar festival by the ancients, because at that time the sun was exalted to the summit of the zodiacal arch, and attained his greatest power and glory. The arrival of the sun at the winter solstice in December and the commencement of his return north toward the vernal equinox was also celebrated in an appropriate manner. The sun was then considered (according to another allegory) to be new-born, and the moment of his emerging from the constellation which marked his lowest declination was celcbrated as the hour of his nativity. At this period, says Macrobins,
"the day being the shortest, the god seems to be but a feeble child." After that, he begins to grow, as some say, nourished by a goat, alluding to the constellation Capricorn, and the days begin to lengthen. The great festival of the new birth of the sun wias therefore celclebrated at this period. These festivals, originally observed on the days of the sumumer and winter solstices, came in time, owing to the rariation of the calendar (as before explained), to be celebrated on the 24th of June and 27 th of l)ecember instearl of the 21 st of those months. Modern masons, however, dedicated these days respectively to St. Johin the Baptist and St. John the Evangelist, who, it is alleged, were born the one at the summer and the other at the winter solstice, and were eminent patrons of Frecmasonry. There is, lowever, no historical evidence to support this statement, and the celebration of these days by the fraternity generally has been very propurly discontinued.

## the chache embordered iy thoo paballel hines.

Q. In every lodge may be seen "a certain point within a circle embordered by two parallel lines." -Have masons lost the true meaning of . this emblem?
A. They have.
Q. What does this emblem signify?
A. The astronomical signification of this emblem is so apprarent that it seems to have forced itself upon the attention of many intelligent masons. Dr. Oliver, in his Dictionary, says: "The symbol of a point within a circle has sometimes been invested with an astronomical reference. Thus it is said that the point in the circle represents the Sapreme Being, the circle indicates the annual circuit of the sun, and the parallel lines mark out the solstices, within which that circuit is limited. And they deduce from this hypothesis this corollary : that the mason, by subjecting himself to due bounds, in imitation of that glorious luminary, will not wander from the path of duty."

This explanation is concurred in by Dr. Mackey, notwithstanding his disapproval of the astronomical theory. It is, however, far morc reasonable than the explanation given in the lecture appertaining to this degree, but is not in all re-
spects correct. It is true that the circle represents the ecliptic or annual path of the sun, but the "point rithin tiec circle" does not represent the Supreme leeing, but the eroth, aromed which, as a center, the, sun arplears to anmally revolve among the stars of the zortiac. The parallel lides are the tropirs of Cancer (ニ) and Capricorn (19). The summer solstice is on the shst of June, and the winter solstice on the elst of Decenlber. These are the solstitial points, alrays marked by two parallel lines representing the tropics, as may be seen on any terrestrial glolec or amap. These two dates, as we have remarked in the answer to the previous quention, hatve heen said to be the respective lirthlays of St. Julin the Baptist and St. John the Evangelist, lut there is no authentic histury to substantiate the assertion.
$\therefore$ The sun's cirreuit among the stars is limited and delinet by the tropics. When, in June, be rearkes the trupic of ('ancer, amel attuins his greatest worthern dealination he grexs wo farthier north, but turns and legeins to appronelh the somth. Ile reaches his greatest suuthern deelination in December at the other tropic, which terminates bis

cirche emionderto my raralleinanes.
southern progress, for be there again turns ahout, and once more jouruegs toward the norti. Epon the integrity of the sun's movement, in.this particular, depend all the order and regularity of the seasons. Should the sun not retrograde at the summer solstice, the heat would grow intolcrable, and both vegetable and animal cxistence not only become inpussible from that canse, but the melting of the polar snows and ise would produce anotber cleluge. If the sun, on the con-
trary, turned. not back at the winter solstice, eternal winter would reign in all lands north of the equator, and a perpetual glacial era extinguish all life and vegetation. The foregoing cut is without question the most ancient and proper method of exhibiting the emblem of "a circle embordered by two parallel lines."

The circle, in order to correspond with our modern ideas of the points of the compass, should be turned about so that the two parallel lines would be in a horizontal and not in a perpendicular position. The tropic- of Cancer (5) would then le at the north, and the tropic of Capricorn (vs) at the south, in accordance with our rustom of deroting the top of any map or draft to the north and the lower part to the south. The Hebrews, however, and other ancient Oriental nations, when speaking of the four quarters of -the heavens, alvays suipposed the spectator to be look: ing east, toward the rising sun ; and in their language " before" meant " cast," "behind"" "west," the right hand south, and the left north-as, for instance, the Hebrew word kedem means not only before, but also east. The same custom as to the points of the compass prerailed with the Arabians, who called the north shemal, a-word meaning at the left. This ancient custom fully accounts for the fact that in this emblem the two lines representing the tropics are placed in a perpendicular and not in a horizontal position. The further fact that in some of the Indian cave-temples the circle. is found, actually inscribed with the signs of the zodiac, makes the correctnes 3 of the foregoing explanation certain. The absurdity of supposing that the operative masons of the middle ages invented this emblem in connection with their art is plain.
Q. Of what does this emblem admoniṣh us?
A. As the sun, in his annual course around the circle of the ecliptic, perpetually performs his revolution with-regularity and certainty, never straying beyond the tropical points, but always returning in due season to beautify, adorn, and fructify the earth, so ought we all to govern our actions with equal certainty and regularity, adorning our lives with wisdom and virtue, and making our years fruitful of giood deeds, never suffering our passions to lead as beyond the boundaryline
of good conduct or the points of reason, for, while we keep ourselves thus circumscribed, it is impossible for us materially to err.

## TIIE LAMCB-SEIE.

Q. To what does the lamb-skin, or whiteleather apron, allude?
A. The vernal equinox, where the sign Aries is found. This sign, as we have seen, teaches immortality, as well as being emblematic of innocence and beauty:

It is a mistake to suppose that the apron, as an article of dress, was confined in ancient times to operative masons and other mechanics. On the contrary, it was an indispensable part of the ordinary apparel of the ancient Egyptians of all classes, and was worn by kings, priests, and nobles, as well as the common people. The apron of the king was, however, of a peculiar form, which belonged exclusively to his rank. It was richly ornamented in front with lions' heads and asps, and other derices, and was of colored leather. The priests, also, wore aprons of peculiar form, as a distinctive part of their sacerdotal dress; so also did the hicrogrammat, or sacred scribe. (Wilkinson's "Ancient Egyptians.")


The aprons used in the $M$ sateries, and by certain sacred officers, were of a triangular form, consisting of two parts, as represented above. In thé central part the asps are seen, and in the lower corners are lions' heads.

The following drawings are taken from ancient

Egyptian monuments. Fig. 1 represents Rameses the Great offering cups of wine in the temple (в. c. 1322). Fig. 2 is the hierogrammat, or sa-

The foregoing is a copy of the Egyptian emblem of the eye of Osiris, taken from the ancient monuments, and fousd both painted and


Fic. 1. sculptured on the yet remaining temple-walls.
masonic bigns.
Q. To what does the first sign of an E. A. M. allude?
A. To the antumnal equinox, or place of darkness, and the sign Libra ( $\Omega$ ), which is found there, composed of two parallel lines. 1his sign teaches equality, because at the equinox...the days and nights are equal. Equality is the first lesson which a mason receives:
"The king from out his palace must leave his diadem ontside the manon's door,
And the poor man find his true resject upon the checkered floor."-(עorris.)
The sign Libra also teaches us to weigh all things in the scales of reason. It is probable
cred scribe. It will be observed that an apron is part of their regalia, each of a different pattern, according to their rank and office.

## TIE ALL-SEEING ETE.

Q. Whence originated the emblem of the allseeing eye?
A. In most of the ancient languages of Asia, "eye" and "sun" are expressed by the same word, and the ancient


THE ETE OF OBIDIS. (Wilkinson: "Ancient Egyptians.") Egyptians hieroglyphically represented their prin. cipal deity, the sun-god Osiris, by the fgure of an open eye, emblematic of the sua, by whose light we are enabled to see, and which itself looks down from the midst of heaven, and beholds all things. In like manner masons have emblematically represented the omniscience of the great Architect of the nuiverse.
that the first sign of an E. A. ML. alludes to.both equinoctial points. When the sien enters Libra he takes the first step of the three leading to his overthrow at the winter soistice ; and in like manner, when he enters Aries, at the vernal equinox, he takes the first step toward his cxaltation at the summer solstice.
Q. To what does the first sign of a F. C. M. allude?
A. The first three wigns of the zodiac, subtending an angle of 90 from the vernal equinox to the summer solstice.
Q. What does the first sign of a M. M. denote?
A. That all is bencath. him, and alludes to the sun, which, when raised into the thitod sign from the vernal equinox to the summit of the zodiacal arch, looke down upon all the signs and constellations beneath him ; so, in like manner, a mason having taken the third degree has attained an equal masonic elevation. It also alludes to that benediction or blessing which the sun of the summer solstice bestows apon the labors of the hus-
bandman, and has always been considered the sign of benediction and prayer. (Matt. xix, $1: \%-$ 15 ; Acts vi, 6 ; xiii, 3.)
hasonic biönificance of the zodical higes.
Q. Mave the zodiacal signs any further masonic significance? -
A. They have, of some important particulars: Astrology was a leading branch of astronomy as cultivated by the Egyptians. The first six'signs of the zodiac, counting from the vernal equinox forward toward the autumnal equinox, may be divided into three parts, typical of the first three
tors" (to use an astrological term) of the first three degrees may therefore be said to be Taurus, Cicucer, and Virgo.

Noor, according to the ancient science of astrolcgy, as cultivated by the Egyptians, the sign Taurus ( $~$ ) mules the neck and throat; the sign Cancer ( 5 ) the loreast ; and the sign Virgo (! the bowels. The deep and singular significance of this will not be overlooked by any intelligent mason. The astronomical rule of the twelve signs orer the various parts of the body, according to astrology, is still kept alive by the figure of "Homo," as seen in old almanacs.


Pisces, $F$ Fect.
degrees of masonry. If we count from the first point of Aries forward $60^{\circ}$, we reach and include Taurus. These two are typical of the first degree, and the unskilled workmen tho labored at the preparation of the materials of the temple. Advancing $60^{\circ}$ farther, we reach and include Cancer. These two signs, Gemini and Cancer, are emblematic of the second degree. Sixty degrees more take us to and include Tiryo, which brings us to the autumnal equinox, typical of completion, and the skilled workmen who wrought at the completion of the temple. The "significa-

Champollion says the accompanying figure is from the Egyptian Ritual of the Dead, and is often found in their papyri. For further information as to the nature of the rule and influence of the twelve signs, see Lilly's "Astrology." Some very interesting remarks on this subject may also be found in that curious book of Southey's called "The Doctor," Vol. II, Chapter LXXXVII, P. I. See, also, "Sibley's Astrologs," Zadkiel's " Grammar of Astrology," and Burton's "Anatomy of Melancholy."

As this division of the first six signs into three
equal parts makes Virgo one of the "significators" of the third degree, we are naturally reminded of the beautifal virgin alluded to in the modern lecture appertaining to that degree.

TIE EEAUTIFEL VIRGIN OF THE THIRD DEGREE.
Q. What is the origin of the masonic emblem of the beautiful virgin?
A. Although the figure of a virgin is no doubt \& very ancient emblem, alluding to the Egyptian goddess Isis and the constellation Virgo as well as to the moon, yet the masonic emblem, as depicted in our monitors, is of late origin. It is in its main features in direct violation with masonic legend and Jewish law and custom. It could not have had an ancient Hebrew origin, for the following reasons:

1. The Jewish law forbids the making of any graven images of the kind. Even the Jews of the present time will not permit any sculptured figures to be set up as monuments in their cemeteries.
2. The urn, which is represented as containing the ashes of O. G. D. H. A. B., implies cremation, which was contrary to the fixed custom of the ancient Jews, as well as Egyptians, which dictated burial.
3. The Jewish law considered the contact, or near approach even, of a dead body unclean, requiring those thus exposed to undergo a long period of exclusion and purification. Our G. M. H. A. could not, therefore, have been buried anywhere even in the neighborhood of the temple, much less near the sanctum srinctorum itself. We have, however, positive testimony as to the modern origin of this emblem. A full history of its invention, and when and by whom introduced into masonry, is given in a late article by Brother Robert B. Folger, in the "Masonic Newspaper." As the communication is of much historical interest, and also fully illustrates the way in which many modern innovations have been made, we give it entire.

It should, however, also be observed that Cross did not claim to have invented all of his hieroglyphics, but admits that many of them had been "described by authors who bad gone before him."


FICTION OF THE WEEPING VIRGIN. GY ROBERT B. POLGEE, $88^{\circ}$.
Jeremy L. Cross has been dead for many years. A more genial and kind-hearted man was not to be found, and his labors in and for the benefit of the masonic fraternity have endeared his memory to all who were acquainted with him during life. He has left a memorial of lis masonic labors in the "Hieroglyphic Monitor," which bears his name, which passed ttrough eighteen large editions before his death, and which has been trespassed upon more by mascnic publishers and lecturers than any other masonic work which ever issued from the press, it being the basis of all works of the kind claimed by other persons.

It was my privilege to make the acquaintance of Brother Cross in 1853, at which time he was in the wholesale paper business, in Pearl near John Street, in the city of New York. I became more than commonly intimate with him, and that intimacy increased and continued up to the day of his death. The history of his life, together with all the incidents connected with the publication of his first "Hieroglyphic Monitor," were very frequently the subject of our conversation, and I found that the book was perfectly his "hobby-horse"; he looked upon it as one of the greatest and most important achievements of his life.

The causes which led him first to devise the
plan of such 2 work were as follows: He was passionately fond of. masonry, studied under Thomas Smith Webb, Gleason, and others, beंcame perfect under them in the lectures and work, and then started through the country as a lecturer in the year 1810. He tas a man of excellent appearance in early life, strictly temperate from his youth up. His manners were prepossessing, open, frank, very fluent in language, and, withal, a very fine singer. As a niatter of course, he became very popular, the business of lecturing flowed in npoi him very fast, and he bad as much to engage his mind in that line as he could well attend to. Wishing to take advantage of all the business that offered, he found the work slow of accomplishment by reason of delays caused by imperfect memories. He wanted something of an objective kind, which would have the effect of bringing to mind the various subjects of lis lectures, and so fiving the details in the mind as, with the sets of objects presented to the sight, the lectures in detail would be complete.

There was not at that time any guide for lodges except the so-called " Master's Carpet," and the works of Preston and Webb. The "Master's Carpet" was deficient, being without many of the most important emblems, and those which it displayed were very much "mixed up." The work of Preston did not agree with the "adopted work." That of Webb agreed perfectly, but still was wanting in its most important part, viz., the hieroglyphics, by which the work is plainly and uniformly presentea to the learner, rendering it easy of acquirement, and imprinting it upon the mind in such a manner that it will not readily be forgotten.

The second object was a copyright. He knew that in those days the cost of bringing together and putting together, and the bringing out of a work of the kind which he desired, would throw him into a large expenditure, and, in order to get back the cost and derive any solid bencfit from it in the end, it must of necessity be in his own hands alone.

He considered the matter for many months, and finally attempted to draw various plans, taking Webb's "Monitor" for a guide. Part of the work he accomplished satisfactorily to himself.

This included the first and second degrees, and, although there was but little really original in the emblems which he produced, yet the claasiocation and arrangement were his own. He went on with the third degree very well as far as the "Monitor". of Webb goes, when be came to $a$ pause.

There was a deficiency in the third degree which had to be filled in order to effect his parposes, and be became wearied in thinking over the subjecti. . He finally consulted a brether, formerly a Mayor of New Haven, who at the time was one of his most intimate friends, and they, after working together for a week or more, could not hit upon any symbol which would be sufficiently simple and yet answer the purpose. Whereapon the copperplate-engraver, also a brother, who was doing-his work, was called in. They went at the business with renewred courage, and the number of hieroglyphics which had by this time accumulated ras immense. Some rere too large, some too small, some too complicated, requiring too much explanation, and many not at all adapted to the subject. Finally, said the copperplateprinter :
"Brother Cross, when great men die, they generally have a monument."
"That's right," said Cross; " I never thought of that," and away he went.

He was missing from the company, and was fonnd loitering around the burying-ground in New Haven in a maze. He had surveyed all that was there, but did not seem satisfied. At last he got an idea, whereupon the council came together again, and he then told them that he had got the foundation of what he wanted-that while sojourning in New York City he had seen the monument erected over Commodore Lawrence,* in the sonthwest corner of Trinity charchyard ; that it was a glorious monument to the memory of a great man who fell in battle. . It was a large marble pillar, broken off. The part broken off was taken away, but they had left the capital lying at the basa. He would hare that pillar for the foundation of his new emblem, but would bring the other part of the pillar in, leaving it to rest against the base. Then one could know what it all meant. The other

[^2]part of the pillar should be there. This was assented to, but more was wanted. They needed some inscription describing the merits of the dead. They found no place on the column, and after a lengthy discussion they hit upon an open book placed upon the broken pillar. . But there should, in the order of things, be some reader of the book; so they selected the emblem of innocence in a beautifal virgin, who should weep over the memory of the deceased while she read of his heroic deeds.
"But, sir," said I, "how will you get along with the Jewish people?. You know that very many Jews are masons. They are very tenacious of the 'law' which forbids the making of any image of any kind, and that even the touch of a dead body by a Jerr renders him unclean, and, as a consequence, unfit to come into the synagogue until after many days' parification. They would never'allow any dead body to be brought into the temple, nor will they even to this day allow any sculptured figures or images to be put up as monuments in their cemeteries."
" "Ob, I never thought of that," said Brother Cross. "However, it makes no difference. I did not intend to injure the feelings or prejudices of any one $\mathrm{bj}_{\mathrm{j}} \mathrm{my}$ monument. I only invented it to serve as a belp to memorize nisy lectures and work."
"Admirable, indeed," said I, "but how does it happen that, in the year 1825, when I was raised to the third degree, in Fireman's Lodge, old City Hotel, there was nothing mentioned about any monument of the kind! How did it get into the history at all?"
"Oh," said Brother Cross, "I put it there. You see the work was imperfect without the monument. It was right that there should be a monument for great men when dead. The thought of burying the body of a great man without leaving some memorial to mark the place where he is laid is repulsive. I think I have supplied the deficiency, and done it admirably."
"But, still, this was done in 1819, and in 1825 it had not reached New York."
"Oh, that is right. The Grand Lodge of the State of New York would not receive my work, and did not until 1826. They worked 'old style.'

All the-Eastern, Southern, and Western States had received and autborized it, but. New York and Pennsylvania. held out. But in 1826 Brother Henry C. Atwood, one of my ablest scholars, and as good a workmah as I ever saw; estáblished Mystic Lodge in New York City, and worked after my aystem. Immediately the work spread throughout the State.
"The craft are indebted to me for harmoniring and beautifying the work and.lecturea. I have labored solely for their benefit, and they are quite welcome to all that l have done. But many have treated me badly, by copying and publishing my hieroglyphics, claiming them as their own. My copyright was based apon them, and upon the order of their arrangement. The publication cost me a large amount of money, and involved me in debt ; and soon after its appearance a lecturer in Vermont made a similar publication, infringing upon my copyright. I sought redress from the law, and was sustaineil My copyright was confirmed and secured. Since that I have never pushed the matter, although frequently on the point of doing so, as all those difficulties generally ended in some compromise, which anounted to very little. Many of the hieroglyphics which I have used are described by the authors who bure gone before me, yet there are nany which are not described, or even made mention of. These I claim as my own property, and, if I hare refused to proceed in law against those brethren who have wronged me, it was not because I doubted the jastice of my claim or my ability to recover. This had been already settled in law. I chose to remember my obligations to the Order, although others had forgotien them. I preferred to dwell in unity and peace with the bretbren rather than be the author of contention and strife, and thas bring a reproach upon an institution which I venerate and love."

