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THE BIZARRE.

NOTES QUERIES

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*HISTORY, FOLK-LORE, MATHEMATICS,
MYSTICISM, ART, SCIENCE, Etc.*

“Learn to know all, but keep thyself unknown.” — *Iræneus.*

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we are thus prompted to review
for one short year, and observe
specially, physically, psychically,
progress toward the good time.

"All minds quote. Old and new
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quote not only books and
customs, and laws; nay, we quote
things, by imitation."—*Ralph Waldo Emerson*

Some one has said that "literature
descended upon earth to soothe
the human mind."

"Writing is not literature unless
it arises not only from the truth
they are said; and that pleasure
carefully, or curiously, or beauti-
fully."—*Stephen Crane*

Every reader knows how true
all literature is.

P R E F A C E .

"Time restores many things, but eternity alone restores all."

Again we have completed a revolution in the orbit around the central sun of our system, which also closes a volume of a twelvemonth. We are thus prompted to review the past by "looking backward," if only for one short year, and observe if we can improve our conditions, mentally, physically, psychically, and spiritually, and thus make some progress toward the good time coming. So mote it be.

"All minds quote. Old and new make the warp and woof of every moment. There is no thread that is not a twist of these two strands. We quote not only books and proverbs, but arts, sciences, religion, customs, and laws; nay, we quote temples, and houses, tables and chairs, by imitation."—*Ralph Waldo Emerson.*

Some one has said that "literature is the daughter of heaven, who has descended upon earth to soften and charm all human ills."

"Writing is not literature unless it gives to the reader a pleasure which arises not only from the things said, but from the way in which they are said; and that pleasure is only given when the words are carefully, or curiously, or beautifully put together into sentences."—*Stoford Brooke.*

Every reader knows how true this is, as is everywhere observed in all departments of literature, but more especially and characteristically seen in old saws, folk-lore, proverbs, epigrams, and in kindred lore. Yet, to the classic admirer, the *Iliad* and *Odyssey*, the *Aeneid*, and a few others, will always retain a fascination; and the same can be said of the mathematic, the mystic, and the *litterateur*, who enthuse on each one's respective tastes. It is well that there is a diversity of gifts, as well as tastes.

"Apologizing — a very desperate habit — one that is rarely cured. Apology is only egotism wrong side out. Nine times out of ten, the

first thing a man's companion knows of his shortcomings is from his apology."—*Oliver Wendell Holmes*.

The contents of these volumes are very varied, and scarcely any person can fail to find something in them but what will prove entertaining. We are aware that there have been some trivial matters included within their pages that appear superficial, yet we should remember that some patrons have not as much light as others, and also have not the advantages of obtaining information that other possess who have well-stocked libraries to search in for the required knowledge.

"They who make research into antiquity, may be said to pass often through many dark lobbies and dusky places before they come to the *Aula Lucis*, the great hall of light; they must repair to old archives, and peruse many moulded and moth-eaten records, and so bring light, as it were, out of darkness, to inform the present world what the former did, and make us see truth through our ancestor's eyes."—*James Howell*.

This quotation calls to mind the remark of Carlyle, that "the true university of these days is a collection of books," but all readers are not fortunate enough to reside near such an university.

We have not yet published a general index to the entire eight volumes, yet we may do so the coming year, or later, and send a copy to all who have been patrons to the entire series.

More than one-third of the entire questions published thus far remain unanswered; and a full index to these questions may yet be printed as an appendix to some future number.

We make no great promises for the future, but shall let to-morrow take care of itself. There are yet plenty of dust-covered volumes to delve in, and bring out things new and old, both esoteric and exoteric, and the mines are free to all to work in.

Several small indexes have been printed as a sort of guide to some of the more general subjects.

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MISCELLANEOUS
NOTES AND QUERIES,

WITH ANSWERS.

"A man's own mind will tell him more than seven sages who sit on a tower."
—HINDU MAXIM.

VOL. VIII.

JANUARY, 1891.

No. 1.

Numerical Enigmas.

Scattered through the literature of the ancients there are some curious as well as remarkable examples of enigmas that many writers since their invention have attempted to solve; and yet differ as to the real answer. Some of these enigmas seem to be only a cover for certain formulæ, discoveries, and occult matters. The following are published for our readers to express their views upon:

I.

"I have nine letters; I am composed of four syllables; weigh it well in your mind. The first three syllables have each two letters; the remaining letters are in the last syllable; and there are five consonants. The whole number consists of twice eight hundreds, and three times three tens, and the addition of seven. If thou knowest who I am, thou shalt not be by me destitute of wisdom." — *Sibylline Oracles, Book 1, ls. 146-151.*

Another translation reads as follows:

My Name has nine Letters, and four Syllables; Consider who I am; the three first Syllables have each two Letters, the other has the rest; and there are five Consonants. The Hundreds of all this number are twice eight, and thrice three Decades, with three sevens. He that knows who I am, shall not be ignorant of that divine Wisdom which is from me.

II.

"He will come upon the earth, clothed with flesh, like mortal men; his name contains four vowels, and two consonants; two of the former are sounded together. I will declare the entire number; for he will declare to incredulous men his name containing eight units, eight tens, and as many hundred."—*Sibylline Oracles Book I, ls., 000-000.*

III.

"I am not afraid of thieves; but my thefts are a terror to others, for my whole life is spent in theft. If you desire to know my name, three numbers will give it to you, which are forty, four hundred, and two hundred."—*Kircher's Œdipus Ægyptiaca, Class I, Symbols, chap. IV, p. 31.*

IV.

"He who is one of five hundred and fifteen will be able to give a gift worthy of my prayers." — *Kircher's Œdipus Ægyptiaca, Class I, Symbols, chap., IV, p. 31.*

ANALEMMA. The question has been asked us, what is an *analema*? This can best be answered by going to the authorities. Webster says *analemma* is Latin and means a sun-dial on a pedestal, showing the latitude and meridian of a place. It has three definitions in its geometrical significance, as follows:

1. A projection of the sphere on the plane of the meridian, orthographically made by straight lines, circles, and ellipses, the eye being supposed at an infinite distance, and in the east or west points of the horizon.

2. An instrument of wood or brass, on which this projection of the sphere is made, and having a horizon fitted to it;—formerly much used in solving astronomical problems, such as finding the time of the sun's rising and setting, the length and hour of the day, &c.

3. A tabular mark, usually in the shape of the figure 8, depicted across the torrid zone on an artificial terrestrial globe, to notify the sun's declination on any day of the year.—*Francis.*

The *lemniscata* is also Latin and means adorned with ribbons hanging down. It is defined by geometers as follows:

A curve in the form of the figure 8, with both parts symmetrical, generated by the point in which a tangent to an equilateral hyperbola meets the perpendicular on it drawn from the center.

A *dilemma*, also Latin and Greek, from *di* for *dis* twice, double, and *lambanein* to take. It is defined in logic as follows:

1. An argument which presents an antagonist with two or more al-

ternatives, but is equally conclusive against him, whichever alternative he chooses.

The following are instances of the *dilemma*. A young rhetorician applied to an old sophist to be taught the art of pleading, and bargained for a certain reward to be paid when he should gain a cause. The master sued for his reward, and the scholar endeavored to elude his claim by a *dilemma*. "If I gain my cause, I shall withhold your pay, because the judge's award will be against you; if I lose it, I may withhold it, because I shall not yet have gained a cause." "On the contrary," says the master, "if you gain your cause, you must pay me, because you are to pay me when you gain a cause; if you lose it, you must pay me, because the judge will award it."—*Johnson*.

2. A state or things in which evils or obstacles present themselves on every side, and it is difficult to determine what course to pursue; a difficult or doubtful choice.

A strong *dilemma* in a desperate case!
To act with intamy, or quit the place.—*Swift*.

The *lemma* is defined in geometry to be anything received, an assumption or premise taken for granted, from *lambanein*, to assume:

An auxilliary proposition demonstrated for immediate use in the demonstration of some other proposition.

Whatever is—so much I conceive to have been a fundamental *lemma* for Haslitt—is wrong.—*De Quincey*.

PORTRAITS ON CURRENCY. The list of portraits on national currency is as follows: On United States notes,—\$1, Washington; 2, Jefferson; 5, Jackson; 10, Webster; 20, Hamilton; 50, Franklin; 100, Lincoln; 500, General Mansfield; 1,000, Dewitt; 5,000, Madison; 10,000, Jackson. On silver certificates—10, Robert Morris; 20, Commodore Decatur; 50, Edward Everett; 100, James Monroe; 500, Charles Sumner; 1,000, W. L. Marcy. On gold notes—20, Garfield; 50, Silas Wright; 100, Thomas H. Benton; 500, Lincoln; 1,000, Alexander Hamilton; 5,000, James Madison; 10,000, Andrew Jackson.

WORDS ENDING IN TCH. (Vol. VI, p., 194.) The following are the words of one syllable ending in "tch," according to the prominent type of Webster's Unabridged Dictionary without the Supplement:

Batch, Bitch, Blotch, Botch, Catch, Clutch, Cratch, Crotch, Crutch, Culch, Cutch, Ditch, Dretch, Dutch, Etch, Fetch, Fitch, Fletch, Flitch, Grutch, Hatch, Hitch, Hutch, Itch, Ketch, Knitch, Latch, Letch, Match, Mitch, Natch, Nautch, Notch, Patch, Pitch, Potch, Quatch, Quitch, Ratch, Retch, Scatch, Scotch, Scratch, Scritch, Scutch, Sketch, Slatch, Sleetch, Slutch, Smatch, Smutch, Snatch, Stetch, Stitch, Stretch, Swatch, Switch, Tatch, Thatch, Twitch, Vetch, Watch, Witch, Wretch, Zoutch.

Laws of the Brotherhood of Rosicrucians.

It is certain, says Semler, that the long series of regulations enumerated by this writer were not adopted before 1622, for Montanns(Ludov. Conr. von Berger), who was supposed to have been expelled from the Order in that year, was not acquainted with them.

1. The brotherhood shall not consist of more than sixty-three members.

2. The initiation of Catholics shall be allowed, and one member is prohibited to question another about his belief.

3. The ten years' office of the Rosicrucian imperator shall be abolished, and he shall be elected for life.

4. The imperator shall keep the address of every member on his list, to enable them to help each other in case of necessity. A list of all names and birthplaces shall likewise be kept. The eldest brother shall always be imperator. Two houses shall be erected at Nuremberg and Ancona for the periodical conventions.

5. If two or three brethren meet together, they shall not be empowered to elect a new member without the permission of the imperator. Any such election shall be void.

6. The young apprentice or brother shall be obedient unto death to his master.

7. The brothers shall not eat together except on Sundays, but if they work together they shall be allowed to live, eat, and drink in common.

8. It is prohibited for a father to elect his son or brother, unless he shall have proved him well. It is better to elect a stranger so as to prevent the Art becoming hereditary.

9. Although two or three of the brethren may be gathered together, they shall not permit anyone, whomsoever it may be, to make his profession to the Order unless he shall have previously taken part in the Practice, and has had full experience of all its workings, and has, moreover, an earnest desire to acquire the Art.

10. When one of the brethren intends to make an heir, such an one shall confess in one of the churches built at our expense, and afterwards shall remain about two years as an apprentice. During this probation he shall be made known to the Congregation, and the Imperator shall be informed of his name, country, profession, and origin, to enable him to dispatch two or three members at the proper time with his seal to make the apprentice a brother.

11. When the brethren meet they shall salute each other in the following manner:—The first shall say, *Ave Frater!* The second shall answer, *Rosæ et Aureæ.* Whereupon the first shall conclude

with *Crucis*. After they have thus discovered their position, they shall say one to another, *Benedictus Dominus Deus noster qui dedit nobis signum*, and shall also uncover their seals, because if the name can be falsified the seal cannot.

12. It is commanded that every brother shall set to work after he has been accepted in our large houses, and has been endowed with the Stone (he receives always a sufficient portion to ensure his life for the space of sixty years). Before beginning he shall recommend himself to God, pledging himself not to use his secret Art to offend Him, to destroy or corrupt the empire, to become a tyrant through ambition or other causes, but always to appear ignorant, invariably asserting, that the existence of such secret arts is only proclaimed by charlatans.

13. It is prohibited to make extracts from the secret writings, or to have them printed, without permission from the Congregation; also to sign them with the names or characters of any brother. Likewise, it is prohibited to print anything against the Art.

14. The brethren shall only be allowed to discourse of the secret Art in a well closed room.

15. It is permitted for one brother to bestow the Stone freely upon another, for it shall not be said that this gift of God can be bought with a price.

16. It is not permissible to kneel before any one, under any circumstances, unless that person be a member of the Order.

17. The brethren shall neither talk much nor marry. Yet it shall be lawful for a member to take a wife if he very much desire it, but he shall live with her in a philosophical mind. He shall not allow his wife to practise overmuch with the young brethren. With the old members she may be permitted to practise, and he shall value the honour of his children as his own.

18. The brethren shall refrain from stirring up hatred and discord among men. They shall not discourse of the soul, whether in human beings, animals, or plants, nor of any other subject which, however natural to themselves, may appear miraculous to the common understanding. Such discourse can easily lead to their discovery, as occurred at Rome in the year 1620. But if the brethren be alone they may speak of these secret things.

19. It is forbidden to give any portion of the Stone to a woman in labour, as she would be brought to bed prematurely.

20. The Stone shall not be used at the chase.

21. No person having the Stone in his possession shall ask a favour of any one.

22. It is not allowable to manufacture pearls or other precious stones larger than the natural size.

23. It is forbidden (under penalty of punishment in one of our large houses) that anyone shall make public the sacred and secret matter, or any manipulation, coagulation, or solution thereof.

24. Because it may happen that several brethren are present together in the same town, it is advised, but not commanded, that on Whitsuntide any brother shall go to that end of the town which is situated towards sunrise and shall hang up a green cross if he be a Rosicrucian, and a red one if he be a brother of the Golden Cross. Afterwards, such a brother shall tarry in the vicinity till sunset, to see if another brother shall come and hang up his cross also, when they shall salute after the usual manner, make themselves mutually acquainted, and subsequently inform the imperator of their meeting.

25. The imperator shall every ten years change his abode, name, and surname. Should he think it needful he may do so at shorter periods, the brethren to be informed with all possible secrecy.

26. It is commanded that each brother, after his initiation into the Order, shall change his name and surname, and alter his years with the Stone. Likewise, should he travel from one country to another, he shall change his name to prevent recognition.

27. No brother shall remain longer than ten years out of his own country, and whenever he departs into another he shall give notice of his destination, and of the name he has adopted.

28. No brother shall begin to work till he has been one year in the town where he is residing, and has made the acquaintance of its inhabitants. He shall have no acquaintance with the *professores ignorantés*.

29. No brother shall dare to reveal his treasures, either of gold or silver, to any person whomsoever; he shall be particularly careful with members of religious societies, two of our brethren having been lost, anno 1641, thereby. No member of any such society shall be accepted as a brother upon any pretence whatever.

30. While working, the brethren shall select persons of years as servants in preference to the young.

31. When the brethren wish to renew themselves, they must, in the first place, travel through another kingdom, and after their renovation is accomplished, must remain absent from their former abode.

32. When brethren dine together, the host, in accordance with the conditions already laid down, shall endeavor to instruct his guests as much as possible.

33. The brethren shall assemble in our great houses as frequent as possible, and shall communicate one to another the name and abode of the imperator.

34. The brethren in their travels shall have no connection nor conversation with women, but shall choose one or two friends, generally not of the Order.

35. When the brethren intend to leave any place, they shall divulge their destination to no one, neither shall they sell anything which they

cannot carry away, but shall direct their landlord to divide it among the poor, if they do not return in six weeks.

36. A brother who is travelling shall carry nothing in oil, but only in the form of powder of the first projection, which shall be enclosed in a metallic box having a metal stopper.

37. No brother should carry any written description of the Art about him, but should he do so, it must be written in an enigmatical manner.

38. Brethren who travel, or take any active part in the world, shall not eat if invited by any man to his table unless their host has first tasted the food. If this be not possible, they shall take in the morning, before leaving home, one grain of our medicine in the sixth projection, after which they can eat without fear, but both in eating and drinking they shall be moderate.

39. No brother shall give the Stone in the sixth projection to strangers, but only to sick brethren.

40. If a brother, who is at work with anyone, be questioned as to his position, he shall say that he is a novice and very ignorant

41. Should a brother desire to work, he shall only employ an apprentice in default of securing the help of a brother, and shall be careful that such an apprentice is not present at all his operations.

42. No married man shall be eligible for initiation as a brother, and in case any brother seeks to appoint an heir, he shall choose some one unencumbered by many friends. If he have friends, he must take a special oath to communicate the secrets to none, under penalty of punishment by the imperator.

43. The brethren may take as an apprentice anyone they have chosen for their heir, provided he be ten years old. Let the person make profession. When the permission of the imperator is obtained, whereby anybody is really accepted as a member, he can be constituted heir,

44. It is commanded that a brother who by any accident has been discovered by any prince, shall sooner die than initiate him into the secret; and all the other brethren, including the imperator, shall be obliged to venture their life for his liberation. If, by misfortune, the prince remain obstinate, and the brother dies to preserve the secret, he shall be declared a martyr, a relative shall be received in his place, and a monument with secret inscriptions shall be erected in his honor.

45. It is commanded that a new brother can only be received into the Order in one of the churches built at our expense, and the presence of six brethren. It is necessary to instruct him for the three months, and to provide him with all things needful. Afterwards he must receive the sign of Peace, a palm-branch, and three kisses, with the words—"Dear brother, we command you to be silent." After this, he must kneel before the imperator in a special dress, with an

assistant on either side, the one being his magister, and the other a brother. He shall then say:—"I, N. N., swear by the eternal and living God not to make known the secret which has been communicated to me (here he uplifts two fingers*) to any human being, but to preserve it in concealment under the natural seal of the days of my life; likewise to keep secret all things connected therewith as far as they may be made known to me; likewise to discover nothing concerning the position of our brotherhood, neither the abode, name, or surname of our imperator, nor to show the Stone to anyone; all which I promise to preserve eternally in silence, by peril of my life, as God and His Word may help me."

After his magister cuts seven tufts of hair from his head and seals them up in seven papers, writing on each the name and surname of the new brother, and giving them to the imperator to keep. The next day the brethren proceed to the residence of the new brother, and eat therein without speaking or saluting each other. When they go away, however, they must say, "*Frater Auræ (vel Rosæ) Crucis Dues sit tecum cum perpetuo silentio Deo promisso et nostræ sanctæ congregationi.*" This is done three days in succession.

46. When these three days are passed, they shall give some gifts to the poor, according to their intention and discretion.

47. It is forbidden to tarry in our houses longer than two months together.

48. After a certain time the brethren shall be on a more familiar footing with the new brother, and shall instruct him as much as possible.

49. No brother need perform more than three projections while he stays in our large house, because there are certain operations which belong to the magisters.

50. The brethren shall be called, in their conversation with each other, by the name they received at their reception.

51. In presence of strangers they shall be called by their ordinary names.

52. The new brother shall invariably receive the name of the brother then last deceased; and all the brethren shall be obedient to these rules when they have been accepted by the Order, and have taken the oath of fidelity in the name of the Lord Jesus Christus.

* See "The Mysteries of Magic," pp. 324, 325.

BEAUTY. Socrates called beauty a short-lived tyranny; Plato, a privilege of nature; Theophrastus, a silent cheat; Theocritus, a delightful prejudice; Carneades, a solitary kingdom; Domitian said that nothing was more grateful; Aristotle affirmed that beauty was better than all the recommendations of the world; Homer, that it was a glorious gift of nature; Ovid, alluding to it, calls it a favor bestowed by the gods.

The Bhāgavad-Gīta.

What are the characteristics of the book entitled "Bhagavad Gītā," one of the sacred books of the east ? JONA. NELSON.

In order that this question may be intelligently answered and that a complete synopsis of the Bhagavad Gītā be given, we here publish the antecedent words of the latest American edition recently issued. These words are from the pen of William Q. Judge, an able exponent of the wisdom-religions of the east; but to enjoy the prose-poem one should read and contemplate it—"the dialogue between Krishna, Lord of Devotion, and Arjuna, Prince of India.

The Bhagvad-Gītā is an episode of the *Mahābhārata*, which is said to have been written by Vyasa. Who Vyasa was and when he lived is not known.

J. Cockburn Thompson, in his translation of the *Bhaghvad-Gītā* says: "The *Mahābhārata*, as all students of Sanskrit well know, is the great epic of India, which from its popularity and extent would seem to correspond with the *Iliad* among the Greeks. The theme of the whole work is a certain war which was carried on between two branches of one tribe, the descendants of Kuru, for the sovereignty of Hāstinapura, commonly supposed to be the same as the modern Delhi. The elder branch is called by the general name of the whole tribe, Kurus; the younger goes by the patronymic from Pandu, the father of the five principal leaders.

"This war between the Kurus and Pandavas occupies about twenty thousand slokas, or a quarter of the whole work as we now possess it . . . In order to understand the allusions there [in the *Bhagavad-Gītā*] a knowledge is requisite of the previous history of the tribe, which will now be given as follows.

"Of the name Kuru we know but little, but that little is sufficient to prove that it is one great importance. We have no means of deriving it from any Sanskrit root. nor has it, like too many of the Hindū names, the appearance of being explanatory of the peculiarities of the person or persons whom it designates. It is therefore in all probability a name of considerable antiquity, brought by the Aryan race from their first seat in Central Asia. Its use in Sanskrit is foretold. It is the name of the northern quarter or Dwipa of the world, and is described as lying between the most northern range of snowy mountains and the polar sea. It is further the name of the most northern of the nine varshas of the known world. Among the long genealogies of the tribe itself it is known as the name of an ancient king to whom the foundation of the tribe is attributed. Lastly, it designates an Aryan tribe of sufficient importance to disturb the whole northern India with

its factions, and to make its battles the theme of the longest epic of olden times.

“Viewing these facts together we should be inclined to draw the conclusion that the name was originally that of a race inhabiting Central Asia beyond the Himalaya, who emigrated with other races into the northwest of the peninsula and with them formed the great people who styled themselves unitedly Arya, or the noble, to distinguish them from the aborigines whom they subdued and on whose territories they eventually settled. . . .

“At the time when the plot of the *Mahābhārata* was enacted this tribe was situated in the Doab, and their particular region lying between the Jumna and Sursooty rivers, was called Kurukshetra, or the plain of the Kurus. The capital of this country was Hústinapura, and here reigned at a period of which we cannot give the exact date a king named Vichitravirya. He was the son of Shantanu and Satyawati; and Bhíshma and Krishna Dwaipayana, the Vyasa, were his half-brothers; the former being his father's the latter his mother's son. He married two sisters—Amba and Ambalika—but dying shortly after marriage, he left no progeny; and his half-brother, the Vyasa, instigated by divine compassion, married his widow and begat two sons, Dhritarāshtra and Pandu. The former had one hundred sons, the eldest of whom was Duryodhana. The latter married firstly Prítha, or Kuntī, the daughter of Shura, and secondly Madri. The children of these wives were the five Pandava princes, but as their mortal father had been cursed by a deer while hunting to be childless all his life, these children were mystically begotten by different deities. Thus Yudhishthira, Bhíma, and Arjuna were the sons of Prítha by Dharma, Vayu, and Indra respectively. Nakula was the son of Madri by Nasatyā the elder, and Sahadeva by Darsa the younger of the twin Ashwinau, the physicians of the gods. This story would seem to be a fiction invented to give a divine origin to the five heroes of the poem; but however that may be, Duryodhana and his brothers are the leaders of the Kuru, or elder branch of the tribe; and the five Pandava princes those of the Pandava or younger branch.

“Dhritarāshtra was blind, but, although thus incapacitated for governing, he retained the throne, while his son Duryodhana really directed the affairs of the state. . . . He prevailed on his father to banish his cousins, the Pandava princes, from the country. After long wanderings and varied hardships, these princes collected their friends around them, formed by the help of many neighboring kings a vast army, and prepared to attack their unjust oppressor, who had in like manner assembled his forces.

“The hostile armies meet on the plain of the Kurus. Bhíshma, the half-brother of Vichitravirya, being the oldest warrior among them, has command of the Kuru faction; Bhíma, the second son of Pandu,

noted for his strength and prowess, is the general of the other party [Arjuna's]. The scene of our poem now opens and remains throughout the same—the field of battle. In order to introduce to the reader the names of the principal chieftains in each army, Duryodhana is made to approach Drōṇa, his military preceptor, and name them one by one. The challenge is then suddenly given by Bhīṣma, the Kuru general, by blowing his conch; and he is seconded by all his followers. It is returned by Arjuna, who is in the same chariot with the god Krishna, who, in compassion for the persecution he had suffered, had become his intimate friend, and was acting the part of a charioteer to him. He is followed by all the generals of the Pandavas. The fight then begins with a volley of arrows from both sides; but when Arjuna to draw up the chariot in the space between the two armies while he examines the lines of the enemy. The god does so and points out in those lines the numerous relatives of his friend. Arjuna is horror-struck at the idea of committing fratricide by slaying his near relations, and throws down his bow and arrows, declaring that he would rather be killed without defending himself than fight against them. Krishna replies with the arguments which form the didactic and philosophical doctrines of the work, and endeavors to persuade him that he mistakes in forming such a resolution. Arjuna is eventually overruled. The fight goes on, and the Pandavas defeat their opponents."

The quotation from Thomson's edition gives the student a brief statement of what is more or less mythological and allegorical, but if the story of the *Mahābhārata* be taken as that of Man in his evolutionary development, as I think it ought to be, the whole can be raised from the plane of fable, and the student will then have before him an account, to some extent, of that evolution.

Thus looking at it from the Theosophical point of view, the king Dhritarāshtra is the human body which is acquired by the immortal Monad in order to go through the evolutionary journey; the mortal envelope is brought into existence by means of Tanha, or thirst for life. He is blind because the body without the faculties within is merely senseless matter, and thus is "incapacitated for governing," and some other person is represented in the *Mahābhārata* as being the governor of the state, the nominal king being the body—Dhritarāshtra. As the Theosophical scheme holds that there is a double line of evolution within us, we find that the Kurus spoken of in the poem represent the more material side of those two lines, and the Pandava princes, of whom Arjuna is one, stand for the spiritual side of the stream—that is, Arjuna represents the immortal Spark.

The learned B ahmin Theosophist, Subba Row, says in his *Notes on the Bhagavad-Gītā* (*Vide The Theosophist*, Vol. VIII, p. 299): "Krishna was intended to represent the Logos, . . . and Arjuna, who was

called Nara, was intended to represent the human monad." Nara also means Man. The alleged celestial origin for the two branches of the family, the Kurus and Pandavas, is in perfect consonance with this, for the body, or Dhritrāshtra, being solely material and the lower plane in which the development takes place, the Kurus and Pandavas are our inheritance from the celestial beings often referred to in Mune. Blavatsky's *Secret Doctrine*, the one tending towards materiality, the other being spiritual. The Kurus, then, the lower portion of our nature earliest developed, obtain the power on this plane for the time being, and one of them, Duryodhana, "prevails," so that the Pandavas, or the more spiritual parts of our nature, are banished temporarily from the country, that is, from governing Man. "The long wanderings caused by the necessities of evolution before these better parts are able to make a stand for the purpose of gaining the control in Man's evolutionary struggle. This also has reference to the cyclic rise and fall of nations and the race.

The hostile armies, then, who meet on the plain of the Kurus are these two collections of the human faculties and powers, those on one side tending to drag us down, those on the other aspiring towards spiritual illumination. The battle refers not only to the great warfare that mankind as a whole carries on, but also to the struggle which is inevitable as soon as any one unit in the human family resolves to allow his higher nature to govern him in his life. Hence, bearing mind the suggestion made by Subba Row, we see that Arjuna, called Nara, represents not only Man as a race, but also any individual who resolves upon the task of developing his better nature. What is described as happening in the poem to him will come to every such individual. Opposition from friends and from all the habits he has acquired, and also that which naturally arises from hereditary tendencies, will confront him, and then it will depend upon how he listens to Krishna, who is the Logos shining within speaking within, whether he will succeed or fail.

With these suggestions the student will find that the mythology and allegory spoken of by Thomson and others are useful instead of being merely ornamental, or, as some think, superfluous and misleading.

The only cheap edition of the *Bhagavad-Gītā* hitherto within the reach of Theosophical students of limited means has been one which was published in Bombay by Brother Tookeram Tatya. F. T. S., whose efforts in that direction are entitled to the highest praise. But that was simply a reprint of the first English translation made one hundred years ago by Wilkins. The great attention of late bestowed on the poem by nearly all members of the Theosophical Society in America has created an imperative demand for an edition which shall be at least free from some of the glaring typographical mistakes and blind renderings so frequent in the Wilkins reprint. To meet this

demand the present has been made up. It is the result of a careful comparison of all the English editions and of a complete re-translation from the original wherever any obscurity or omission was evident in the various renderings consulted.

The making of a commentary has not been essayed, because it is believed that the *Bhagavad-Gītā* should stand on its own merits without comments, each student being left to himself to see deeper as he advances. The publisher of this edition holds that the poem can be read in many different ways, each depending on the view-point taken, *e. g.*, whether it is considered in its application to the individual, or to cosmogenesis, or to the evolution of the Astral world, or the Hierarchies in Nature, or two the moral nature, and so on. To attach a commentary, except such an one as only a sage like Sankaracharya could write, would be audacious, and therefore the poem is given undisfigured.

The *Bhagavad Gītā* tends to impress upon the individual two things: first, selflessness, and second, action; the studying of and living by it will arouse the belief that there is but one Spirit and not several, that we cannot live for ourselves alone, but must come to realize that there is no such thing as separateness, and no possibility of escaping from the collective Karma of the race to which one belongs, and then, that we must think and act in accordance with such belief.

The poem is held in the highest esteem by all sects in Hindustan except the Mahomedan and Christian. It has been translated into many languages, both Asiatic and European; it is being read to-day by hundreds of sincere Theosophists in every part of the world. To those and to all others who truly love their fellowmen, and who aspire to learn and teach the science of devotion, this edition of the *Bhagavad-Gīta* is offered.

New York, October, 1890.

WILLIAM Q. JUDGE.

ORIGIN OF THE CUSTOM OF DRINKING TOASTS.—The custom of drinking toasts at feasts and celebrations arose from the practice of pouring out wine or drinking in honor of the heathen gods, and is a practice that still partakes of the nature of heathenism. It was one of the abominations of heathenism to suppose that their gods would be pleased with the intoxicating draught. Such a pouring out of a libation was usually accompanied with a prayer to the idol that he would be propitious, and that he would grant the desire of the worshipper. From that custom the habit of pressing a sentiment or proposing a toast, uttered in drinking wine, is derived.—*Barre's Notes* on I Cor. ch. x. v. 21.

* The *Bhagavad-Gīta*, the great Indian epic from the *Bhishma Parvan* of the *Mahabharata*, being dialogues between Krishna, the Hindu Avatar, and Arjuna, Prince of India. Revised, with an introduction, by Wm. Q. Judge. Flexible leather, 16mo, 160 pp., price \$1.00. Good pocket edition. Address THE PARN, 132 Nassau St., New York City.

Perfect and Amicable Numbers.

A perfect number is equal to the sum of all its divisors except itself. If it be a perfect number, its value is obtained by the formula, $N=2^{n-1}(2^n-1)$, in which 2^n-1 is a prime number.

If $n=1$, $2^{n-1}(2^n-1)=6$, the first perfect number.

The perfect numbers, at present known, are 6, 28, 496, 8128, 33550336, 8589869056, 137438691328, and 2305843008139952128.

These numbers all terminate with 6 or 28.

The difficulty of finding these numbers consists in finding prime numbers of the form 2^n-1 . Euler ascertained the fact that $2^{31}-1=2147483647$ is a prime number, which is believed to be the greatest at present known. An author of an arithmetic has, however, added two larger numbers to the list as perfect numbers, which have been copied into several works, and if authentic, ten of these numbers have been ascertained. If these are correct a much larger prime was used to ascertain them than the one found by Euler. These two additional numbers are

$$2417851639228158837784576, \text{ and} \\ 9903520314282971830448816128.$$

"The rarity of these numbers," says an author, "is the symbol of perfection."

Perfect numbers were discovered by Michael Steiffel, Professor of Mathematics in the University of Jena.

Amicable numbers have such an affinity of relation, that the sum of the divisors of one, not including itself is equal to the other number. For ascertaining these numbers, the formulas used by Barlow, Hutton, and others, are

$$A=2^{n+1}d, \text{ and } B=2^n+1bc,$$

n being a whole number, and b , c , and d , prime numbers, satisfying the following conditions :

$$3 \times 2^n - 1 = b, \quad 6 \times 2^n - 1 = c, \quad \text{and} \quad 18 \times 2^{2n} - 1 = d.$$

Barlow, in his "Theory of Numbers," gives three pairs of amicable numbers : 220 and 284, 17296 and 18416, 9363584 and 9437056.

Davies and Peck, in their "Mathematical Dictionary," say, "Only four pairs of amicable numbers are known at the present time."

Hutton, in his "Recreations," says, "If perfect numbers are rare

amicable numbers are much more so." He gives three pairs of these numbers.

Edward Brooks, in his "Philosophy of Arithmetic," seems to have known Hutton's three pairs of these numbers. Yet in spite of these authorities, we find as early as 1750, Euler wrote an elaborate article upon the subject, having deduced a general formula, and worked out by that formula over sixty pairs of these numbers. The above given formulas will give amicable numbers, but only a small part of them.

In the appendix to the "Ladies' Diary," Vol IV, are given 63 pairs of amicable numbers, taken from Euler's tract, published in 1750. We sent these to NOTES AND QUERIES, and they were printed in Vol. III, 1886, page 150.

Euler's tract states that Stifelius was the first to take notice of such numbers. The first pair, 220 and 284, was found by E. Van Schooten, who gave the name "amicable," though this property was previously known.

The following is a simple formula for testing amicable numbers :

If $N = a^n b^m c^t$, one of the amicable numbers, then

$$\frac{a^{n+1}-1}{a-1} \times \frac{b^{m+1}-1}{b-1} \times \frac{c^{t+1}-1}{c-1} - N = M, \text{ the other number.}$$

The two numbers, 2620 and 2924, are not given by any of the above authorities, except Euler, as amicable numbers. Applying the formula to the first pair of these numbers, we have

$$2620 = 2^2 \times 5 \times 131, \text{ which, in the formula, gives}$$

$$\frac{2^3-1}{2-1} \times \frac{5^2-1}{5-1} \times \frac{131^2-1}{131-1} = 5544, \text{ sum of the numbers, and } 5544 - 2620 = 2924, \text{ the other number.}$$

Again, $2924 = 2^2 \times 17 \times 43$: hence, we have

$$\frac{2^3-1}{2-1} \times \frac{17^2-1}{17-1} \times \frac{43^2-1}{43-1} = 5544, \text{ sum of the numbers, the same as above,}$$

which proves that they are amicable numbers.

Will some of the readers of NOTES AND QUERIES produce Euler's general formula, or the formula by which these numbers may be found.

H. A. WOOD, A. M., Stevens High School,
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THE LOTOS-SYMBOL. The mystic symbol called a modius or *palos*, which is upon the heads of Pluto, Serapis, Venus, and Fortune or Isis, appears to be no other than the bell or seed-vessel of the lotus or water-lily, the *Nymphæa nelumbo* of Linnæus. This plant appears to be a native of the eastern parts of Asia, and is not now found in Ægypt. It grows in the water, and amidst its broad leaves, which float upon the surface, puts forth a large white flower, the base and center of which is shaped like a bell or inverted cone, and punctuated on the top with little cells or cavities, in which the seeds grow. The orifices of these cells being too small to let them drop out when ripe, they shoot forth into new plants in the places where they were formed, the bulb of the vessel serving as a matrix to nourish them until they acquire a degree of magnitude sufficient to burst it open and release themselves, when they sink to the bottom and take root wherever the current happens to deposit them. Being, therefore, of a nature thus reproductive in itself, the *Nelumbo* was naturally adopted as the symbol of the productive power of the waters which spread life and vegetation over the earth. It also appeared to have a peculiar sympathy with the Sun, the great fountain of life and motion, by rising above the horizon, and sinking under them as it retired below. Accordingly we find it employed in every part of the Northern hemisphere, where symbolical worship either does or ever did prevail. The sacred images of the Tartars, Japanese, and Indians, are almost all placed upon it; and it is still sacred both in Thibet and China. The upper parts of the base of the lingam also consists of the flower of it blended with the more distinctive characteristic of the female sex; in which that of the male is placed, in order to complete the mystic symbol of the ancient religion of the Brahmans; who, in their sacred writings, speak of *Brahma sitting upon his lotos throne*.

THE UNITED STATES STANDARD FLAG is spoken of as containing forty-four stars in the Union. This will be true after July 4, 1891. The law upon the subject is that new stars to the Union, to represent new States, will be added on July 4th next succeeding the admission of the State. The official United States Flag, therefore, from July 4, 1890, to July 4, 1891, contains forty-three stars in the Union—Wyoming being admitted after July 4, 1890.

MISCELLANEOUS

NOTES AND QUERIES,

WITH ANSWERS.

" *The instructor of the people is a man of many lives.*" — PEREECT WAY.

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No. 2.

AN ASYMPTOTE. Is it possible for two lines to continually approach each other and yet never meet? I heard this statement made and to me it appeared impossible.

SYLVIA JONES.

Paradoxical as it may seem yet nevertheless it is true. The following from Nichol's "Cyclopædia of the Physical Sciences," illustrates:

A straight line which a curve continually approaches without ever being able to meet it, is called an asymptote. The possibility of this, not seen often at first, will be readily demonstrated in this way. Suppose the curve to be at first distant by $\frac{1}{2}$ foot from the line, and suppose that in the next foot it goes $\frac{1}{3}$ of a foot nearer it, in the next, $\frac{1}{4}$ of a foot, in the next, $\frac{1}{5}$, and so on. If putting all these sums together they will never, however far we carry them, come to make up one-half foot, it is manifest that the curve will never meet the line. The sum of the geometrical series $\frac{1}{3} + \frac{1}{4} + \frac{1}{5} + \dots$, when carried on to infinity, is equal to $\frac{1}{2}$, but only then. If we take any finite number we stop short of this, and the curve has not at that point been yet cut by the line. As this holds with any finite number of terms, the curve never reaches the line, but constantly approaches. Each advance is accompanied by an approach, but each approach becomes smaller and smaller. Two curves which have both the same asymptote, and which do not cut one another, are called also asymptotes, by an extension of the term. It is only in practice applied to a straight line. There are curves like the circle which evidently cannot have asymptotes. There are others, like the parabola, infinitely extended, which have not. The hyperbola, is the commonest instance of a curve with an asymptote. have originated the custom of our binding young men to 7 years' The term is derived from the Greek, and signifies *not falling together*.

Similitudes of Demophilus—I.

1. Flattery resembles the picture of a suit of armour in this respect, that it is calculated to yield delight, not to render any actual service.

2. Education is, to its possessor, like a golden crown, in which honor is united with intrinsic worth.

3. Vain and frivolous persons, like empty vessels, are easily laid hold of and borne along by the ears.

4. As a musical instrument sounds more sweetly from the chords being not kept always on the stretch, so life is rendered more agreeable by alternate occupation and leisure.

5. The disposition is moulded in a happy manner by instruction, as the shapeless material assumes a beautiful form in the hands of a skilful artist.

6. The judgement of the wise is, like gold, distinguished for its superior weight.

7. It may be said of boasting words, no less truly than of gilded arms, that their actual worth bears no proportion to their fair outward appearance.

8. Philosophy possesses, in common with ointment, the power of alleviating the pains of disease, and enhancing the pleasures of health.

9. The silence of a knave, like that of a mischievous dog, is more to be dreaded than his voice.

10. A mistress is not to be preferred to a wife, neither is flattery to be preferred to friendship.

11. Prattlers, like swallows, destroy the pleasure of conversation by incessant loquacity.

12. Bad men, when they have plunged into impiety, and the foolish and lascivious, when loaded with the frailties of age, are both assailed by the horrors of a guilty conscience.

13. A wise man should depart from life with a modest demeanor, as if retiring from a banquet.

14. As the harbor is the refuge of a ship from the tempest, so is friendship the refuge of man in adversity.

15. The reproof of a parent is a pleasant medicine, for the sweet ingredients predominate over the bitter.

16. A good man, like a well trained wrestler, ought to struggle against adversity with the whole energy of his faculties.

17. Frugality, like a short and pleasant journey, is attended with much enjoyment and little toil.

18. Refractory horses are managed by the reins, and passionate tempers are controlled by the force of reason.

19. Raillery, like salt, should be used in moderation.

20. A shoe that fits well, and a moderate fortune, give least uneasiness.

21. Long flowing robes impede the body, immoderate wealth embarrasses the mind.

22. Competitors in the race-course obtain the reward of victory when they reach the goal, and those devoted to the study attain the palm of wisdom in old age.

23. He that aspires after virtue with the ardor of a stranger panting for his native country, must avoid the allurements of pleasure as he would the treacherous charms of the Sirens.

24. As mariners, even, in fair weather, have all things in readiness to encounter a storm, so wise men, even in prosperity, are provided against the attacks of adversity.

25. Apparel, however clean and handsome, is again soiled by use ; but the mind, when the dark clouds of ignorance have been once swept away, retains perpetual lustre.

26. Runaway slaves are afraid even when none pursues, and weak-minded men are dismayed though threatened with no calamity.

27. The wealth of misers, like the evening sun sinking below the horizon, contributes nothing to the enjoyments of mankind.

28. The earth yields us blessings every year, and friendship every moment.

29. Suitably to attune an instrument is the part of a musician ; to accommodate himself to every temper is the business of a wise man.

30. A lash in the hand of a sick man, and threats in the mouth of a fool, are equally to be disregarded.

31. A tunic is necessary for the breast, and a stout heart for supporting affliction.

32. The taste of a sick man, and the disposition of a fool, are equally capricious.

33. Uninstructed children confound words, ill informed men confound actions.

34. The mind, when imbued with the lessons of wisdom, is like a charioteer ; for it restrains the desire implanted in us, and brings us back to virtue.

35. There are times when even wormwood is more acceptable to the taste than honey, and circumstances sometimes render an enemy of more value than a friend.

36. A skilful pilot sometimes suffers shipwreck, and a good man is sometimes the victim of misfortune.

37. Thunder is most an object of terror to children, and threats occasion most terror to fools.

38. The beauty of a statue consists in its form, that of a man in his actions.

39. To listen to the advice of a treacherous friend, is like drinking poison from a golden cup.

40. As swallows give us intimation of fair weather, so the lessons of philosophy *point* out to us the way to attain tranquility of mind.

41. Orphans do not so much stand in need of the care of parents, as foolish men of the direction of guardians.

42. Fortune resembles an unjust distributor of the Olympic prizes, in so much as she most frequently bestows her favors on the undeserving.

43. A pilot and a fair wind are the requisites for a prosperous voyage, and prudence and fortune the requisites for a happy life.

44. As a sword in the hand of a coward is dangerous to himself, so is wealth in the possession of a fool pernicious to his own happiness.

45. It is equally precarious to moor a ship by an insufficient anchor, and to ground hope on a capricious temper.

46. Clouds sometimes obscure the sun, and the passions sometimes darken the understanding.

47. A golden couch brings no relief to the victim of disease, and a splendid fortune adds nothing to the comfort of a fool.

48. Wine diluted with water removes the burning heat of thirst, and gentle words pacify anger.

49. Strong wine is unfit for copious draughts, and asperity of character is not adapted for companionship.

50. The anger of an ape and the threats of a flatterer are equally to be disregarded.

51. In life, as in dreams, youth is the introductory act, and therefore all view it with eager attention.

52. Writings ought to be free from every inaccuracy, and actions should be noble and illustrious.

53. It is the case with children as with plants, that their future character is indicated by their early dispositions.

54. In company, the most agreeable person is he who is least addicted to drinking; and amongst the good, he holds the highest place who is least chargeable with injustice.

55. It is equally unwise to nourish a serpent, and to bestow favors on a villain; for kindness elicits gratitude from neither.

56. Seldom is a ship wrecked in fair weather, but seldom, too, is she preserved without prudent management.

57. Empty bladders are inflated by air, and silly men by self-conceit.

58. In exercise, study to avoid fatigue; and in prosperity, endeavor not to incur envy.

59. The golden mean is of all things the best, according to the sentiment of a certain sage, in conformity with whose opinion we shall now, my dearest and worthiest Asclepiades, conclude our maxims for the regulation of life.

Similitudes of Demophilus—II.

1. Forbear to request from the Deity things which when procured you cannot retain : for the gifts of God are of such a kind, that they cannot be taken away ; therefore he will by no means bestow what you have not power to preserve.

2. Suffer not your mind to lie dormant and inactive ; for lethargy of soul is akin to actual death.

3. It is through ignorance that men impute their calamities to the anger of God : for anger is foreign to the divine nature, inasmuch as it subsists only in the minds of those whose desires have been thwarted ; but nothing happens contrary to the will of God.

4. When you meditate evil against another, you are instrumental in bringing mischief upon yourself. And forbear to desire a benefit from a worthless man : for as a man's character is, so will his life and actions be ; since the mind is in truth a storehouse—the virtuous mind o what is good, and the vicious of what is bad.

6. Deliberate long and maturely before you proceed to speak or act ; for it will not be in your power to alter what has been said or done.

6. The wise man earns the favor of God not so much by his words as by his deeds , for the wise man honors God even by his silence.

7. An ignorant babbler dishonors God both by his prayers and his sacrifices : none, therefore, but a wise man can be truly a priest, or pious, or qualified to pray.

8. A wise man, though sent into the world naked, would even in that condition invoke Him that sent him ; for God hearkens to him aloue who is not loaded with the property of others.

9. It is not possible to receive from God any endowment superior to virtue.

10. Gifts and sacrifices confer no honor upon God, neither do offerings suspended in temples grace the Divinity : but a pious spirit connects us intimately with God ; for things of a similar nature must of necessity be united.

11. It is more miserable to be the slave of the passions than of despotic rulers.

12. It is of no advantage to converse with your own heart more frequently than with your neighbors.

13. Were you always to remember that, in what situation soever your mind conceives or your body executes any thing, the eye of God perceives it ; in all your words and actions, you would be awed by the presence of an inspector whose notice nothing escapes, and God would even become the inmate of your bosom.

14. Regard yourself in the light of a fool and a madman, just in proportion as you are ignorant of your own character.

15. It is proper to desire a husband and children who will survive the present transitory existence.

16. The frugal and indigent philosopher leads a life truly resembling that of a god, and esteems it the greatest riches to possess no external wealth or superfluities : for the acquisition of property sometimes excites desire ; but to abstain from every injustice is all that is necessary to render life useful and happy.

17. Possessions of undoubted worth are not to be acquired by indolence and ease.

18. Reckon that especially a blessing, which yields more gratification by being shared with another.

19. Look upon those principally in the light of friends who contribute more to the pleasure of the mind than to that of the body.

20. The praise and censure of a fool are to be treated with contempt, and the whole conduct of an ignorant man as meriting unmeasured reproach.

21. Desire that the inmates of your house should reverence rather than fear you : for a respectful behavior is allied to veneration, but fear is attended with hatred.

22. The sacrifices of fools are food for the flames, and their votive offerings afford a harvest to sacrilegious knaves.

23. Be assured that no deception can long remain undiscovered.

24. An unjust man endures greater sufferings from the torments of a guilty conscience, than if his body were subjected to the pain of scourges.

25. It is by no means safe to introduce topics connected with the divine nature amongst men tainted with depraved opinions ; for it is alike dangerous to address them in the language of truth or falsehood.