It would be proper to state that the monument erected to the memory of Commodore Lawrenue was put up in the southwest corner of. Trinity churchyard, in the year 1813, after the fight between the frigates Chesapeake and Shannon, in which battle Lawrence fell. . It was a beautiful marble pillar, broken off, and a part of the capital laid at its base. The monument remained
there until 1844-'45, at which time Trinity Church had been taken down and rebuilt as it now stands. When finished, all the débris was sleaned away, the burial-grounds trimmed and fancifully decorated, and tbe corporation of the church took away the old and dilapidated monument of Lawrence from that spot and erected a new one of a different form, placing it in the front of the yard on Broadway, at the lower entrance of the church, where it now stands. brother Cross and myself visited the new monument together, and be expressed great disappointinent at the change, saying, "It was not half as good as the one they had taken away."

Brother Cross was a lecturer in masonry for more than forty yeare, and his narne will be cherished by masons for many generations to come. ("Masonic Newspaper,". New Fork, May 10, 1879.)


The above is a view of the Lawrence monument, formerly in Trinity churchyard, referred to in the foregoing article from the "Masonic Newspaper," and from which it is said Cross took his emblematic monument of Hiram Abif. (See Lossing, "Pictorial Field-Book of the War of 1812.") It will be observed that the weeping virgin, the open book, aud the figure of Time, are all wanting. As these form the essential features of the masonic monument, Cross must have obtained the most significant elements of his emblem from some other source, which bas not been disclosed.

Had Cross been more familiar with the symbolism of those ancient Mysteries from which Freemasonry is derived, he might have devised such an cmblem as he desired, which, while it expressed the same general idea, would not have thus violated the traditions of our Order, and also, at the same time, have been in entire harmony with the astronomical basis of the legend of the third degree.

Among the many names under which the constellation Virgo was adored was that of Rhea. This goddess was figured (according to Bryant) as a beautiful female adorned with a chaplet, in which were seen rays composed of ears of corn (i. e., wheat), her rigbt hand reclining on a pillar, and in her left spikes of corn. By corn the ancients intended wheat. Maize, which in Amer-ica-is almost exclusively called corn, was not known until the discovery of this continent. The spikes of "wheat" in the chaplet and left hand of the goddess Rhea are, like those held in the left hand. of Virgo, emblematic of the season when the sun enters that sign. This figure of the goddess Rhea, it will be seen, resembles somewhat the virgin of Cross, standing by the broken column, holding in her land a sprig of acacia instead of the spikes of wheat. Rhea was the daughter of Sky and Earth (Ceelus and Terra). She was also the mother of Jupiter and wife of Saturn, also known as Kronos, or Time. This would quite nat:arally permit the association of the figure of Saturn and his scythe-or Timewith that of the virgin. In the Dionysiac Myteries, Dionysus (who is the same as Osiris, the personified sun-god) is represented as being slain. Rhea (who is also identical with Isis and Virgo) goes in search of his body, which she at last finde, and causes it to be buried with due honor. Now if, as Dr. Mackey admits, this legend was introduced into the fraternity established by Hiram at the building of King Solomon's teraple, and forms the basis of the third degree of Freemasonry, this figure of the goddess Rhea would be a very appropriate emblem of that degree.

Thas the present emblem of the beautiful virgin requires but slight modifications to bring it into entire harmony with all the ancient traditions and mythology. The pretended history illustrat-
ing the emhlem, which Cruss admit: he inventrd, should be expunged from the ritual, and ile tarure of the beautiful virgin represented somewhat :'fter the manner bere depictert.

The open book and funcral urn are omitted for the reasons before given. In the lift hamd thus placed at liberty is the evergreen, or sprig of acaria, because in her left hand Virgo holds the spear oif ripe wheat, for which masons have
which thoul sowest is :no that busly which shall be, but bare grain, it may ela iace of what, or some other." Z'he ri!h hand is represented as ' restivg on the brohen columa, berause the ancients figured Vira'. n! 'er the amme of Rhea, with har right band reatige on a stone pillar.

The alterations thins nade in the emblem are but :light, arci rothing is omitted but the "funeral urn" and the "open book." Tre latter is repre-

tae beattifil rirgis of the thimd degime.
substituted the former as ar emblem of immor-tality-although to those who are familiar with the beautifel utterances of St. Paul, the spike of wheat is as significant an emblem of eternal life as the evergreen. Sars the apostle: "But some will say, How are the dead raised up, and with what body do they come? Fool, that which thou sowest is not quickencd except it dic, and that
sented by Cross in a shiape eutirely unknown to the ancients, whone nuly hooks ware in the form of rolls of manuscript. The hanctsome octavo volume, which he has placed on the broken co!umn, looks as if just issued from the press, and is a gross anachron:cm. Those who are familiar with the lectures belonging to the third degree rill find an arlditional and masonic reason for
placing the evergreen in the left hand, "for, as the left is considered the weakest part of the body," it is thus more significant of its mortality: the acacia, therefore, placed in the left hand, more cleariy teaches us that, when the body, by reason of its weakness, crumbles into dust, the soul of man, rising from the "rublish" ${ }^{\text {s and }}$ ruins of its earthly tabernacle, shall dwell-in perpetual youth in that "temple not made with hands, eternal in the heavens." Behind the figure of the virgin stands the form of Saturn, or Time, not counting the ringlets of ber hair, but pointing uprard toward the summit of the zodiacal arch. This beautiful danghter of the skies, Firgo, according to other mythological legends, is also the tusband of the sun, who, when he entered the constellation Virgo, was said to espouse her.

The whole emblem may therefore be astronomically explained as follows : The rirgin weeping over the broken column denotes ber grief at the death of the sun, slain by the wintry signs. Saturn standing behind her and pointing to the summit of the zodiacal arch denotes that Time will heul her sorrozes, and, when the year has filled its circuit, her lord the sun will arise from the gravc of winter, and, triumphing over all the powers of darkness, come again to her embraces.

The emblem of the beautiful virgin, thus represented and explained, is not only an eloquent expression of affection weeping over the loss of a beloved friend, but also a mystic symbol of some of the leading facts of astronomy, and a significant emblem of the inmortality of the soul.

## THE EVERGREEN

Has been selected by masons as an emblem of immortality, because, when in.the icy grasp of winter the whole regetable kingdom lies dead, it alone blooms in beauty, reminding us of the vernal equinor, when all nature shall revive sgain :
". . $\therefore$. the erergreen,
That brares the inclement blast, And still retains the bloom of spring

When summer days are past;
And though the wintry sky ahould lower,
and dim the cheerful day,
It still retnios a vital power,
Unconscinus of decay."

## THE SPRIG OF $\triangle C A C L A$

Q: Has the sprig of acacia any further signification?
A. The astronomical significance of the "evergrecn," whicb we have substituted for the Egyptian acacin, and its allusion to the vernal equinox and the doctrine of immortality, bas already been fully explained and illustrated. The symbolism of the acacia is, bowever, more extended. The acacia grows in Eggpt, and is the plant from which gum-arabic is obtained. It is also the acanthus of Herodotus and Strabo. "The thickets of acanthus, alluded to by Strabo, still grow above Memphis, at the base of the low Libyan hill!s. In going from the Nile to Abydos, you ride through the grove of acacia, once sacred to Apulln, and see the canal traversing it, as when the geographer risited that city." (Wilkinson's "Ancient Fggsptians," Cbapter VI.) The acacia is also a symbol of innocence." "The symbolism here," says Dr. Macker, "is of a peculiar and unusual character, depending not upon any real analngy of form or use of the symbol to the thing srmbolized, but simply on the double or compound meaning of the word. For acacia, in the Greek languege, signifies both the plant in question and innocence or purity of life." ("Symbolism," Chapter XXVIII.)

We think Dr. Mackey is mistaken in this. IIf does not seem to have been aware, or has overlooked the fact, that one species of the acacia is a sensitive-plant. "Pliny mentions a sensitive acacia abuut Memphis. One is now common on the banks of the Nile abcue Dongola (the Acacia asperata). The 'Mimosa Lubbek' also grew of old in Egypt, and the Copt Christians have a silly legend of its worshiping the .Sariour." (Wilkinson's "Ancient Egyptians.")

The peculiar nature of the sensitive-pladt has in all ages excited the wonder and superstition of man, and there is no doubt that it was the Acacia asperatc, or mimosa, which was the species of -the acacia held as a sacred plant by the ancienta. The word acacia is of Greek origin, and to the lively and poetical imagination of the Greeke thin
sensitive-plant, thus shrinking from the touch, was an expressive symbol of that innocence which in like manner shrinks from the rude contact of the world-and thus they named it acacia, a word which means innocence. It therefore appears that there is a real and beautiful analogy ". between the symbol and the idea symbolized," and that this symbolism does not "depend simply on the double or compound meaning of the word" acacia, as stated by Dr. Mackey; this sensitive plant being named "innocence" because it was the natural and appropriate cmblem of innocence and purity.

## THE LETTER "G."

Q. Is the custom of displaying the letter " $\mathcal{C}$ " in masonic lodges of any great antiquity?
A. That it can not be must appear evident when we reflect that masonry existed long bufore the English language. The letter " G " as displayed in the lodge is, howerer, a necessary and appropriate substitute for the equilateral trionngle, so prominently used as a sacred symbol by our ancient brethren.

## tie fuuilateral triangle.

Q. Why so ?
A. For two reasons: 1. The triangle is the true significator of that noble masonic science, geometry-since, without a knowledge of its form and properties, that scicnce is impossible. It was upon the triangle that Pythagoras erected his celebrated and invaluable "I'orty-scventh Propositiois." IIe is also said to hare discorered that the sum of all the angles of any triangle is equal to two rigist angles. It is more jro'sable, however, that he brought these two propositions, together with a knowledge of the true system of the universe, with him from Egypt, whe:e he went to pursue hic studies, and was initiated into the Mysteries.

The equilateral triangle is also a sacred symbol of the Deity, being the same in its form as the ancient Greek delta, or letter ".D." The Phœoician letter "D," as well as. the Egsptian, was of a similar form. The equilateral triangle, in the Greek tongue, as well as many other ancient languages, was thus the initial letter of the
name of Deity. In the days of Pythagoras we are told that, whenever an oath of unusual importance was to be taken, it was administered on the equilateral triangle, as, by so doing, the name of God was directly invoked. This oath is said never to have been violated." The Equmatrall. triangle, therefore, since it is at once the emblem and easence of geometry, and the initial letter of the name of Dcity, should be seen in the midst of every regular masonic assembly.

## THE COMPASSES.

Q. According to an ancient custom, the compasses, as a inasonic emblem, whether reposing on the altar or worn as an officer's jewel, should be set ạt an angle of $60^{\circ}$. What is the reason of this?
A. The reason is principally geometrical. The sacred import of the equilateral triangle has alrcady been explained. Now, as the sum of all the angles of any triangle is equal to two right angles, or $180^{\circ}$, it follows that each of the equal angles of any equilateral triangle is equal to one third of two right angles $\left(\frac{180^{\circ}}{3}=60^{\circ}\right)$, which is $60^{\circ}$.

The compasses being set at $60^{\circ}$, thus allode to the equilateral triangle, and, if the two points were united hy a straight line, one would be formed. There can be but little doubt that it wis the equilateral triangle itscif which our $\cdot$ ancient brethren placeed upon the altar, since it was upon that emblew their most solemn obligations were taken. In nodern times the compasses, set at an ancle of $60^{\circ}$, have been substituted. This may have been donc purposrir. or it may be that, during the dark ages, some of our ignorant mechanical brethren mistook the sacred emblem for onc of their working-tools, and that the change was thus brought about. Other mistakes equally as singular, as will ie seen in the sequel, were thus made at that period.

The angle of $60^{\circ}$ Las also an allusion to the rodiac, being equal to two signs thereof, and, if-multiplied by the-sacred number three, becomes $180^{\circ}$, or the dimensions of the Rogal Arch.

Again, if a circle of any size be drawn, a chord
of $60^{\circ}$ of that circle will be equal to its radius, and the compasses so set will divide the circunnfer ence into six equal parts. The points thus made, taken with the one in the conter, constitute the mystic number saren. The siz exterior points, if joined by six straight lines, will furm a perfect hexagon within a circle, one of the perfect tigures. Or, if we unite these sis points in muther way, we have the double equileteral triungle, in union with the symbol of "a point within a circle."

This nas one of the most siacred of all the emblems of l'jthagoras, and is also known wen to this day through the whole East, and has lreen there revered for ages, as the Seal ur Kins; Solomus, by the power of which he bound fasi the genii and other spirits who rebellece against God. (See "Arabian Nights," and the story of the "Fisherman and the Genius" for an expres:sion of this belief.) If the whole seren points le joined by straight lines, we ohtain the figure of a perfect cobe within a perfect sj)hart. (Su.י. " Historical Lanimarks," Lecture ${ }^{\text {P }}$, and nutes.) The cube has in all ages been held sacred.


All altars were in the form of a cube, or deable cube, which last is the form that ancient custom prescribed for the masonic altar. The ancients estecined the double eube "holy," bu: the jerri.ct cube was "most holy." We alo read in the Scriptures that the house of Gorl, which Kins: Soloron built, was in the form of a donble cube, being fort!/ cubies long ard toonty/ cubits bruad ( 1 Kings vi). The holy place itself was a perfect cube, being twenty cubits each way ( 2 Chron. iii 8). According to the teachings of Pythagoras, also, the cube was the most sacred of all the perfect bodies. From what has been soid, the deep emblematic significance of the masonic altar, or donble cube, upon which was anciently placed the equilateral triangle, or sacred symbol of Deity. is
sufficiently apparent. To this we have in m.sdern tinces, with great proprictr, added, as having a corresuending place upou our altar, the holy Scriptures, the inestimable gift of a later period. the blessing of its pussession having been denied to our ancient brethren, from whom, however, was not withlield $\alpha$ knowledge of the true God; but the holy liilke, as we possess it, was not only unknown to Plato and Pythagoras, but also to King solumou, the wisest of mankind.

TIIL EMELI:M CF E.ARS Or CORS HANOING BY A WATE:-FORI, OR A SHEAF UF WUEAT BY A Pr:LR.
Q. Onc of the most expressive and beautiful emblems of the fellow-cralt degree is the representation of "ears of corn hanging by a waterfor.i." or, as the emblem is also often represented, "a shaf of whe:at suspended near the loank of a river:" (Suc Sirkies's "Monitor," page 90.) What is the meaniug of this cmblem?
A. I)r. (liver ilevotes the whole of Chapter NI.ㅇ of hi: "Lamimarks" to the consideration of this emblem. It appears that there is, or was, some confusion as to its tue meaning. some old ma-ons suem to think it rufers to the first passage of the rin er Jurian liy the lsraelites under Josh. ua, when they entered Canaan; at which time the promisel land was covered over by ficlds of rige corn, whicl: was by them then assumed as a srubul of the rutiry which gladiened the hearts of the fanished lsraclites after their forty years wandering in the derert. Another iuterpretation of the symbol, which lir. Oliver gives in full, refern to a passate in the life of Jephthuh. recordec in ituiges aii, her which we learn that the Ephra. imites querreled r:ith him. A bloody battle iollowed, and the Ephrainitcs mere defeated. Jeph. thah took possession of the: passages of the Jordan to prevent their escape. When any of the fugitives attempted to cross orer: they were commanded to say "shibbuleth," but, as they could not frame to pronounce it right, and said "aibbolath," they were discovered and slain, to the number of forty-and-two thqusand. This latter interpretation Dr. Oliver thinks to be the true one. He says, "Such is the historical account of the warfara of Jephtian with the Ephraimiten,
and the reputed origin of the symbol and its interpretation, because the battle took place in a field of corn near the ricer Jordan."

The interpretation which refers it to the passage of the river under Joshua has been generally discarded by masons, and is not countenanced by the masonic lecture as given in America. The otber interpretation, which refers this emblem to the battle with the Ephraimites, is, however, also manifestly incorrect, for the following reasons:

1. There is no history of this battle outside of the lible and Joscphus, and neither account makes any mention of the battle having taken place "in a field of corr." Josephns does not


The fact that the words "shibboleth" aud "sibbulith" occur in the story told in Jiulyes of the crnel and useless slaughter of the defeated and flying Ephraimites, was scized upon, and seems to have induced the attempt to thus explain the lost meaning of this peeuliar and siriking emblem; but ceven then it was necessary to invent an addlition to the Scriptural narrative in order to account for the "ears of corn," which were otherwise not explained.

## simola.

Q. What is the probable true meaning of the cmblem of "ears of corn hanging by a waterford," or "a sheaf of wheat suspended near the bank of a river"?
A. A reference to the Eleusinian Mysteries will go far to clear up the matter, and give us the truc inport of this symbol. The Fleusinian Mysteries rere derived from those of $I$ sis (see initial chapter), who was known to the Greeks by the name of Corrs, and also C'ybulc. Ceres, or Cybele, was the groddess of the harvest, and was represented, like the beautiful virgin of the zonliac, bearing spears of ripe corn. Sis was in like manner. with the Eerptians, emblematic of the harvest-seavon. In the Egyptian zodiae Isis occupied the place of Virgo, and
even mention the use of the word "shibboleth."
(See Judges xii, and "Antiquities," Book V, Chapter V"I.) The truth is, the statement that the battle "took place in a field of corn" is pureIr imaginary, and was invented to make out the interpretation, which otherwise mould not explain "the ears of corn," which constitute the leading and most expressive feature of the emblem. It is but another instance of an interpretetion being invented to explain an emblem, the true meaning of which wras lost.
2. This interpretation is also clearly incorrect, from the fact that it bas no sort of connection with ans other part of masonry, or any masonic event or person whaterer. It refers to a period long before the building of Solomon's temple, and is utterly out of harmony witb the entire system of Freemasonry and all its details.
was represented with three cars of corn in her hand.

The Syrian word for an ear of corn is siloln. identical with shiblolcth, which the Ephraimites pronouncel, more nearly correct, "sibboleth." This worl also means "a streain of water," and the emblem of ears of corn or a sheaf of wheat near a wateresurse, or river, wan one of the emblems of the Elcusinian and Tyrian (or Dionysiac) Mysteries. As the word had a double meaning. the pieture formed a sort of rebus. The river is the river Nile, the overfion of which enriched the soil and bronglit forth the abundaut harrests of Egyptian corn, all of which was symbolically represented by the cars of corn hanging by a river. It is also worthy of remark that the same of the goddess Cybelc, althosigh differing in orthography, is almost identical in sound with si-
bola in some dialects. This mystic word is therefore a triple pun, and has a threefold signification: 1. An ear of corn ; 2. A stream of water, referring to the Nile, upon the inundation of which the barrest depended; 3. It might le understood as one of the names of the goddess of the harvest. Hutchinson, a masonic writer of note, admits that the use of the word sibbolcth was equivalent to an avowal of a profession of the Mysteries, as it implies ears of corn. ("Spirit of Masonry.")

How much more perfect and beautiful is this interpretation of the eniblem, and how much more in harmony with the moral teachings of our order ! The one explanation recalls -nothing to the mind but the bloody and brutal butchery of forty-ticu thousand of his fellow-beings by Jephthah, the vile wretch who offered up his own innorent daughter as a burut-offering (see Judges xi, 2040 ) ; the other reminds us of the peaceful pursuits of agriculture, and the benerolence of the Great Creator, who each year bringṣ forth the harvest in due season, and rewards with "plenty" the industry of the busbandman. The improbability of the operative masons of the middle ages baving invented this astronomical-agricultural emblem is so plain as to require no comment.

TIIE PILLARS OF THE JORCII.
Q. In every masonic lodge may be seen tro pillars, surmounted by globes. What iṣ the origin of these pillars, and what do they signify?
A. According to the masonic lecture appertaining to the fellow-craft degree, these two pillars represent those which stood before the porch of King Solomon's temple, and are described in 1 Kings vii, $1.7-2 \boldsymbol{2}$ : 2 Chron. iii, $15-17$; Jer. lii, 21, 22. The description given in the Bible is very minute, and renders it evident thit they were made after Egyptian models. The decorations consisted principally, if not entirely, of network, Jily-work, and pomegranates. . Speaking of these, the Rev. Dr. William Smith, in his Diction. ary of the Bible, sars: "The Phœenician architects of Solomon's temple decorated the capitals of the columns with 'iily-work,' that is, wiih the leaves and flowers of the lily, corresponding to the lotus. headed capitals of Egyptian architecture." The same writer also says in the same work: "The
pomegranate was early cultivated in Egypt : bence the complaint of the Israelites in the wilderness of Zin (Numb. $x x, 5$ ), this 'is no place of figs, or of vines, or ot poincyranates.' The tree, with its characteristic caly $x$-crowned fruit, is easily recognized on the Egyptian sculptures." (See article " Pomegranate.")

The description of the pillars, as given in the Bible, also renders it probable that ther had no glubes upon the top of their capitals, as none are mentioned. This idea of surmounting the pillars


With globes arose, no douht, from a misconstruction of the word "pommels," as used in 2 Chron. iv, 12, 13, or the word "boools," in 1. Kings vii, 41. That these pommels, or bowis, were not in any. sense academic globes, such as adorn the masonic colurnns, is evident from the fact that they were covered with network," containing four hundred pomegranates in two "rows, or wreaths" (1 Kings vii, 41; 42; 2 Chron. iv, 12, 13). The chapiters, of which these pommels or bowls formed a part, were also adorned with lilywork: These pommels must, therefore, have been something entirely different irom our modern celestial and terrestrial globes. In place of bear:
ing representations of the "various seas and conntries of the earth," and "the face of the heavens," they were "covered" by wreaths of network, lilies, and pomegranates. They were not, in fact, globes of any kind, according to Dr. Smith, who says the word pommels "signifies convex projections belonging to the capitals of pillars."

The globes that surmount the masonic columns are, on the contrary, modern acadeinic globes, for we find theru thus described in the "Monitor":

## "the globes.

"The globes are two artificial spherical bodics, on the convex surface of whick are represented the countries, seas, and rarious parts of the earth, the face of the licarens, the planetary revolutions, and other important particulars" (" Monitor").

It is very erident that no such globes as these could have ever been placed on the top of the pillars of the porch of Sulomon's temple, even had the sacred text left any doubt upon the sul. ject. Dr. Macker very truly remarks, in speaking of the symbolical form of the lodge, that "at the Solomonic era, the era of the building of the temple at Jerusalem, the world was supposed to be of an oblong form." Such was the jii"a be! 1 by the most enlightened among the Jewish נиtion, even down to a very late date, comparative1y. Thus, Isaiah (xi, 12) sars," The Lord shall gatber togetber the dispersed of Judah from the four corners of the earth"; and we find in the Apocalypse ( $x x, 9$ ) a prophetic vision of four angels standing on the four corners of the earth. Dr. Mackey, illustrating the ancient idea of the form of the earth (see "Symbolism," Chapter XIII), furnishes $\&$ drawing in this form within which are marked the "various countries and seas of the earth."

There can be no-sort of doubt that such.was the prevailing idea of the form of the earth held at that era, not only by the Jews but by most of the other nations. . If, therefore, the architect of that age had desired to surnount either of these pillars with a figure representing the earth, be would have placed there a body having the form of a double cubbe, with the "countries, seas, and various parts of the earth" dcpicted on its flat upper
surface. The same remarks will apply to any representation then made of the "face of the heavens," which, according to the ideas of that age, " was coextensive with the earth taking the same form and inclosing. a cubical space, of which the earth was the base, and thie beavens, or sky, the upper surface." (Dudles, quoted by Dr. Mackey in note to page 104.)

It is, therefore, beyond all question that the introduction of our modern academic celestial and terrestrial globes, as the pripcipal feature and leading oinnanent of these columns, was not derived from the pillars at the porch of King Solomon's temple. The custom, however, of placing two lofty columns before the porch of temples dedicated to the worship of the heavenly bodies, was a very ancient and universal one. The Egyptian temples were always decorated by such pillars. They may have al*o ornamented, and probably did sometimes ornament, these pillars with spheres or globes placed on their tops, and intendad to represent the one the orb of the sun. or Osiris, the other the full moon of the equinox, or Isis.

That the lhomician artists who constracted the pillars at the : orrb of King Solomon's temple also imitated the architecture of the Egyptians in this, is possible, although no mention is made o! the fact in either Kings or Chronicles. Such spine:es, bowerer, would be something very diflierent from those upon the masonic columns. That the jillars of the porch may have been surmounted loy figures globular in form, and intended to , epresent respectively the sun and moon, is rendered somewhat probable from the fact that the whole construction of the temiple, as we have seen from what Josephus sars, was emblematic of the entire universe. That these columns partook of this symbolism, and were emblematic in some way of the sun and moon, would seem to be indicated by their very names. One of them was called "Boaz." This wọrd is derived from two roots, " bo," motion, haste ; and " $a 2$," fire, $i$ e., the sun, the great moving fire.* The other was called "Jachin," which clearly refers to the moon. Our word "month" is derived from the word "moon"-a month being one mion, or one revolution of the moon. The Hebrew months were
also lunar, hence they called them Jachin, which comes from Jarac, which means the moon (Dr. Adam Clarke).

This connection of the globes on the columns, Jachin and Boaz, or the columns themselves, with the moon and the sun, seems to have beer at one time fully acknowledged, if not understood, by the fraternity. This connection was no doubt accepted from ancient tradition, while the true cause and real meaning of it was probably lost. The following is a drawing of the two pillars of the porch, taken from a masonic medal struck in 1798, which is but a copy of the way these pillars are represented in the more ancient charts. It will be observed that above the pillar Jachin the figure of the moon is seen, while above that of Boaz the sun appears. (See "Macoy's Cycinpædia," article "Medals.")


As to which pillar properly represents Jachin and which Boaz, it must be remembered that, when standing in front of them, thes are reversed, Jachin then being on the left hand, and boaz on the right. In this matter muct confusion exists in the pictorial representations made in the Munitora. Kings and Chronicles sas that the right pillar was Jachin, and the left Boaz, and the confusion arises as to whether you are suppnscd to be going into or coming out of the temple. Josephus, however, makes this plain, for, in locating "the table mith loaves upon it," he gires the Ley to the whole matter, and renders it evident that the pillar Jachin was on the south side of the temple, and Boaz on the north. He alyo aays the temple itself "fronted to the east." ("Antiquities," Book VIII, Chapter III, and note.) The
true position of the pillars is therefore shown by the following diagram :


Besides this, the Ifelorewr, like other ancient Oriental nations, always supplosed the spectator looking east, not north, as we do; hence the word slemall means left as well as "orth; Eeclem means ecsst, and also brifire: ; while the sane word which means somth also means at the righe hand. Wiben we are toll, therefore, in Kings and Chronicles, that the pillar Boaz was on the left side of the temple, it is also implied that it was on the north side. But, as the temple itself fronted to the east, and the pillar Boaz was on the north side of the porch, it also follows that this pillar, which represented the sun, was placed at the "northeast corner" of the temple, and in direct line with the rising sun of the sumrner solitice, as was the case xith the ancient temples of Egypt. The full sig. nificance of this will be more clearly seen from the answer to the next question, as well as the reason why this pillar was placed on the north side of the porch and not ,n the south.

It may be thougint that, in tracing the primitive meaning of the words Boaz and Jachin to the sun and moon, a conflict arises witk what is stated on the margin of both Kings and Chronicles, where Jachin is translated to mean, "He sball establish," and Boaz, "In it is strength." (See 1 Kings vii, 21 ; and 2 Chron. iii, 17.) That
the words have such a meaning, in a collateral sense, there is no doubt, but the allusion is to the fact that the strength and order of nature, the due course of the seasons, and the division of day and night, were ordained and established by the solar and lunar orbs. "And God said, Let there be lights in the firmameut of heaven, to divide the day from the night; and let them be for signs, and for seasons, and for days and years" (Geiu. i, 14). The word "strength" is also applied to the sun in many places (see Psalm xic, where the sun is compared to "a strong man, rejoicing to run a race"). The allusion of the words Jachin and Boaz to 2 Sam. vii, 16, "And thine house and thy kingdom shall be established for ever before thee". (Simons's "Monitor," page 66), as given in the fellow-craft lecture, has no foundation other than the fancy of the inventor. The "house" spoken of in Samuel is not the temple, but the roral house, or line of David, just as we now speat of the house of Brunswick, or the house of Hapsburg. It must be remembered, also, that the marginal notes in Kings and Chronicles are really no part of the sacred text, being supplied by the coinmentators.

The promise made to Darid is, however, directly alluded to in Psalm lexxix, 35-37: "Once have I sworn by my holiness, that I will not lie unio David. His seed shall endure for ever, and his throne as the sun before me. It shall be established for ever as the moon, and as a faithful witness in heaven." Here the connection between the sun and moon, and tae ideas of strength and establis! ment, is directly alluded to, and the symbolism of the pillars of the porch, as representing the sun and the moon, might be appropriately made to refer to the promise made to David. The attempt, bowever, to make a connection between the inarginal Dotes to Kings and Chronicles, and the text from Samuel, and then to apply them both to the temple, has no foundation in the Bible. The words Jachin an Boaz are simply the names given to these pillars. They. mean the moon and the sun, and also strength and establishment, alluding to the respective offices of the ann and the moon. The Hebrew year was lanar, and the moon establisined years, and months, aind weeks ; while the sun, "in whom is strength,"
raled and divided the seasons. The primitive allusion of the words to the sun and moon is direct. This symbolism, as we have seen by what Josephus says, is in purfect harmony with that whish charactarizel the whole temple, and all parts of it alike. This solar and lunar symbolism of the pillars of the porch was, no doubt, intended to teach the Israelites that the sun and moon were thus to be regarded as amblems only of the great Creator, and not to be worshiped themselves as gods. As to the globes, if indeed the pillars of the porch were surmounted by globes, the idea must have been derived from Egypt, either directly or through the 'I'yrian workmen. The allusion of the globes was then, as now, wholly ustronomical ; but the sulstitution of our modern academic celestial and terrestrial globes for the orbs of the sun and monn is an innovation of very late date, and was probably the work of Preston, Webb, or, still later, of Cross, author of the "Hierogiyphic Chart," a history of which has been previously given. Cross acknowledges that he invented some emblems, but hc also says shat sany of them had been described before his time. In attempting to depict these, he made many mistakee, from his want of a more intimate knowledge of the symbolism of the ancient Mysteries. It is true that the Hebrews, and most of the nations at the time of the building of Solomon's temple, did not know the trae figure of the earth, yet there is no doubt that the Egyptians were more learned on this point. This, however, while it conceles the Egyptian origin of the globes, does not help the matter, for our academic globes, such as are now placed on the pillars, are philosophical instruments of a much more recent date. Apart from thid, there can be no doubt that the idea of placing two columns before the temple, however they may have been ornamented, was derived from Egypt, where it was the custom, as is not only proved by Herodotas and .other historians, bat by the temples themselves, remainiog to this day. What was the real meaning and true office of these pillars standing before the ancient Egyptian temples, will more fully appear from the answer to the next question. Brother Robert Macoy, in his."Cyclopædia," expresses the opinion that the columns Jachin and Boaz were fac-similes of the
obelisks which stood before the Egyptian temples (see article "Ohelisk"). This, of course, does away with the globes, as well as the lily, pomegranate, and network. As to the latter, he is contradicted by Jeremiab, Kings, and Cbronicles.

TEE NORTEEAST CORSER.AND THE CORNER-STONE.
Q. Why is, or ought to be, the first stone of any building laid in the northeast corner?
A. The ancients believed that the morements, conjunctions, and position of the heavenly bodies influenced not only the destiny of nations, but of individuals, and regulated all the affairs of life. Their temples were dedicated to the worship of the sun, and the whole process of their erection, from the laying of the first stone up to their completion, as well as all the details of the architecture, had special reference to astrological condi; tions, and the movement of the sun in the zodiac, or his position at stated periods therein. '

In our attempt to account for the.reason $\begin{array}{rl}\mathrm{r} & \mathrm{hy}\end{array}$ the corner-stone was laid in the northeast corner, we will, of course, have, in the first place, to resort somewhat to conjecture, as no record of the reason is left; but if by so doing we finally arrive at a theory, not only in entire harmony with the facts of astronoms, but also with what is known of the peculiar customs and religious ideas of the ancients, and which, at the same time, gives a reasonable and sufficient cause, according to the same, for the custom itself, we may feel almost certain that the truth has been discovered.

The corner-stone, we know,.was always laid by the ancients with impressive ceremonies and solemn religious rites. As an illustration and confirmation of this statement, the following passage is here transcribed from Tacitus, descriptive of the iaying of the corner-stone of the-Capitol at Rome, when it was rebuilt by the Emperor Tespasian: "The care of rebuilding the Capitol be committed to Lucius Vestinus, a man of equestrian rank, but in credit and dignity among the first men of Rome. The soothsayers, who were convened by him, advised that the ruins of the former shrine should be removed to the marshes, and a temple raised on the old foundation, for the gods would not permit a change in the ancient form.
"On the eleventh day before the calends of July, the sky being remarkably serene, the whole space deroted to the sacred structure was encompassed with chaplets of garlands. Such of the soldiers as bad names of auspicious import entered within the inclosure with brauches from trees emblematic of good fortune. Then the vestal virgins in procession, with a band of boys and girls, those-parents,-male and female, were still living, sprinkled the whole place with water drawn from living fountains and rivers. Helvidius Priscus, the protor, preceded by Plantias Elianus, the pontiff, after purifying the ares by sacrificing a swine, a sheep, and a bull, and replacing the entrails upon the turf, invoked Japiter, Juno, and Minerra, and the tutelar deities of the empire, prasing that they would prosper the undertaking, and with divine power carry to perfection a work begin by the piety of man; and then Helvidius jaid his hands upon the wreaths that bound the.foundation-stone and were twined about the cords; at the same time the magistrates, the priests, the senators, the knights, and a number of citizens, with simultancous efforts, prompted by zeal and exultation, haled the ponderons stone along. Contributions of gold and silver, and pieces of other metals, the first that were taken from the mines, that bad nerer been melted in the furnace, but in their natire state, were thrown upon the foundations on all hands. The soothsayers enjoined that neither stone nor gold which bad been applied to other uses should profane the building. Additional height was given to the edifice, this was the only variation conceded by religion." ("History". of Tacitus, Book IV, c. 53.)

From this it appears that the priests and the soothsayers had the whole control and direction of the ceremony, which was itsclf of 2 religions character. This custom was derived by the Romans from 2 more ancient source, and probably from Eg.pt, where similar solemn rites were celebrated on like occasions. As all ancient temples were dedicated to the sun primarily, ander some one of his personified names, we may with good reason believe that the day selected for laying the corner-, or foundation-stone, would be on one of the great solar festivala. Such an oocasion
would present itself,ou the arrival of the sun at the tropic at the summer solstice, which indeed would not be far from the "eleventh day before the calends of. July," mentioned by Tacitus.

The summer solstice was celebrated as a great solar festival by all the ancient nations whose religion had a solar foundation. The day when
tious and fortunate by the diviners, soothsayers, and astrologers. Now, as the temples always faced the east, so as to catch the first rays of the rising sun, it is almost certain that the cornerstone also, for like religious reasons, would be laid in a line with the rising sun. The sun, as be arose on the longest day of the year; rejoicing in


WEY TEE FTRGT GTONL WAS LAID IN TILE NORTEEAST OORNER-ITB CONSECTION WITE TIE SOLSTITIAL AND EQLTHOCTIAL POINTB.
the san thus reached his highest northern declination, and mounted to the summit of "the circle of the heavens," when, according to the teachings of astrology, " be entered his own honse" among the stars, would naturally be pronounced propi-
his pride and strength, would thus be a type of the new temple about to rise majestically from its foundations. On the contrary, to lay the cor-ner-stone of the new solar templs in the southeastern line of the sun's decline and fall, at the
winter solstice, or toward the north, the point of darkness, or yet toward Amenti, the western region of gloom and death, would, according to the teachings of astrology, be most unpropitious, if not sacrilegious.

It therefore of necessity followed that, as the sun on the 21st of June rises in the northeast, and as the future temple itself faced the east, its cor-ner-stone, if placed so as to emblematically represent and mark the place of the rising sun of the summer solstice, must have been laid in the northeast corner. In the preceding diagram Fig. 1 will clearly illustrate this. The dotted line shows the path of the sun from sunrise to sunset on the 21st day of June, or summer solstice. The horizontal circle represents the visible horizon. At this period of the year the sun rises in the northeast and sets in the northwest, as represented by the dotted line, where the respective points of sunrise, noon, and sunset are cach marked. This drawing also clearly shows the reason why that is the longest day in the year, as it is erident that the circuit from the point of sunrise, by the way of the south to that of the sunset, is greater than at any other time. This custom of laying the corner-stone so as to mark the place of the rising sun of the summer solstice was productive of other useful astronomical purpcses ; for, due care being taken to establish the proper angle, the southeast corner would, as a necessary consequence, be in an exact line with the point of the horizon at which the sun rose at the winter solstice. At that period the sun rises in the southeast and sets in the southwest (see Fig. 2). This is the shortest day of the yew, for, as will be seen, the path of the sun from the point where he rises to where he sets, by way of the south, is shorter thar at any other period. Another consequence followed from this arrangement; for, after the sun quits the south and goes north, when he arrives at the vernal equinor he has journeyed half the distance to the other tropic, and rises at a point due east. At the period of the vernal equinox, the sun, therefore, rose at a point directly in
front of the center of the principal entrance of the teraple, which in Egrpt was alucays surmounted by the sculpturcd symbol of $a$ " winged globe," ernblematic of the sun, whose motion was symbolized by the wings.

The same result would also take place when the sun returned from the suinmer solstice and reached the autumnal equinox. This is illustrated by Fig. 3. The points marked $A$ and $B$ are those where the sun rises at the summer and winter solstice. It is thus apparent that the purch or front of the teraple, from its position and construction, might be used as a perpetual almanac, as the return of the sun to either equinox would be indicated by his rising in a direct line with the


EGYPTIAS PTLON, OR TEMPLE-GATE, SERMOCNTED BY THR " WTNGED GLOBE."
"winged globe," sculptured above the principal entrance; and in like manner his arrival at the solstitial points was marked by the northeast and southoast corners of the porch.

The correct marking of the solstitial points in this manner was, however, dependent upon a certain proportion (quite easy to determine) betwoen the breadtn of the front of the temple and a point established back of its center, at such a.distance that two lines drawn from that point through the
corners would cut off the same number of degrees, measured on the horizon, as actually separaied the points where the sun rose on the 21 st of June and the 21st of December, thus making the front of the temple the chord of an arc of the same number of degrees which separated those two points. The number of degrecs contained in this arc would depend upon the latitude of the place, increasing in length as we advance toward the north.

In the latitude of Egypt, Rome, Greece, and Asia Minor, if this point so establisbed was desired, for any reason, to be placed in or near the center of the ground-fioor of the temple, it wonld be necessary to build the temple in the form of an "oblong square," and in many places the exact form of a "double cube" would be required. This may account for the reason why ancient temples were generally built in the form of a "double cube," and why that forin was esteemed sacred. This "certain point" back of the center of the front, and in or near the center of the temple proper, might be appropriately marked by an altar, or a "blazing star" (emblematic of the sun) "set in the 'mosaic pavement.'"

This arrangement, by which the front or porch of an ancient temple was thus made to serve an astronomical purpose, and accurately to point out the commencement of the seasons, is illustrated in Fig. 4. $A$ and $B$ represent the two points of the horizon where the sun rises at the summer and winter solstice. $C D$ represents the froat of the temple; the sta: indicates the point from which the imaginary or actual lines, as the case may be, are required to be drawn; so as to intersect the points $A$ and $B$, by passing through the corners of the temple, thus making the front the churd of an arc, containing the same number of degrees as $A G B$. The other letters indicate the points of the compass. By the use of a "plumb-line" a point corresponding to the star might, if required, be established on the roof. This, bowever, would not be necessary if, as was generally the case, the principal entrances of the temple conducted into an open court, ornamented by rows of pillars. The whole atrangement, if correctly inaugurated by placing the-corner-stone in its true position, in the northeast corner, would
enable an observer, by the use of the most simple and primitive instruments, to determine when the sun reached either of the equinoctial or soletitial points ; or, in other words, enabling him to divide the year into its four great natural divisions, and accurately mark the commencement of each.