26. You will never fall into error, if you follow the dictates of reason.

27. He that occasions disquiet to others will almost to a certainty bring trouble upon himself.

28. Patiently to bear with the imperfections of the ignorant is to be esteemed a great acquirement.

29. Wickedness is regardless of the divine law, and therefore violates all law.

30. A stranger, if a just man, is preferable, not only to a countryman, but even to a kinsman.

31. A man has just as many tyrannical masters to serve, as he has unsubdued passions.

32. He who is not master of himself cannot be called free.

33. No valuable acquisition can be secured without previous exertion and self-denial.

Rest assured that you have no real possessions but those that are stored up in your mind.

35. Follow the course which honor dictates, though it should not promote your fame ; for popular opinion is a bad standard of the propriety of actions.

36. Let a man's deeds, and not his words, be the test of his character ; for many whose discourse is highly plausible, lead a very disreputable life.

37. Perform great actions without making lofty professions.

38. God being the root whence we derive our origin and existence, let us not separate ourselves from our parent stock ; for both streams of water and blossoms of the earth, when severed the one from their sources and the other from their roots, dry up and become offensive.

39. Sobriety constitutes the energy of the soul : for it is the light of the mind emancipated from the thralldom of the passions ; and better is it to die, than to cloud the mind by indulging the irregular appetites of the body.

40. The man who places his reliance on friends, children, or any other frail and transitory object, cannot with propriety be called happy ; for all these things are in their nature insecure : but a dependence upon God is the only sure and unailing support.

41. He who willingly undergoes as much labor for the improvement of his mind as others submit to for the gratification of the body, merits the appellation of a wise and righteous man.

42. To a relation and a prince yield every thing but liberty alone.

43. Study to be the parent of immortal children—not of such as may cherish the mind with imperishable food.

44. In the same individual the love of God cannot possibly coexist with the love of pleasure, of the body, and of wealth : for the votary of pleasure bestows much attention on his body ; but a tender regard for the body inspires a wish for money, the desire of which unavoidably leads to injustice—a vice that renders a man at once impious towards God, and dishonest in his dealings with men. Should such a man, therefore, sacrifice whole hecatombs, he only adds to his impiety, and, along with a hatred of God and all religion, cherishes sacrilege in his heart ; on which account we ought to regard with aversion every voluptuary, as a godless and sacrilegious person.

45. God has not a more fitting abode upon earth than a pure and unblemished mind.

ESTHER AND EASTER. The name *Esther*, which is one with *Easter*, denotes a star, or fountain of light, a dawn or rising. The feast of Purim, instituted in token of the deliverance wrought through Esther, coincides in date with Easter. In the Protestant Bible the latter part of the Book, *Esther*, is placed in the Apocrypha to the Old Testament.

A Lost Chapter of Genesis.

Hippolytus, the Targumist expositor, said : The names of the wives of the sons of Noah are these : the name of the wife of Sem, Nahalath Mahnnk ; and the name of the wife of Cham, Zedkat Nabu ; and the name of the wife of Japheth, Arathka. These, moreover, are their names in the Syriac Targum. (*What follows was thus expressed probably in Syriac in some Syriac version*) : The name of the wife of Sem, was Nahalath Mahnnk ; the name of the wife of Cham, Zedkat Nabu ; the name of the wife of Japheth, Arathka.

Therefore God gave intimation to Noah, and informed him of the coming of the flood, and of the destruction of the ruined (wicked).

And God Most High ordered him to descend from the holy mount, him and his sons, and wives of his sons, and to build a ship of three stories. The lower story was for fierce, wild, and dangerous beasts. Between them there were stakes or wooden beams, to separate them from each other, and prevent them from having intercourse with each other. The middle story was for birds, and their different genera. Then the upper story was for Noah himself and his sons—for his own wife and his sons' wives.

Noah also made a door in the ship, on the east side. He also constructed tanks of water, and store-rooms of provisions.

When he had made an end, accordingly, of building the ship, Noah, with his sons, Sem, Cham, and Japheth, entered the cave of deposits.

And on their first approach, indeed, they happily found the bodies of the fathers, Adam, Seth, Enosh, Kainan, Mahaliel, Jared, Mathusalach, and Lamech. Those eight bodies were in the place of deposits, viz. those of Adam, Seth, Enosh, Kainan, Mahaliel, Jared, Mathusalach, and Lamech.

Noah, moreover, took the body of Adam. And his sons took with them offerings. Sem, carried gold, Cham myrrh, and Japheth frankincense. Then, leaving the cave of deposits, they transferred the offerings and the body of Adam to the holy mount.

And when they sat down by the body of Adam, over against paradise, they began to lament and weep for the loss of paradise.

Then, descending from the holy mount, and lifting up their eyes towards paradise, they renewed their weeping and wailing, (and) uttered an eternal farewell in these terms : Farewell ! peace to thee, O paradise of God ! Farewell, O habitation of religion and purity ! Farewell, O seat of pleasure and delight !

Then they embraced the stones and trees of the holy mount, and wept, and said : Farewell, O habitation of the good ! Farewell, O abode of holy bodies !

Then, after three days, Noah, with his sons and his sons' wives,

came down from the holy mount to the base of the holy mount, to the ship's place. For the (ark) was under the projecting edge of the holy mount.

And Noah entered the ship, and deposited the body of Adam, and the offerings, in the middle of the ship, upon a bier of wood, which he had prepared for the reception of the body.

And God charged Noah, saying : Make for thyself rattles of box-wood (or cypress). Now *shimshal* is the wood called Sagh, *i. e.* Indian plane.

Make also the hammer (bell) thereof of the same wood. And the length of the rattle shall be three whole cubits, and its breadth one and a half cubit.

And God enjoined him to strike the rattles three times every day, to wit, for the first time at early dawn, for the second time at mid-day, add for the third time at sunset.

And it happened that, as soon as Noah had struck the rattles, the sons of Cain and the sons of Vahim ran up straightway to him, and he warned and alarmed them by telling of the immediate approach of the flood, and of the destruction already hastening on and impending.

Thus, moreover, was the pity of God toward them displayed, that they might be converted and come to themselves again. But the sons of Cain did not comply with what Noah proclaimed to them. And Noah brought together pairs, male and female, of all birds of every kind ; and thus also of all beasts, tame and wild alike, pair and pair.

◆◆◆

Beautiful Lines from the Laws of Manu.

“ Asididam tamobhutam, apragyatam, alak’shanam,
Apratarkyam, avigyeyam, prasuptam iva sarvata :.”

“ Tata : Swayambhur Bhagavan avyakto vyanjayan-n-idam
Mahabhutadi, vrittauja : pradurasit tamonuda :.”

“ Jo savatindriyagrahya ; suk’shmo vyakta ; sanatana ;
Sarvahutamayo chintya ;, sa eva swayam utbabhau :.”

“ This world was as yet in darkness, imperceptible, undenabfile, undiscoverable by reason, indiscernible, as if it were altogether asleep. ”

“ Then He who exists by Himself (JEHOVAH, “ The Eternal ”), the Most High, who is Himself imperceptible, He made this world, composed of great elements, perceptible, He, the Almighty, showed Himself, and dispelled the gloom.” He, whose nature is beyond our reach ; whose essence escapes our senses ; who is indiscernible, but eternal ; He, the All-pervading Spirit, whom the mind even cannot grasp, even He shone forth Himself.”

Planetary Configuration at Creation.

The planetary configuration at the commencement of the first age of the world has been preserved to us by all the nations of antiquity. We find it in the "Hypsomata planetarum" (beginnings of the planets) of the Romans, Greeks, Egyptians, Arabians, Persians, Chaldeans, Hindoos and others. The most explicit account of it is given by the translator of the chronicle of *Abu Djafar Mohamed Tabari*, an old Arabian writer. It is as follows: "know then, that the astronomers Aristotle, Hipparchus and other great masters of this science before us make mention of, the time which is to elapse from Adam (peace be with him) to the day of judgment.—Those masters inform us that the time when the Almighty and Incomparable One created the moon, the sun and planets, every one of these heavenly bodies remained motionless in its place, until the command went forth from God. At that time Saturn stood in Libra 21° , Jupiter in Cancer 15° , Mars in Capricornus 28° , the Sun in Aries 0° , (others incorrectly 19°), Venus in Pisces 27° , Mercury in Pisces 27° (others incorrectly in Virgo 15°) and the Moon in Taurus 3° . *This was the beginning of the world, and since that time the planets have never again been in the same position.*—And so it is; for such a planetary configuration can occur but once in millions of years. It took place in no other years and on no other day than the year 5871 B. C., and on the 10th of Julian May, which at that time was the day of the vernal equinox and a Sunday. On that day the sun stood near the first star of Gemini (Castor and Pollux), which the celestial globes of the Arabians call Adam and Eve."

The special historical notices among the ancient Phœnicians, Chaldeans, Greeks and others, according to which Noah, or his contemporaries employed the alphabet to indicate the places of the seven planets in the Zodiacs at the time of the flood, by means of the seven vowels. The alphabets of the present time contain but five or six vowels, but the ancient Egyptians still had seven; and the two vowels ϵ and $\bar{\epsilon}$ which were afterwards dropped, had their place, according to the ancient Arabians, next to the Hebrew *cheth*, the Latin *h*. The Hebrews had, before their present system of vowels, invented by the Rabbis, 700 A. C., the same vowels as the Greeks, Romans and other nations, as Jerome says, and the Hebrew diphthongs prove. The ancients still further specify to which particular planet each one of these seven distinct vowels respectively referred, that is: *a* to the Moon, *e* to Venus, $\bar{\epsilon}$ to the Sun, δ to Mercury, *i* to Mars, *o* to Jupiter, *u* to Saturn. That the seven vowels of the Noachian alphabet, as the ancients affirm, really expressed a planetary configuration, is evident from the very fact, that those vowels which are entirely distinct from the conso-

nants, are not put in juxta-position, either at the commencement, or in the middle, or at the end of the alphabet, but scattered, like the planets in different points of the Zodiac.

Now, if these traditions are correct, then the alphabet must indicate the planetary configuration at the end of the deluge, namely on the 7th of Sept. 3447 B. C. For all the reliable traditions of antiquity, as we shall show, concur in the testimony, that the deluge ended in the year 3447 B. C. on the 7th day of September, on a Sabbath. If therefore the alphabet was at that time a representation of the signs of the Zodiac, as Sanchunjathon and others expressly say; then the twenty-five letters must be referred to the twelve signs of the Zodiac, and that in such a manner, as that the two first letters are placed in Gemini, which was then the first sign of the Zodiac, and so forth. We then obtain the following places of the planets: the Moon (*a*) in Gemini 0° — 15° , Venus (*e*) in Leo 0° — 15° , the Sun (*l*) in Virgo 15° — 30° , Mercury (*z*) in Libra 0° — 15° , Mars (*i*) in Scorpio 15° — 30° , Jupiter (*o*) in Aquarius 15° — 30° , Saturn (*u*) in Gemini 0° — 15° . And this is really, as every one can find from his astronomical tables, the planetary configuration of Sept. 7th, Anno 3447 B. C. In the same year and on the same day the flood ended, according to the true biblical chronology. This subject has been explained more in extenso in a book, entitled: "Unser Alphabet ein Abbild des Thierkreises," Leipz. 1834. and "Unumstösslicher Beweis," cet. Leipz. 1842. "Alphabeta genuina," Lips. 1840.

Carcassonne.

(From the French.)

I'm growing old; I've sixty years;
I've labored all my life in vain:
In all that time of hope and fears
I've failed my dearest wish to gain.
I see full well that here below
Bliss unalloyed there is for none.
My prayer will ne'er fulfillment know—
I never have seen Carcassonne,
I never have seen Carcassonne.

You see the city from the hill,
It lies beyond the mountains blue:
And yet to reach it, one must still
Five long and weary leagues pursue.
And to return as many more!
Ah! had the vintage plenteous grown!
The grape withheld its yellow store—
I shall not look on Carcassonne,
I shall not look on Carcassonne!

They tell me every day is there
For more nor less than Sunday gay;
In shining robes and garments fair
The people walk upon their way.
One gaze there on castle walls
As grand as those in Babylon,
A Bishop and two generals!
I do not know fair Carcassonne
I do not know fair Carcassonne.

The vicar's right; he says that we
Are ever wayward, weak and blind;
He tells us in his homily
Ambition ruins all mankind;
Yet could I there two days have spent
While still the autumn sweetly shone,
Ah me! I might have died content
When I had looked on Carcassonne,
When I had looked on Carcassonne.

Thy pardon, Father, I beseech,
In this my prayer, if I offend;
One something sees beyond his search,
From childhood to his journey's end.
My wife, our little boy Aignan,
Have travelled over to Narbonne,
My grandchild has seen Perpignan,
And I have ne'er seen Carcassonne,
And I have ne'er seen Carcassonne!

So crowned one day, close by Linoux,
A peasant, double bent with age,
"Rise up, my friend," said I, "with you
I'll go upon this pilgrimage."
We left next morning his abode;
But (heaven forgive him!) half way on
The old man died upon the road,
He never gazed on Carcassonne,
Each mortal has his Carcassonne.

THE TWELVE ANGELS OF THE ZODIAC. What are the names of these angels, and where found ? SEARCHER.

These names are found throughout the apocryphal literature of the east. The following is from the pseudo-apocryphal work entitled "The Sixth and Seventh Books of Moses" :

The twelve angels, which represent the twelve signs, are called in the Apocrypha Malchidael, Asmodel, Ambriel, Muriel, Yerchiei. Hamaliel, Zuriel, Barbiel, Aduachiel, Hanael, Cambiel, Barchiel, Over this the angels also received names from the stars over which they rule as the twelve signs: Teletial, Zariel, Tomimil, Sartimel, Ariel, Bataliel, Masuiel, Archiel, Shesatiel, Gediel, Doliel, Dagymel, which means the same as if expressed in Latin: Ariel, Tawnel, Geminiel, Cancriel, Leonial, Virginiel, Libriell, Scorpiel, Sagitariel, Capriel, Apuariel, Pisciel.

This method of obtaining all kinds of things with peculiar power, in the twelve signs, is described in many kinds of books. The seal of Hermes teaches how the powers of the heavenly influence may be obtained under each sign in a crystal or gem ; that they are constellated, and then, at each period of the twelve signs the appropriate character of each is divided into four parts, each of which is represented by an angel. Therefore, each of the twelve stories in the badge of office of Aaron (Solomonis) was constellated, and the Amorites possessed a constellated stone for each idol, and to this end they consecrated the book. Further, King Solomon teaches a hidden Almadel or a Geometrical figure bearing upon the twelve signs of heaven, which he calls heights, and gives to each height seven or eight names of princes. There are also many other methods for seeking after the powers or heaven in the twelve signs, which, for good reasons, must not be made known, because they are not mentioned in the Holy Scriptures and were kept secret.

BIBLICAL RIDDLE. A prophet exists, whose generation was before Adam; who was with Noah in the Ark, and was present at the trial of our Lord. The only sermon he preached, was so convincing as to bring tears to the eyes and repentance to the heart of a sinner. He neither lies in a bed nor sits in a chair ; his clothing is neither dyed, spun nor woven, but is of finest texture and most brilliant hue. His warning cry ought to call all sluggards from their slumbers: he utters it in every land and every age ; and yet he is not the Wandering Jew.

A VERONICA. The Greek is Beronice, but the Latin Veronica seems to be the original. The name has reference to a supposed likeness of Christ, and was often applied to the likeness itself. "The likeness of the Lord, which is called Veronica—Veronica is the *true picture* of the Lord," says Gervase of Tilbury. The word is said not to be a corrup-

tion of Bernice, but of *Vera Icon*, a true likeness". According to one story, Veronica is the name of a woman who *received* from Jesus his portrait, upon a handkerchief or napkin. They still pretend to exhibit this at Rome and elsewhere, for like many relics, it has increased and multiplied. According to another legend, the woman mentioned in our text *made* an image or representation of Jesus at Paneas.

KNIGHTS OF KADOSH. What is the brief history of this degree ?
JONATHAN.

The following is from the work on high grade masonry translated from the French by an adept :

It is known to have been practised at an early period last century, and in 1762 a conference was held to enquire whether it was identical with the Templar order which led them to adopt the title of Knight of the Black and White Eagle ; it corresponds in England with the degree of Knight Templar Priest, also called Knight of the Temple of Holy Wisdom, and which was the Commander of the Templar, as the Kadosh of the Rose Croix. The Aspirant to the Templar Priest represented Joshua stopped by the angel of the Lord with his sword drawn in his hand ; the officers were seven pillars, alluding to the words, " Wisdom hath builded her house, she hath hewn out her seven pillars ;" the Bible had seven seals, and the aspirant made seven journeys, answered seven questions and received seven passwords, during which he was seven times regaled with fruit and other things; after which he was finally admitted to the Sanctuary, clothed in white, and crowned with the fair mitre mentioned by the Prophet Hoshea. Corresponding with these grades, is the Prince of the Royal Secret, or the Commander's degree of the Swedish Knights of Palestine, or Templars, in which also are seven journeys and seven passwords, which symbolize the entry to as many eastern ports; and teaching, moreover, that the Rite consisted originally of seven degrees, and that Masonry is the disguised Order of the Temple.

SAINT JOHN THE ALMONER. The saint to whom Commanderies of Knights Templars are dedicated. He was the son of the King of Cyprus and was born in that island in the sixth century. He was elected Patriarch of Alexandria, and has been canonized by both the Greek and Roman churches, his festival among the former occurring on the 11th of November, and among the latter on the 23d of January. Bazot, who published a Manual of Freemasonry, in 1811, at Paris, thinks that it is this saint, and not St. John the Evangelist, or St. John the Baptist, who is meant as the true patron of our order. " He quitted his country and the hope of a throne," says this author, " to go to Jerusalem, that he might generously aid and assist the knights and pilgrims. He founded

a hospital and organized a fraternity to attend upon the sick and wounded Christians, and to bestow pecuniary aid upon the pilgrims who visited the Holy Sepulchre. St. John, who was worthy to become the patron of a society, whose only object, is charity, exposed his life a thousand times in the cause of virtue. Neither war, nor pestilence, nor the fury of the infidels, could deter him from pursuits of benevolence.

But death, at length, arrested him in the midst of his labors. Yet he left the example of his virtues to that brethren, who have made it their duty to endeavor to imitate them. Rome canonized him under the name of St. John the Almoner, or St. John of Jerusalem; and the Masons, whose temples, over thrown by the barbarians, he had caused to be rebuilt, selected him with one accord as their patron."

ORDER OF, MUSTARD SEED. This associations, whose members also called themselves "The fraternity of Moravian Brothers of the order of Religious Freemasonry. It was instituted In the year 1739. Its mysteries were founded on that passage in the 4th chapter of St. Mark's gospel. in which Christ compares the kingdom of heaven to a mustard seed. The brethren wore a ring, on which was inscribed, "No one of us lives for himself." The Jewel of the order was a cross of gold, surmounted by a mustard plant, with the words, "What was it before? Nothing." This was suspended from a green ribbon.

I THE FALLS OF NIAGARA, situated three miles northward of their present site (A. D. 1876) The water-worn gorge, which extends below the Falls to Lake Ontario, is nearly seven miles in length, with bounding cliffs 350 feet high, while the rock over which the river is precipitated has been variously estimated to wear away at the rate of from one inch to one foot per annum. Assuming the latter estimate. which would require the shortest time, to be the average rate of wearing away, the Niagara Falls must have been in existence fully 36,000 years. (Travels in North America, by Charles Lyell, vol. ii. p. 34 ; London, 1845.)

The time necessary for the formation of the Niagara gorge, sinks into insignificance, when compared with that required to produce the Great Canón of the Colorado, California. This stupendous chasm is 500 miles in length, with perpendicular sides varying in height from 3,000 to 5,000 feet, and in width from 200 to 1,000 yards, and hollowed out of the solid rock by the erosive action of the stream flowing in it, which has cut through all the sedimentary strata and several hundred feet into the granite underneath. (New Tracks in North America, by W. A. Bell, vol. 1, pp. 45, 46 ; London, 1869.)

ODD NAMES. I have lately heard of a Mrs. Achilles, a Mr. and Mrs. December, a John January, and a Mr. Greengrass; and of an Indiana girl, at school in Cincinnati, named Laura Eusebia Debutts Miranda M'Kinn Parron Isabella Isadora Virginia Lucretia A—p.

ADDRESSING THE CHAIR. In the various secret orders, the ritualistic manner of addressing the chair is as follows:

Iron Hall, Chief Justice,	American Legion of Honor, Com-
Foresters, Chief Ranger.	mander.
Royal Arcanum, Regent.	United Order of American Mechan-
Order of Tonti, President.	ics, Councilor,
Order of Solons, resident.	Knights and Ladies of Honor Pro-
Pilgrim Fathers, Governor.	jector.
Knights of Honor, Dictator.	Sons of Temperance, Worthy Pa-
Grand Orient, Grand Orient.	triarch.
Order of Eleusis, Hierophant.	New England Order of Protection,
Order of Elks, Exalted Ruler.	Warden.
Helping Hand, Central Guide.	Knights of Pythias, Chancellor Com-
Good Templars, Chief Templar,	mander.
Rosicrucian Society, Chief Adept.	Sons and Daughters of Brit-o-Mart,
Royal Templars, Select Councilor.	Commander.
Order of Scottish Clans, Chieftain.	Ancient Order of United Workmen,
Golden Cross, Noble Commander.	Master Workman.
Ancient Order of Hibernians, Presi-	Peoples' Five-year Benefit Order,
dent.	Worthy Commander.
Grand Army of Republic, Com-	Improved Order of Red Men,
mander.	Worthy Sachem.
Hermetic Brothers of Luxor, Mas-	Daughters of Pocahontas. Poca-
ter.	hontas.

Knights of Pythias, Uniform Rank, Sir Knight Captain.

Odd Fellows. Subordinate Lodge, Noble Grand; Encampment, Chief Patriarch; Patriarchs Militant, Commandant.

Masonic, Blue Lodge, Worshipful Master; Royal Arch Chapter, Most Excellent High Priest; Royal and Select Masters, Thrice Illustrious Master; Commandery of Knights Templars, Eminent Commander.

CENTROBARIC THEOREM. A word not much used now. It is intended to indicate the following principles: Every figure, generated by the motion of any line or surface, is equal to the product of the generating magnitude, by the length of path of the center of gravity of the line or surface. This is merely a translation of the maxim that any body may be theoretically considered to have its mass concentrated in a heavy point, at its centre of gravity. In that case the figure generated by the body, would be measured by the length of the path of the center of gravity, multiplied by the quantity contained in the body. In the original case, we have to consider, the different points of the body, as perhaps taking different paths. The center of gravity is the point round which these differences compensate one another. By aid of this principle, when the center of gravity of a line or surface is given, we can determine the content of the body or surface generated.

QUESTIONS.

1. What is the meaning of the word "paranatellon" as used in astronomical works ? CARROLL.

2. In what apocryphal book of the New Testament is found the account that Jesus made sparrows from clay and by miraculous power caused them to fly ? J. A. H.

3. What are the numbers called by mathematicians "Quetelet's numbers" ? W. HOWARD.

4. Augustus DeMorgan speaks of "critical error" in the theory of probabilities. What is understood to be a "critical error" ? ORR.

5. J. J. Garth Wilkinson wrote a work entitled "Oannes." Is it founded on the mythical fish Oannes ?

Why was Jesus so intimately associated with the fish lore ? H.

6. Thomas Taylor in his work, "New Arithmetical Notation," on page 146, gives as amicable numbers, 4831837184 and 4827120640. Is this pair given in any other work ? CALEB CANNON.

7. What writer made the statement that all ancient oracles became dumb at the birth of Jesus ? HINDU.

8. What astronomer interpreted the phoenix-period to be transit of Mercury, and what was the period ? G. C. S.

9. What motto did Mohammed the Arabian prophet use for his seal ?

Why did the Mohammedans adopt the crescent of the moon for their symbol ? STUDENT.