The length of the solar fear could also thus be determined-that is, full as accurately as the ancients did determine it. All of these particulars might, indeed, be ascertained witbout any instruments whatever, by means of the pillars at the porch. All ancient temples had two lofty pillars, one at each corner of the porch, and there is no doubt that they had some connection with the arrangement above described. If they were located with care, the rising sun of the summer solstice would cast the shadow of the northeastern pillar, Boaz, along the line $A \star$ (see Fig. 4), and the rising sun of the winter solstice cast the shadow of the other pillar, Juchin, along the line $B \not \subset$. Careful observations would also probably be made of the length as well as direction of these shadows at different periods of the year, for at noon on the day of the summer solstice the sun, being higher in the heavens than at any other time in the year, the shadows of the columns would be shortest; and at noon on the winter solstice the shadows would be the longest. These observations of the length of the shadows, being made at noon, would be free from the errior occasioned by refraction at sumrise, and thus serve to correct the otbers.

If these pillars werc thus secretly ased by the priests for astronomical purposes, it fully accounts for the idea ala rays entertained, but never entirely understood, that the pillars themselves had some connection, antual or emblematic,' with the solstitial or equinoctial points. The following drawing will clearly illustrate the probable astronomical use of the pillars of the porch in ancient Egyptian temples. The sun is rising. It is the hour of the morning sacritice. The parement of the temple is represented as open to the sky, fur the parpose of morc easy illustration. It need not bave been so in fact, as it is only required that the shadow of the column at sunrise should fall parallel to the solatitial line, which conld have heen determined from without. 'In the ancient Egyptian temples,
however, the portico and courts leading to the sanctuary were open and uncovered (see Wilkinson's "Ancient Egjptians"), and the shadow's of the columns were projected on tbe floor.

## THE CHECKERED FLOOR.

Whenever it was considered necessary to have the solstitial lines or the length of the shadow actually marked on the floor, then a certain carefully placed line or row of mosaic squares (see illustration) would answer the purpose, and also perfectly cunceal the design of the whole arrangement; and this is probably the reason why the priests in their temple architecture adopted that kind of pavement. Of course, the details of the arrangement were modified to suit different places and circumstances. The obserrations might be made from the roof, or standing in front of the temple, where instruments,

tended application of the priuciple of the sundial, by means of which not only the bours of the day, but the arrival of the sun at the solstitial and equinoctial points, was determined, together with the length of the year and other important particulars. Of course, these methods seem clumsy to us, being familiar with the wonderful "instruments of precision" which modern science possesses; but, in those ancient dars, such primitive methods were the only ones known, and the accuracy of simple in construction,
for determining the line of direction toward the rising sun, with reference to the front of the temple, might be, and probably were, used, without relying wholly on the shadows cast by the columns. The mean daily rate at which the point of sunrise moved along the borizon, and the length of the shadows iocreased or diminished, would also soon be determined, and thus an observation could be taken at sanrise, noon, and sunset any day. The month and day of the month could thus be determined at any time with tolerable accuracy. The same arrangement would serve to ascertain the true solar time. Of course, it is now impossible, in the absence of any direct information, to arrive at all the details of the peculiar arrangement by which these ancient solar observations were made, but the main outline is without doubt correct. It was but a more ex-
astronomy and the porches of ancient temples, beyond the fact, apparent at first sight, that they all face the rising sun; and this is attribated to religious ideas wholly, and not at all to-scientific ones, although it was the well-known custom of the ancient priests to conceal the facts of astronomical science under religious allegories.

Those mysterious structures, the pyramids of Egypt, have been more carefully examined, and are found to have been constructed with direct reference to certain astronomical facts, if not uses. The pyramid of Cheops is placed so correctly on the trae meridian that the variation of the magnetic needle may be determined by it. It is also so proportioned that its height is the radius of a circle whose circumference is equal to the circuit of the pyramid's base. The long, slant tunnel, leading downward from the pyramid's northern face, points to the pole-star of Cheops's time.

Professor R. A. Proctor, the astronomer, says in a late article, "The Mystery of the Pyramids" ("Popular Scieuce Monthly Supplement," No. III), that the purpose for which the pyramids were erected "was in some was associated with

west, and two lying north and sonth ; or, in other words, so that their four faces front the four cardinal points. One can not imagine why a tomb should have such a position. It is not, indeed, easy to understand why any building at all, except an astronomical observatory, should have such a position. A temple, perhaps, devoted to sun-woorship, and generally to the worship of the heavenly bodies, might be built in that roay; for it is to be noticed that the peculiar figure and position of the pyramids would bring about. the following relations: When the sun rose and set south of the east and west points, or (speaking generally) between the autumn and spring equinores, the rays of the rising and setting sun illuminated the southern face of the pyramid; whereas during the rest of the year, that is, during the six months between the spring and autumn equinozes, the rays of the rising and setting sun illuminated the nortbern face. Again, all the year round the sun's rays passed from the eastern to the western face at solar noon. And, lastly; during seven months and a half of each year, namely, for three months and three quarters before and after midsummer, the noon rays of the sun fell * on all four faces of the prramid, or, according to a Peruvian expression (so Smyth says), the sun shone on the pyramid 'with all his rays.'"

Mr. Proctor thinks the purpose of the pyramids was rather astrological than astronomical, for be says,' "The slant tunnel above mentioned is precisely what the astrologer would require in order to get the horoscope correctly." This distinction between astrology and astronomy was unknown to the ancients. The two were one. Astrology assumes, it is true, to predict not only eclipces, but the astronomy, for the pyramids were built with most accurate reference to celestial aspects." The following is quoted at length from Mr. Proctor's interesting article. We have italicized a line or two, as bearing more particularly on our subject. Mr. Proctor says: "These buildings [the pyramids] are all, without exception, built on special astronomical principles. Their square bases are so placed as to have two sides lying east and
future generally from the position and aspects of the heavenly bodies; but, in order to make those assumed predictions, it was first required, according to the rules of astrology itself, to obtain a correct knowledge of the position and aspects of the sun, moon, and planets. This necessitated, of course, correct astronomical observations, which might be and were put to uses entirely scientific and practical by the ancients, as well as serving
as a basis for their pretended predictions of the future.

That the pyramids (whatever else they may have been intended for) were not temples, we are perfectly willing to grant, hecause the only object which has induced this notice of their astronomical proportions, is to show that it is a demonstrated fact that the ancient Egyptians did allow the most exact astronomical ideais to greatly influence, if not wholly cointrol, their most stupendous works of architecture-works so gigantic in size, and requiring such an expenditure of time, treasure, labor, and human life, as to render them the greatest wonder of all antiquity. It therefore becomes almost certain that astronomical considerations wonld not be neglected in the construction of their temples proper, devoted as they were to sun-worship, and the service of a religion having a purely astronomical foundation.

In ancient times the only astronomers were the priests, and the only observatorics the temples. .The mass of the people were ignorant and superstitious, and wholly dependent upon the priests for the knowledge required to carry on agriculture. Says Salverti : "From the observations of the stars, the return of the seasons and several metcorological phenomena were predicted by the priest. He regulated agricultural labors in a rational manner, and foretold its probable success with tolerable exactness. The ignorant men, therefore, under his direction, set no bounds in their own minds to the power of science, and doubted not that the futurity of the moral world. $a s$ well as that of the physical, was to be read on the face of the starry heavens. In this mistaken idea they were not undeceived by the priests."

In order to perpetuate these ideas, and so increase and preserve their power and influence, all scientific knowledge wras locked up in the sacerdotal order and the Mysteries. Astronomical observations were thas of necessity secretly condncted in the temples, and the methods by which those observations were taken, and the real object of constructions for that purpose, were securely veiled beneath allegorical and religious rites and formulas.

The real and scientific reasons why the cor-ner-stone was placed with such care in the north-
east corner having been concealed by the priests, in process of time, when their i eligion wae superseded, were entirely lost. The custom, however, was first establisbed under all the sanction and requirements of religion, and came at last to be superstitiously followed, not only as to temples, but all other buildings of any importance, whether built so as to face the east or not. The castom has eren lescended to this day, which shows that some very inportant reasons must bave led to its adoption in the first place. It is thus that the superstitions observance of this custom continued for centuriss after the real scientific and the pretended religious reasons for it had not only ceased, but.been forgotten.

## JRE゚IDICAF TEMPLES.

That the Druids of Britain celebrated the Mrsteries in some form, and had secret symbols and signs known only to those who were initiated into the ligher pricistly orders, is admitted by all investigators. Nor is there any doubt that the Druidical Mysteries were dierived from the Phenician and Tyrian navigators, who visited that country for tin, and who established colonies there. The principal temple of the Druids was what is now called Stumehenye, much of which remains to this day. These ancient remains, it is conceded, were erected by those who worshiped the sun, either actually or symbolically, and the peculiar arrangement of the stones strongly confirms the views we have expressed as to the secret solar significance of the "northeast corner" and "the pillars of the porch." Mr. M. D. Conway, in his "South-Coast Saunterings in England" (and who visited the piace), informs us that, some two hundred yards from the entrance of the temple at Stonehenge, there is set up a pillar sixteen feet high. This stone pillar, he also says, "is not only set exactly at that point toward the northeast where the sun rises at the summer solstice exacthy over its top, hut bas also been set in a place where the ground bas been scooped out, so as to bring its top, as seen from the altar, precisely against the horizon. Every year people go out on the 21st day of June to see the sun rise above this stone, and that it does so, with absolute exactness, admits now of no question."

At the Drcidical temple at Abury there is a stone pillar in the eame astronomical position. These pillars are, it is true, of rough stone, but, had the builders of these Druidical temples possessed the same wonderful skill in architecture as the Tyrians and Eggptians, from whom their religious ideas were derived, no doubt more elegant if not fineiy sculptured columns or obelisks would have been erected; nor is it at all strange that the temples built by the rude inhabitauts of Britair should be inferior to those of Tyre snd. Thebes, although erected upon the same astronomical principles, for the same symbolical solar worship, since it was far easier to adopt the religious rites and ceremonies of the Phenicians than to rival their skill in art, or to obtain the services of their architects or artists. It may also be presumed that the Phonicians themselves, who colonized there in the interests of trade, were more skilled in working the tin-mines, or in commercial pursuits, than in temple-building and architecture.

## TIIE CORSTCORIA.

Q. Whence was this masonic emblem derived, and what does it signify?
A. The Cornucopia, or Horn of Plentr, is an enublem of purely astronomical origin. It alludes to the constellation Cupricornus.
 Capricorn, according to mythology, is the same as Pun, or Bucchus, who. with some other deities, while feasting near the banks of the Nile, were suddenly set upon by the dreadful giant Typhon. In order to escape, they at once all assumed different shapes and plunged into the river-Pan, or Bacchus, leading the way. That part of bis body which was under water took the form of a fish, and the other part that of a goat. Pan was the god who presided over the flocks and berds. Virgil thus invokes hin:

> "Pan orias custos."
> " Thou, O Pan ! gaardicn of the sheep." ("Georgics," Book I.)

Pan was also the god of plenty. Therefore the twisted horn of Capricornus became an emblem of plenty.

Accurding to another astronomico-mythological tale, Jupiter is said to have been suckled by a goat-the meaning of which is that the sun, emerging from the stars of Capricornus at the winter solstice, begins to grow in light and heat as he mounts toward the vernal equinox. He is thus figuratively maid to be nourished by this goat. The mythological name of this nurse of


Jupiter was $A$ multhurn. To reward her kindness Jupiter, it is said, placed ber among the constellations, and gave onc of her horns to the nymphs who had aided in taking care of him during his infancy. This gift possessed the power of imparting to its holder whatever she desired. On

this account the Latin rord " cornucopia" denotes plenty; the word "Amelthece"," :rhen used figoratively, has the same meaning. The whole story is a soler allegory, alluding to the arrival of the sun among the stars of Capricorn, at which time the fruits of the earth-"corn, oil, and wine" have all been gathered in and stored away, so that, although winter comes to desolate the land, the industrious husbandman is yet blessed with "plenty."

2KE BREETVE.
This was one of the emblems of the Eleusinian Mysteries. The goddess Rhea, according to Bryant, was represented with a beehive beside her, out of the.top of which arose corn (wheat) and flowers, denoting the renewal of the seasons and the return of the sun to the vernal equinox.
Q. Whence is the masonic emblem of the hour-glass derived?
A. The hour-glass was one of the sacred astronomical emblems of the Egyptians. Clement of Alexandria, who gives a description of one of their religions processions, informs us that the singer went first, bearing the rymbols of music; and that he was followed by the horoscopus, bearing in his hand an honnglass, as the measure of time, together with a palm-branch, these being the symbols of astrology or astronomy. It was the duty of the horoscopus to be versed in and able to recite the four books of Hermes which treat of that science. One of these books describes the position of the fixed stars; another the conjunctions, eclipses, and illuminaiions of the sun and moon; and the others their risings and settings. The hour-glass is, therefore, peculiarly an astronomical emblem of great antiquity. The moral application of this masonic emblem is beautifully given in the "Monitor."
the ANCHOR, tHE ECYTHE, AND tHE RANBOTT.
Q. Have the anchor, the scythe, and the rainbow any astronomical significance?
A. These emblems ire only insidentally alladed to in the lectures, and bave no particular significance as to any part of our ancient rites and ceremonies, except in a general way. . They are all of them emblems which have been for ages the common property of all mankind, used either . to point a moral or adorn a .tale.". The last two are; howcver, astronomical in their inception, as the scythe sppertains to Saturn, and the rainbow is not only a celestial phenomenon, but was also one of the emblems of the Eleusinian Mygteries.

THE COFFIN, SPADE, ETC.
These are sll common emblems of mortality, and appertain as such to the legend of the third
degree. As the astronomical allegory contained in that legend has been fully explained and illngtrated, these emblems require no further remark.

CHE KEY-STONE, AND TEE LEGEND OF ITB LO88.
The emblem of the key-stone, as now exhibited, together with the legend of the lost keystone, would appear to be of very recent date. They helong to the Jark master's degree, as given in the American rite. The Mark degree, saye Dr. Mackey, was taken by Webb from the Scottish rite. Webh, however, "improved the ritual and changed the legend, substituting one of his own invention." Another writer informs us that Webb's Mark degree is founded on the Earopean degree of Mark master mason-" the sigD, token, and sacred sign," of which are exactly the same as the "due guard, real grip, and principal sign" of Webb's degree-although it contains no mention of the "key-stone," bat in its stead the "cubic stone." The weight of testimony from all sources seems to render it certann that the idea of the "key-stone" and the legend connected with it, as given in the American degree of Mark magter, are wholly the invention of Webb.

In making these additions to the legends and symbols of Freemasonry, Webb, however, was under the necessity of making what he added harmonize with the principal legend of the third degree, as well as that of the Royal Arch ; and, in doing so, he unconsciously rendered his new legend and its accompanying emblem aapable of the same astronomical explanation as the original legend, which be degired to thus more fully illastrate. We do not mean to be understood as saying that Webb ever had any auch astronomical ideas in his own mind, but, being under the absolute necessity of making the machinery of his new degree harmonize with the really ancient and astronomical legends of the Order, he was unconsciously compelled. by a logical necessity, to render that which he supplemented capable of tho same astronomical interpretation as the origion and fundamental legends of Freemssonry tbemselvés.
. The emblem of the key-atone and the legend of its loss may thus be astronomically. ers plained :

## THE' KET-STONE.

Q. Of what is the key-stone emblematic?
A. Of strength, that being the strongest part of an arch, binding the
 several parts together, and thus enabling it to bid defiance to the elements.
Q. Has the key-stone any astronomical allusion?
A. It alludes to the summer solstice, or key . of the zodiacal arch, in close proximity to which it is now seen, and where anciently was located the constellation Leo; also typical of strength.
the circle on the met-stone.
Q. Why is a circle inscribed in the masonic key-stone?
A. A circle is the astronomical sign, and Egyptian hierogiyph of the sun. It is placed in the key-stone to denote the sun in the summer solstice, exaltec ${ }^{7}$ to the summit of the zodiacal arch (see zodiacal figure opposite page 47).
Q. Are the letters surrounding the circle, with the explanation usually given of them, correct?
A. As the English language was not spoken at the time of the building of King Solomon's temple, either by the Hebrews or the men of Tyre, the Kinglish sentence. which these letters are asid to imply can not be anything but a very modern innovation. If the circle and its accompenying letters, which Webb placed on his keystone, were borrowed from a more ancient source, he evidently did not bnow. what their true meaning was, and so invented an explanation of his own.

The degree of Master Mark Mason, or. Past Master, Which was confined tơ those who had aotually. presided as masters, while it furnished Webb the groundwork for his new degree, made no mention of the key-atone. It did, however, erhibit the letters E. T. S. T. K. S., to which it would appear Webb added a W. and another S., for rescons of his own. It is worthy of remark
that the mesning attached to these lettars has varied considerably. Thas, some fifty or sirty jears ago, they were explained as, forming the initials of the following sentence: 'He That Was Slain Soared To Eindred Spirits; alluding to the legend of the death of H. A. B., as' related in Oliver's Dictionary, and before quoted at length. The reading of the present. day is very different from this, but the reading is not uniform in all the Ststes of the Union. - In some States the. letters K. S. are said to stand for key-stone, and in others for King Solomon. Some are of the opinion that S. S. stand for sanctum sanctorum; others that the K. T. allude to Knights Templars. It is evident, however, that there is no definite limit to this mode of reading the mysterious.detters; for, proceeding on the same principle, we might suppose them to mean-Safely Keep This Sacred Secret Within. Thy Heart; or, Hidden Things We Solemnly Shoear To Keep Secret; or, There Were Seven Steps T' King Solomon's House; or, Enights Tempilars Should Sucrelly Watch The Holy Sepulchre; and thus until our ingenuity or patience is exhausted. And it is also equally evident that all methods of reading these letters, which are founded on the idea that they are in any way initials of English words, must be wrong if the emblem is ancient, and can only be right if it is of quite recent and wholly English or American origin. If, therefore, these letters are of ancient origin, as arranged in this emblem, we may be quite certain that their real meaning has been entirely lcst. If they have any ancient meaning, proper investigation and stady might, no doubt, rediscover it ; but, as we have no evidence whatever that they are ancient, it is not worth while to make any attennt in that direotion.

The legend of the loss of the key-stone and -its recovery may, however, be brought into harmony with the principal legend of. the third dogree, and that of the Royal Arch, and thos istronomically explained. All the legends of Freemsoonry relating to the finding of that which was lost, refer to the euresis, or discovery, by finding of the san-god, whose desth formed the story of the ceremiony of the initiation into the Myatariea.

The key-stone is an astrononical emblem of the sun at the summer solstice, or summit of the Royal Arch, after leaving which he is slain, and bis body lost among the wintry signs. The astronomical hieroglypb of the sun $\mathcal{O}$, which is marked on the key-stone, makes this solar allusion of its loss and recovery perfectly apparent. It may, therefore, br considered as but another allegory of the loss of the sun during the winter months, and his discovery again at the vernal equinox. And, as the name of O. G. M. H. A. B. means the sun, as before explained, the astronomical sign of the sun $\odot$ on the key-stone is equivalent to his name being there, to mark or desig. nate the stone as appertaining to him.

THE LEGEND OF TEE LOST WORD.
Q. What is the meaning of the masonic legend of the "lost word"?
A. This legend, as briefly stated by Dr. Mackey, in his "Symbolism of Freemasonry" (page 300), is as follows: "The mystical bistory of Freemasonry informs us that there once existed a WORD of surpassing value, and claiming a profound veneration; that.this word was known to the few, and that it was at length lost, and that a temporary substitute for it was adopted."