10. Where can be found a translation of the "Hymn to the Sun by Martianus Capella, containing the explanation of the name *Yez* which numerical value is 608, as applied to Jesus. * * *

11. What are the names of the 28 "mansions of the moon" referred to on page 5, of Vol. VII, N. AND Q. ?

Give the Hindu names of the 12 Signs of the Zodiac. ORTHO.

12. What messiah most opportunely fulfilled the prophecy in Numbers xxiv, 17 : "There shall come a star out of Jacob." ? NESTOR.

13. Has the great work called by the Hindûs "Mahabharata" been translated into English ? LLEWELLYN.

14. Sir Gardner Wilkinson says that the ancient Egyptians called the number 5 "the evil number." Why was it so regarded ? J.

15. Lieut. C. A. L. Totten, U. S. A., proposes for "the universal problem," the following : "To construct an equilateral triangle whose area shall be equal to that of a given square" ("An Important Question in Metrology," 1884, by C. A. L. Totten, pages 190-191.) H. H. H.

MISCELLANEOUS
 NOTES AND QUERIES,

WITH ANSWERS.

"Intellect is the fountain of words, and speech is its mouthpiece."—PHILO.

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THE GREEK ALPHABET IN FOUR WORDS. There is a quotation in Clemens Alexandrinus from the tragic poet Thespis who according to Anthon was born at the beginning of the sixth century B. C., which contains four words comprehending the entire 24 letters of the Greek alphabet. The words are

KNAXZBI, CHTHUPTES, PHLEGMO, DROPS.

There seems to be a question as to whether this is a genuine fragment from Thespis as there seems to be a doubt about the invention of some of the letters. However, here we have the entire alphabet:

Kappa, Nu, Alpha, Xi, Zeta, Beta, Iota,
 Chi, Theta, Upsilon, Pi, Tau, Eta, Sigma,
 Phi, Lambda, Epsilon, Gamma, Mu, Omega,
 Delta, Rho, Omicron, Psi.

Knaxzbi, chthuptes, phlegmo, drops. What do each of these words mean?
 A. G. L. A.

QUETELET'S NUMBERS. (Vol. VII. p. 242.) "Letters on the Theory of Probabilities, as applied to the Moral and Political Sciences," by M. A. Quetelet, pages 375-378, contain a table of the terms of the binomial $(\frac{1}{2} + \frac{1}{2})^{999}$ for eighty terms on each side of the middle term. The method of its computation is given and explained. These numbers have since been called "Quetelet's numbers." (See Mansfield Merriman's "List of Writings Relating to the Method of Least Squares," p. 190. 1877.)

The Descent of Istar.—A Poem.

This poem represents the descent of Istar into the Immutable Land, the nether world, divided into seven circles. The heavenly world of the Chaldees was also divided into seven circles, each ruled by a planet. The poem therefore exhibits a descent rather than an ascent. But there is little reason to doubt that the passage in each case would have been analogous. We have no ancient Assyrian account of an ascent; we must therefore content ourselves with what we have. Istar descends into the lower region and stands before Belith, the Queen of the Land of Death.

1. "At the first gate, as I made her enter, I despoiled her, I took the crown from off her head.

Hold, gatekeeper! Thou hast taken the crown from off my head.

Enter into the empire of the Lady of the Earth, to this stage of the circle.

2 At the second gate I made her enter, I despoiled her, and took from off her the earrings from her ears.

Hold, keeper of the gate! Thou hast despoiled me of the earrings from my ears.

Enter into the empire of the Lady of the Earth, to this stage of the circles.

3 At the third gate I made her enter; I despoiled her of the precious jewels on her neck.

Hold, keeper of the gate! Thou hast despoiled me of the jewels of my neck.

Enter into the empire of the Lady of the Earth, to this stage of the circles.

4 At the fourth gate I made her enter; I despoiled her of the brooch of jewels upon her breast.

Hold, keeper of the gate! Thou hast despoiled me of the brooch of jewels upon my breast.

Enter into the empire of the Lady of the Earth, to this stage of the circles.

5 At the fifth gate I made her enter; I despoiled her of the belt of jewels about her waist.

Hold, keeper of the gate! Thou hast despoiled me of the belt of jewels about my waist.

Enter into the empire of the Lady of the Earth, to this stage of the circles.

6 At the sixth gate I made her enter; I despoiled her of her armlets and bracelets.

Hold keeper of the gate! Thou hast despoiled me of my armlets and bracelets.

Enter into the empire of the Lady of the earth, to this stage of the circles.

7 At the seventh gate I made her enter; I despoiled her of her skirt Hold keeper of the gate! Thou hast despoiled me of my skirt.

Enter into the empire of the Lady of the Earth, to this degree of circles.

BEAUTIFUL ALLEGORY. In the Apocryphal "Book of the Conversation of God with Moses on Mount Sinai," translated by the Rev. W. Cureton from an Arabic MS. of the fifteenth century, and published by the Philobiblion Society of London, the idea of the eternal watchfulness of God is thus beautifully allegorized: "Then Moses said to the Lord, O Lord, dost thou sleep or not? The Lord said unto Moses, I never sleep: but take a cup and fill it with water. Then Moses took a cup and filled it with water, as the Lord commanded him. Then the Lord cast into the heart of Moses the breath of slumber; so he slept, and the cup fell from his hand, and the water which was therein was spilled. Then Moses awoke from his sleep. Then said God to Moses, I declare by my power, and by my glory, that if I were to withdraw my providence from the heavens and earth, for no longer a space of time than thou hast slept, they would at once fall to ruin and confusion, like as the cup fell from thy hand."

ALLEGORY, SYMBOL, PARABLE. There is no essential difference between these words. The Greek *paraballo*, whence comes the word parable, and the verb *symbollo* in the same language which is the root of the word symbol, both have the synonymous meaning, "to compare." A parable is only a spoken symbol. The definition of a parable given by Adam Clarke, is equally applicable to a symbol, "A comparison or similitude, in which one thing is compared with another, especially spiritual things with natural, by which means these spiritual things are better understood, and make a deeper impression on the attentive mind."

GREAT VICIES OF ASIA. What is a family? An elementary portion of that great body called nation. The spirit of this great body is but the sum of its fractions; as the manners of the family are, so are the manners of the whole. The great vices of Asia are: 1. Paternal despotism; 2. Polygamy, which demoralizes the entire family, and which, among kings and princes, causes the massacre of the brothers at each succession, and ruins the people in appanages; 3. The want of landed property, owing to the tyrannical right usurped by the despot; 4. The unequal portioning of children; 5. The abusive right of legacies; 6. The exclusion of women from the inheritance. Change these laws, and you change Asia.

The Number Seven in the Bible.

In six days creation was completed, and the 7th was consecrated to rest. On the 7th day of the 7th month, a holy observance was ordained to the children of Israel, who feasted 7 days, and remained 7 days in tents; the 7th year was directed to be a Sabbath of rest for all things; and at the end of 7 times 7 years commenced the grand jubilee. Every 7th year the land lay fallow; every 7th year there was a general release from all debts, and all bondmen were set free. From this law may have originated the custom of our binding young men to 7 years of apprenticeship, and punishing incorrigible offenders by transportation for 7, twice 7, and three times 7, years. Every 7 years the law was to be read to the people. Jacob served 7 years for the possession of Rachel; and also o her 7. Noah had 7 days' warning of the flood, and was commanded to take the fowls of the air in by 7, and the clean beasts by 7. The ark touched ground on the 7th month; and in 7 days the dove was sent out, and again in 7 days after. The 7 years of plenty, and 7 years of famine were foretold in Pharaoh's dream by 7 fat and 7 lean beasts, and the 7 full and 7 blasted ears of corn. Nebuchadnezzar was 7 years a beast; and the fiery furnace was 7 times hotter to receive Shadrach, &c. A man defiled was, by the Mosaic law, unclean 7 days; the young of both animals was to remain with the dam 7 days, and at the end of the 7 was to be taken away. By the old law, man was commanded to forgive his offending brother 7 times; but the meekness of the revealed law extended his humility to 70 times 7; if Cain shall be avenged 7 times, truly Lamech 70 times 7. In the destruction of Jericho, 7 priests bore 7 trumpets 7 days; on the 7th they surrounded the wall 7 times; after the 7th, the wall fell. Balaam prepared 7 years sacrifice; and 7 of Saul's sons were hanged to stay a famine. Laban pursued Jacob 7 days journey. Job's friends sat 7 days and 7 nights, and offered 7 bullocks and 7 rams, as an atonement for their wickedness. In the 7th year of his reign, King Ahazuerus feasted 7 days, and on the 7th deputed his 7 chamberlains to find a queen, who was allowed 7 maidens to attend her. Miriam was cleansed of her leprosy by being shut up 7 days. Solomon was 7 years building the Temple, at the dedication of which he feasted 7 days; in the Temple were 7 lamps; 7 days were appointed for an atonement upon the altar, and the priest's son was ordained to wear his father's garments 7 days. The children of Israel eat unleaven bread 7 days. Abraham gave 7 ewe-lambs to Abimelech, as a memorial for a well. Joseph mourned 7 days for Jacob. Naaman was cleansed of his leprosy by bathing 7 times in Jordan. The Rabbins say that God employed the power of this number to perfect the greatness of Samuel, his name answering the value of the letters in the Hebrew word, which signifies 7; whence

Hannah his mother, in her thanksgiving, says, the barren hath brought forth 7. In scripture are enumerated 7 resurrections : the widow's son, by Elijah ; the Shunamite's son by Elisha ; the soldier who touched the bones of the prophet ; the daughter of the ruler of the synagogue ; the widow's son of Nain ; Lazarus, and our Lord. The apostles chose 7 deacons. Enoch, who was translated, was the 7th from Adam ; and Jesus Christ was the 77th in a direct line. Our Lord spoke 7 times on the cross, on which he was 7 hours ; he appeared 7 times ; and after 7 times 7 days sent the Holy Ghost. In the Lord's prayer are 7 petitions, contained in 7 times 7 words, omitting those of mere grammatical connexion ; within this number are concealed all the mysteries of apocalypse revealed to the 7 churches of Asia. There appeared 7 golden candlesticks and 7 stars in the hand of him that was in the midst ; 7 lambs before the 7 spirits of God ; the book with 7 seals ; the lamb with 7 horns and 7 eyes ; 7 angels with 7 trumpets ; 7 kings 7 thunders ; 7,000 men slain. The dragon with 7 heads and 7 crowns ; and the beasts with 7 heads ; 7 angels bearing 7 plagues, and 7 vials of wrath. The vision of Daniel was of 70 weeks ; and the elders of Israel were 70. There were also 7 heavens, 7 planets (query), 7 stars, 7 wise men, 7 champions of Christendom, 7 notes in music, 7 primary colours, 7 deadly sins, and 7 sacraments in the Catholic church. The 7th son was considered as endowed with pre-eminent wisdom ; and the 7th son of a 7th son is still thought to possess the power of healing diseases spontaneously. Perfection is likened to gold 7 times purified in the fire ; and we yet say you frighten me out of my 7 senses. The opposite sides of a dice make 7, whence the players at hazard make 7 the main. Hippocrates says the septenary number, by its occult virtues, tends to the accomplishment of all things, to be the dispenser of life, and fountain of all its changes ; and, like Shakespere, he divideth the life of man into 7 ages ; for as the moon changes her phases every 7 days, this number influences all sublunary beings. The teeth spring out on the 7th month, and are shed and renewed in the 7th year, when infancy is changed into childhood ; at twice 7 years puberty begins ; at three times 7 the faculties are developed, and manhood commences, and we are become legally competent to all civil acts ; at four times 7 man is in full possession of all his strength ; at five times 7 he is fit for the business of the world ; at six times 7 he becoms grave and wise, or never ; at 7 times 7 he is in his apogee, and from that time decays ; at eight times 7 he is in his first climacteric ; at nine times 7, or 63, he is in his last or grand climacteric ; or year of danger ; and ten times 7, or three score and ten, has, by the royal prophet, been pronounced the natural period of human life.

THE SEVEN STARS are thus enumerated by in a verse attributed Hermes by Strobæus, (*Physica*, 176 ; *Meineke*, i, 45.) :

“ Méne, Zeûs, Ares, Papîn, Krónos, Helios, Hermês.”

The Wonderful Predictions of Cleombrotus.

Most strange and wonderful predictions of *Cleombrotus an Heathen Jew*, prophesied in the year one thousand two hundred seventy and two; upon the reigns of twenty nine kings of England, from Edward the fifth to Charles the fifth, one thousand seven hundred ninety nine. Found in the college of Wittenburg in Germany.

When sixteen hundred year is come,
And twenty five, the I is done;
The letter C shall take the crown,
And reign nine years in great renown;
But then beware of Lebon Rex,
Lest that the P the Lyon vex;
For then sad fates and destinie
By ware, throughout his reign shall be;
Then, with a blow, the times will turn,
And thousands for one man shall mourn,
The C shall stoop unto the C,
But, pray the first, it be not he.

But before this day come, there will reign a mighty war; many towers will be brought low, stately cedars will bow their heads, and mighty castles stoop to cottages. Then will England be surfeited with the blood of innocents, and remain a while without King, Lord, or Commons; then will churches be made stables, palaces become prisons, The people at that time shall stand amazed, thus bewailing:

O Happy certainly are they
That never did live to see this day:
Our wealth is all unto confusion brought,
By those who have not left us worth a groat.
Our stately livings to the ground are come,
But dare not speak we must be dumb.
Once had we Justice, and a glorious king,
Now one thousand tyrants in the room of him,
Which, like to tygers, did his life betray,
Since we, like sheep, must unto wolves obey.
We know not where to go, nor where to flye,
But like poor Job, sit down in misery.

Great changes at that time will happen; and the death of some great man will then hasten: but when you remember the fall of Charran Cross and see a new one built in Pauls church, then will captivity be led captive, and redemption out of bondage will draw near: at which time the sea will say unto the land, I have brought home the treasure of many years voyage. And the land shall then answer, it is so rich and precious, I am not worthy to receive it. Which time is in the year one thousand six hundred and sixty.

In the sixteen hundred and sixty year
Strange wonders unto England shall appear;
Providence by convulsion joyneeth close,
The exil'd thistle to the southern rose.
For Neptune of the ocean home shall bring
A second C, but what a precious thing

Will this same letter be, and high will stand,
 Lord of th' eleventh house, by sea and land.
 Describe but Mars and Venus to command.
 He 'll come in May, or else the first of June.
 Prey that the seas may calm and quiet be,
 Twice mas'd be dangers, now again at sea,
 Yet will be quiet from troubles, Neptune roar,
 And when he is arrived on the shoar.
 Observe this prophecy, 'twill make appear,
 His reign consists, one five and fifty year;
 But yet before the eighty first, you'll see
 A mighty Monarch in the world he'll be,
 Some great and bugby war may then ensue;
 If that by chance the eagle proves not true,
 The lyon rampant may in fury grow,
 Though 'tis suspected whether he will or no;
 For if the eagle he should fly too fast,
 'Tis thought his talions will be clip'd at last.
 For then in his description you will find,
 All Europe will be subject to one mind,
 which is the letter C predicted true,
 That will some great and neighbouring Prince subdue,
 And then, before the lyon proveth kind,
 He'll have an Heir according to his mind,
 Sprung from from an house that's of a pretty name,
 An ostridge foundeth something near the same.

Then Spain in fame shall last,
 France by chance may fall,
 Gern any will stand fast,
 But England all in all.

Now mark, that towards the year one thousand six hundred sixty two, will great contest be in England about religion, at which time will then reign, twenty eight scots of several opinions, in which time will many sparks of dissensions, but of small continuance, like the snuff of a candle, quickly waste out and soon extinguish; for then will the crows head and the magpies breast, be a stumbling block to erroneous errors, more disputants will be in arguing, than parish paltors in reconciling; many at that time will be confuted and range abroad, like seemed mad men, but after a while be soon quieted, so that by the year, one thousand six hundred sixty five. will become, one peculiar Government, and then it will be as hard to hear the name of a soldier in open hostility, as to see a white raven on the top of a pinnacle, a white harvest will follow, and peace and plenty, will continue, few murders will be committed no treasons will be thought of; but in the year, one thousand six hundred sixty nine, or thereabouts, will a ship sail upon the river Thames, and a merchant will ask the mariner, what news he bringeth, and the mariner shall answer, that Austria is removed to England, and the Gates of Rome doth seem to tremble; that year will some foreign prince have a fall, but England shall reign dominical and provide a great voyage for sea, but beware a swallow do not fit in the stern of the admiral, for if it do, it will endanger the fleet, for that bout. And in the year one thousand six hundred and eighty, great tournaments will be exercised, tilting and launces will be in high request, and that year will a Talbot jump to a Duke of

Norfolk, but it will be better for him, to absent that day, than repent of his title all the year after ; for if his horse throw him in the morning let him abstain his honour that day, otherwise he will take a fall at court, and pitch his head at Berkley Castle. For the eagle and the leopard shall spurn him in the dark, for the moon at that time, will be eclipsed, but if his horse doth not stumble, as he mounteth, let him proceed, for then he shall discover, by the light of the moon, the craftiness of the eagle in all her darkness,

The fifteen hundred eighty year will bring,
Great days of honour, by a mighty King;
For nobles in the month of July they
Shall try great actions on the twentieth day.
By which you'll find in this same prophesie,
A Talbot shall the Duke of Norfolk be,
An eagle then at this begins to spurn,
Till she have made the Talbot's Title turn.
Unhappy then will be the twentieth day,
Unhappy Talbot, this prediction say,
If that his horse doth stumble when he mount,
This is a perfect and a true account.
In his behalf the moon will lose her light,
And be arrested at the court for spright,
For treason and contentions they have bred,
He shall at Barkley-Castle lose his head:
But if he miss that twentieth day before,
He'll live a Duke for thirty years and more.

THE SECOND PROPHESE OF ALDURA MANASACH, ON THE YEAR ONE THOUSAND SEVEN HUNDRED

This will be a year of great change and alteration throughout the whole realm, but no wars heard or thought of ; and a glorious flower of long continuance that year shall fall ; his colour for the letter C will lay down in his dormitory, and a fresh rose will arise from the same root ; observe a little before and you shall see an eagle alight upon the tower of Canterbury, and two white doves shall come and oppose him, but after a small repose, the eagle will return to the wood and the two doves, retire to the top of the church, and after a short space, they shall take their flight towards some great city ; then shall a man in a long gown say, this is a great and notable sign, what meaneth it ? then shall a man of a strange nation answer, shaking his head and say, some mighty monarch is desperate ill ; but he passeth the ninth day, and the nineteenth day, and the twenty ninth, it will be added to his reign fifteen years. It is observed this prediction comes near to that prophesie, on the year one thousand six hundred sixty.

THE THIRD PROPHESE ON THE YEAR ONE THOUSAND SEVEN HUNDRED.

Times when the second letter C
Begins to reign will prosperous be,
Whose great abilities have been foretold,
And pattern to the universal world.
All malice, envy, hate, discord, and spright,
For length of days (will vanish from his sight)

He will exceed all reigns of kings before.
 He'll reign till forty seven, if not more.
 And, if in forty eight he miss a drift,
 He'll reign out fifty, nay, till fifty fifth.
 With plous, virtuous, and a Godly fame,
 Both peace and plenty then shall end his reign.

A PROPHECY ON CHARLES THE THIRD AND TWO KINGS AFTER HIM

When that the third of this same letter C. do reign,
 Then will be cheap all kinds of grain.
 The space of twenty two years 'twill consist,
 Which this prediction here doth manifest.
 No wars nor rumours in his reign shall be,
 Except in thirty or in thirty three,
 And then some Foreign Prince will with him jar,
 Which in the thirty fourth proves a war;
 In June do it but mark, in July after,
 'Twixt Diep and Calis is a mighty slaughter,
 The first will dye, the third will have renown,
 And win two standards and a crown;
 Which ends the grudge, long time had been before,
 But after this will ne'er be battle more.
 The F. shall subject be unto the E.
 And shall subjective unto them at sea.
 To Charles the third will nations interceed,
 He'll live in peace, and die in quietness.
 But then beware O Germany,
 For the letter I will Emperour be.

The second letter of this name, will be a mighty warrior abroad in other nations, great conquests will be gotten, but in the last battel he will intend to fight in the eastern part of the world, let him beware the moon he do not change, for if he do, the day will be lost in the afternoon, and a great prince of the blood will be slain; but in the afternoon he shall recover most part by the assistance of a Monk. Three Kings will be in the field that day, but the victory will go to the west, and suddenly after will a Northern Prince send an Embassage to this great conquerour; but let him beware he gives not audience, for if he do, the letter I will be in danger of stab; and if he escape that, he will be delivered from a great many more that year following. But in the month of December, let him sit up late and have trusty friends to be watchful of his body, and under the mat of his bed-chamber, will a horrid bear be lodged, yet it will be discovered by the scent of a talbot, where by the moon will be greatly eclipsed, and indanger the loss of his light. After this the letter I will return home, and carry the house of Austria upon his back; great lands will be subjective, and never after will wars or rebellion be heard of in his days. In Canterbury he will end his reign in quiet, but before this will the Prince of the Blood be born in Cornwall, and the fourth of the name, which begins with the letter C. but then shall London be removed to Canterbury, and remain the space of sixteen years: at which time will England be troubled, by two Roman senators, for then shall two ships sail up the river of Thames, and a merchant on the bridge shall ask them, what merchandize they have; and the other

shall answer two white ravens and a black swan ; the merchant on the bridge shall ask, what they will have in exchange for them ; they will answer, the Cathedra of Paul's, and reliques there unto belonging ; then the merchant will say, the merchandize is but counterfeits, and Paul's is too heavy for the strength of Rome to remove, at which the tower will seem to thunder, and Dover-Castle to give an echo. That when Charles the Fourth, should take the Royal Diadem, London will be removed to Canterbury for sixteen years, in which latter time England will be troubled with two Roman Senators : that is, the Pope shall send to the Bishops of England, and endeavor to seduce them, for to acknowledge the supremacy of Rome ; the merchants on the bridge signifies the Bishops disputing upon the grounds of religion. The two white ravens are the Pope's indulgences, and the black swan his tyrannic penance ; had he but obtained his errand, the saying of the Bishops, their merchandize were but counterfeits, was the invalidity of their proffers, and that Paul's was too heavy for Rome to carry away, signifies, they will keep up the church government of England, and renounce his idolatry. After this, church government shall never be attempted neither by Pope nor secretarian any more. Now the thundering of the tower, and the echo of Dover-Castle is the roaring of some great guns in scorn to the Pope's Supremacy.

THE DESCRIPTION OF CHARLES THE FOURTH.

When Charles the fourth reigneth England's King,
Some great repulse to Rome that year will bring.
The true religion he'll maintain as far,
As Charles the Second his Progenitor ;
Or Charles the Third of everlasting fame,
Or James his father, second of that name,
Who was victorious both by land and sea,
But Charles his reign, no wars in it shall be.
Both peace and plenty all his days shall spring,
That's one and twenty years He'd be a King.
So long continuance he shall rule and away,
Then like a rose he will depart away.
With grief of thousands, he will end his reign,
Then Seventh Edward will come in again.
From James the Second, know it certainly,
These Kings will rule Imperial Majesty.
Till Charles the fifth, both King and Emperour then,
Shall keep his Court in Germany again.

When that the month of July doth begin,
In Canterbury will be born a King.
Edward the seventh, he is called by name,
But in the image of the former name,
Till that the time of sixteen years doth come,
A Monk will be his tutor all along.
But near the eighteenth, Cleombrotus say,
The Seventh Edward will depart away.
And then will York rule Lord Protector be,
Till Charles the fifth comes to maturity ;
Which when the Royal Diadem shall take,
And make the crown of other Princes shake,
But when that twenty years is gone and past,
To his Native Country, he comes home at last,
And leave his Crown, and to the grave doth go,
He'll die in Love both Peace and Plenty too.

Observe that near the year, one thousand seven hundred ninety nine, there will a Prince of the Blood, be born in Canterbury, and at two years of age, the Imperial Crown will be put on his head, and he shall remain under the tuition of a Monk three years; but York shall have the preeminence.

Alphabet, Tetragrammaton, and Human Body.

Everything here below, as above, is mysterious. Therefore it is written—'God created man in his own image, in the image of God, created he him' (Gen. 1, 27); repeating the word God twice, one for the man the other for the woman. The mystery of the earthly man is after the mystery of the Heavenly Man. And just as we see in the firmament above, covering all things, different signs which are formed of the stars and planets, and which contain secret things and profound mysteries, studied by those who are wise and expert in these signs; so there are in the skin, which is the cover of the body of the son of man, and which is like the sky that covers all things, signs and features which are the stars and planets of the skin, indicating secret things and profound mysteries, whereby the wise are attracted, who understand to read the mysteries in the human face. (Sohar, ii, 76 a.) He is still the presence of God upon earth and the very form of the body depicts the Tetragrammaton, the most sacred name Jehovah JHVH . Thus the head is the form of the *Yod*, the arms and the shoulders are like the *He*, the breast represents the form of the *Vau*, whilst the two legs with the back represents the form of the second *He*, (Sohar, ii, 42 a.)

The Karmarhi, who interpretend the precepts of Islamism allegorically, also maintained that the human body represents the letters in the name of God. When standing the human body represents an *Elif*, when kneeling a *Lâm*, and when prostrated on the ground a *Hê*, so that the body is like a book in which may be read the name *Allah*. De Sacy, *Introduction à l'Exposé la Religion des Druzes*, pp. 86, 87. Comp. Frank, *Die Kabbala*, p. 32.

Who was Ionithus?

There is a book to be found in some libraries, called the, "Revelations of Methodius," bishop of Tyre. The author of which delivers the following statement. "In the year of the world 2100, there was

born unto Noah in his own likeness a fourth son, Ionithus; and in 2300, Noah gave him his portion and sent him into the land of Ethan. In 2690 Noah died; and then the people began building the Tower of the plain of Sennaar, and the confusion and dispersion came to pass. But Ionithus held the entering-in of Ethan, to the sea, which region is called Heliochora, because the sun riseth there. He received wisdom from God and invented astronomy; and Nimrod the giant, a man instructed in many things by God, went to Ionithus, and learned from him under what influences of the stars he was to begin his reign. He was son of Chus, son of Cham." In this story Nimrod is made out to be a man inspired by God himself, and instructed in his ambitious counsels by another prophet of the Lord, Ionithus, whose name is however formed from Ion, the second part of this very name Or-Ion. However, in another Chronicle, we read, from *Heber the Shemite* came Rehu, Peleg, and Irari the father of Nimrod, who learned astrology from Ionithus son of Noah, and sought to have obtained the sovereignty of the house of *Shem*, and upon their refusal went over to the children of Cham, and being accepted by them, began the building of Babel. Peter Comestor had, again, read a different text of Methodius, and cites from him, that Nimrod was son of Hiron, son of Shem, and derived his instruction from the prophecies of Ionithus son of Noah. This is an attempt to make it appear, as if the "God of Shem" was Nimrod's god; and also to dissemble the name of the infamous man from whom he really derived his lore, by inventing a new son for Noah, or else a new title for Cham. It is to be observed, that no such name as *Ionithus* appears in the Greek copy of the Revelations; but Shem is said to have made a prophecy to Nimrod; and the Greek copy is also deficient in several other curious passages that are in the Latin. Both, however, were written subsequent to the establishment of the *German* empire of Rome. I cannot believe that the Revelations were the work of Methodius, who was patriarch of Constantinople from 842 to 847, or of any known or respectable person.

GREETING THE NEW MOON IN FIJI. From a work on "Moon-Lore": "There is, I find, in Colo ('the devil's country' as it is called), the mountainous interior of Viti Levu, the largest island of Fiji very curious method of greeting the new moon, that may not, as few Europeans have visited this wild part, have been noticed. The native, on seeing the thin crescent rise above the hills, salutes it with a prolonged 'Ah!' at the same time quickly rapping his open mouth with his hand, thus producing a rapid vibratory sound. I inquired of a chief in the town the meaning and origin of this custom, and my interpreter told me that he said, 'We always look and hunt for the moon in the sky, and when it comes we do so to show our pleasure at finding it again. I don't know the meaning of it; our fathers always did so,'"
—*Camping Among Cannibals*, by, Alfred St. Johnston, London, 1883.

PHŒNIX-PERIOD (VOL. XII, P. 242.) The astronomer was Prof. G. Seyffarth, and the account of his interpretation of the Phœnix period is found in his work. "Summary of Recent Discoveries in Biblical Chronology, Universal History, and Egyptian Aethæology," page 75-78, second edition, New York, 1859 :

"Nearly all the copies of the sacred writings of Egypt contain, as is evident from the Turin Todtenbuch, p. xxxi., Dr. Abbott's, No 766, among others, a religious consideration of two birds *Penoh* and *Choli*, placed side by side, and distinguished from each other only by the long feathers which adorn the head of the former. These two birds have reference to the well-known myth concerning the Phœnix. For the word *Penoh* is identical with Phœnix, or Phœni; and Hermapion translates the picture of that bird sitting on his funeral pile, which is to be observed in the Flaminian Obelisk, by Phœnix. The name *Choli* corresponds exactly with the name of Phœnix in the book of Job, where it is *Chol*, and also with the later Coptic *Allœ*, (the Phœnix). Now what may be the true meaning of the ancient myth concerning the Phœnix, which has been preserved and transmitted upon monuments and coins even down to the time of St. Cæcilia. The Ancients themselves, who were well acquainted with the import of this myth, give us only the following brief account of it. There is a bird, of which there exists but one specimen in the world, and which comes flying from the East once in the course of six hundred and fifty-one years, in company with many other birds; and after its arrival in the city of the sun (Heliopolis), there burns itself up about the time of the vernal equinox, whereupon it rises again out of its ashes, and flies away again, to return no more till after the expiration of six hundred and fifty-one years. This Phœnix made his first appearance in the reign of Sesostris, a king of the twelfth Egyptian Dynasty, about 2500 B. C., then again, during the reign of Amos, in the eighteenth Dynasty, about 1900 B. C., and, the last time, amid great festivities, in the sixth year of Claudius (50 A. C.) There was, however, also a pseudo Phœnix (*Chol*), which consigned itself to the flames as early as the autumn of the five hundred and thirty-ninth year, and besides made its appearance repeatedly during the interval. The latter event occurred under the Consuls A. 310 B. C., under the king Evergetes I, under the Consuls 37 after Christ, under Trajan, during the second and sixth year of the reign of the Antoninus Pius, under Caracalla, Carus, Constantine the Great, Constantine II. and others. It has now been ascertained, that this singular myth *signified* nothing more than the transit of Mercury across the disk of the sun. The bird Phœnix was an emblem of Mercury, as we are informed by the Isis table (Tabula Bembina). There is but one planet Mercury, as there was but one Phœnix. The city of the sun, in which the Phœnix was accus-

tomed to consign himself to the flames, is simply the sun, or the house of the god Sun, in which Mercury during his passage over the disk, may be said to be consumed by fire. As the Phœnix burns himself up every six hundred and fifty-one years, about the time of the vernal equinox, so Mercury subjects himself to a similar process every six hundred and fifty-one years, on nearly the same days of the year. Mercury passes always from east to west across the disk of the sun: it is exactly the same with the Phœnix. Whilst Mercury enters upon his passage across the disk of the sun, he is attended by a multitude of stars; and in a similar manner the Phœnix is accompanied by a multitude of minor birds (flying stars). As the Phœnix came forth anew out of his ashes in the sixth year of Claudius, under Amos and Sesostris, and always at the expiration of six hundred and fifty-one years, so Mercury was likewise, as it were, born again in the years 50 A. C., in 1904 and 2555 B. C. Precisely, as another and different Phœnix consigns himself to the flames in the autumn, always after the expiration of five hundred and thirty-nine years, and, according to circumstances, still more frequently; so also does Mercury. Like the Phœnix, Mercury has also made his transits over the sun's disk on October tenth A. 310 B. C., on April eleventh A. 227 B. C., on April thirteenth A. D. 37, on April nineteenth A. D. 109, on October twenty fifth A. D. 138, on April eighteenth A. D. 142, on October twenty-fourth A. D. 217, on October twenty-third A. D. 283, on April twentieth A. D. 326, and on April twenty-second A. D. 339. In a word, there was a Phœnix-period and a Mercurial-period of six hundred and fifty-one and of five hundred and thirty-nine years. In all the years, in which the Phœnix had destroyed himself with fire in the city of the sun, Mercury had likewise performed his transits over the sun."

MOHAMMED'S SEAL. (Vol. VII, p. 242.) John Floyer, says on page 232 of his work, "The Sibylline Oracles," London, 1713, that on Mahomet's seal are engraven, "Mahomet, the Messenger of God."

THE SYMBOL OF THE CRESCENT. (Vol. VII, p. 242.) John Floyer says on page 230 of his work, "The Sibylline Oracles," that Mahomet pretended to a few miracles :

"He divided the moon into two parts, the one fell on the ground and the other into his lap; but these two pieces he soldered together again. In memory of this, the Turks use the half-moon in their ensigns."

CLAY BIRDS. (Vol. VII, p. 242.) For the sparrows, which Jesus made from clay and caused to fly, see "The Gospel of Infancy," Book I. Chapter xv. of the Apocryphal New Testament.

Chronological Life of Pythagoras.

The following chronological life of Pythagoras was compiled by Mr. Dodwell (*De Cyclis*) and is quoted in Richard Bentley's "Dissertation on the Epistles of Philaris," London, 1816, p. 96. It is copied here in answer to several inquiries as to the time of Pythagoras. The questioners will observe for themselves the uncertainty of some of the dates and the variations of the authorities. Eratosthenes says :

"Pythagoras (Olympiad XLVIII) offered himself at the boys' match to fight at cuffs ; but, being voted by judges to be above a boy's age, and laughed at as a coward for putting himself among boys, he presently offered himself at the match for men, and beat them everytime."

XLIII	4	1	Pythagoras born.
XLVIII	1	18	Won the prize at Olympia.—Eratosthenes, Phavorinus, Lucian, St. Augustine.
XLIX	2	23	Pythagoras at man's age.—Antilocheus.
LIII	3	40	Forty years old, went to Italy.
	4	41	In Italy after Olympiad L.—Dion. Halicarnassus.
LIV	1	52	Famous.—Chron. Alexandrinus.
LVIII	2	59	Went to Italy about sixty years old. — Jamblichus.
LX	1	66	Flourished.—Laertius.
LXI	1	70	Famous.—Diodorus.
	4	73	Came to Italy in the reign of Superbus. — Cicero.
LXII	1	74	Went to Italy.—Jamblichus.
	2	75	Famous.—Clemens, Cyrillus, Eusebius, Tatian.
LXIII	3	80	Died eighty years old—Heraclitus.
LXIV	1	82	Taken captive by Cambyses in Egypt.—Jamblichus, Syncellus.
XLVI	1	90	Died ninety years old.—Laertius.
LXVII	2	95	Died at ninety-five years old.—Syncellus.
LXVIII	1	98	Went to Italy when Brutus was consul. — Solinus, Cicero.
		98	At Crotona when Sybaris was taken. — Diodorus, Jamblichus.
	2	99	Died at ninety-nine years old.—Tzetzes.
	2		Died near one hundred years old.—Jamblichus.
	3	100	Died one hundred years old.—Eusebius' MS.
LXIX	3	104	Died one hundred and four years old. — Incertus apud Photium.
LXX	4	109	Died one hundred and nine years old.—Eusebius vulgate.
LXXII	4	117	Died one hundred and seventeen years old. — Author de Medicina.

QUESTIONS.

1. Who was Opsopæus, and when did he live? Anthon seems to be silent about him. MARK WELL.
2. Who were known as the "Arval Brothers" and when and where did they live? MARK WELL.
3. What are the real names of the persons who annually compile the English astrological almanacs under the names of *Orion*, *Zadkiel*, *Raphael*, and formerly an almanac by *Mercurius* was published? Who is "Philo-Israel" the author of much literature on Anglo-Israelism, and also an almanac? HENRY VANDIEMAN.
4. Who is the author of the English novel "Vathic," when published and where can a copy be found or seen? J. T. L.
5. At what time were each of the letters, U, V, W, X, Y, and Z, added to the English alphabet? ACHSAH.
6. Who were considered the "Twelve Cæsars" of history? L.
7. From whom did John the Baptist quote the words, "He must increase, but I must decrease"? BENOTH.
8. How did Southey form, and what is the meaning of, the word found at the head of Interchapter II, page 91, of "The Doctor" as follows: *Aballiboozobanganorribo*. BENOTH.
9. Give the etymology and meaning of the names, *Æsculapius*, and *Æsclepius*. BENOTH.
10. Who is the author of the following quotation and where found?
"The earth weeps even on account of her children."
MURRAY.
11. Which of the ancient philosophers first applied the word *Cosmos* to the universe at large? SEARCHER.
12. Who was Philitis, or Philiton, mentioned as a shepherd-king by Herodotus (*Euterpe* 128), and what is the argument that is claimed for him as being the architect and builder of the Great Pyramid? HENRIETTA.
13. From what person comes the name "Charles's Wain," as applied to the asterism commonly known as the Great Dipper? HENRIETTA.
14. Anthon says the Areopagus (Mars' Hill) consisted of two rude stone seats one for the accuser and one for the defendant. Paul is said to have first occupied the latter before rising to speak to the Athenians (Acts xvii, 22). Who occupied the other seat? DELOS.
15. Where are *quaternions* first mentioned? DELOS.

MISCELLANEOUS
 NOTES AND QUERIES,
 WITH ANSWERS.

"The center of each thing is Spirit, co-existing with the Word."—BEHME.

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No. 4.

SIBYLLINE ORACLE COROLLARIES. What are the Sibylline Oracle corollaries of William Whiston? ANDREW.

William Whiston published in 1723, a translation of the Sibylline Oracles with his vindication which consisted of twenty propositions and eight corollaries, as follows :

1. "The opinion of modern critics who reject the Sibylline Oracles is dishonorable to Christianity and false in itself.

2. The primitive Christian writers who received and cited them as inspired, are not to be blamed for so doing.

3. Since the contents of these writings are agreeable to Scripture, and were in early times received as such, it is not reasonable now to recede from this opinion.

4. God did not wholly confine divine inspiration to the Jews.

5. These Oracles deserve a more careful study, in order that we may see how far events have corresponded to the things there predicted.

6. There seems to have been the same difference between the authors of the genuine or original, and the spurious or Roman Sibylline Oracles, that there was between Moses, on one side, and Jannes and Jambres, the Ægyptian magicians, on the other.

7. Since these Oracles are quoted by ancient writers as divinely inspired, the exact understanding of them will be of great advantage to sacred and profane learning.

8. These Oracles are a new and very great confirmation of natural and revealed religion."

His translation is based on that of John Floyer, London, 1713. Whiston prefaces his work with the queries and answer of Paul in Romans III, 26: "*Is he the God of the Jews only? Is he not also of the Gentiles? Yes, of the Gentiles also.*"

A Few Flying Etymologies.

GATHERED BY GORDON W. J. GYLL.

The following vocabulary of words are a collection taken from Gyll's "Tractate on Language," published in London, 1860, prefaced by the glowing lines of Virgil (*Æneid* iv, l. 594),

"Quick, snatch the brands, set sail impetuous row."

Ag means fear, hence ag-ue is a shivering fit.

Age expresses action, agere, and is used for time; as non-age, dotage, wharfage, breakage, pontage. The commercial word *agio*, is from agium, agere a charge or deduction; *ate* is variation of action, hence atory, &c.

Albion. The etymology has been variously given. I and that of Dr. Meyer, who derives it from Alani, whose God was *alw*; the island *iön* being added, hence Alw-ion, Albion by an easy transition. The *Ædui* had also a God; *Aed*, don, Eiddyn, from which Eding-burg may derive; while Briton may be deduced from their God Bryd or Prydynys, Pyrdain, Great Britain—but of this word there is no end of fanciful etymologies.

Art in German means kind, slug gard, cow-ard.

Aye may be the initial syllable of *æ-ternitas*; *aiön*, *æ-vum*, the digamma interposed; aiv, aiva, aye, ever, and aon is Hebrew for strength, and *hiat* the Arabic for life, state, &c., in which the termination as in *æternitas* may be found. Does not the termination express every absolute and relative category of Aristotle?

Bacon derives from bucon, beech mast, with which swine are fattened. Leaves of beech in which linen was soaked in a solution of wood ashes, buck ashes, buck basket.

Barbecue, means from head to tail. Barbe aud cu, meat barbecued, is done whole—an holocaust or entire sacrifice.

Bear, Bruin, derives from përo, pir-inn.

Bear. This word is of large significance and extension, found in bore, bear, birth, brat, bairn, for children becaws borne. "That such a barne was borne in Bethlem's city."

P. Ploughman. Berth, board, burden—for sea room.

Beignets aux pommes, apple fritters, and so called because *bathed* in hot melted butter. Beignets soufflés were invented by nuns, who blew on them through a tube, like omelette soufflée. This last word comes from animellæ, the sweet bread in a hog.

Belfry is belfredus, in French beffroi, turris bellifera.

Believe. This word means to live by, or abide by, direct life by. Hence it comes to mean *think*, judge, give credit to, and was written

leve—be-leve. Be gives what are called neuter verbs an active sense, as gan, go, be-gan.

Be-ware, is by-ware, be-cause, by-cause, sit causa. Black is be-lack, block, be-lock, Brim, be-rim. Ge is another particle prefixed to words, and generally has a collective sense, ge-denken. Ge is turned into be in be-ond, beyond.

Bombast answers to the French ampoule, turgid, bombastic; ampulla, a flask metaphorically. So this is a metaphor from the Latin word Bombyx, a silk worm, bombycis, bombazine, any thing stuffed out.

Boudin, pudding, is the Latin botellus, which means a small sausage.

Bread making is very old, and the Hebrews called it behem, the Greeks *Artos*, and the Gauls and Celts bar, hence, barley. Buckwheat is called sarrasin in France. Sweet bread is pancreas, ris de veau, *pas kreas*.

Bridegroom, brauti-gam, Guma, man, Man-sin, man eid-oath, man-sworn or perjury. The word wer (fir) was used by the Saxons for man, and it resembles vir in Latin, which is aor in Celtic and Scythian.

The Scythians call the Amazons Oiorpata, man-slayers.

Brindis, Spanish, and far brindisi in Italian, means drink a health; and may be from *bring dirs* in German; but it is as doubtful as the word Carouse, which is thought to be a corruption of *gar ous* quite out.

Bubula. Bouilli in French boiled, pronounced *boui*, the liquid *ll* being melted away.

Bugle and *Bufle* is bubulus, bucus, buirculus, bos, *bous*, ox—worshipped in Egypt as the type of agriculture.

Bulled or *holled* is only once used in the Bible; Ex. 9, 31.; but it finds a place in Chaucer, and it means bulged or bulge—swollen, and means in full seed, full blown; "And hang the *bulled* nosegays 'bove their heads."

Butter is supposed to be of modern invention. Beurre. butyrus, the general agent in culinary mysteries, like onion. "It is every cook's opinion, nothing's savory without onion." Butter was styled the oil of milk. (See Pliny II. 41). The Jews called it Chameah, or pinguedo lactis oil of milk.

Can, canse, canst. "Alle gentlemens chyl dren beth ytaught for to speke frensche fro the tyme that thei beth rokked in their cradel and *kunneth* speke and play."—*John de Trevisa*. This shews that *can* comes from kennen to know, cuuning.

Canard, French for duck and for a hoax, is derived from *Chen*, duck, pronounced cane. Mallard and duck are canard and cane in French.

Nessa, from *neo* to swim, means duck, from it comes anas. Gôs, gandra, goose, gander, and anetrekho, enterich, äntrech, is the origin of our word drake.

Caviare, the roe of the sturgeon, known to the Romans under the word *garum*, which is its origin, and it is one of the indispensable

seasonings of Turkish pilau or pilaf. " 'Twas caviare to the general." —Hamlet.

Charavari, is a contraction of Che arie varie; a compound of odd varieties.—The French Punch.

Charcutier, usually applied to pork butcher, is derived from *chair*, flesh, caro.

Cheese is deduced from case or form. Caseus, casa, the figure in which this concretion of milk is made. *Frommage*, its French and Italian name, is only the word *form*; and Grotius says, Forma formaginem vocat. It was known to the Hebrews and styled Sheboth, 2 Sam. xvii. 19; and in Job, x. 10. Ghebinah, which word answers to gibbosus, and Sheboth to eminens, round or pyramidal shape.

Chief is caput, as mis-chief, ker-chief, which is a contraction of cover for the head.

Churl. This word derives from Ceorl or Churls, who held land in villenage, contradistinguished from Eorl, Earl. Cotsela a cottarii were cottagers, theves or serfs. In old Saxon theówas, servants.

Claret, is claretum, clear, a liquor composed of wine and honey clarified by becoction or boiling; styled also Hippocras, vinum Hippocratis.

Cleave, cleofan, cleave, split; Clifian, cleave, adhere.

Coffin, derives from *kophinos*, which means basket, cited in the New Testament under the miracle of the 12 baskets.

Cook. It is said the origin of Cook is unknown, and has been the torment of etymologists, and is not mentioned in the "Divisions of Purley," that rich repository of philological lore, but like the sources of the father of plenty, Nilus' stream, that majestic flood which feeds the Egyptian sands, the etymon is doubtful or yet enveloped in obscurity. In Rome there was a Coquinum forum, where cooks were to be hired.

Corner. Kante, cant, canton, cantonments, corners of land; soldiers go into cantonments. Canton in heraldry means a corner.

Cowardice is derived from Culverteyne. Dove is derived from Columba, Culufre.

Curmudgeon, a word at which Dr. Johnson "tried his prenticed hand," and made nothing of it, which is a contraction of care-much-ane, too much care.

Cushion, written quisson, is derived from cuisse, a rest for the thigh.

Dinner Diner, has been derived from de cœnare, or from desinere, desist from eating: as dejeuner.

Dout, do out, do up, dup, do on, don, doff, douse, do out in nautical dialect, douse the glimms, put out the light. Tuer la chandelle.

Doom or dom, is judgments, kingdom: Regnum ubi Rex jus aut sententiam dicit. Thum in German, wis-dom.

Doomesday book is the book of the house, domus. The ancient Britons had their Brawd-Lyfe, or Domesday-book, wherein their laws

and statutes were recorded, since quite lost, compiled by order of the Prince Howel Dda, Howel the Good, circa 940, A. D.

Drum is deduced from dreman, jubilaré, de and hrem, an, clamare.

Earth derives from ere, ear. In Sanscrit Dhar, terra.

Eld, palsied eld, yld, is human being.

Ell is synonymous with arm; ell, a measure, and ell-bow. Ell, ind, ette, oon; ball, balloon, salle, salloon.

Endeavour derives from ende haben, have a motive or end.

Enormous means ex norma, out of law, while abnormis is without any standard at all; abnormis sapiens, wise without instruction.

Er is to advance, and may be found in *re*, as, ama-re; which means also res or thing, reality. The letter R is often transposed, as sceptre, nitre; and in iron, always pronounced *iurn* and never i-ron; apron, saffron, citron, and even children and hundred partaks of this pronunciation. In fact it is very common in English to transpose the letter *r*, as brent, burnt; brast, burst; Thorpe, Thrope; Bird, bryd; *curdle*, cruddle; gers, grus; kers, kress; whence the phrase not worth a *cross*, as it should be, not *curse*.

Er is a common termination in English, er, or, doctor, spinster, baker, cutler, &c.; eur our, or, as am-or, sail-or; *en* and *ed* are not distinguishable, melted, molten, which gets into t, mixt, spilt; and id again into morbid. Huliwr, pronounced hillier, tiler a slater; children is a double plural of er and en.

Eye means islets, isle; eyt, isles; Guerns-ey, Orkn-ey, and is the Norse for isle,

Fear is to fare, feran to go, fly, fahren. Fari to speak; hence fatum a thing said or fate—"and what I will is fate."—Milton. Fate is like chance, direction which we can not see.