This idea of a mystic, all-powerful "word" was an ancient and widely diffused superstition. Just how this notion originated has not been handed dov. $n$ to us, either by tradition or otherwise. It, however, probably came to lee entertained in the following manner: It was generally known to the profane-i. e., the uninitiated-that those who were admitted to the "Mysteries" were intrusted with a certain sacred word, under a most solemn pledge not to reveal it to the world; and as the scientific knowledge, also secretly imparted to those who were initiated, gave those who took the higher degrees the power to work apparent miracles, the ignorant and superstitious multitude naturally thought, and were perhaps taught to believe, that it was by the use of this "word," so sacredly concealed, that the priests were able to perform all their wonderful works. This word was, however, nothing but the "password" which went with the "sign," by which the initiated could make themselves known to
one another. This iciea of an all-powerful word was very prevalent among the Jews, no doubt derived from their long stay in Egypt. The notion was that this "word" consisted of the true name of God, together with a knowledge of its proper pronunciation, and that the fortunate possessor of this bnowledge becanse therebs clothed with supernatural power-that by the speaking of this word be could perform all sorts of miracles, and eren raise the dead. According to the Ca balists, "the very heavens shook, and the angels themselves were fille? with terror and astonishment when this tremendous word was pronounced." •

Jewish tradition states that God himself taught Moses his true name and its correct pronunciation at the "burning bush." And they believed that Moses, being thus possessed of the "Word," used it to perform all his miracles, and to confound and overthrow Pharaoh and his hosts. The Jews of a later date, seeking to account for the wonderful works of Cbrist, asserted blasphemously that he unlawfully entered the "hols of holies," and clandestincly obtained the word used by Moses, which was engraved upon the stone upon which the ark rested. The superstition in relation to a wonder-working word also prevailed among the Arabians, who say that King Solomon wras in possession of this "grand omnific word," and by its use subdued the genii who rebelled against God, many of whom Solumon imprisoned by the use of his magical seal, upon which the word, contained in a pentacle, was engraved. (See the "Story of the Fisherman," and other tales of the "Arabian Nights," where this legend is alluded to.)

It was from these, and other similar legends thus widely diffused among the ancient Oriental nations, that the veneration for a particular word arose, together with an earuest desire to obtain it, and a laborious search for it, by ambitious believers in its power. All the magicians, enchanters, and wonder-workers of the East, and the adepts of the West, were supposed to have, in some mysterious way, become possessed of this "word," and were known to the aspirants and students of the occult sciences (not jet so fortunate) by the name of "masters," and the "word"
was called by them the "master's word." This ancient superstition seems to have left its impress on our ritual, for the "word," of which we hear so often therein, is assumed to be something more than a were "pass-word," although we, as masons, now use the phrase "master's word" in a very different sense from that of the adepts of former limes.

In former and less enlightened times the possession of the true name of God and its proper pronunciation, or some substitute for it, auchorized by divirce command, were even supposed requisite in order to worship him aright ; for it was igno. rantly thought that, if God was not addressed by his own proper name, he would not attend to the call, nor even know that the prayers of his worshipe" were really addressed to him, and not to Baal, Osiris, or Jupiter; or, if knowing, would indignantly reject them. In the East, to address even an earthly potentate by any other than bis own proper, high, and ceremonious title, was considcred both irreverent and insulting. Among the Jews, however, the pronunciation of the true name was supposed to be followed by sach tremendous effecte that a sulstitute, for which they believed they had the divine sanction, was enjoinea. Accordingly, we find in the Old Testament that, whenever the name of God occurs, the substitute is used instead of the true name. The word substituted is gencrally "Adonai," or Lord, ucless the name follows that word, and ihen "Elohim" is used ; as; "Adonai Elo?.im," meaning, Lord God. From this Iong-continued use of a oubstitute for the real word, the latter, or at least its correct pronunciation, was thought to be lost. A trace of all this is found in our ritual, and, perhaps, furnishes the true reason why a substitute (as Dr. Mackey informs us in the extract we have quoted above from his "Symbolism") was adopted.

It will be of no use to trace any further the nomerous superstitions and legends in relation to this fabled "grand omnific word." Dr. Mackey very justly says, in the work before mentiuned, that it is "no matter winat this word was, or how it was lost," for we now know that no word can be at present of any use to a mason, except to eerve as a "Dass-word," to prove his right to the
bonors and benefits of some particular masonic body or degree ; and for that purpose (apart from considerations of a purely archosological and historical nature) one word is just as good as another, so long as it is appropriate to the time and place, and has been cstablished for that purpose, either by ancient usages or some competent anthority: Much learning, however, as might be expected, together with persistent search, laboricus study, and even the practice of magical arts, bave been employed in past ages, and even down to within a few years, to discover the ancient wonder-working word by those who believed in its fabled power, or from a motive of historical curiosity desired to obtain it. According to some, the siacred Tetragranımaton, or four-lettered name of God in Hebrew, incorrectly pronounced Jehovah, was the true word. Others thought that the Hebrew word Jah, the Chaldaic Bul or Beh, or the Egyptian On or Ox, the Hindoo Aum, together with various combinations of them all, constituted the "grand omnific word." But as the possession of no one of them, nor any possible combination of them, seems to confer any miraculous powers on the possessor, neither of them can be the correct one according to ancient traditions. If there ever was actually any such thing as a "grand omnific word" (tbat is, all-powerful word, from omnificus rll-creating), it certainly remains lost to this day, and "I fear it is for ever lost," for certainly none of the words disclosed, with so much solemn wremony, in certain masonic degrees, confer any supernatural powers on those to whom they a: communicated.
Q. What astronomical allusion has the ancient legend of the "lost word," as illustrated in the masonic ceremonies?
A. As the masonic legend of the deposit of the "word" in a sccure and secret place, and its consequent loss, has been already quite fully stated by masonic writers, in works sanctioned by the highest masonic authority, there can be no sort of impropriety in relating it bere, for the parpose of showing its primitive astronomical significance. The legend is substantially as follows:
"Enoch, under the inspiration of the Most High, built 2. secret temple underground, con-
aisting of nine vaults, or arches, situated perpendicularly under each other. A triangwiar plateof gold, each sidee.of which was a cubit long, and enriched with precious stones; wins fixed to a stone of agate of the saime form. On this plate of gold was engraved the "word,' or trus name of God ; and this was placèd on a cubical stone, and deposited in the ninth or lovest arch. In consequence of the delige, all knowledge of this secret temple was lost, together with the siacred andifineffable or unutterable name, 'for ages.. The lost word was subsequently found in this longforgotten subterranean temple by Darid; when digging the foundations for the temple, afterward built by Solomon his son."

Other versions of this legend ascribe the building of the underground temple, and the deposit therein of thé "cord," to Solomon, and its discovery to those "who dug the foundations of the second temple on the same spot, and connect it with the 'substitute ark' deposited in the same place."

Buth legends, however,"agree in statirg that the "word" was buried deep underground, and in the ninth arch, or lowest one of them all; that it was there lost, and remained "buried in darkness" until it was subsequently found and brought to light.

In ancient times, and according to the mystical theology of those days; God and the sacred name of God were supposèd to be one and the same. The "word" was itself considersd to be, in some sense, a living, creative power. This Plato taught that the divine "logos,"- or-wert, was God. But, as we hiave shown, the sun was by the ancients iniversally adopted as the sijmbol of God, and subsequently confounded with God, 60 that the various names of God became also solar names. The loss of the solar name, therefore, became bat anather expression of the loss of the sun, or sun-god, in the lower hemisphere. Now, let us see bow this will harmonize with the legend just related.-. The sun, having reached the summit of thie zodiacal arch, at the summer' solstice, begins to descend toward the region of darkness. From Canuer he Jescends tọ Leo, from Leo to Virgo, from: Wirgo to Libra, and so on until Capricorn is reached, which is the ninth sign from the vernal equinox, and the undermost
one of the zodiac, corresponding to the ninth or loweest arch of the secret vault, and there on the 21st of December, at his lowest declination, at the winter solstice, he is lost, and. "lies buried in dark. ness," until, reviving, he commences his ascent toward the vernal equinox, and begins by his more potent rays to rebuïld that glorious temple of light and beaute, adorined by flowers and fraits, which the rude assaults of wrinter have destroyed.

Another allegorical correspondence is found in the fact:that the discovery of the word is made, according to the masonic "fegend, b.y "three," rihich agrees perfectly with the number of signs, Aquarius, Pisces, and Aries, and the months, Jainuary, Fubruary, and March, which separate the winter solstice from the ternal equinox, When, according to tre legend of Hiram, the sưn is found, as before explained.
$\because$ The sacred name was engraved on a triangular plate of gold, which, according to astrology, is the solur metal. This triangular plate, according to the Royal Arch legend, was surrounded by a circle. This triangle within a circle would therefore correctly represent the diagram of the Egyptian year, as shown on page 15. But, again, the legend informs us that this itriangular plate of gold was fixed to a srone of agate of the same form. N'ow each month, the ancient astrologers taught, had its appropriate gem :
Jan., the Garnet.
Fel., the Amethyst. • NLureh, the Bloadstone. April, the Diamond. ${ }^{*}$ Fifay, the Emerald. Juixe, the Agate.

> July; the Ruby. Aug., the Sardonyx. Sept., the Sapphire. Oct., the Opal. Nov., the Topaz. Dec:, the Turquoise.

The : a $\rceil$ ate, therèfore, is emblematic of the month of Jone, the summer solstice, and the resurrection and exaltation of the sun. :The whole was placed on a cubical stone, but the cube was sacred to Apollo, who is idettical with Helios, the sun-god: The altar of Apollo at Delos was in the form.of a cube: 'The symbolism_of this legiend is therefore perfect in all of its details-the emblematic correspondence is toc absolute to be accidental: The legend of the lost word is bat another form of the solar allegory of the death and reaurrection of Hiram, and teaches the same lesson.

THE MASCAIC ARK.
The ark was one of the principal features of the Egyptian Mysteries. Speaking of the religious ceremonies of the ancient Egyptians, Wilkinson says: "One of the most important ceremonies; was the ${ }^{-2}$ procession of shrines;' which is mentioned in the Rosetta Stone, and is frequently represented on the walls of the temples. The shrines were of two kinds, the one a sort of canopy, the other an ark, or sacred boat, which may be termed the great shrine. This wäs carried with great pomp by the priests; a certain number being selected for that duty, who supported it on their. shoulders by means of long staves passing through metal rings at the side of the sledge on which it stood, brought it into the temple, where it pias placed on 2 stard or table, in order that the pres scribed ceremonies might be performed before it. The same is said to have heen the custom of the Jews in some of their religions processions, as in carrying the arix 'to its place, in the ciracle of the house, to the most holy place,' when the temple was built by Solonon:" (1 Kings viif. See "Ancient Egyptians," vol. i, page 267.) Wilkinson also says in his notes to "Herodotus," "The same mode of carrying the arls wás adopted by the Jews (Joshua iii, 12 ;:1 Cbron. xv, 2, 15 ; 2 Sam. IV, 24; 1 Esdras $\mathrm{i}, 4$ ), and the gods of Babyion as well as of Egrpt were borne and 'set in their place' in a síviilar msịner (Is. z:lvi, 7 ; Baruch iv, 4-26). Some of the sacred boats, or arks, contained the emblems of life and ptability, which, When the veil was drawn aside, were partly seen. and others contained the figure of the divine spirit Nef, cr Now, and some presented the sacrith beetle of the sun, overshadowed by the wings of the itwo figares of the goddess of Themi, or Truth, which calls to mind the cherubim of the Jews." ("Ancient Egyptians," rol. i, page 270 ; also, nute to Rawlinson's "Herndotưs," Book II, Chapteas LVIII. LIX.)

The feliowing drawing is taken from Wilkinson's book, and represents the Egyptian arik, 所ith the "sacred beetie" overshadowed by the wings of the doable goddess of Trath, copied from the walls of an ancient Egyptian temple.

The principal difference between the Jewish
and Egyptian arks is that the Egyptian was more like.a "boat" in shape ${ }_{x}$, according to our ideas of a boat, while the Jewish ark is described as being

of an oblong-square form ; this, however, it may be observed, was the exact form of Noal's "ark" as described by the Jewish historian in Gen. vi, 14-16. .The idea of a boat is therefore characteristic of both of these ancient.emblems, as, indeed, the very name " ark" denotes.


The above is another view of the Egyptian ark of Osiris, taken from Kitto's " Cyclopsedia of Biblical Literature." The, hieroglyphics on the side of the ark are the emblems of dominion, stability, and life everlasting, arranged by $3 \times 3$.
. This mifsterious ark, or chest, which figured in the Mysteries of Egypt, much more nearly resembled the, Jewish ark in form. After Typhon had slain Osiris, "he inclosed him in a
cheat and cast him into the sea, thus plunging all heaven in grief and sadness. Isis, when she learned the melancholy news, refused all consolotion, despoiled herself of her ornamenta, cut off her treases, robed herself in the habiliments of mourning, and wandered forth through the world. Disconsolate and sorrowful, she traveled into all conntries, seeking the mysterious chest which contained the body of the lost Osiris. . In the mean while, the chest was drawn ashore at Byblos, and thrown into the center of a bush, which, having grown up into a beautiful tree, had entirely inclosed it. At length, however, the tree was cut down by a king of that country, and used by him in the construction of a new palace. But Isis finally learned the singular fate of the chest, and her persevering- love was rewarded by the possession of it." (" Philosophical History of Secret Socisties," by Rev. Augustus C. Arnold.)

The plant which thus indirectly led to the discovery of the mutilated body of Osiris was held sacred by the Egyptians. The whole story of the death of Osiris and the finding of his body is admitted to be an astronomical ailegory of the death of the san-god, slain by Typhon when the san was in Sicorpio, which was at that time on the autumnal equinox. Plutarch informs us that "when the sun was.in Scorpio, in the month of Athyr, the Egyptians inclosed the body of their god Osiris in an ark, or chest, and during this ceremony a great annual festival was celebrated. Three days after the priests had inclosed Osiris in tive arl, they pretended to have found him again. The death of Osiris was lamented by them when the sun, in Scorpio, descended to the lower hemisphere; and, when he arose at the vernal equinox, then Osiris was said to be born anew."

The use made of the ark, or sacred chest, in certain masonic degrees, derives no bce of its particulars from anything narrated in the Bible; on the contrary, it bears so striking an analogy to the ark of the Egyptian Mysteries as to at noce disclose the criginal from which it wascopied. The masonic aric, like that of the Egyptian Mysteries, is lost or hidden, and after a difficult search at last found. The masonic ark, it is true, does not, like the Egyptian one, contain
the body of the slain sun-god Osiris. It does, however, contain something aymbolically representing the true God, and also certain matters which, it is claimed, lead to a superior knowledge of him. The analogy is therefore perfect, and the astronomical allegory is strictly preserved.
Q. What is the meaning of the emblem of the kes?
A. This is a very ancient emblem, and formerly alluded to the initianon into the Mystories, whick at once unlocked to the aspirant all the hidden secreta of religion, and furnished him with a key to those allegories and tales under which the sublime facts of astronomy and other sciences were concealed from the profane. In Freemasonry it is, more properly, an emblem of the first degree, which, in like manner, furuishes the candidate with a key, and opers the door to the "hidden mysteries of Freemasonry." It has, however, been diverted to the Royal Arch degree, and invested with a different meaning.


IRON xis. (From Thebes.)
The preceding is a picture of an ancient Egyptian key, from Thebes, and will gire a correct idea of the ancient emblem appertaining to the Mysteries.

THE LION, THE EAGLD, TEE OK, $\triangle N D$ TEB MCNN.
Q. What is the astronomical allusion of these four ancient emblems, and why are they thus associated together?
A. They refer to the four great angles of the heavens, where the equinoctial and solstitial points are situated, and the signs at these points are, according to ancient astrology, called "fired signs." Each sign was, morenver, raled by three geds, called Decans, tile first of which in each sign was called "the powerful leader of three" The most important and powerful of these thirtysix celential gods were the four Decang, who ruled the four angles of the heavans, and the stability and perpetaity of the universe ware sap-
posed to be insured by them. They were also called Elohion, and the two who had their seat on the equator were believed to compel the sun to shine twelve hours over all the earth, as well as to repel him, so that he moved on to the next sign of the zodiac in progressive order. The no less powerful Flohim, or Decans, who ruled the solstitial points, caused the sun to turn back at the tropics, and preserved the order of nature and of the seasons.

In all ancient astrological projections of the heavens, the four great angles of the zodiac, rehere these celestial gods were seated, were marked by the figures of the lion, the eagle, the ox, and the mau-the constellation Leo being anciently at the summer solstice; Aquarius, depicted as a man pouring water from a jar, at the winter solstice; and Taurus, the Ox, or Bull, at the vernal equinox; while the other angle, or autumnal equinox, was marked by a flying eagle. The quadrants of the celestial sphere were also anciently occupied by the forr bright stars Aldebaran, Regulus, Antcres, and Fomalhaut. These were called "royal stars," and in them the four great Elohim were beliered to dwell. To them divine honors were paid and sacred images erected, in which the lion, the eagle, the ox, and the man were variously combined. 'These emblems were worshiped by all the ancient nations. The priests and the initiated knew them to be nothing more tban astronomical allegories, emblematic representations of the zodiac, but the superstitious people adored them as real gods. The Jews obtained these four emblems from Egypt. Moses, bowever, forbade their worship, and taught the Israelites to use them to denote the points of the compass and the divisions of their camp, by means of banners on which they were pictured (Numb. ii). These celebrated emblems are therefore of a parely astronomical and zodiacal origin, and, when properly understood (as they were by the initiated), teach many of the most important facts of astronomical science.

## TIE ROTAL ARCE BANTER.

Q. What is the meaning and origin of the device on the Royal Arch bannor which is represented below?
A. The center of the device consists of the figures of the lion, eagle, ox, and man, the meaning of which has just been explained. The cross which divides them is a correct representation of the equator, cut at right angles by the great solstitial colure. The grotesque and imaginary creat-
 ures standing on eachside are also astronomical emblems, being compounded of the three figures of the man, the eagle, and the cx-exhibiting the face and body of a man, the wings of the eagle, and the feet of the ox-emblematic of the winter solstice and the antumnal and vernal equinoxes, as before explained. Some are, however, of the opinion that the lower parts of the figures represent the legs of a goat instead of the ox. This would make them refer to Capricornus, the Goat, which now marks the winter solstice, thus clearly denoting the "precession of the equinoxes," in consequence of which the figure of the man (Aquariks) was changed into that of a goat (Capricornus), as the solstitial point left Aquarius and entered Capricornus.

Capricornus is also identical in mythology with Pan, who is represented as a god, with the body of a man and the legs of a goat. Astronomical emblems and figures similar to these compound creatures on the Royal Arch banner were quite common among the sun-worshiping nations of antiquity, and were called spicinaes. The Egrptians, who held the constellation Leo in especial reverence, more frequently combined the human figure with that of a lion, to which they sometimes added the wings of the eagle. These were called andro-sphinacs; others, called criosphinires, had the head of a ram, allnding to the sign.Aries. The winged Greek sphinxes, common on vases, were partly Egyptian and Phanician. The Assyrians more particularly esteemed the constellation Taurro, and therefore generally combined the figure of a bull with the head and face of a man, to which the wings of the eagle were always attached.

In the Assyrian Musenm at the Louvre, M. Botta deposited a slab taken from the palace of Khorsabial, which is ornamented with figures almost identical with those on the Royal Arch binner. They have a human head, the rings of an eagle, and the legs and fect of in ox. The hearls of these Assyrian sphinxes only differ from those of the banner, in being covered by the characteristic Assyrian head-dress, and wearing the long ornamented Assyrian beard. Layard also found. among the ruins of Niturvird, sculptures of monsters with the hearl of a lion, the buily of a man, and the feet of a lird, which is but a different combination of the same figures, expressing- the same astronomical ideas. It is, thercfore, evident that the Royal streh bannor is composed wholly of ancient astronomical cmblems. The mottn, "Holiness to the Lomel," is but. a properer expresision of adoration to the great Cruator of the warry hearens, which are so graphically represented lig the whole device.