Freund, freundin, friend; fuchs, fuchs-in, hence vixen, the female of a fox, fox, fyxen.

Furlough, permission of leave, lauben, lough, leave, verlough.

Ght, brohte, brought, bringen. G is interchangeable with w, as ward, guard, guichet, wicket, guile, wile, guise, wise, Gaul, Walloon, Guarth, Warwick, and Rurrick.

Haberdasher, berd dash; tache, loop, or neckloth for the beard. The *ha* is thought to be only *a* the article attached to the noun, as *the* is occasionally, as in t'accomplish.

Hackney, a horse, is said to be derived from the village near London but Shakspeare uses the phrase for an impure woman; and it applies to anything hired, as hackney horse, author, maid, &c. Some think our word nag is found in the *ney*, and that hack implies a half gelding horse.

Hag is not German or anglo-Saxon, but a Druidical Celtic root. Hag and hac means serpent.

(Concluded next month.)

The Naughty Greek Girl.

BY PROF. G. B. L. SOULE.

Miss *Alpha*, though she led her class,
 Was yet a most unlovely lass ;
 She a had a little sister *Theta*,
 And she would often bang and *beta*,
 And push, and pinch, and bang, and pelt her,
 And many a heavy blow she *delta* ;
 So that the kitten e'en would *mu*,
 When *Theta's* sufferings she *nu*.

Miss *Alpha* was so bad to *Theta*,
 That every time she chanced to meet her,
 She looked as though she longed to *eta*,
 And oft against the wall she jammed her,
 And oft she took a stick and *lambda* ;
 And for the pain and tears she brought her
 She pitied her not one *iota* ;
 But with a sly and wicked eye
 Would only say, " Oh, fiddle, *phi*."

Then *Theta* cried with noisy clamor,
 And ran and told her grief to *gamma*,
 And *gamma* with a pitying *psi*,
 Would give the little girl same *pi*,
 And say, " Now, darling mustn't *chi*."

Two Irish lads, of ruddy cheek,
 Were living just across the creek,—
 Their names, *Omicron* and *Omega*,
 The one was small, the other bigger.

For *Alpha*, so demure and striking,
Omega took an ardent liking ;
 And " Mike " when first he chanced to meet her,
 Fell deep in love with little *Theta*.
 And oft at eve the boys would go
 And on the pleasant waters *rho*.

So when the little hapless *Theta*
Nu Alpha was about to *beta*,
 She down upon the bank would *Zeta*,
 And *chi* aloud and shout like fun,
 " Run, ' Mike, ' run, *Omicron* ! "

MORAL.

Have you a sister? Oh, do not treat her,
 As *Alpha* did her sister *Theta*.

Satellites, Discoverers, Names.

(Vol. VI, p. 300.) A correspondent asks for the names of Jupiter's four satellites. We here give the names of all the satellites thus far known, with names of discoverers and dates :

The earth has one satellite, discovered by Adam ; its Latin name is *Luna*, and its Greek name is *Selene*.

Mars has two satellites, discovered by Asaph Hall, August 19, 1877, named by him *Deimus* and *Phobus* (Iliad xv, 119) at the suggestion of Rev. H. G. Hadan of Eton ; *Deimus* being the outer, and *Phobus* the inner satellite.

Jupiter has four satellites, discovered by Galileo who saw three on January 7, 1610, and all four on January 13, 1610, and generally known by the numbers 1, 2, 3, 4, from the order of nearness to Jupiter. The names *Io*, *Europa*, *Ganymede*, and *Calisto*, were proposed by Simon Marius, or Mayer, who claimed priority in their discovery, but they have not yet come into general use.

Saturn has eight satellites, named in the order of their discovery :

1. *Mimas*. 2. *Enceladus*. 3. *Tethys*. 4. *Dione*. 5. *Rhea*. 6. *Titan*. 7. *Hyperion*. 8. *Japetus*.

Titan was discovered by Huygens, March 25, 1655 ; *Japetus* by Cassini, October 25, 1671 ; *Rhea* by Cassini, Dec. 23, 1672 ; *Tethys* and *Dione* by Cassini, in March, 1684 ; *Enceladus* by Sir Wm. Herschel, August 28, 1789 ; *Mimas* by Sir Wm. Herschel, Sept. 17, 1789. These seven proper names which were suggested by Sir John Herschel and *Hyperion* by Prof. Bond of Cambridge, Mass., Sept. 16, 1848, although he did not find out it was a satellite until the 19th, the same night that Lassell of Liverpool and Dawes observing with him discovered it.

Uranus has four satellites, named in the order of nearness, thus :

1. *Ariel*. 2. *Umbriel*. 3. *Titania*. 4. *Oberon*.

Titania and *Oberon* were discovered by Sir Wm. Herschel, Jan. 11, 1787 ; *Umbriel* probably by Sir Wm. Herschel, Jan. 18, 1790 ; and re-discovered by Otto Struve, Oct. 8, 1847 ; and *Ariel* by Lassell, Sept. 14, 1847. *Neptune* has one, discovered by Lassell, July 7, 1847, seen by him Oct. 10, 1846 ; and suspected to be a satellite, making in all 20 satellites in the solar system. It should, however, be added that Sir Wm. Herschel announced that he had discovered Feb. 9, 1790, a satellite more distant than *Oberon*, on Feb. 28, 1794 ; another more distant still, and on March 26, 1794, one between *Titania* and *Oberon*. No astronomer has been able to detect these three satellites, even if they exist. If such do exist *Uranus* would have seven.

Sir John Herschel thinks that there is no doubt but that Lassell discovered August. 14, 1850, an outer satellite to *Neptune*.

*The Rosicrucian Prayer To God.**Jesus Mihi Omnia.*

Oh Thou everywhere and good of all, whatsoever I do remember, I beseech Thee, that I am but dust, but as a vapour sprung from earth^d which even Thy smallest breath can scatter. Thou hast given me a soul and laws to govern it; let that fraternal rule which Thou didst first appoint to sway man, order me; make me careful to point at Thy glory in all my ways, and where I cannot rightly know Thee, that not only my understanding but my ignorance may honour Thee. Thou art all that can be perfect; Thy revelation hath made me happy. Be not angry, O Divine One, O God the most high Creator! If it please Thee, suffer these revealed secrets, Thy gifts alone, not for my praise but to Thy glory, to manifest themselves. I beseech Thee, most gracious God, they may not fall into the hands of ignorant envious persons that cloud these truths to Thy disgrace, saying they are not lawful to be published because what God reveals is to be kept secret. But Rosie Crucian philosophers lay up this secret into the bosome of God which I have presumed to manifest clearly and plainly. I beseech the Trinity it may be printed as I have written it that the truth may no more be darkened with ambiguous language. Good God, besides Thee nothing is! O stream Thyself into my soul, and flow it with Thy grace, illumination and revelation! Make me to depend on Thee. Thou delightest that man should account Thee as his King, and not hide what honey of knowledge he hath revealed. I cast myself as an honourer of Thee at Thy feet, and because I cannot be defended by Thee unless I believe after Thy laws, keep me, O my soul's Sovereign, in the obedience of Thy will, and that I wound not my conscience with vice and hiding Thy gifts and graces bestowed upon me, for this, I know, will destroy me within, and make Thy illuminating Spirit leave me. I am afraid I have already infinitely swerved from the revelations of that Divine Guide which Thou hast commanded to direct me to the truth, and for this I am a sad prostrate and penitent at the foot of Thy throne. I appeal only to the abundance of Thy remissions, O God, my God. I know it is a mystery beyond the vast soul's apprehension, and therefore deep enough for man to rest in safety! O Thou Being of all beings, cause me to work myself to Thee, and into the receiving arms of Thy paternal mercies throw myself. For outward things I thank Thee, and such as I have I give unto others, in the name of the Trinity, freely and faithfully, without hiding anything of what was revealed to me and experienced to be no diabolical delusion or dream, but the *Adjectamenta* of Thy richer graces the mines and deprivation are both in Thy hands. In what Thou hast given me I am content. Good God, ray Thyself into my soul!

Give me but a heart to please Thee, I beg no more then Thou hast given, and that to continue me uncontentedly and unpittiedly honest. Save me from the devil, lusts, and men, and from those fond dotages of mortality which would weigh down my soul to lowness and debauchment. Let it be my glory (planting myself in a noble height above them) to condemn them, Take me from myself and fill me but with Thee. Sum up Thy blessings in these two, that I may be rightly good and wise, and these, for Thy eternal truth's sake, grant and make grateful.

QUATERNIONS. (N. AND Q, Vol. VIII, p 258.) Where are "quaternions" first mentioned ?
DELOS.

This correspondent does not designate what kind of quaternions he refers to. Sir William Rowan Hamilton in three letters to a lady, in 1856 and 1857, gives a lucid account of mathematical quaternions, which letters are published in Nichols' "Cyclopædia of the Physical Sciences," Glasgow, 1860. Hamilton says it is "a good old English word," and occurs in in King James's version of the Bible in Acts XII, 4. It is also found in Milton "Paradise Lost": "Air and ye elements, that in quaternion run perpetual circle manifold." (Bk. 5, l. 180.) Walter Scott, in "Guy Mannering" speaks of "triads quaternions." Dr. Latham wrote an essay on "Phonetic Quaternions." The word "quaternionen" is used by the German author Moebius. It is claimed that Pythagoras used an equivalent word, *tetractys*. All these are referred to by Hamilton, and implies a system of *fours*. He quotes Horace :

"*Si volet usus, quem penes arbitrium est, et jus, et nomina loquendi,*"

and says, almost or altogether, restricts the word to the sense in which he employs it as a mathematical term. He thus defines the word in a mathematical sense :

First. A quaternion is the *quotient of two vectors*, or of two directed right lines in space, considered as depending on a system of *four geometrical elements*, and as expressible by an algebraic symbol of *quadrinomial form*.

Second. The *science, or calculus, of quaternions* is a new *mathematical method* wherein the foregoing *conception* of a quaternion is unfolded, and symbolically *expressed*, and is applied to various classes of algebraical, geometrical, and physical questions, so as to discover many new theorems, and to arrive at the solution of many difficult problems.

THE DANAIDES. Who were the Danaides, and their names ? W.

The Danaides were fifty daughters of Danaus, King of Argos. When their uncle Ægyptus came from Ægypt into Greece with his fifty sons, they were promised in marriage to their cousins; but before the celebration of their nuptials, Danaus, who had been informed by an oracle that he was to be killed by the hands of one of his sons-in-law, made his daughters solemnly promise that they would destroy their husbands. They were provided with daggers by their father, and all except Hypermnestra, stained their hands with the blood of their cousins, the first night of their nuptials, and as a pledge of their obedience to their father's injunctions, they each presented him with a head of a murdered son of Ægyptus. The sisters were purified of this murder by Mercury and Minerva, by order of Jupiter; but according to the more received opinion, they were condemned to severe punishment in the infernal regions, and were compelled to fill with water a vessel full of holes, so that the water ran out as soon as poured into it, and therefore their labor proved infinite, and their punishment eternal. The names of the Danaides and of their husbands, were as follows, according to Apollodorus; 2. c. 1.

Actea	married	Periphas,	Glauce	married	Aleis,
Adiante	"	Diaphron,	Glaucippe	"	Potamon,
Adyte	"	Menalces,	Gorge	"	Hippothous,
Agave	"	Lycus,	Gorgophone	"	Proteus,
Amymone	"	Enceladus,	Hippodamia I	"	Diacorytes,
Anaxidia	"	Archelaus,	Hippodamia II	"	Ister,
Antonoe	"	Eurylochus,	Hippodice	"	Idas,
Asteria	"	Chætus,	Hippomedusa	"	Alemenon,
Autholea	"	Cisseus,	Hyperia	"	Hippocoristes,
Automate	"	Busiris,	Hypermnestra	"	Lynceus I,
Bryce	"	Chthonius,	Iphimedusa	"	Euchenor,
Callidia	"	Pandion,	Mnestra	"	Ægius,
Calyce	"	Lynceus II,	Nelo	"	Melachus,
Celena	"	Hixibius,	Ocipete	"	Lampus,
Cercestes	"	Dorion,	Æme	"	Arbelas,
Chrysippe	"	Chrysippus,	Pharte	"	Eurydamas,
Cleodora	"	Lixus,	Pilarge	"	Idmon,
Cleopatra	"	Agenor,	Pirea	"	Agoptolemus,
Clite	"	Clitus,	Podarce	"	Æneus,
Dioxippe	"	Ægyptus,	Rhode	"	Hippolitus,
Electra	"	Peristenes,	Rhodia	"	Chalcedon,
Erata	"	Bromius,	Scea	"	Dayphron,
Eurydice	"	Dryas,	Stenele	"	Stenelus,
Evippe I	"	Arigius,	Stygne	"	Polycter,
Evippe II	"	Imbrus,	Theane	"	Phantes.

Oannes. The Fish God.

In the old mythological remains of the Chaldeans, compiled by Berosus, Abydenus, and Aolyhistor, there is an account of one *Oannes*, a fish-god, who rendered great service to mankind. This being is said to have *come out of the Erythraean Sea*. This is evidently *the Sun rising out of the sea*, as it apparently does, in the East.

Prof. Goldzoier, speaking of *Oannes*, says :

"That this founder of civilization has a *Solar character*, like similar heroes in all other nations, is shown . . . in the words of Berosus who says : '*During the day time Oannes held intercourse with man, but when the Sun set, Oannes fell into the sea, where he used to pass the night. Here, evidently, only the Sun can be meant, who, in the evening, dips into the sea, and comes forth again in the morning, and passes the day on the dry land in the company of men.*'"

Dagon was sometimes represented as *a man emerging from a fish's mouth*, and sometimes as half-man and half-fish. It was believed that he came *in a ship*, and taught the people. Ancient history abounds with such mythological personages. There was also a *Durga*, a fish deity, among the *Hindoos*, represented as *a full grown man emerging from a fish's mouth*. The Philistines worshiped *Dagon*, and in Babylonian Mythology *Odakon* is applied to a fish-like being, who *rose from the waters of the Red Sea* as one of the benefactors of men.

On the coins of Ascalon, where she was held in great honor, the goddess *Derceto* or *Atergatis* is represented as a woman with her lower extremities like a fish. This is *Semiramis*, who appeared at *Joppa* as a mermaid. She is simply a personification of the *Moon*, who follows the course of the *Sun*. At times she manifests herself to the eyes of men, at others she seeks concealment in the Western flood.

The Sun-god *Phoibos* traverses the sea in the form of a fish, and imparts lessons of wisdom and goodness when he has come forth from the green depths. All these powers or qualities are shared by *Proteus* in Hellenic story, as well as by the fish-god, *Dagon* or *Oannes*.

In the *Iliad* and *Odyssey*, *Atlas* is brought into close connection with *Helios*, the bright god, the Latin *Sol*, and our *Sun*. In these poems he rises every morning from a beautiful lake by the deep-flowing stream of *Ocean*, and having accomplished his journey across the heavens, plunges again into the Western waters.

The ancient *Mexicans* and *Peruvians* had likewise semi-fish gods.

Jonah then, is like these other personages, in so far as they are all personifications of the *Sun* ; they all *come out of the sea* ; *a man emerging from a fish's mouth* ; and they are all benefactors of mankind.

Problem of the 15 Christians and 15 Turks.

Fifteen Christians and fifteen Turks being at sea in the same vessel a dreadful storm came on, which obliged them to throw all their merchandise overboard; this however not being sufficient to lighten the ship, the captain informed them that there was no possibility of its being saved, unless half the passengers were thrown overboard also. Having therefore caused them all to arrange themselves in a row, by counting from 9 to 9, and throwing every ninth person into the sea beginning again at the first of the row when it had been counted to the end, it was found that after fifteen persons had been thrown overboard the fifteen Christians remained. How did the captain arrange these thirty persons so as to save the Christians?

The method of arranging the thirty persons may be deduced from these two French verses :

Mort, tu ne failliras pas
En me livrant le trespas.

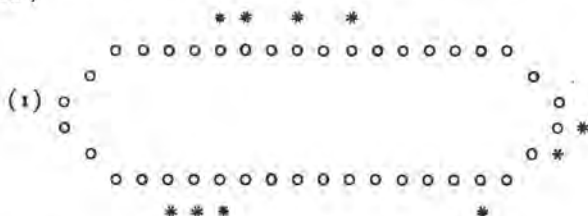
Or from the following Latin one, which is not so bad of its kind :

Populeam virgam mater regina ferebat.

Attention must be paid to the vowels A, E, I, O, U, contained in the syllables of these verses; observing that A is equal to 1, E to 2, I to 3, O to 4, and U to 5. You must begin then by arranging 4 Christians together, because the vowel in the first syllable is o; then five Turks, because the vowel in the second syllable is U; and so on to the end. By proceeding in this manner, it will be found, taking every ninth person circularly, that is to say, beginning at the first of the row, after it is ended, that the lot will fall entirely on the Turks.

The solution of this problem may be easily extended still farther.

Let it be required, for example, to make the lot fall upon 10 persons in 40, counting from 12 to 12. Arrange 40 ciphers in a circular form, as below;



Then, beginning at the first, mark every twelfth one with a cross; continue in this manner, taking care to pass over those already crossed still proceeding circularly, till the required number of places has been

marked ; if you then count the places of the marked ciphers, those on which the lot falls will be easily known : in the present case they are the 7th, the 8th, the 10th, the 12th, the 21st, the 22rd, the 24th, the 34th, the 35th, and the 36th.

A captain, obliged to decimate his company, might employ this expedient, to make the lot fall upon those most culpable.

It is related that Josephus, the historian, saved his life by means of this expedient. Having fled for shelter to a cavern, with forty other Jews, after Jotapat had been taken by the Romans, his companions resolved to kill each other rather than surrender. Josephus tried to dissuade them from their horrid purpose, but not being able to succeed, he pretended to coincide with their wishes, and retaining the authority he had over them as their chief, to avoid the disorder which would necessarily be the consequence of this cruel execution, if they should kill each other at random, he prevailed on them to arrange themselves in order, and, beginning to count from one end to a certain number, to put to death the person on whom that number should fall, until there remained only one, who should kill himself. Having all agreed to this proposal, Josephus arranged them in such a manner, and placed himself in such a position, that when the slaughter had been continued to the end, he remained with only one more person, whom he persuaded to live.

Such is the story related of Josephus by Hegesippus ; but we are far from warranting the truth of it. However, by applying to this case the method above indicated, and supposing that every third person was to be killed, it will be found that the two last places on which the lot fell were the 16th, and 31st ; so that Josephus must have placed himself in one of these, and the person he was desirous of saving in the other.

THE BRAHMINICAL CORD. This Thread is called Brahma Sutra because it signifies the Eternal Spirit. Each Brahmin must make this thread for himself and wear it around his neck. It is composed of three threads; and as he weaves them he says: "I shall govern my body, my speech, and my mind ; and I know that these three are one." The three rolled into one is the first Triangle of Pythagoras. The unmanifested Monad emerges from the darkness *first* as a Triangle. The *second* manifestation is the perfect Square ; the *third* is the Circle of Eternity ; and thus is the square made into the circle, or the quadrature of the circle. It signifies the merging of the individual in the Universal: "I and my Father are One." There are the planes of manifestation, and each plane is of *three*. Three times three are nine, the number of perfect initiation, and at each nine the man becomes merged in the Universal ; and the circle shows how the man becomes the All.

M, C.

POEMS.—VIRGIL AND HOMER. What are the comparative length of the *Æneid*, and *Iliad*? X.

The number of verses of the 12 books of the *Æneid* of Virgil are,

756, 804, 718, 705, 871, 902, 817, 726, 818, 908, 915, 952.

Total, 9,892.

• The number of verses in the 24 books of the *Iliad* of Homer are,

611, 877, 461, 544, 909, 929, 482, 565, 713, 549, 848, 471,

837, 522, 746, 867, 791, 617, 424, 503, 611, 515, 897, 804.

Total, 15,693.

Thus it will be seen that the *Æneid* is not quite two-thirds the *Iliad*. The *Odyssey* contains 12,106 verses, or lines. The *Iliad* and *Odyssey* together contain 27,799 lines; and thus the *Æneid* is a little more than one-third of both.

Dante's "*Divina Comedia*" has 14,233 lines; Tasso's "*Jerusalem Delivered*" has 15,336 lines; Milton's "*Paradise Lost*" has 10,565 lines; Klopstock's "*Messiah*" has 11,007 lines; Aristo's "*Orlando*" has 38,736 lines; Camoens's "*Lusiad*" has 8,816 lines; Voltaire's "*Henriad*" has 4,340 lines.

COSMOS. Who first called the universe at large *Cosmos*? (Vol. VIII, p. 258.) S.

Richard Bentley, in his "*Dessertation on the Epistles of Phalaris*," London, 1816, p. 284, says Pythagoras was the first that used the word *Cosmos* to signify the world or the heavens. Laertius says that "Pythagoras first named the heavens *Cosmos*." Plutarch (11, 1) says, that "Pythagoras first called the whole compass of the universe *Cosmos*." The Scholiast on Homer (*Iliad* 1, 1,) says "The order of the universe was named *Cosmos* by Pythagoras."

SIGN OF THE CROSS. In signing themselves with the sign of the cross, when uttering the last words of "The Lord's Prayer," the Catholics express more than many of them are probably aware of. On saying "for thine is the kingdom," they first touch the forehead with the back of the thumb, and then the vital region of the heart; thus indicating the first as the Throne, "Mercy-seat," and dwelling-place of the Lord, (or as Divine Wisdom, the Lady) of the Kingdom. At the words, "the Power and the Glory," the thumb touches first the right and then the left shoulder, ("The right-hand of power" "At the left-hand of glory.") At the words "For ever and ever, Amen" the thumb is laid on the forefinger of the same hand in the form of a cross, and raised to the lips, which seal it with a kiss, expressive of "So be it." or Amen.

QUESTIONS.

Please give an explanation and an illustration, or example, of the following mathematical expressions : Q.

- | | | |
|----------------------------|-----|-----------------------------|
| 1. Personal equation. | 15' | Law of exception. |
| 2. Solar equation. | 16. | Pencil of rays. |
| 3. Luna equation. | 17. | Ghost of the spectrum. |
| 4. Negative squares. | 18. | Curve of quickest descent. |
| 5. Probability curve. | 19. | Cow's foot in the milkpail. |
| 6. Circle of necessity. | 20. | Witch of Agnesi. |
| 7. Imaginary quantity. | 21. | Plato's geometric number. |
| 8. Unknown quantity. | 22. | The universal equation. |
| 9. Angle of rest. | 23. | The personal radix. |
| 10. Facial angle. | 24. | The ecliptic equation. |
| 11. Oblique orbit. | 25. | Method of least squares. |
| 12. Line of beauty. | 26. | Parallactic equation. |
| 13. Mathematical error. | 27. | Chromatic triangle. |
| 14. Completing the square. | 28. | Angle of incidence. |

1. Who were the Gnostics? There are many accounts of them published; but what was their origin, what their peculiarities and what their end? W. W.

2. What is the meaning of those peculiar alliterative names of the four largest stars in the zodiacal constellation Libra, namely, *Zubenschamali*, *Zubenelgemabi*, *Zubenhakrabi*, *Zubenelgubi*? G.

3. What is the form of the geometric figure called the *phyaloid*? LOGOS.

4. Where can be found an English translation of the poem of Nonnus "On the Sun"? ALBION.

5. Who is the man who claimed to have *forty-nine* lives and how did he explain his transmigrations? OSCAR LEAVITT.

6. What are "the seven gifts of the Holy Spirit" (*sacrum septuagintum*) of the Christians? SEVEN.

7. Who were the Orpheotolites and what their tenets of belief and practice? L. C. W.

8. Why are the sufferings of Jesus at the crucifixion called *The Passions*? M. A. B.

9. Who first used the term *backslider* and applied it to a person who had "fallen from grace"? M. A. B.

Afterwards a convert of Trajan, being at Heliopolis in Egypt, at the time of the crucifixion, and on observing the darkness, exclaimed, "Either the God of nature suffers, or sympathizes with one who now suffers." The name Dionysius means *divinely touched*. How does its name compare with the quotation on page 242, N. AND Q., March, 1890, the author of which, "MURRAY," is now in search of, namely, "The earth weeps for her children." LOTOS.

5. What were some of the formulas or incantations used by the sorcerists, and did the apostles use any formula? LOTOS.

6. Why do the Manichæans call Tubal-cain (Gen. iv, 22), by the name of *Thoulousiel*? They give the two names "Jubal and Tubal-cain" as *Joubel and Thoulousiel*. (See Herbert's *Nimrod*, Vol. I, p. 5.)

Three of the kings of Scythia are given as *Arpoxais*, *Colaxais*, and *Ipoxais*. What are the etymological meanings? JOHN KING.

7. What was the vow of Arrius Babinus, said to be recorded by Iontfaugon? H. K. R.

8. What river does the constellation Eridanus commemorate, and what does the word mean? ALLEN GREENE.

... (Vol. VIII, p. 242.)
... in the Church of the A...
... London, 1888: This work
... in Berossus and in its various
... of correspondences, the
... from the standpoint of a Sweden
... (Apocalypse XIX, 11-16) when und
... series of the Indian Creed
... by the reverent interg
... has spoken abundantly in the
... age is the present Aeon, 11
... It is the fourth in serie
... (1) The Adamic Church
... and Jewish Church: 1-4
... The last or tenth Avatar is yet
... when the world has become

—Lotos—

Heliopolis in Egypt, at the
 the darkness, exclaimed:
 athizes with one who not
only touched. How does
 re 242, N. AND Q., Mart.
 now in search of, names?
 LOROS.
 incantations used by the
 bla" LOROS.
 ain (Gen. iv, 22), by the
 James "Jubal and Tubal-
 ert's *Nimrod*, Vol. I, p. 5.
 Arpoxais, Colaxais, and
 rgs? JOHN KING.
 said to be recorded by
 H. K. R.
 Janus commemorate, and
 ALLEN GREENE.

study in the Church of the Ancients." By James John Garth Wilkin-
 son. London, 1888. This work gives the account of the fish god as
 found in Berosus and in its various transformations or avatars by the
 doctrine of correspondences, the progress of the church as traced
 from the standpoint of a Swedenborgian. By the light of the Word
 (Apocalypse XIX, 11-16) when understood in the internal sense, the
 avatar series of the Indian Creed, from the fish to the horse, may be
 unlocked by the reverent interpreter. Of the fish avatar in Oannes
 he has spoken abundantly in the following series. The close of the
 fourth age is the present *Æon*, the consummation of the first Christian
 Church. It is the fourth in series.

Thus—(1) The Adamic Church: (2) The Noahitic Church: (3) The
 Israelitish and Jewish Church: (4) The Christian Church.

The last or tenth Avatar is yet to come, at the close of the fourth
 age, when the world has become wholly depraved.

The *Æons* of these are the golden, the silver, the brazen, and the

A Few Flying Etymologies.

(Continued from April N. and Q., Page 263.)

Hac-pen, head of the serpent at Stonehenge, which is *Stone-hang*; one stone hanging on the other without cement, as close as the stones of the Pyramid between which a penknife can scarcely be inserted. The Serpent or Python was the oracular agent of divination, and a sorceress is styled a hag. The compound word hagworm is not obsolete, and into such snakes does Milton transform Satan and his infernal crew :

“ He would have spoke,
But hiss for hiss returned with forkéd tongue
To forkéd tongue, for now were all transformed
Alike to *Serpents* all, as accessories
To his bold riot.”—*Paradise Lost*, x, v, 517.

Harry, harass, hergian, heeren, to waste,
Hearse is the ornamental part of a funeral, and *hurst*, a place ornamented with trees; *hyrstan* to adorn, Chislehurst, &c.

Henchman is not an uncommon patronymic, and is the same as haunch-man, or one used for a servant who wore a cutlas—derivable from *coustille*, *coûtille*, *coste*, *côte*. The name of Cotterell is the same. *Hoche-pot*, a dish, and also a clause introduced into settlements, &c. by lawyers, all implying a mixture, a sort of *olla podrida*, *Spanish*, which latter is *pot-pourri*, *olla putrida*. This is derived from *hocher*, to shake, and it originates in the reiterated shaking of a vessel by the cook's hand to prevent the adhesion of its contents, or any undue stagnation.

Hus, *haus*; huys, huissier, userfa, vessier, ursers, uisers. *Hus* came into *huis*, entrance of a door, so *huissier*, and our word *usher*. *Parler au Suisse* or *Suivre* have nothing to do with the porter of a gate, but it means speak to the usher or conductor.

Id is the same as *ed*, morbid; *ad* and *ade* is heap, arcade, canon-ade *bastinade*, repetition of beating.

Ism is equivalent to *g*, and *y*, is copia or abundance. *G*, *Y*, *W*, are interchangeable in northern dialects; *morgen* is morrow, *sorge*, sorrow, *talg*, tallow.

Kid is the young of man or beast. *Cid* means shoot in Saxon. *Kidde*, *kith*, *kin*, *kennan*, hence *kindle*. The word *deer*, now applied to one animal, is only the generic name *thier*, *deor*, *beast*.

Lease means glean, *lesan*, *lisan*, hence *lease contract*; *let*, *lassan*, *laisser*.

Leasing, lies, seek after *lesynges*—“with his chere and his *lesynges*.”—*Chaucer*. *Leasunge*, lying.

Let means little, a hamlet, home, rivulet, a diminutive.

Lief, leof, lufian to love; "I had as lief not be, as live to be in awe."
—*J. Cæsar. Shakspeare.*

Loan. The modern system or tenancy seems to have had its rise in leases for life, or the shorter periods called læ-an, loan; in the freemen the free occupants of the læ-an land, types of our present free labourers and tenantry, as in the Thanes of Marks and Lords of Hundreds' one form of that English rural gentry which struggled for existence with the Norman power, and partially survived. The word *lesed*, als; how else, what else, this and all else; alessen, to loosen.

Lobster is the distortion of locusta, locust, a crustaceous fish of as great rearch among Gourmand and Gourmets, as John Dory supposed to be a corruption of janitore or poisson de Pierre; some call it Jaune Doré, Auratus Zeus, and it had the reputation of bearing the palm of delicacy even over the turbot.

Luncheon, is corruption of noon cheon, a repast taken at noon.

Marshal, mearh, horse, scalc, schalk, rogue, like knade—boy or knave. Our night mare is connected with this word mearh, mare.

Mass. The origin of the word has been disputed. Ite, missa est. Go, the commission is sent to heaven; or the people are dismissed. Cætus dimittur, church is over. It bears the name of mass in English, messe in Franc, and missa in Spanish and Italian.

Ment, from moneo, regi-men. monu-ment. Mony is the same in matri-mony and ali-mony.

Mercy derives from merx, merces, a merchant. Mercy means subject to a tax, hence amerce, whilst remission of merx or tax is mercy. "Virtutis gloria merces," the family motto of the author of this work, where merces means reward.

Mis in Latin answers to *me* in French; mistake, meprendre, me-content.

Mustard, called by the ancients sinápi; "fletum tactura sinapi," tear-eliciting mustard. There is a curious derivation assigned to mustard from old French, moult me tarde, I long ardently; multum ardet is its theme.

Nectarine is a bastard peach, persicum malum; while *apricot* is malus aprica, as being a tenant of a *sunny* wall, which apricus means. The French say *à l'abri*, that which is out of the sun, or under cover, under a helmet; from hüllen to cover. The word *espalier* is a wall exposed to the meridian sun; palum a prop for vines.

Nemo is non-nemo—supposed to be nemo or homo. To look for an impossibility, the Romans said jocosely—Nodum in scirpo quærere, to find a knot in a bulrush; and one of our poets not less jocosely writes, "See gudgeons graze on grass."

Page, pagan, paynim, pagina, a square of land, all from pagus a village; pagare to pay, meant originally, field service.

Palus meant formerly a spade, and being set upright, it came to

mean a pale. Pale in heraldry means arms divided by a pale, as those of husband and wife. Quarterings are a congeries of arms brought in by heiresses only; in some families there are more than 1,000 quarterings, as in the Duke of Buckingham.

Palladium and *Pallas* may be Palet or Phalet, which indicates escape. Beth Phalet is the Booth or house of Phalet: according to Lycophron the Palladium was not a Grecian Deity, but was borrowed from Palestine, and Cassandra calls Ulysses the stealer of the Phœnician goddess; "*klopa phoinikes theas*"—*Cassandra*, v. 658. Pallas was worshipped at Corinth as a Phœnician goddess, says Tzetzes, the scoliast of Lycophron.

Parricide. The word in Latin is derived from *par* and *cædo*, not *pater*; and *duid* is for *dem* to kill, to do—hence *tuer* in French. "Si quis hemonem leiberum sciens *duid*, parricidat estod." Twelve Tables which were adopted by Rome from Greece about 450 B. C., and which became the foundation or as great an adjunct to the Roman laws, as the Greek language was to the Roman speech.

Plagiarist is of singular import, implying a slave abducted for the purpose of sale, hence metaphorically, theft; *plagios* means oblique, and the Greeks called their cases *plagios*, oblique.

Poach is derived from *pochê*, pocket, the yolk of the egg being inclosed in the albumen or white, as if in a pocket or poke or bag.

Poach, game, is only to put it in a bag.

Porridge is derived from *porrus* a leek, with which porridge was flavoured.

Queen, *cwen* queen-bee, queen-fowl, *coinne* and *quean* is woman in Norse; is a corruption of *königin* from king, which is thought to be from *ken* to see, *kennen* to know, and may be identical with the Chinese *gyn*, which means king and man. The word *quean* is the same as *queen* used in a bad sense; could *gune* be the feminine of *gyn*?

Quilt is only the Latin *culcita*, and means anything stuffed with feathers, a cushion.

Re means reverse, as re-tract. retro-active to undo, while ER means advance. R is symbolical of motion either way.

Reek means steam, reechy, steamy kisses.—Shakspeare.

Revenue is re-venir, and is mispronounced *reven-nue*, Shakspeare says in metre, Who no revenue has: but that does not justify this pronunciation in prose; if so, what is to become of parvenu, avenue, and retinue? Mr. Pitt first set this affected example in the House of Commons.

Rob, reave, rauben, be-reafian.

Sad means settled; a sad stone says Wicliff, is a set stone. "The *sadness* of your bileve," means, the steadfastness of your belief, sæd, seated. Secede is sine cedo, as sedulo, sincerely, is sine dolo, and securus, sine cura.

Scold, bescylding, schelden.

Ship is hood or head, and means kind or species ; ship, shop, shape kind means substance, and person means kind in the Athanasian creed ; kin-lamb, kin—and tude means *kind*, altitude, which is breadth and depth also.

Shroud, wrapping for the dead, and also for vessels, derives from scud, meaning clothing.

Skate, the fish, is a corruption of squattina, hence squat, the natural position of this and similar fish, lying flat at the bottom of the sea ; plat, flat, platitude, a dull flat expression.

Sleight should be written slight, from schlichten to slight, or throw away ; hence slay, sly, sleyed silk, a weaver's slay, sleight of hand ; as "The rogues slighted me into the river."—*Shakspeare*. Height should be written hight from high, also, Milton wrote it heighth.

Smattering, comes from *smack*, taste. *Synop*, sherbet, shrub, from the Arabic sib.

Soare, a three-year-old deer ; sorrel.

Some, *sum*, means quantity, in opposition to none, from so.

Spinach comes from Spain, epinard. This *olus* resembles a thorn, or the head of an arrow.

Tellan to tell, told, tale, to sell by tale or numeration, and not by weight, but by *telling* ; to tell off soldiers, means to number off. *Toll*, thol, tituli fiscales, hence the German *Zoll*. *Zollverein*, union in one toll or tax.

Truffle, a fungus which grows underground in subterraneous cradles, A few crevices in the *tophus*, or sandy ground, are the only indications, and through them the perfume of the truffle betrays the secret to animals schooled to hunt for them, as dogs and pigs. The origin of the wood is subter topho, from which the Italians made *tetuffalo*, truffle.

Vavator, a title next in dignity below a Baron, the same as Vaywode. The word *varo* means man, as Baron and femme, man and wife in law. Baron, *kat hexochen* pre-eminently a man, hence a Peer.

Yeoman, *yeman*, gemein, common ; y is frequently superseded by g, as yate, gate.

Wall-nut is Wälsh-nut. Wäla means foreign in Old Saxon. They called all foreigners Wall or Welsh, especially French and Italian. Wall-fahrt, foreign journey, pilgrimage. Bryd Walena, or Welshman.

Whilk, quhilk, ilk, means like. The Scotch say of that ilk, meaning of that same place and name.

Witena gemote. Parliament or meet of the wits.

World. Ur denotes origin. We-or-uld is contracted into world. Rum is land, hence room.

Wormwood, were-muth, which is mood, hence courage.

Worship, weord-shippe, means virtue, or manhood. Please your Worship—with my body I thee worship, or do reverence.

Wassaile. Waes heal hlaford cyning, be of health Lord King.

THE TEN CATEGORIES OF EXISTENCE. What are these, referred to in occult works ?

JONATHAN.

These are found in the "Sepher Yezirah," or book of creation, a production ascribed to the patriarch Abraham. It is a book of Jewish metaphysics of remote antiquity.

The following are the ten categories of existence out of nothing :

1. The spirit of the living God, praised and glorified by the name of Him who lives to all eternity. The articulate word of creative power, the spirit and the word are what we call the holy spirit.

2. Air emanated from the spirit by which He formed and established twenty-two consonants, stamina. Three of them, however, are fundamental letters, or mothers, seven double and twelve simple consonants; hence the spirit is the first one.

3. Primitive water emanated from the air. He formed and established by it Bohu (water, stones) mud and loam, made them like a bed, put them up like a wall, and surrounded them as with a rampart, put coldness upon them and they became dust, as it reads: "He says to the snow (coldness) be thou earth." (Job xxxvii, 6.)

4. Fire or ether emanated from the water. He established by it the throne of glory, the Seraphim and Ophanim, the holy living creatures and the angels, and of these three He formed His habitation, as it reads: "Who made His angels spirits, His ministers a flaming fire." (Psalm civ, 4.) He selected three consonants from the simple ones which are in the hidden secret of three mothers or first elements: *Aleph*, *Mem*, and *Shin*—air, water, and ether or fire. He sealed them with spirit and fastened them to His great name and sealed it with six dimensions.

{	World,	}	{	Air.	}	{	Earth.	}	{	Heaven.	}
{	Man,	}	{	Breast.	}	{	Belly.	}	{	Head.	}
{	Year,	}	{	Moisture.	}	{	Coldness.	}	{	Heat.	}

5. He sealed the height and turned upward and sealed it with *VHI*.
6. He sealed the depth and turned downward and sealed it with *VIF*.
7. He sealed the east and turned forward and sealed it with *HIV*.
8. He sealed the west and turned backward and sealed it with *HVI*.
9. He sealed the south and turned to the right and sealed it with *IHV*.
10. He sealed the north and turned to the left and sealed it with *IVH*.

These are the ten spheres of existence out of nothing. From the spirit of the living God emanated air; from air, water; from water fire or ether; from ether, height and depth, the East, the West, the North, the South.

*Queens - Regnant and Queens - Consort,
Of Great Britain and Ireland according to Agnes Strickland.*

Adelicia of Louvaine, second queen of	Henry I
Anne, queen-rengant.	
Anne Boleyn second queen	Henry VIII
Anne of Bohemia, first queen	Richard II
Anne of Cleves, fourth queen	Henry VIII
Anne of Denmark, queen	James I
Anne of Warwick, queen	Richard III
Berengaria of Navarre, queen	Richard I
Catharine of Braganza, queen	Charles II
Eleanor of Provence, queen	Henry III
Eleanora of Aquitaine, queen	Henry II
Eleanora of Castile, first queen	Edward I
Elizabeth, queen-regnant	
Elixabeth of York, queen	Henry VII
Elizabeth Woodville, queen	Edward IV
Henrietta Maria, queen	Charles I
Isabella of Angouleme, queen	King John
Isabella of France, queen	Edward II
Isabella of Valois, second	Richard II
Jane Seymour, third queen	Henry VIII
Joanna of Navarre, queen	Henry IV
Katharine Howard, fifth queen	Henry VIII
Katharine of Aragon, first queen	Henry VIII
Katharine Parr, sixth queen	Henry VIII
Katharine of Valois, queen	Henry V
Margaret of Anjou, queen	Henry VI
Marguerite of France, second	Edward I
Mary, queen regnant	
Mary II, queen-regnant, wife	William III
Mary Beatrice of Modena, queen	James II
Matilda of Boulogne, queen	Stephen
Matilda of Flanders, queen	William I
Matilda of Scotland, first queen	Henry
Philippa of Hainault, queen	Edward III

MARTIN DEXTER

SATELLITE OF VENUS. (Vol. VIII, p. 265.) "A Satellite of Venus was discovered by Domenico Cassini, and subsequently seen by Short, by Montaigne of Limoges, and other astronomers at different epochs. It always presented to them, as it must naturally, a phase similar to the phase presented by Venus, at the moment of the observations, but with a faint degree of brightness, by no means proportionate to the estimated dimensions of the satellite. As the volume of Venus is very nearly equal to the volume of the Earth, so the volume of the satellite of Venus appears to be very nearly equal to that of our own moon. This is a remarkable coincidence. But then, if the fireective power of the Satellite of Venus were equal to that of Venus herself, the satellite should not shine less brilliantly to our eyes than a moderate star of the first magnitude, for, the surface of Venus is not more than fourteen times larger than that of her satellite, but the light of Venus, to our eyes, is more than fourteen times greater than that of a moderate star of the first magnitude. How comes it to pass that the Satellite of Venus is so seldom seen, even with good telescopes, that many astronomers actually doubt its existence? Helle contended that it was all an optical illusion. Mairan thought that the difficulty of seeing it was owing to the zodiacal light. The most obvious explanation appears to me to suppose that the surface of the satellite or at least a considerable portion of it, has a tint naturally dark or dusky. A planet could not even be seen at all, except an internal planet in its passages over the solar disk, if its surface were absolutely black."—*Miranda, Vol. II, pp. 39 40.*

"As to Uranus, Burritt, in his *Geography of the Heavens*, published more than 50 years ago, said plainly: 'Uranus is attended by six moons. Four of them were discovered by Sir William Herschel, and two by his sister, Miss. Caroline Herschel. It is possible that others remain yet to be discovered.' This positive assertion is afterward qualified by the remark that 'Sir William Herschel reckoned six, though no other observer has confirmed this opinion; and even his son, Sir John Herschel, seems to consider the existence of six satellites quite doubtful.' This high-born doubt, out of respect for its alleged parentage, has become conventional. So Prof. Loomis, Lockyer, Proctor and other astronomers of later times omit from their accredited list of satellites the first-and-second-born of Uranus; and of course the school-teachers assure their pupils that *four* Titans are sufficiently incredible and enough for the nonce of Uranian moonshine."—*Pericomic Theory by George Stearns, pp. 157-158.*

The author of the "Pericomic Theory" says the proper conventional name of the first-born satellite of Uranus is *Caroline*, and the other discovered by Miss Herschel is *Lucretia* — her Christian names being Caroline Lucretia.

THE PUZZLE KNOWN AS THE CHINESE RINGS. This puzzle consists of a number of rings hung upon a bar in such a manner that the ring at one end (say *A*) can be put on or off the bar at pleasure; but any other ring can only be put on or off when the next one to it towards *A* is on, and all the rest towards *A* off the bar. The order of the rings cannot be changed. It is easy to shew by induction that there be n rings, it will be necessary, in order to disconnect them from the bar, to put a ring either off or on $\frac{1}{3}(2^n+1-1)$ or $\frac{1}{3}(2^n+1-2)$ times according as n is odd or even: e.g. if there be sixty rings it will be necessary to put a ring on or off 768,614,836,404,564,650 times. M. Gros has recently published a most ingenious solution in which the act of taking a ring off or on is represented by the subtraction or addition of unity to a certain number expressed in the binary scale.

How many ways can the following verse be varied, without destroying the measure: "Tot tibi sunt dotes, Virgo, quot sidera cælo."

This verse, the production of a devout Jesuit of Louvain, named Father Bauhuys, is celebrated on account of the great number of arrangements of which it is susceptible, without the laws of quantity being violated; and various mathematicians have exercised or amused themselves with finding out the number. Erycius Puteanus took the trouble to give an enumeration of them in forty-eight pages, making them amount to 1,022, or the number of the stars comprehended in the catalogues of the ancient astronomers; and he very devoutly observes, that the arrangements of these words as much exceed the above number as the perfections of the Virgin exceed that of the stars.

Father Prestet, in the first edition of his *Elements of the Mathematics*, says that this verse is susceptible of 2,196 variations; but in the second edition he extends the number to 3,276.

Dr. Wallis, in the edition of his *Algebra*, printed at Oxford, in 1693 makes them amount to 3,096.

But none of them has exactly hit the truth, as has been remarked by James Bernoulli, in his *Ars Conjectandi*. This author says, that the different combinations of the above verse, leaving out the spondee, and admitting those which have no cæsure, amount exactly to 3,312. The method by which the enumeration was made may be seen in the above work. (Maseres's "Doctrines of Chances," pp. 49-50).

The same question has been proposed respecting the following verses from Thomas Lansius:

Lex, rex grex res, spes, jus, thus, sal, sol, (bona) lux laus;

Mars, mors, sors, lis, vis, styx, pus, nox fex, (mala) cruz, fraus.

It may be found, retaining the words *bona* and *mala* in the autepenult places, in order to preserve the measure, that each verse is susceptible of 39,916,800 different arrangements. (Dr. Hutton makes it 399,168,000. "Mathematical Recreations," p. 46, Riddle's edition.)

Questions and Answers.

CLAY BIRDS. (Vol. VIII, p. 242.) Narratives of clay sparrows being endowed with life by Jesus are found in the following apocryphal gospels; The Gospel of Pseudo-Matthew, or of the Infancy of Mary and of Jesus, xxvii; The Gospel of Thomas (No. 1), ii; The Gospel of Thomas (No. 11), iv; and The Arabic Gospel of the Infancy, xxxvi; (See B. H. Cowper's Apocryphal Gospels, London, 1881. pp. 66, 130-1, 146, 156, 202.)

WM. EMMETTE COLEMAN.

HINDU "MANSIONS OF THE MOON." (Vol. VIII, p. 242.) The following are the names of the 28 "mansions of the moon" or Hindu nakshatras: Kritika (meaning unknown), Rohini (ruddy), Mrigashirsha or Mrigashiras (stag's head), Ardra (moist), Punarvasu (the two good again), Pushya (flower), Ashlesha (embracer), Magha (generous), Purva-Phalguni (the former Phalguni, -meaning doubtful), Uttara-Phalguni (latter Phalguni), Masta (hand), Chitra (bright), Svati (meaning doubtful), Vishakha (branched), Anuradha (propitiars), Jyeshtha (eldest), Mula (root), Purva-Ashadha (the former Ashadya unconquered), Uttara-Ashadya (latter Ashadya), Abhijit (victorious), Shrivana (ear), or Shrona (lame), Shrivishtha (most famous), or Dhanishtha (richest), Shatabhishaj (hundred physician), Purva-Bhadrpadas (auspicious foot) or Proshthapadas (foot stool), Uttara-Bhadrpadas or U.-Proshtrapadas (latter Bh. or Pr.), Revati (wealthy), Ashvini (equestrian), and Bharani (bearer).

WM. EMMETTE COLEMAN.

HINDU SOLAR ZODIAC. (Vol. VIII, p. 242.) The Hindu names of the 12 Signs of the Zodiac are these: Mesha, the Ram; Vrisha, the Bull; Mithuna, the Pair; Karkata, the Crab; Sinha, the Lion; Kanya, the Virgin; Tula, the Balance; Vrishchika, the Scorpion; Dhanus, the Bow; Makara, the Sea-Monster; Kumbha, the Ewer; Mina, the Fish.