## TIE STMBER "SEVI:N."

Q. Why was the umbler serem held in especial reverence lis all the nations of antiquity?
A. The mystic number seven was leeld sacred by our ancient brethren for reasons which had a purely astronomical origin. The reasons for this will lead us to inquire into the origin of the division of time into dajs, weeks, months, and years. We were naturalls inluced to divide our time into periods called days, because the sun makes his apparent diurnal revolution in that time. The Egsptians used to watch for the heliacal rising of the dog-star (Sirins), which, like a faithful guardian, gave notice of the approaching inundation of the Nile, a period of the greatest importance to them, as their harvests depended upon it. By this means a definite period of time was marked off, corresponding to the apparent revolution of the sun in the zodiac. This period was denominated a ycar, a word which, in our language and all northern tongues, Whether "gear," "jaar," "juev," or, as in the Persian, "yare," signifies a circle. In Latin, also, the words annus, a year, and annulus, a circle, are synonymous. Thus the very viord "ycar" alludes directly to the great circle of the zodiac,
and points out the origin of that division of time. This period was further divided by the revolutions of the moon about the earth. These latter subdivisions were naturally called " moons," from which is derived our word "month." Anong the ancient Engptians the hieroglyphic sign for a month is the crencent of the moon. In the liebrew the same imimute comnection betreecn the words monem and month exists as in English. It was aliso still further ubsurved, by these carly students of the sties, that in earh lunar month that planet asomacel in regular oriler, at fixed periuds of seroo ellogs each, four ilistinct phasegthe new moon, the first guarter, the full moon, and the last quarter. The "month" was therefure divided ints four equal parts of seren days cach, ralled ror:Cis.

All , whe divisions of time, whether of days, Wecks, months, or reass, have: therefore an astronomical origiol. and are hut measures of the ebrervel motionss of the moon, for the gear itself was originally lunar, the sedir year having been subsicquently alopite.l on account of its greater accuracy and ernvenience. The monn, among the nations of antiguity, was the whject of undversal aloration. Next to the sun in beauty and xplember the moon leads all the hosts of heaven. It may be that the awful majasty and solemn silence of that starry vault, in the midst of which she is seen, caused her to appeal uure strongly to the inagination of the carly Oriental nations than even the meridian sun itself. It is certain, however, that from anciunt Egrpt to the distant plains of India, or those far-off lands where the Incas ruled, altars were erected to the worship of the moon, and the gorldess adored under a multitude of names, with rites as splendid and awful as those instituted in honor of the sun.

As on every seventh day the moon assumed a new phase, therefore on every seventh day a festival to Lience was celebrated. The number seven was thus sacred because it ras dedicated to the moon. The day set apart for the worship of the moon was known among most northern nations as "moon-day"-whence is derived our name for the second day of the week, Monday. The tirst day of the week being in like manner set apart to the worship of the sun, was called "sun-
day." In fact, each day of the week was set apart to the special worship of some one of the hearenly bodies: Sunday to the sun; Monday to the moon ; Tuesday to Mars; Wednesday to Mercury ; Thursday to Jupiter; Friday to Venus ; and Saturday to Saturn. A strange reminiscence of this fact is found in the modern names of all the days of the week, each of which, like Sunday and Monday, has derived its name from the planet or god to which it was anciently sacred.

Tuesday is derived from the Scandinavian name of ifurs. The name of the day in French is Mecrdi, derived directly from the Latin, and meaning " Mars's day."

Wednesday is from the Scandinavian Mercury, W'orlen; hence Woden's day, or Wednesday. The French name of this clay is Mercredi, from the Latin, meaning "Mercury's day."

Our Thursday is from the Scandinavian Jupiter, Thor ; hence "Thor's day;" and Thnrsday. The German name is Donncrstag, meaning the "'Thunderer's day," in allusion to Jupiter Tonans. The French call it Jcucli, meaning " Jupiter's day."

Friday is named after the Scandinarian Venus, Fricr. The German name is Freitag, with the same derivation and meaning. The French call this day 「"endrecli, which means "Venus's day."

Saturday is derived from the Latin, and means "Saturn's day."

The days of the week may, therefore, be just as well designated by the planetary signs as by their names; thus-

| © | Sunday. |
| :--- | :--- |
| ©. | Monday. |
| $\delta$ | Tuesday. |
| $\%$ | Wednesday. |

$$
\begin{array}{cl}
\text { if } & \text { Thursday. } \\
\text { \& } & \text { Friday. } \\
5 & \text { Saturday. }
\end{array}
$$

It was thus that not only the mysterious changes of the moon and the number of the planets, but also the number and order of their religious festivals, and the• whole system of ancient worship, were inseparably and autronomically connected with the number seven and "the moon, whose phases marked and appointed their holy days." (See Cicero, in the "Tusculan Disprtations," Book I, Chapter XXVIII) It is,
therefore, a matter of no wonder that this number.should have been beld in esperial reverence by all the nations of antiquity, or that their imagination should have clothel it with mysterious and magical virtues. This veneration for the number suven was diffused as widely as the worship of the hearculy hudies. 'The moon was adored in all lands alike, and all her motions, especially ber weekly jhases, obseried with superstitious:reverence. It thus happened that, from similar reasons, the number seven was alike considered sacred by uations who had no intercourse, the idea being a spontaneous growth from common astronomical calises.

> THE WORD " SETEN:"

The meaniug of the reard scven is also indicstive not only of the lunar origin of the division of time into periorls determined by the phases of the moon, but also of the universality and identity of the ideas attacherl to the number itself. The Hlebrew worl schibrl, seren, signifies funcess, or completion. In the Saxon, Pursian, Syrian, Arabic, Phanician, and Chaldean, the word seven has the same signification, and without doubt refers to the mooll, which "fills," os becomes "completc," seven days after the first quarter ; and, in like manner, each of the four phases, or changes, of the moon, becomes "complete" after a period of seven. days. It is easy to see bnw a word signifying " filled," or " completed," should be adopted to mark the time when the moon should reach its "full." Before that time she had been increasing in size and light, but. now she is filled, or completed; and so, by analogy, the same word in time was also uscd to mark each period when the other equally distinct, phases of the moon reached maturity.

## the "figl:re" setex.

Our figures, 1,$2 ; 3,4 ;$ etc., are called the Arsbian numerals, because we derive them from the Arabians, who, it. is thought, received them from India. Their true origin is lost in the dim night of extreme antiquity. It is, however, probable that, like the zodiacal and planctary signs, they were originally hieroglyphs. Now, as each seventh day, when the moon assumes a new phase,
sbe has traversed just one quarter of her orbit, we might naturally expect that the kieroglyphic representing the word "seven" would, in harmony with the ancient meihod of writing, be "a right angle, $90^{\circ}$, or one fourth part of a circle." And so, indeed, we find it to be, with only such slight variation as would necessarily result from a constant use for ages, after its emblenatic meaning was lost, and only its arbitrary.signification was retained. For illustration, let this 7 be the original hieroglyph, denoting a period of a quarter revolution of the moon, $90^{\circ}$, and indicating that the moon has "filled," or "completed," schiba (seven), one of her phases. The change from 7 to 7 is but slight; it is but the natural result of the difficulty of rapidly, and without instruments, making a correct right angle by the union of tro perfectly straight lines, while the lines becoming slightly curved only tended to give the character a more finished and graceful appearance.

## TRIPLE TAU.

This emblem is not adopted in American Freemasonry, but, placed in the center of a triangle and circle, both emblems of the Deity, it constitutes the jewel of the Royal Arch as practiced in England, where it is so highly esteemed as to be called the "emblem of all emblems," and the "grand emblem of Royal Arch Masonry."

The original signification of this emblem has been variously explained. Some suppose it to include the initials of the

thiplis tat. Temple of Jerusalem, T.II. (Templum. Hierosolymce); but, as the tau cross as an emblem is much older than the Temple of Jerusalem, this can not be correct; besides, no other evidence is offered for this solution thar that the letters T. H. stand for the words "Templum Hierosolyma." Wee might just as well conclude that the letters stand for "Thrice Holy," "Hiram Tyrian," or the name of any other thing for which the letters T. H. or H.T. may be the initials. Neither is any proof offered to show that the emblem is really composed of the letters T and H , instead of three tan crosses united. Others say it is a
symbol of the mystical union of the Father and Son, $H$ signifying Jehovah, and $T$, or the cross, the Son. A writer in "Jloore's Magazine" ingeniously supposes it io be a representation of three T -squares, and that it alludes to the three jewels of the theee ancient grand masters. But these solutions are also suggested without any proofs, while the fact that the tau cross as an emblem antedates the Cbristian era, effectually disposes of one of them. It has also been said that it is the monogram of Hiram of Tyre, and otbers assert that it is only a modification of the Hebrew letter shin, which was one of the Jewish abbreviations of the sacred name. Oliver thinks, from its connection with the circle and triangle in the Royal Arch jewel, that it was intended to typify the sacred name as the author of eternal life.

The same objection may be made to these conjectures: no proof is advanced by their authors to support them, while the monuments and hieroglyphics of Egypt show.that the tau cross was in use as an emblem before the era of Hiram. Dr. Mackey says that, among so many conjectures, he need not hesitate to offer one of his own, and remarks as follows: "The prophet Ezekicl speaks of the tau, or tau cross, as the mark distinguishing those who were to be saved, on account of their sorrow for their sins, from those who, as idolaters, were to be slain. It was a mark or sign of favorable distinction, and with this allusion we may, therefore, suppose the triple tau to be used in the Rogal Arch degree as a mark designatirg and separating those who know and worship the true name of God from those who are ignorant of that august mystery."

This is much nearer the truth, but is not, after all, any explanation of either the meaning or origin of the emblem itself. It is only a suggestion of the reason why it may have been adopted by the Royal Arch degree, as being appropriate to its spirit. Dr. Mackey leaves us in the dark why Ezekiel speaks of it as an emblern of life and salvation: "The English Royal Arch Lectures aay that ' by its intersection it forms a given number of angles that may be taken in five several combinations; and, reduced, their amount in right
angles will be found equal to the five Platonic bodies, which represent the four elements and the spbere of the universe.' ".

But this, if true, throws no light on the sabject. The tau cross, as an emblem in various forms, is found on the ancient monuments of Egypt, and in order to discoveer its real meating, and how it came to be used as a symbol, we will have to go back to a period long before the era of King Solomon.
Q. What is the origin and meuning of the triple tau?
A. The triple tau is the ancient symbol of the tau cross, thrce times repeated and joined at a common center. The tau cross is the same in shape as the Greek letter $T$, which is also called tau, and was anciently considered as an emblem of life. It was held to be a sacred mark, and was placed upon the foreheads of those who escaped from shipwreck, battle, or other great peril of life, in token of their deliverance from death. This is why the tau is mentioned in "Ezekiel (ix, 4-6) as the "mark set upon the foreheads of the men" who were to be preserved aliye. The name by which this emblem is known points to its origin, and also the reason why it'was selected as an emblem of life. The word taus is derived from an Egyptian or Coptic root, meaning a bull or cow, and the constellation anciently marking the vernal equinox. This word; with a Latin or Greek termination, is found in both those lan-guages-Taurus (Latin), a bull, and Tauros (Greek), meaning the same. The ancient hieroglyphic sign of the constellation Taurus and the vernal equinox is in this form, $\measuredangle$, as an astrenomical sign, representing the face and horns of a bull. It is now considered established that letters were derived from the ancient bieroglyphs, and, when the phonetic mode of writing was invented; many of those letters retained the name of the object which the original hieroglyphs, or pictures, were intended to represent.

These hieroglyphs, in process of time, assumed a form more and more arbitrary, so much so that, at last, they lost almost all resemblance to the original picture, of which, however, many of them still retained the name. It was thos that the drawing of the face and horns of a bull became
a mere outline, and assumed this form, $y$, as an astronomical sign. Even this did not remain permanent, for, after it came to be used as a letter, it happened, either from carelessness or confenience in writing, that the circle representing the face of the bull became a straight line. The same kind of a change appears, $\mathrm{to}^{\circ}$ have taken place with tine original "picture of Aries, or the head and horns of a ram:; whith, from,the actual picture, became finally like this, $P$, its present form as an asironomical sign. It was in just the sàme way that 8 , Taurus, became changed, as shown by Fig. 3, after it came into use as a letter. The next change was as shown by Fig. $\dot{4}$, and, finally, the semicircle of the horns, like the circle formerly representing the face, became a straight line also, and the character assumed this form, $T$.

These changes may be represented at one view, . as follows:


The first of these is the original hieroglyphic picture of the head and.. horns of a bull; the second is the astronomical sign of Taurus. and, as such, for astronomical purposes has retained that form, probably because so seldom thus ased in comparison to its subsëquent employment 88 a letter; the third shows the transition of the second into the fourth, after it begàn to be used alphabetically, and is one form of the Greek letter tan; the last is the Greek and Roman capital tan, which is identical with the tan cross.

The common name of all these characters, it will be observed, from the first pictorial representation of the head and horns of a bull, and including the sign $T$, is tau, meaning a bull or cow. For the real name is tau, the "us" of the Latin snd the " os" of the Greek being nothing but the usual termination characteristic of those languages. The Phœnician name of the letter T, according to Ran linson, is also tau, meaning, however, "bread" in that langaage. Bat, as bread is the nourisher and "stafi of life," the word is equivalent to the Egyptian "givar of
life." The real meaning and figurative signifcance of the Phœenician word for bread thus becomes at once apparent ; it mas have had a double as well as a figurative meaning. Even in the Egyptian the word has a meaning suggestive of agriculture and the raising of grain, out of which bread is made, for the Coptic word thour meant a bull, and its verb atrior meant to plov.

The constellation Taurus was anciently at the vernal equinox, and was considered by the Egyptians (for reasons before-fully explained) the emblem of a perpetual return to life; the sign Taurus, and consequently the tau cross, thus became the expressive symbol of the vernal equinox and of immortality. The letter, or symbol, together with the mythology connected with it, was adopted by the Greeks, perhaps, indirectly through the Phœenicians, for the Greeks claim to have been taught the letters by Cadmus, a Phonician. The foregoing is probably the origin of the letter tau, and the peculiar significance attached to it.

Rawlinson, in his notes to "Herodotus," Dook V, Chapter LVIII, holds that the Greeks derived their letters direct 5 from the Pbernicians, for the reason that they are quite similar in form, and that their names all have a significance in the Phonician language of the object which they were originally intended to represent; while, on the other hand, their names have no meaning whatever in the Greek tongue. In other words, he argues that the names of the letters are Phoenician, and not Greek, and that, therefore, the Greeks must bave horrowed their letters directly from the Phoenicians. This he shows conclusirely by the table of letters with their names, which he gives. This list of names, however, proves just as conclusively that the Phocnicians themselves did not invent the letters, but simply trans!ated their names into their own language when they hegan to use them. The names, translated into English, are as follows :

| A Bull, | A Paling, | A Prop, |
| :--- | :--- | :--- |
| A Tent, | A Serpent, | An Ere, |
| A Camel, | A Hand, | A Mouth, |
| A Door, | The Hollow of | An Are, |
| A Window, | a Hand, | A Head, and |
| A Hook, | A Prick-atick, | A Tooth, and |
| A Lance, | Water, | Bread. |
|  | A Fish; |  |

A Paling,
A Serpent,
A Hand,
The Hollow of
a Hand,
A Prick-stick,
Water,
A Fish;
A Prop, An Ere, A Mouth, An Are, A. Tooth, and Bread.

The Phœnicians, it is certain, were a maritime nation. They were wholly commercial in their character, and the most renowned people of all antiquity for their naval parsuits. Had they invented the letters, the objects which the letters most certainly would hare represented would have been of a marine and commercial uature. We would expect to find ships, boats, sails, ropes, rudders, anchors, chains, oars, and that class of objects. None of these, however, appear ; on the contrary, tice objents are all pastoral or agricultural in their character, indicative of a people engaged in those pursuits-a people who used the bull to plow with, and whose commercial enterprises were not conducted on the sea by ships. It is another significant and almost conclusive fact tbat each and every une of these "objects," except the camel, are found in profusion among the hieroglyphic pictures of the Egyptians, and were in daily and familiar use in all their written inscriptions, as we find them on their monuments and sculptures even to this day. This is true of no other ancient people, and the conclusion becomes irresistible that the Phennicians, whose ships and traffic brought them in frequent contact with the Egyptians, borrowed of them their letters, or derived them from the hieroglyphics of Egspt. They naturally, and almost of course, translated the names of the various objects and animals represented in the bieroglyphs into their own Phomician tongue. This the Greeks, when they in turn borrowed from the Pbænicians, did not do, probahly because, when the hieroglyphs reached them, they had assumed a more arbitrary form, and one so far removed from the original pictures as to render any sach translation wholly unnecessary, if not impossible. That tiee Phoenicians, a people preëminent for their ingenuity and skill, greatly improved on the Egyptian method, and reduced the hieroglyphs to a more strictly alphabetic and arbitrary form and use, is highly probable, if not cartain; bat that the originals of the letters, togetber with their names, first came from Egypt, is also just as certain. The improvements which the Phenicians made in the art of writing by letters was, no doubt, as much due to the fact that they were free from certain religious restrictions,
which hampered an advance in that direction by the Egfptians, as to their own characteristic ingenuity and national aptitude for scientific pursuits.

It may be urged, as an objection to our derivation of the letter tau, that, in the Phonician and Hebrew alphabets, the letter $A$ is named aleph, meaning a bull. The Greeks, also, called the letter A $\alpha l^{\prime}$ hha, adopting the Phoenician name. But the sound of $A$ is also represented in the Egyptian hieroglyphs by the tau cross. The very fact, therefore, that the Pbœnician letter $\boldsymbol{A}$ was named a bull, shows that the Egyptian tau cross bad a name with a similar meaning, and did represent not only a bull, but specifically the sacred bull called Apis, which, according to the Egyptian system, gave it the sound of the letter $A$, for the use of a hieroglyph-as a letter followed the first sound of the name of the object represented. It also shows that the allusion of tbe tau cross of Egypt was to the vernal equinox, and the constellation of the bull thereon, for which reason it was an emblem of life and a return to life. Apis was the name of the sacred bull, under which emblematic form the Egyptians worsbiped Osiris, the sun-god. In the Chaldaic alphabets it is the letter $\mathbf{T}$ which is said to have been originally represented by a bull. In the alphabet of Cadmus the letter $T$ is a cross, similar to another of the Egyptian signs for.the letter A. Now, if all these alphabets were in fact originally derived from the hieroglyphics of Egypt, this is just that sort of confusion which we would naturally expect to exist respecting the name and form of the letters $T$ and $A$ among the earlier alphabets of other nations, who translated the names into their owr language, and began to use them on the Egyptian system, and according to the initial sounds of those names.

In some of these alphabets the letter $A$, while it loss the form of the cross, retained the name of a bull, as no distinction would naturally be made by other nations between that particular bull named Apis, sacred to the Egyptians only, and a bull generally.

In other alphabets both the name and form might be retained, but the name being translated into another language, the letter might be used
as the symbol of another soand. The Greek Tauros and Latin Taurus have the word tau as a common root, which may have been derived from the Egyptian or Coptic kau, a cow or bull, or athor. The Arabic thourr a bull, is evidently the same as athor, the " $a$ " only being dropped. Such changes as these would cause the hieroglyphic sign of the bull to represent in some languages the sound of $T$ in place of that of $A$.

The specific ancient Egyptian "emblem of eternal life," horrever, does not appear to have been adopted in its complete form -by other na-tions-that is, as a letter. Its form was abbreviated, although its sjimbolical meaning was retained to some extent. The Egyptian symbol of eternal life, in its unabridged form, is as below, and was known in later times as. the "Crue An sata." As will be seen, it is nothing more than the "tau cross" surmounted by a circle, sometimes made somewhat oval in shape. The entire hieroglyphic was probably originally the picture of the bend and horns of a bull, surmounted by the orb of the sun, thus expressing in a still more direct and specific manner the sun in Tanrus.

It was thas they were accustomed to represent Apis. This symbol, from its constant use at first as a sacred emblem, and, tinally, as a letter, or hieroglyphic, would naturally assume more and more of an arbitrary form. The face and horns of the bull would gradually take the shape of a cross, as before described, anol the orb of the sun which surmounter it lose somewhat its perfect circular form. The whole hieroglyph would thus finally assume an arbitrary ${ }^{\circ}$ form, like that bere represented. If
 this conjecture be correct, it fully explains why this peculiar symbol denoted among the Egyptians eternal life-the reason for which, accoraing to both Wilkinson and Kendrick, has as jet remained in obscurity: (See Kendrick's "Ancient Egypt," vol. i, page 254 ; Wilkinson's "Ancient Egyptians," vol. i, page 277.)

This Egyptian emblem was subsequently named the Crace Ansata, or "cross with a haddie," because it was thought the circle was noth-
ing. more than a handle for the purpose of carrying the cross. It is, in fact, often represented as being" so carried on the sculptures, but quite as frequently otherwise. The following cut shows the "sign of life" held by the lower exd, in the hand of the double goddess of Truth apd Justice.

(Wiletinson.)
The idea advanced by some, that it is a key, derives little or no support from thê monuments; besides this, the Egyptian form of a key was entirely different, as is seen from the drawing which accompanies our explanation of the masonic emblem of "the key." "The Crux Ansata was adopted by the early Christians of the East as an appropriate symbol of their faith. The old inscriptions of the CMristians at the Great Oasis are headed by this symbol, and it is also found in some of their monuments at Rome" (Wilkinson). Among the ancients, the cross in this form, + , was also considered a sacred emblem, as it pointed to the four quarters of the heavens, and embraced woth the celestial and terrestrial hemispheres. It was thus a symbol of the universe, and expressive of the perpetual life and endless duration of nature. The Rosicrucians also taught that this form of the cross was the symbol of light, because it contained in its formation the ancient Roman letters LVX, lux, the Latin w.ord for light. Whether this beantiful conceit was invented by them or derived-from ancient sources is. unknown.

The tau cross is, as has been shown, an àncient symbol of Egjpt, denoting salvation•and eternal life. The triple tau, being a combination of the tan cross three times repeated, teaches us that "we have an immortal part within as that shall
survive the grave, and which shall never, never, never die." (Masonic Lecture.)

## THE- ASTRONOMECAT TRIPLR TAU.

Q. Has the triple tau any further astronomical signification?
A. It has-for, when the geometrical principles upon which it is erected are analyzed, it will be found to represent, symbolically, the Royal Arch, together with its three principal points, and many other astronomical particulars. In order to explain this more fully, let us draw out on our "trestle-board" a triple tan. We will first draw the line $A \cdot B_{-}^{\prime}$ (see following diagram), representing the great equinoctial colure; on this describe a semicircle, and erect the Royal Arch (see illustration on page 37). Next distinguish the two equinoctial points by two parallel lines, in the same manner as the solstitial points are marked in the emblem of "a point within a circle" (see page 61). Draw the line $C, D$, representing the solstitial colure, and add the line $K I$, representing the summer solstice and tropic of cancer, in the same manner as shown in the emblem last. referred to. The lines at the extremities of $A B$ are perpendicular to it, and in a properly drawn triple tau the lines $M N, O P$, and $K L$, are all equal to each other, and equal to the radius of the circle which maj be inscribed within them. The radius of any circle is one sixthr of its circumference, and, therefore, is a chord of an arc of $60^{\circ}$. It therefore follows that the line $\bar{K} \mathcal{L}$ is divided by the perpendicular (" $\dot{D}$ into two parts, each of which represents $30^{\circ}$, or one sign of the zodiac. The same is true of the lines $M N$ and
 O.P, each of which is divided by $\dot{A} B$ into parts representing a chord of $30^{\circ}$. The line $O P$ is thus the chord of the twe signs $\varphi$ and $\gamma$, the line $K L$ is the chord of II and,$\sigma$, and the line $M . N$ of $\Omega$ and $\mathbb{N}_{\text {, which }}$ constitutes $180^{\circ}$, and takes us to the first point of Libra ( $\bumpeq$ ); at the antumnal equinox.

The first six signs of the zodiac, reaching from the vernal to the autumnal equinor, and consti-
tating the Royal Arch of heaven, are therefore represented with geometrical precision by the exterior lines of the triple tau, while, at the same

abtronomical triple tad.
time, the line $K L$ represents the summer solstice, and the lines $O P$ and $M N^{N}$ the vernal and autumnal equinoxes. This geometrical analysis of the triple tau reveals the fact that it is a striking symbol of the Royal Arch, the exaltation of the sun therein, and several other astronomical particulars. The preceding is a drawing of what may be termed the, astronomical triple tau.

The three principal points of the zodiacal arch,
to denote the three great masonic columns placed in a triangular form. It was these emblematic pillars that Job alluded to when, speaking of T. G. A. O. T. U., he said, "The pillars of heaven tremble and are astonished at his reproof" (Job xxvi, 11). The three masonic columns of "wisdom, strength, and beanty," must not be confounded with the "pillars of the porch." The latter have a different emblematic meaning, which has been already explained.

## THE QUADRUPLE TAV.

That part of the zodiac embracing the summer solstice, and reaching from the vernal to the autumnal equinox, was considered the most important and sacred by the ancients, because the

sun was therein exalted, and because it embraced the whole of the seasons of spring-time and harvest. It is that part of the zodiac only which is therefore represented in the symbol of the triple tau. If, however, we unite in one emblem the triple tau and that of "a circle embordered by two parallel lines," we will have a correct geometrical representation of the whole zodiac, the four principal points of which will thus also be designated in a similar manner, by which it will be seen that the two emblems are in fact but parts of one complete whole.

The union of these two masonic emblems gives us the deivice which appears between them in the above diagram, which, as will be scen, is another ancient and well-known cmblem, sometimes called the " cross of Jerusalem." It consists of
as explained on page 37, are emblematic of wisdom, strength, and beauty; on these the whole arch of heaven seems to rest. The three parallel perpendicular lines, as they represent those three points, are also emblematic of wisdom, strength, and beauty, and, as a perpendicular line is the geometrical symbol of a pillar, they may be said
the tau cross four times repeated, and joined at a common center, which is really that of the zodiac. The circle about that center is sometimes exhibited in this emblem, but is more frequently left out, as not being required to express its meaning, and adding nothing to its beauty. This emblem would be more properly known under the name
of the quadruple tau. This emblem was brought by the Crusaders from the East, and they, ignorant of its true meaning, adopted it as the symbol of their faith, from its sup- posed resemblance to the Christian cross.

The quadruple tau represents at one view the entire universe. The central lines, one of which is horizontal and the other perpendicular, thus crossing each other at right angles, point to and embrace the foar quarters of the celestial and terrestrial spheres. - The limits of the sun's circuit among the stars, both at the solstitial and equinoctial points, are designated by the lines at the extremities of the central ones, placed at right angles to bar the way. Two of them represent the solstitial points, which is in entire harmony with the emblem of the "circle embordered by two parallel lines," from which they are derived, as explained in our desoription of that emblem on page 61. The other two, taken from the triple tau, represent the vernal and autumnal equinoxes, as has been explained in our remarks on the astronnmical triple tan. The quadruple tau, moreover, being composed entirely of "right angles, horizontals, and perpendiculars," contains within itself all the secret signs of Freemasonry, a fact which I am not permitted to further explain. It will, however, be apparent to every "bright mason," who can soon study them all out for himself.
Q. Are there any remaining masonic emblems which have not been explained?
A. The gavel, the rough and perfect ushlur, the twenty-four-inch gauge, the troicel, the plumbline and level; also, the mallet, clisel, and pickaxe, appertaining to the Roral Arch degree, have not been astronomically explained, because all of them are nothing more than the mechanical tools of those operative masons and architects who (as will be subsequently explained), after the Mysteries ceased to be celebrated, assumed entire control of our Order, and which they ingrafted into the ancient ritual at a comparatively recent date, as emblems of their art. Had they at that time invented the whole ritual, originated the entire
matter, no other emblems bat those of a like exclusive mechanical import would have been adopted. Those other sublime astronomical allegories and pure scientific symbols, with the elevated philosophy they teach, would never have been found in Freemasonry. We are indebted to Preston, Webb, and Cross for a fine moral application of the gavel, twenty-four-inch gange, etc. They require no further explanation.

With the exception of these, all the other ancient emblems have been found to have an astronomical origin and meaning. It is also a strong confirmation that no contradiction exists among them when thus explained. The separate astronomical explanation of each one of them is in perfect harmony, not only with all the others, but also with the main central allegory of the annual passage of the sun among the stars of the zodiac, his death during the winter months, his return to life at the vernal equinor, and his exaltation at the summer solstice.
the Tords "mystery" and "nesontr."
Q. Is there any connection between the words "mystery" and "masonry"?
A. If, in fact, the masonic institution, as Mackey and Oliver both admit, was descended from the ancient "Mysteries," there should be some close connection between the words "mystery" and " masonry," eren if the latter is not directly derived from the former. The word "mystery," which originally had an exclusive meaning, came in process of time to have three different meanings, all derived from the original one :

1. It was the name of the sacred drama which, as we have seen, constituted the ceremony of initiation into the secret religious associations of the ancients, which were so named from the fact that the "aspirant" for initiation was blindfolded. The word "mystery" is derived from the Latin
 from $\mu v e i v$, to shut the eyes.
2. In the middle ages it came to be applied to a different sort of "sacred drama," founded on the legends of the Christian religion. These "Mysteries," or religious dramas, were, however, performed in public, and had no alement of 20 crecy about them.
3. Another use of the word "mystery" arose from the fact that all scientific knowledge was formerly concealed in the ancient Mysteries, and commanicated only to the initiated. Great skill, therefore, in any art which required scientific knowledge, anciently implied -ivitiation into the Mysteries. Hence, in process of time, and even after the Mysteries themselves were suppressed, the word " mystery " was applied to any art which required scientific knowledge in addition to manual dexterity. The art of architecture is one which requires not only a proficiency in geometry, but several other sciences. In more ancient times, owing to the peculiar position and construction of temples, considerable knowledge of astronomy, even, was required by the architect. This art was therefore preexminently above all others denominated a "mystery," and the words "mystery" and "masonry"-i. e., architecture-became aynonymous in meaning. . Architecture was thus probably the first one of the arts called a "mystery" ; this name, however, at length came to be applied to all the arts without distinction, including even those wholly mechanical.

There can be no doubt that all the early architects, at least, like the Tyrian artists who directed the work at the building of King Solomon's temple, derived the scientific knowledge required for their profession from having been initiated into the Mysteries of Dionysus. The word "masonry" has been thought to be derived from several different roots, by different writers, but it is not so far removed either in form or meaning from the word "mrstery" but that it might not have been derived either directly, or indirectly from it. In fact, IHutchinson, in his "Spirit of Masonry," advances the idea that the word is derived from a corruption of the Latin mysterium, but fails to give any satisfactory reason for his opinion. The foregoing considerations, however, tend to show that his conjecture is not without some. support. The derivation of the word "mason" from the French "macgon," a house, will only take us back to the Mysteries by another path, for the word "mason" is derived from the Latin maceria, a wall or inclosure, which carries with it the idea of secrecy, and the exclusion of all who have not 8 right to enter. Thus, all those who were not
initiated into the Mysteries were called the pro-fano-i. e., pro-fano, those without the templeand who had no right to enter at all times. The words "temple" and "house" were also anciently synonymous. (See 1 Kings vi, 7-9 ; also, 2 Chron. iii.) Brother J. H. Little, formerly G. H. P. of Virginia, derives the word "Freemasonry" directly from the Egypto-Coptic, and nges the following langaage on the subject :
"Great mistake has arisen from the very name we bear, and many do not understand what we are, or what our name itself means, Masons are not free, in the sense in which this word is sometimes used; they are positively bound by absolate laws, they are the slaves of truth and their word-unqualified obedience is their duty. The profane are free, the mason is not. The origin of our name shows this. Our title is 'Freemsson,' and this is not an English word, nor is our Order of English origin. The name is not of any of the languages of modern Earope, nor is it found in the classic tongues of Greece and Rome; nor is it a part of the languages of Syria, Tyre, or Chaldea, nor is it Hebrew. More ancient than all, it comes from a nation that had organization, architecture, and literature, before Abraham first beheld the stars glitter above the plains of Shinar. It is from the language of ancient Egypt ; that wonderful land where all antediluvian science and art was preserved and extended, where a system of priestly and kingly government was carried out which has been the wonder of the world; that land where mer of science, organized into 3 close and secret organization, ruled; where they created a mystic language, and where they erected those mighty works of architectural skill whose undestroyed firmness still amazes the worldamong these ancient sages the sun was an ohject of veneration, as the visible pomer of life and light. In their language it was called Phre, and in the same language mas means-a child. Hence, being born of light, that is, knowledge of every kind, physical, moral, and intellectual, they called themselves Phre-masscn-Cbildren of the Sun, or Sons of Light. They inculcated and practiced purity and perfection- of the body, control of all the pascions, or moral purity, and devoted themselves to the intense study of all intellectual
acquirements. Now, this is Freemasonry-we are true Sons of.Light." (St. Louis "Freemason's Monthly," January, 1872.)
Q. How came operative architects, or masons, to be the last cusitodians of the secretg of the ancient Mysteries?
A. It has.no doubt been a puzzie to more than one, why the architects and temple'builders of antiquity should have been so intimatel'y connected with the Mysteries, and thus have been 'in a: position to hand down their essential segrets and philosophical teachings, from generation to generation, to those skilled workmen who came after them. In other words, how was it that the oper. ative masons, or architects, leècame special guardians, and their guilds, or associations, the depositories of these philosophical mysteries? If a good and sufficient answer to this question can be found, one great stumbling-block and source of skepticism will be removed. This question we think we can answer. The ancient Mysteries, as is well known, were celebrated in the bidden recesses of the temples. In order to present the grand and impressive drams of initiation, many secret chambers, doors, and labyrinthian passages had to be constructed within the interior ; also, much ingenious mechanism, by which wonderful and sublime spectacular effects were produced. It was, therefore, a matter of necessity that the building of a temple (except the bare outside walls) should be intrusted only to those who bad been duly initiated. Any "tattling mechanic". might otherwise disclose the"whole secrè. Such operative architects and artists, therefore, who were known and distinguished as the most cunning worl̀men, were initiated in all branches of the Mysteries, becauge their services were imperatively necessary.

Among the buildings uncovered at Pumpeii is a temple of Isis, which is a telltale of the Mysteries of the Egyptian deity, for the secret stairs which conducted the priests unseen to an opening back of the statue of the goddess, through whose marble lips pretended oracles were given and warnings uttered, now lies open to the day, and reveals the whole imposition. ("A Day in Pompeii," "Harper's Magaine," vol. ii.) "When the asges of India conducted Apollonius to the temple
of their god, singing hymns and forming a sacred march, the earth, which they struck with their staves in cadecice, was agitated like a boisterous sea, and raised up nearly two feet, then calmed itself and resumed its usual level. The act of striking with their sticks betrays the necessity of warning workmen, wha were placed beneath, to raise a moving stage covered with earth-an operation plainly effected by the aid of mechanism, very easy to be comprehended. 'It is probable a similar secret existed in other temples. English travelers who visited the remiains of the temple of Ceres, at Eleusis, observed that the pavement of the sanctuary is rough and unpolished, and much lower than that of the adjacent portico. It is therefore probable that a wooden floor on a level with the portico covered the present floor, and concealed a vanlt designed to admit of the action of machinery beneath the sanctuary for moving the floor. In the soil of an interior vestibule they observed two deeply indented grooves, or ruts, and as no carriage could possibly be drawn into this place, the travelers conjectured that these were grooves to receive the pulleys which served in the Mysteries to raise a heary body-'perhaps,' said they, 's moving floor.' In confirmation of this opinion, they perceived further on other grooves which might bave served for the counterbalances to raise the floor; and they also detected places for wedges, to fix it immovable at the desired height. These were eight holes fixed in blocks of marble, and raised above the floor, four on the right and four on the left, adapted to receive pegs of large dimensions."
-We are also informed that, in order to descend into the care of Trophonius, those who came to consult the oracle placed themselves before an aperture apparently too narrow to admit a mid-dle-sized man; yet, as soon as the knees had entered it, the whole body was rapidly drawn in by some invisible power. The mechanism used for this purpose was connected with other machinery, which at the same time enlarged the entrance to the grotto. The person who went to consult this oracle was obliged to make certain sacrifices, to bathe in certain rivers, and to anoint his body with oil. He was then clothod in a linen robe, and, with a cake of honey in his
hand, he descended into the grotto in the manner before described. What passed there was never revealed, but the person on his return generally looked pale and dejected. The individual-whose name this cave bore was an architect of great skill, and, in conjunction with his brother, Agse: mides, was the architect of the temple of Apollo; at Delphi ; and they were, of course; the designers and constructors of all the mechanical secrets of that temple, no doubt far more ingenious and terrifying in their nature than those of the oracular cave just described. The Mysteries being also celebrated in the temple, the demand for secrecy was imperative, and the priesta, fearing that the initistion of Trophonins and Agamides would not insure their silence, resorted to assassination. The brothers were desired by the god, through the priests, to be cheerful, and to wait eight days for their reward; at the end of which period they were found dead in their bede-the result of poison, or some other secret means of murder. (See Salverti's "Philosophy of Magic," vol. i, Chapter XI.)

Instances might be multiplied of the secrets involved in the construction of ancient temples, which made it a matter of necessity that the architects should be initiated, if allowed to live. But enough has been advancéd to make it plain that the initiation of operative architects was a matter of absolute necessity. When the Mysteries were discontinued, after the advent of Christianity as the state religion of the Roman Empire, it was no longer necessary for the tem-ple-builders to belong to any such organization, but by that time operative architects had found that the bond of union which the initiation into the Mysteries had established among them was useful and profitable. It enabled them to keep the higher secrets of their art among themselves, thus giving them a monopoly of the whole business of temple:building. They were thus also enabled to assume an, independence and consequence, upon which followed the favor of princes and those high in authority, who desired their services to erect a palace or build a cathedral. The operative architects, therefore, kept up their secret organization, and thas preserved the occult tie which originally united them in the.Mysteries,
of whose legends, signs, and emblems they became the last custodians, sfter the Mysteries themselves had fallen into disuse, and ceased to be celebrated either at Athens or Bome. Thus originated those mysterious "trayeling Freemasons" of the middle ages, who left so many "massive monuments of their skill." as early as the ninth and tenth centuries. .Thns, also, originated those famous guilds of operative masons of the fifteenth, sixteenth, and seventeenth centuries. No other hypothesis will satiefactorily account for the strainge character and mysterious nature of those secret associations of operative architects.

Although the Mysteries themselves are traced back historically to the days of ancient Egypt, yet there is no chronological impossibility, or even improbability, of their connection with the societies above mentioned, for they were cele-- brated in some form as late as the eighth and perhaps twelfth century, while the traveling Freemasons are traced back to the eighth or tenth century. Notwithstanding the celebration of the Mysteries was prohibited by the Christian emperors succeeding Coirstantine, as beung connected with the pagan worship, yet many of their rites continued to be observed under assumed names, and the pretense of convivial meetings, for a long time afterward (Gibbon, Chapter XXVIII). Maximus, Bishop of Turin, writes in the middle of the fifth century against the ancient worship, and speaks of it as if existing in full force in the neighborbood of his city. The Elensinian Myंteries at Athens, indeed, seem to have enjoyed a special exemption, for Gibbon informs us that the Emperor " Valentinian immediately admitted the petition of Pretextatus, proconsul of Achaia, who represented that the life of the Greeks would become dreary and comfortless if they were deprived of the invaluable blessing of the Elensinian Mysteries." This petition was, no doubt, accompanied with an assurance that the secret doctrines tanght in the Mysteries, being those of the unity and epiritual nature of God, and the immortality of the soul, were not inconsistent, bat rather in harmony, with the Christian religion, which would account for the petition being so promptly granted. The Mysteries -at Athens, in consequence,
although suspended, do not seem to have ever been totally suppressed, but continued to be celebrated in some form as late as the eighth century. It is also certain that the Mysteries, under various forme, continued to be celebrated in Britain and on the Continent as late as the tenth century. Dr. Oliver says, in his "History of Initiation," "We are assured, on undoubted authority, namely, from the bardic writings of that period, that they were celebrated in Wales and Scotland down to the twelfth century of Christianity."

This brings us down to an era when it is admitted on all hands that the traveling Freemasons existed, by whom, some claim, our frateraity was invented. It is not, however, claimed that the Mysteries in their parity or original splendor existed at so late a period. No doubt they had become corrupt, and many of their secrets been lost. No doabt they had become obscure, but still they existed, impressed with their original character. The connection is therefore close be$t$ ween them and the mysterious secret rites and ceremonies of thosesocieties of operative masons and architects above mentioned. When, in process of time, the celebration of the ancient Mysteries in a modified form was confined to these associations of operative architects, for the reasons before given, then it was that the term Freemason began to be descriptive of the initiated. This would more rationally account for the present name of our fraternity than the ingenious derivation of the words "frec-mason" from the Egyptian roots, Phre-massen (Children of Light), as advanced by Brother J. H. Little.

Salverti, in his "Pbilosophy of Magic," is of the opinion that the occult sciences, possessed by the secret societies of the middle ages in. Europe, were derived from the learning taught in the Mysteries. .He says: "It is certain that, in that age of ignorance, learned men have conveyed the charge of their knowledge to secret societies, which bave existed almost in our day. One of the brightest geniuses who shed - honor upon Europe and the human race, Leibnitz, penetrated into one of these societies at Naremberg, and, from the arowal of his panegyrist" (Fontenelle, "Eloge de Leibnitz"), "obtained there instructions which, perhapg, he might have sought for
in vain elsewhere. Were these mysterious reunions the remains of the ancient initiations? Everything conduces to the belief that they were, not only the ordeal and the examination, to which it was necessary to submit before obtaining an entrance to them, but, above all, the nature of the secrets they possessed, and the means they appear to have employed to preserve them." (See "Philosophy of Magic," vol. i, Chapter XI)

But if, as Salverti learnedly argues, the scientific secrets of the Mysteries were thus transmitted to the secret societies of the middle ages, we may be certain that not only the form of initiation in substance, but also many of the.legends or scientific allegories, as well as the symbols and emblems connected therewith, were also handed down in a like manner, and the same may probably be said of many of the signs and modes of recognition. In this connection it is worthy of remark that none of the pass-words of Freemasonry are either English, German, or French, nor indeed of any modern spoken language. Had Freemasonry been invented, or fabricated, either in Germany, England, or France, such would not have been the case. We might as well expect to find the arnies of France, Germany, England, or America, using Coptic, Chaldean, and Hebrew countersigns, as the Freemasons do, had our fraternity originated in eitber England, France, or Germany.
the antiquity of hasomby.
Q. What is the probable antiquity of masonry?
A. There can be but little doubt that the Mysteries, from which, as we have seen, Freemasonry is the direct descendant, were first arranged when Taurus was on the vernal equinox, Leo at the summer solstice, and Scorpio at the autumnal equinox. The solar allegory, as handed down to us, shows this to be the fact. As the rate of the precession of the equinores is known, we can calculate when the vernal equinox was in Taurus. Such a calculation will take us back about four thousand two hundred and eighty. years. The antiquity of masoing is thus writfen on the face of the starry heavene-a record which atters no falsehoods.

TREEMCAONRY NOT BUN-TORSHIP.
Q. Is it to be understood, from the foregoing pages, that Freemasonry is nothing more than a fragment of an idolatrous form of sun-worship?
A. Such is far from being the case, nor has anything been advanced in the foregoing pages which, unless wholly misunderstood, gives any countenance to such an idea. In the introductory chapter it was fully shown that the Mysteries themselves, in their primitive and ancorrupted form, taught the unity of God and the immortality of man as their cardinal doctrines, and that the sun was but 2 syinbol of him whom "the sun, moon, and stars obcy, and beneath whose all-seeing eye even comets perform their stupendous revolutions" (Masonic Lecture).

Though in all parts of our ritual, from the threshold to the altar, and from the altar to the penetralia (as in the ancient Mysteries, from which Freemasonry has descended), the profoundest truths of science and true religion are tanght and illustrated by astronomical allegories, yet nowhere do we find, even in its most ancient portions, any prayers, invocations, or adoration, addressed to the heavenly bodies themsclves. The sun and the hosts of beaven are only used as emblems of the Deity-a sacred symbolism, with which the Bible itself ahounds.

In more ancient times, when false and idolatrous forms of religion ruled all the civilized nations, masonry protected the worshipers of the true God. This was not only true in Rome and in Greece, where Socrates and Pythagoras fell martyrs to truth, but also in Palestine. When we call to mind the long succession of Hebrew kings "who did evil in the sight of the Lord," and sacrificed to Baal "upon the high places and in the grove," a crime of which even Solomon was guilty in his old age, we can easily see that, except at certain favorable epochs, it was not safe, "no, not even in Judea," to deny the actual divinity of the sun, moon, and stars. The Jews stoned the prophets just as the Greeks persecuted the philosophers. The great debt that not only religion but science owes to masonry can bardly be eatimated.

In its ritual, as we have seen, most of the
truths of astronomy and geometry are illustrated and- perpetuated. And it would be no stretch of the imagination to say that, if all, whether of books or manuscripts, were swept out of existence, the ritual of our Order, as orally communicated, would alone be sufficient to transmit to future generations a knowledge of the true Göd and a correct code of morals, as well as the leading principles of science, whereon to build anew the great temple of knowledge.

## II.

## COACLESSION.

This work might with ' perfect propriety have been named "A Defense of Freemasonry" -

1. Against the assaults of those who stigmatize all its claims to a remote origin as delasive and false. This class of objectors assert that the Order is of no great antiquity, having originated late in the middle ages, in a union of operative stone-masons, builders, and carpenters, who thus sought to keep secret the practical arts of their craft, and also by a coüperative combination to be able to control. the business of arehitectare, and fix the rate of wages for skilled workmen, on the aame principles of the "trades-unions" of the present day. Such organizations, without doubt, did exist, but they could never have originated the profound, beautiful, and scientific astronomical allegory of the masonic legend. This has already been made evident to the reader, without argament.
2. Against the absurd.claims of a class of overenthusiastic masonic writers, who, going to the opposite extreme, affirm that missonry originated in the garden of Eden, by inspiration of God; that.Adam was the first Grand Master, be being succeeded by Enoch, Shem, Ham, and Japheth, Abrabam, Moses, Solomon, and so on down to General Warren, who fell at.the battle of Bunker's Hill! These well-meaning enthusiasta, provoked by a lively imagination, see masonry in everything, and claim that every structure ever built, from the Tower of Babel and the pyramids to King Solomon's temple, the Colosseum at

Rome and St. Paul's Church in London, were built by the self-same Order which now assembles in its lodges in Europe and America, Asia and Africa, uader the name of Freemasons. These absuzd claims only serve to bring masonry into ridicule, and cause judicious persons to laugh at our supposed credulity, thus doing the fraternity more real harm than the former class, who really accord ue a very respectable age of eight or ten centuries.

One great stumbling-block in the way of rational investigation is caused by extravagant expectations, and an unphilosophical demand for a too exact correspondence between alleged ancient masonic organizations, and the emblems relating to them, with modern masonic bodies, their degrees, emblems, verbal rituals,' and the modern version of our ancient legends. itany worthy brothers, among whom are some of much learning, seem to entertain the idea that unless. we go to the full extent of demonstrating that the ancient Mysteries were identical in all-respects with modern masonry, including not only our present ritual and lodge-work, but also the division and order of the degrees, that our arguments amount to nothing, and afford no proof of the antiquitr of our fraternity.

Nothing less, I fear, would convince this class of investigators than the discovery of the whole ritual and catechism, beginning at "From whence came you?" ctc.-as authorized by the Grand Lodge of their State-sculptured in hieroglyphics, or written in Coptic on 2 roll of papgrus from an Egyptian tomb. Certainly all such expectations are unreasonable and unphilosophical. Rest assured we will never find any proof that lorlges cxactly like ours, presided over by a Worshipful Master and Wardens, and conferring the Entered Apprentice Felloo-craft, and Master's degree, existed in ancient Egypt. Frcemasonry, like the Cbristian system of theology and mode of worship, has undergone mauy modifications since the day of its advent; yet, like Christianity, it has preserved its identity, as well as all of its vital principles and most exalted features.in all ages. Although in masonry there has been no "apostolic succession," beginning with the Grand Mierophant of the Osirian Mysteries and ending with
the present highly respected Grand Master of New York, yet the identity of our Order cau be traced from a remote antiquity just as satisfactorily as the identity of the Christian religion can be traced from our Protestant churches (who deny all "apostolic succession") on beyond the Reformation, and through the.Catholic Church, with, in earlier times, its half-pagan rites, back to the plains of Judea and the advent of Christ. Nor does the vast difference which such a view of Christianity discloses, in doctrine, practice, ritual, and mode of worship at different eras in the past, or at present in different lands and among different sects, at all obscure the real identity, of the Christian system in all ages since its promulgation. In like mānner the antiquity of our fraternity and its identity are establishednot so much by any such close correspondence of our present ritual and emblems with those of ancient times (as some.jnvestigators illogically look for), as from other considerations. It is quite enough if we are able to discover in ancient times, when polytheism was the dominant state religion in all nations, societies possessed of similar organizations, and, like Freemasonry, teaching the two great doctrines of the unity of God, as $\mathrm{Ons}^{2}$ Eterval Spiritucul Being, and the immortality of the soul of man-societies like masonry, secret in their nature, and possessed of icords, signs, and other occult modes of recognition, also of similar but not identical form of initiation, the ceremonies of which were founded upon a similar legend, allegory, or myth, the same in substance, and only differing as io the name, era, and nationality of its hero-societies which taught the same truths by similar and in many cases the very same emblems, signs, and symbols. These things certainly demonstrate the identity of modern Freemasonry with those ancient organizations, just as conclusively as the identity of modern Christianity, as a system of religion, with that of the first century or any intermediate time, is established by a like train of reasoning and correspondences. If, on the contrary, we confine our attention to the present condition of Freemasonry, as disclosed in the various degrees and "rites" into which it has divided itself, just as Christianity has split into Catholics and Protestants, and the
latter again into numerous secta-if we regard nothing but the verbal form of our ritual-it is easy to show that masonry is not of any very great antiquity. The date and even the authorship of some parts of our verbal ritual can be and have been traced, but neither the Cbevalier Ramsey nor jet those who met at the famous "Appletree Tavern," in 1717, were the founders and inventors of Freemasonry, any more than Luther and Wesley were the authors of the Cbristian religion.

If we view masonry from a rational standpoint, and contemplate its mystic legends and allegories in their substance, without regard to the modern language in which they are now clothed; if we investigate the meaning of its ceremonies, without regard to the specific words now used in comducting them; if we study the signs, symbols, and emblems, disregarding the erroneous modern explanation given to. many of them-the great antiquity of masonry is at once apparent. It is now admitted on all sides that all the ancient Mysteries werc identical, and had a common origin from those of Egypt, à conclusion which has been reached by the same method of reasoning and comparison. The legend of Osiris is the parent stock from which all the others came, but in Greece and Asia Minor the name of Osiris disappeared, and those of Dionysus and Bacchus were substituted, while in the Hebrew-Tyrian temple legend the name of Hiram is found.' The claim, however, that the legend of Hiram is an actual history, descriptive of events which really took place about the time of the building of King Solomon's temple, must be abandoned by the few who still blindly cling to it.

Masonry can no longer hope to stand without criticism in this age of inquiry. There is a apirit abroad which does not hesitate to catch Antiquity by its gray beard, stare into its wrinkled face, and demand upon what authority, of right reason, or authentic history, it founds its pretensions. The masonic tradition can not hope to escape examination in its turn ; and, when it is examined, it will not stand the test as claiming to be historically true. If, then, we have no explanation to offer, it must be discarded, and take its place among many other exploded legends of the past. By showing, however, that it is not intonded as
an actual history, but is really a sublime allegory of great antiquity, teaching the profoundest truths of astronomy, and inculcating, by an ancient oystem of types, symbols, and emblems, an exalted code of morals, we at once reply to and disarm all that kind of criticism. The masonic Order is thus placed on a loftier plane, and assumes a position which challenges the respect and admiration of both the learned and virtuous; the learned, because they will thus be enabled to recogaize it as the depository of an ancient system of scientific knowledge; the virtucus, because the Order also stands revealed to them as baving been in past ages the preserver of true worship, and the teacher of morality and brotherly love. It has been the boast of masonry that its ritual contained great scientific as well as moral truths. While this was plainly the fact as to the moral teachings of our Order, to a large number of our most intelligent brothers the key which alone could unlock the masonic treasury of scientific trath appeared to have been lost. We believe that key is at length restored; for, if the masonic traditions and legends, with the ritual illustrating them, are regarded as astronomical allegories, the light of scientific truth is at once seen to illuminate and permeate evcry part. If the explanation given in the foregoing pages is correct, any person who fully naderstands the meaning and intention of the legends and ceremonies, symbols and emblems of our Order, is necessarily well informed as to the sciences of astronomy and geometry, which form the foundation of all the others.

And why is not the explanation correct? Have you ever considered the "calculus of probabilities," as applied to a subject like this? That masonry should contain a single allusion to the sun, might happen, and imply nothing. The same might be said if it contained but three or four ; but when we find that the naine of the Order, the form, dimensions, lighta, ornaments, and furniture of its lodges, and all the emblems, symbols, ceremonies, words, and signs, without exception, allude to the annaal circuit of the sun一that astronomical ideas and colar symbols are interwoven into the very texture of the whole institution, and, what is still more significant, that there is such a harmony of relation existing
between all these astronomical allusions as to render the whole ritual capable of a perfect and natural interpretation as an astronomical allegory, which is also one and complete-the prohability that. it was originally so intended is overwhelming, and amounts to a positive demonstration. There are millions of probabilities to one against the theory of the allegory being accidental and not designed.

Can any reasonable mind suppose that, when Bunyan wrote his "Pilgrim's Progress," the story was an allegory of the trials and triamphs of a Christian life by an accident only, and that the author of it never intended or designed the allegory at allp Yet the astronomical allegory of the masonic legend pervades all parts of it, and is just as complete and perfect when examined as the allegory of the travels, combats, adrentures, and temptations of the hero of "Pilgrim's Progress." The probability that Banyan wrote his book without any intention of making it an allegory, and that it becaune so by accident, is just about as reasonable an idea to entertain as that the masonic legend and the emblems illustrating it were not originally designed to be what we have shown that they are-a profound and beautiful astronomical allegory.

As to the antiquity of masonry, that, we have shown, rests on an astronomical basis, and enables us to mathematically demonstrate its remote origin, independent of the ancertain and dim light of ancient history or tradition. It is true that its exact date can not be fixed, but the proof that masonry is of great antiquity, and was founded by men of profound knowledge and exalted virtue, is conclusive : men of great learning, because their scientific knowledge lies embalmed in their work to this day ; men of exalted virtue, because our ritual inculcates a code of morality never equaled or excelled until the promulgation in later times of the New Testament.

The method by which the-annual progress of the sun in the zodiac is illustrated, in our explanation of the masonic allegory, also affords a key to the greater part of ancient mythology, the tales of which are founded upon the same basis, and are bat so many different allegories of the same astronomical facts. When these stories were first
invented by the learned, for the twofold purpose of preserving and concealing the truthe of astronomy, the parallel was, of course, more perfectly preserved in each, throughout the whole narrative, than it is in the forms in which they have come down to us. Being orally transmitted, they underwent, in the lapse of long periods of time, material alterations; and particulars, not in entire hamnony with the original allegory, were introduced in order to make the stories more in corrospondence with the incidents of actual human life. The vulgar, who did not understand the true meaning of these astronomical parables, were most prone to make these changes. For these reasons the parallel and allegory will not be found perfect in every particular in some of them, yet in all of them enough remains of the original features to render it easy to illustrate them and their true meaning, without any material alteration of the zodiacal diagram by which we have explained the masonic legend of Firam. It would, no doubt, be interesting to thus explain and interpret other mythological tales of antiqnity, but the desired limits and special purpose of this work forbid. Having, however, pointed out the key which will unlock them all, and the method by which to conduct such an investigation, those of my readers who are curious in sach matters will find their time not lost if employed in a more extended examination, from an astronomical point of riew, of the poetical and wonderful adventures of the gods.

Whatever doubt may rest upon the origin of masonry, or obscurity exist as to the people among whom it first was established, it is certainly the most venerable and ancient of all existing institutions organized by man. The very obscurity as to its origin, which is lost in the dim distance of by-gone ages, testifies to its real antiquity. Its lodges exist in all lands, and the sound of the Worshipful Master's gavel, as be calls the brethren to" order, "following the sun in his coarse, encircles the globe."

Its principles are as universal as its diffusion. No difference of race or color, country, clime, languago, or religion, excludes any worthy and moral man from our Order. Only the atheist, the madman, or the fool, the vicious, imbecile,
depraved, or degraded, are forbidden to enter our ranks, and share in all the rights, honors, and benefits of our ancient fraternity.

At our assemblies meet in harmony the Christian, the Hebrew, the Mohammedan, the Buddhist, and the Brahman, the followers of Confucius and the disciples of Zoroaster. At the masouic altar all these may offer their adoration to the same great Being in whom they all believe, the supreme great Architect of the universe-thus presenting a sublime spectacle of the "fatherhood of God and the brotherhood of man."

The institution has frequently in times past gone through the fires of persecution, but only to rise again with its wonderful vitality renewed, and the purity and truth of its principles vindicated. At the present day it is not only one of the most popular, but also one of the most powerful and widespread, of all organizations.

While the fraternity is day by day drawing to its ranks the most intelligent and virtnous. everywhere, a growing interest is also manifest among the members of the Order itself, and a disposition to inquire more fully into its origin and history, as well as to study its peculiar and beautiful system of ancient symbolical instruction. It is to be hoped that this newly awakened interest among masons will increase and bear abundant fruit, for in the ritual and emblems of our Order is a treasury of useful knowledge and sub-
lime truth which at every step will amply roward him who diligently seeks. The subject is profound enough to enlist the highest intellect and the most accomplished scholarship. These investigations should be aided by all masons, and those engaged in them be encouraged to bring the results of their labors into the lodge-room, and communicate them for the benefit of all the brethren. Our assemblies would thus be made more interesting, and great benefits in various ways result to the fraternity.

It is the hope of the author that this work will at least aid in creating a greater interest among masons as to the history of our Order, and the true meaning of its ancient and wonderful ritnal. It is not expected that all readers will adopt the views of the writer ; it is quite probable, on the contrary, that some will emphatically dissent from them, and, maybe, violently oppose them. But if those who disagree with the author are only induced to take a more enlarged view of the whole"subject than formerly, and if in their opinion the writer is wrong in his theory as to the origin and signification of certain portions of our ritual, will themselves endeavor to discover the true solution, he will be amply satisfied with the results of his labors; for, although the anthor may not have discovered the truth himself, be will, perchance, thus be the cause of others doing so, and in this he will have his reward.

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[^0]:    'Hsil to thee, all areatures!
    Sulatation from every land.

[^1]:    * Ebers, tho German Ecyptologist, informi we that the Efopptiuns believed the tcans of the immortals had this creative poume.

[^2]:    - Captain Lawrence : see "American Cjclopedia"