WM. EMMETTE COLEMAN.

ENGLISH VERSION OF MAHABHARATA. (Vol. VIII, p. 242.) There have been published various English Translations of small portions of the great Hindu epic, the Mahabharata; as the Bhagavad Gita, Nala and Damayanti, etc.; but as yet no complete English version has been published. At present, what is intended to be, when

finished, a complete translation of the entire work is being published in bi-monthly fasciculas, by Pratapa Chandra Roy No. I. Raja Goonor Dass' Street, Calcutta So far, more than half the work has appeared, and it is hoped that this gigantic task will be carried steadily forward to a successful termination.

WM. EMMETTE COLEMAN.

FIRST USE OF "COSMOS." (Vol. VIII, p. 258.) It is not known which of the ancient philosophers first applied the word *Kosmos* to the universe at large. It has been attributed to Pythagoras by a number of writers including Plutarch Diogenes Laërtius; Stoicæus, Galen, and Photius; and it is true that the School of Pythagoras often made use of the word in this sense. It is very doubtful, though, that Pythagoras himself was the first to apply the word to the universe. Zeller tells us ("Pre-Socratic Philosophy," Vol. I, p. 472. note), that when it is said that Pythagoras was the first to use this expression, what is probably true in the statement is, that the Pythagoreans were fond of employing the word to designate the harmonious order of the world. But even at the time of Xenophon it was not in general use as is plain from his *Memorabilia* I, II; *ho kalarmonos heepo ton sophiston kosmos*, (that which the Sophists call *Kosmos*).

WM. EMMETTE COLEMAN.

ANCIENT ORACLES. (Vol. VIII, p. 242.) Eusebins was the first writer who asserted that the ancient oracles ceased at the birth of Christ, and a number of subsequent writers repeated the statement. It is alluded to by John Milton in his poem "The Hymn of the Nativity."

WM. EMMETTE COLEMAN.

One Hundred Cities of Crete.

Homer, in the *Iliad* (II, 790) giving a catalogue of the ships in the expedition to Troy, says :

"Crete's hundred cities pour forth all her sons."—*Pope*.

Virgil, in the *Æneid* (III, 106), says :

"The Cretians inhabit a hundred cities, all most fertile realms."—*Davidson*.

Homer, again in the *Odyssey* (XIX, 196-197), says :

"Crete awes the circling waves, a fruitful soil,
And ninety cities crown the sea-born isle."—*Pope*.

Other ancient writers have referred to Crete as having one hundred or more cities. Homer gives to Grete, according to Davidson, the name *Hekatompolis*.

Hon. Charles Boyle, and others, state that geographers have not mentioned the names of *one hundred* cities of Crete. If one will refer to Meursius's "History of Crete" he will find there some 145 names of cities given, though several seem to be one and the same. However, Richard Bentley states that at least 120 cities are mentioned by Meursius, We give the list in answer to several correspondents.

(NOTES AND QUERIES, Vol. VI, p. 332. *Educational Notes and Queries*, Vol. VI, p. 35.)

Meursius says, as to number, "*Habes urbes universim ac virginti.*"

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|------------------------------|---------------------------------|
| 1. Achaia, | 29. Camyrus, (see Hiera Pytna,) |
| 2. Æpea, | 30. Cautanus, |
| 3. Agrium, | 31. Catrea, |
| 4. Alba, | 32. Caunus, |
| 5. Alloria, | 33. Ceratus, |
| 6. Amnisus, | 34. Cerea, |
| 7. Ampelus, | 35. Chalchetorium, |
| 8. Amphimalla, | 36. Chaudace, |
| 9. Anopolis, | 37. Cherronesus, |
| 10. Aorus, | 38. Cisamus, |
| 11. Apollonia, | 39. Clatos, |
| 12. Aptera, | 40. Cnossus, |
| 13. Araden, (see Anopolis,) | 41. Corycus, |
| 14. Arcades, Arcadia, | 42. Creninja, (see Gortyn,) |
| 15. Artacina, | 43. Cydonia, |
| 16. Asus, | 44. Cyrba, (see Hiera Pytna,) |
| 17. Auton, | 45. Cytaeum, |
| 18. Aulopotamus, | 46. Daedala, |
| 19. Axus, | 47. Diatonun, |
| 20. Baucus, | 48. Dictamnum, |
| 21. Bena, | 49. Dium, |
| 22. Biennus, | 50. Dragmus, |
| 23. Boeae, | 51. Drauca, |
| 24. Boeba, | 52. Dulopolis, |
| 25. Caeno, | 53. Einatus, |
| 26. Caeratus, (see Ceratus,) | 54. Elaea, |
| 27. Cale, | 55. Eleuthera, |
| 28. Camara, | 56. Eleutherna, |

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|---------------------------------|--------------------------|
| 57. Elyrus, | 102. Olyssa, (see Olus,) |
| 58. Erythraea, | 103. Osmida, |
| 59. Etea, | 104. Pan, |
| 60. Gortyn, | 105. Pannona, |
| 61. Glamia, | 106. Pantomatrium, |
| 62. Grammiun, | 107. Paxus, |
| 63. Heraclea, | 108. Pergamea, |
| 64. Hierapolis, | 109. Phaestus, |
| 65. Hierapytna, | 110. Phalanna, |
| 66. Hippocoronium, | 111. Phalannaea, |
| 67. Holopyxos, | 112. Phalasarna, |
| 68. Hydramia, | 113. Pharae, |
| 69. Hyrtacus, | 114. Phoenicas, |
| 70. Hystoe, | 115. Phoenix, |
| 71. Ilattia, | 116. Poecilasium, |
| 72. Inachorium, | 117. Polichna, |
| 73. Inatus, (see Einatus,) | 118. Polyren, |
| 74. Istrus, | 119. Praesus, |
| 75. Itanus, | 120. Priaesus, |
| 76. Lampa, | 121. Psychium, |
| 77. Lappa, (see Lampa,) | 122. Pylorus, |
| 78. Larissa, | 123. Pyranthus, |
| 79. Lasaea, | 124. Rhamnus, |
| 80. Lasus, | 125. Rhaucus, |
| 81. Lato, | 126. Rhizenia, |
| 82. Laebena, | 127. Rhithymnia, |
| 83. Lissus, | 128. Rhytium, |
| 84. Lycastus, | 129. Salomon, |
| 85. Lyctus, | 130. Salyrus, |
| 86. Manethusa, (see Marathusa,) | 131. Satra, |
| 87. Marathusa, | 132. Sibyrthus, |
| 88. Matalia, | 133. Sitea, |
| 89. Matium, | 134. Stelae, |
| 90. Melissa, (see Lissus,) | 185. Strenus, |
| 91. Metallum, | 136. Syia, |
| 92. Miletus, | 137. Syrinthus, |
| 93. Minoa, | 138. Tanus, |
| 94. Mycenæ, | 139. Tarba, |
| 95. Myrina, (see Mycenæ,) | 140. Tarrha, |
| 96. Naxus, | 141. Tegea, |
| 97. Oanormus, | 142. Thennae, |
| 98. Oaxus, | 143. Therapuae, |
| 99. Olerus, | 144. Tiresia, |
| 100. Olulis, (see Olus,) | 145. Tripodus. |
| 101. Olus, | |

FORTY-NINE LIVES. (Vol. VIII, p. 273.) The man who claimed to have had *forty-nine lives* on this mundane sphere was *Filopanti* who styled himself *Emmanuel XXXXIX*. He wrote his book and published it in 1859, entitled "Miranda, a book divided into three parts, *Souls, Numbers, Stars*, on the Neo-Christian Religion; its confirmation of the old and new doctrine of Christ from wonders hitherto unheeded in the words and divisions of the Bible, in the facts and dates of history: and in the position and motions of the celestial bodies."

The following are the names of the remarkable personages that the author of "Miranda" (*wonders*) claims as reincarnations :

1. Adam, 1st	18. Noac, or Noah,	35. Archimedes,
2. Orion,	19. Fui, or Fo-hi,	36. Cæsar,
3. Cepheus,	20. Semirama,	37. Jesus Christ,
4. Pan,	21. Minos,	38. Marcus Aurelius,
5. Ermus,	22. Sesostris,	39. Constantine,
6. Canopus,	23. Hercules,	40. Mahomet,
7. Adam, 2d;	24. Moses,	41. Charlemagne,
8. Boötes,	25. Job,	42. Godfrey,
9. Bel,	26. Sibylla,	43. Dante,
10. Crisnu,	27. Homer,	44. Gutemberg,
11. Osiris,	28. Romulus,	45. Raphael,
12. Totus,	29. Buddas,	46. Galileo,
13. Manes,	30. Pythagoras,	47. Newton,
14. Jupiter,	31. Brutus,	48. Wasfington,
15. Trismegistus,	32. Confucius,	49. Emmanuel,
16. Oximandias,	33. Plato,	
17. Adam, 3d:	34. Euclid,	

He also claims that each had "his own star" as a sort of guardian angel, as follows, the numerical numbers corresponding with the above :

1. Anilam, Orion.	13. <i>Kappa Cassiopeia</i> .
2. Formalhaut, Southern Fish.	14. Alioth, Ursa Major.
3. Schedir, Cassiopeia.	15. <i>Delta Crucis</i> .
4. Caph, Cassiopeia.	16. <i>Gamma Cassiopeia</i> .
5. <i>Gamma Crucis</i> .	17. Acrux, Southern Cross.
6. Achernar, Eridanus.	18. Markab, Pegasus.
7. Dubhe, Ursa Major.	19. Scheat, Pegasus.
8. Merak, Ursa Major.	20. Alpheratz, Andromeda.
9. Phad, Ursa Major.	21. Ruchbah ur Rannih, Sagitt.
10. Algenib, Pegasus.	22. Ruchbuh, Cassiopeia.
11. Canopus, Argo Navis.	23. <i>Beta Crucis</i> .
12. Megres, Ursa Major.	24. Sirius, Canis Major.

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|--------------------------------|----------------------------------|
| 25. Aldebaran, Taurus. | 38. <i>Epsilon Ursæ Minoris.</i> |
| 26. Arided Cygnus. | 39. <i>Zeta Ursæ Minoris.</i> |
| 27. Agena, Centaurus. | 40. Algol, Perseus. |
| 28. Cynosura, Ursa Minor. | 41. Kochab, Ursa Minor. |
| 29. Merach, Andromeda. | 42. <i>Beta Trianguli.</i> |
| 30. Bungula, Centaurus. | 43. Rigel, Orion. |
| 31. Mizar, Ursa Major. | 44. <i>Gamma Ursæ Minoris.</i> |
| 32. Almach, Andromeda. | 45. <i>Eta Ursæ Minoris.</i> |
| 33. Betelguese, Orion. | 46. Spica, Virgo. |
| 34. <i>Epsilon Cassiopeiæ.</i> | 47. Zubeneschemali, Libra. |
| 35. Regulus, Leo. | 48. Benetnasch, Ursa Major. |
| 36. <i>Delta Ursæ Minoris.</i> | 49. Alnitak, Orion. |
| 37. Mintaka, Orion. | |

Section 1149 says that on February 8, 1849, he heard Charles Bonapart, nephew of Napoleon, having ascended to the tribune, make an eloquent speech, at the conclusion of which, suddenly turning pale, he said, "I hear the voice of your ancestors, from under the ground, demanding of you the Republic." The occult sense of the words were comprehended by Filopanti, who also ascended the tribune, and proposed the fundamental decree, or constitution, of the Republic, in these five articles:

1. The Papacy has fallen, by right and in fact, from the temporal government of the Roman States.
2. The form of the Roman State shall be purely democratic, and take the glorious name of the Roman Republic.
3. The Roman Republic shall have for its principal object the amelioration of the moral and physical condition of all classes of society.
4. The necessary guarantees shall be given to the Sovereign Pontiff for the independent exercise of his spiritual power.
5. The relations of the Roman Republic with the other parts of Italy shall be determined by the Italian Constituent Assembly.

The articles were substantially adopted after a long discussion, and at noon, on February 9, 1849, the Republic was solemnly proclaimed on the Capitol.

Filopanti immediately claimed to realize his former transmigrations and commenced to record his metempsychosian lives. He claims to have been incarnated in three Adams who, he says, Moses recorded under one Adam. He says Jesus was incarnated 49 times, and several others like Pythagoras *knew* and realized metempsychosis. He has developed a wonderful combination of date-numbers, as to events and

epochs, which must be left to the investigator of his system to decide whether they are coincidences or divine design. The author seems to be perfectly at home as to familiarity with universal history.

Edward Vaughan Kenealy wrote six thick octavo volumes entitled Oannes (3 vols.), Fo-hi, Enoch (2 vols.), endeavoring to show that there had been *twelve* reincarnations from Adam (A. M. 3,000) to the present age 1800, *circa*,) A. M. 9600. These personages appeared at each Naros, or 600 years and were reincarnations, as follows :

1. Adam,	A. M. 3,000	7. Amosis,	6,600
2. Enoch,	3,600	8. Lao-Tseu,	7,200
3. Fo-hi,	4,200	9. Jesus,	7,800
4. Brigoo,	4,800	10. Mohammed,	8,400
5. Zaratusth,	5,400	11. Chenzig-Khan,	9,000
6. Thoth,	6,000	12. Twelfth messenger	9,600

The twelfth messenger was to be revealed during the present century. Some of his supporters think that Edward V. Kenealy considered himself the Twelfth Messenger.

The first 2,400 years of the world were guided by *twenty-four ancients* (four and twenty elders).

Godfrey Higgins wrote and published a remarkable work in two volumes, entitled "Anacalypsis," in which he names the reincarnations slightly different down to and including the ninth, as follows :

1. Adam, the first cycle, ending with the birth of Enoch.
2. Enoch, the second cycle, ending with the birth of Noah.
3. Noah, the third cycle, ending with Noah leaving the ark.
4. Isaac, the fourth cycle, ending about the time of Abraham.
5. Joshua, the fifth cycle, ending when the ark was brought to Shiloh.
6. Samson, the sixth cycle, ending with time of Samson (probably).
7. Elijah, the seventh cycle, ending with the time of that person.
8. Cyrus, the eighth cycle, ending with the time of that person.
9. Jesus the ninth cycle, ending about 600 A. D.

Kenealy arranges his reincarnations by the cycle of 600 years called the Naros ; while Higgins seems to favor the cycle of 608 years called YES (Greek, thus Y 400, E 8, S 200) = 608.

Rev. A. Herbert, in that wonderful monument of learning and lore, entitled "Nimrod," in four thick volumes, London, 1828, speaks of these cycles, as also does Jacob Bryant in his work "System of Mythology."

Planetary Laws.

The following collection of planetary laws, or as some call them planetary analogies, may be useful for comparison. Bode's and Bayne's laws have been called "empirical," but they have served to lead to greater search for further discoveries in the planetary realms.

BODE'S LAW.

If the tenth part of the mean distance of the earth from the sun be taken as a unit, the mean solar distance of the planets (Neptune excepted) will be approximately represented by the numbers in the following table :

Planets.	Approx. Dlst.	Geom. Series.	Const.	Mean. Dlst.
Mercury,	3	=	0 + 4	3.6
Venus,	7	=	3 + 4	6.8
Earth,	10	=	6 + 4	9.5
Mars,	16	=	12 + 4	14.5
Asteroids,	28	=	24 + 4	27.5
Jupiter,	52	=	48 + 4	49.5
Saturn,	100	=	96 + 4	90.9
Uranus,	196	=	192 + 4	192.8

—*Dictionary of Science.* By G. F. Rodwell. Philadelphia, 1873.

LAW OF PHYLLOTAXIS.

The Law of Phyllotaxis is well known to be in harmony with Bode's Law. Thus the *plants* and the *planets* obey the same law.

The phyllotatic law is not of practical importance in the growth of plants ; they live and flourish on the rudest approach to it. But the tracing of these approximations up, in such numerous instances, to the highest degree of accuracy, such as 55 : 44, and 34 : 89, one above, and one below the perfect, show that :

The law of extreme and mean ratio is actually incorporated into the vegetable kingdom. The builder of the planet knew that law untold ages before the geometer invented it.—Geometry and Faith. By Thoma. Hill, p. 88. (NOTES AND QUERIES, Vol. V, p. 154-155, September, 1888.)

BAYNE'S LAW.

This law is an extension of "Bode's Law." Instead of doubling, in the geometrical series, on 192, this law adds 96 to 192 thus giving Neptune's distance 292, while Brocklesby "Elements of Astronomy,"

(p. 196) places the real distance at 286.2, and other authors at 300. From Uranus the geometrical series reverses, as follows :

BODE.					BAYNE.							
Mercury,	0	+	4	=	4	Mercury,	0	+	0	=	0	4
Venus,	3	+	4	=	7	Venus,	0	+	3	=	3	7
Earth,	6	+	4	=	10	Earth,	3	+	3	=	6	10
Mars,	12	+	4	=	16	Mars,	6	+	6	=	12	16
Asteroids,	24	+	4	=	28	Asteroids,	12	+	12	=	24	28
Jupiter,	48	+	4	=	52	Jupiter,	24	+	24	=	48	52
Saturn,	96	+	4	=	100	Saturn,	48	+	48	=	96	100
Uranus,	192	+	4	=	196	Uranus,	96	+	96	=	192	196
						Neptune,	96	+	192	=	288	292
							48	+	288	=	336	340
						Ultra-	24	+	336	=	360	364
						Neptunian	12	+	360	=	372	376
							6	+	372	=	378	482
						Planets,	3	+	378	=	381	385
							0	+	381	=	381	385

—*Psychological, Mathematical, and Philosophical Chronology*, p. 91. By Dr. Bayne. Portland, Me., 1880.

BANKS'S LAWS.

Equilibrium. The Solidity of the Sun, multiplied by the radius of its orbit —, is equal to —, the Solidities of all the Planets multiplied by the radii of their respective orbits.

Propulsion. The Solidity of the Sun, multiplied by the circumference of its orbit —, is equal to —, the Solidities of all the Planets multiplied by the spaces they respectively pass in their orbits during one revolution of the Sun.

Evolution. The Convex Surface of the Sun in one diurnal rotation —, is equal to —, the Convex Surfaces of all the Planets multiplied by the number of diurnal rotations they respectively make in 25 days and 12 hours, that being the time in which the Sun makes one diurnal rotation.

Inclination. The Inclination of the Sun to the plane of its orbit —, is equal to —, the Inclinations of all the Planets to the planes of their respective orbits.

Light. The Light transmitted from the Sun to the Planets in a second of time —, is equal to —, the squares of the diameters of all the Planets multiplied by 200,000, that being the velocity of Light

in miles per second. — *Astronomy, or the Solar System Explained on Mechanical Principles*, pp. 28, 37, 42, 53, 58. By Richard Banks. London, 1829.

GHOLSON'S LAW.

Divide the greater of the two velocities of any planet or satellite by the lesser velocity and square the quotient; multiply the squared quotient by the square root of the radius, and this product by the fifth power of the radius. The result will represent the total attraction or mass.—*The Origin of Forces*. By John G. Gholson. Broughton, Ill.

KEPLER'S LAWS.

1. The orbit of each planet is an ellipse, having the sun in one focus.
2. As the planet moves around the sun, its radius-vector (or the line joining it to the sun) passes over equal areas in equal times.
3. The square of the time of revolution of each planet is proportional to the cube of its mean distance from the sun.—*Popular Astronomy*, pp. 69-70. By Simon Newcomb, New York, 1878.

KIRKWOOD'S LAWS.

Let P be the point of equal attraction between any planet and the one next interior, the two being in conjunction; P', that between the same and the one next exterior.

Let also D = the sum of the distances of the points P, P', from the orbit of the planet, which is called the diameter of the sphere of the planet's attraction.

D' = the diameter of any other planet's sphere of attraction found in like manner.

n = the number of sidereal rotations performed by the former during one sidereal revolution round the sun.

n' = the number performed by the latter; then it will be found that

$$n^2 : n'^2 : : D^3 : D'^3 ; \text{ or, } n = n' \left\{ \frac{D}{D'} \right\}^{\frac{2}{3}}$$

Prof. Kirkwood says: "When it is considered that this formula involves the distances, masses, annual revolutions, axial rotations, of the primary planets of the system, I must confess, I find it difficult to resist the conclusion that the law is founded in nature.—*Proceedings of American Association for Advancement of Science*, 1849, p. 208.

LAPLACE'S LAWS.

1. If the mass of each planet be multiplied by the product of the

square of the eccentricity and square root of the mean distance, the sum of all these products will always retain the same magnitude.

2. If the mass of each planet be multiplied by the product of the square of the inclination of the orbit and the square root of the mean distance, the sum of these products will always remain invariable.—*Report of Regents of Smithsonian Institution, 1871, p. 263.*

NEWTON'S LAWS.

1. A body once set in motion and acted on by no force will move forward in a straight line and with a uniform velocity forever.

2. If a moving body be acted on by any force, its deviation from the motion defined in the first law will be in the direction of the force, and proportional to it.

3. Action and reaction are equal, and in opposite directions; that is whenever any one body exerts a force on a second one, the latter exerts a similar force on the first, only in the opposite direction.—*Popular Astronomy, pp. 75-76. By Simon Newcomb. New York, 1878.*

NORTON'S LAWS.

1. The axial velocities (angular) of the planets are—as their diameters.

2. The orbital velocity of the planets is inversely as the square root of the semi-diameter of their orbits. Now it will be remembered that “the intensity of light diminishes inversely as the square of the distance.” Clearly, then, if the preceding statement be correct, the cause of the orbital motion must be Light.—*The Numerical Basis of the Solar System. By Frank H. Norton. Lucifer, Vol. V, No. 30. February 15, 1890, pp. 481-490.*

PRATT'S LAWS.

1. The squares of the cube roots of the densities of the planets are as their periods of rotation.

2. The cube roots of the densities of the planets are as the square roots of their periods of rotation. The squares of the cube roots of the masses divided by the squares of the diameters are as the periods of rotation.—*Key to the Universe; New Theory of its Mechanism, p. 82. By Orson Pratt, Sen. Salt Lake City, Utah, 1879.*

STEARNS'S LAWS.

The ratio of a senior planet's orbit to a junior planet's orbit is

equal to the square of the ratio of the junior planet's orbital motion to the senior planet's orbital motion.

And so conversely —

The square root of the ratio of a senior planet's orbit to a junior planet's orbit is equal to the ratio of the junior planet's orbital motion to the senior planet's orbital motion.

As the ratio of Neptune's orbit to Venus's orbit is to the ratio of Neptune's orbit to Mercury's orbit, so the ratio of Neptune's orbit to Mercury's orbit is to the ratio of the Solar Nebula's prime equator to Mercury's orbit.

1. The product of the square of the ratio of the Earth's daily orbital motion to Neptune's daily orbital motion multiplied by the radius of the Earth's orbit, is equal to the radius of Neptune's orbit.

2. The product of the square root of the ratio of Neptune's orbit to Mercury's orbit multiplied by Neptune's daily orbital motion, is just equal to the product of the square root of the ratio of the Solar Nebula's prime equator to Mercury's orbit multiplied by the solar Nebula's primal rotary motion, *per diem*; and either product is equal to the daily orbital motion of Mercury.

3. The square of the ratio of Mercury's daily orbital motion to the primal rotary motion of the Solar Nebula *per diem* multiplied by the radius of Mercury's orbit, is equal to the radius of the Solar Nebula's prime equator.

4. The primal rotary motion of the Solar Nebula *per diem* was equal to the quotient of Neptune's daily orbital motion divided by the square root of the ratio of the Solar Nebula's prime equator to Neptune's orbit.—*The Pericosmic Theory of Physical Existence and its Sequel*, pp. 91-98. By George Stearns. Hudson, Mass., 1891.

RUSH'S LAWS.

Sun's Disturbing Action. The sun's action increases the gravity of the moon to the earth at the quadrature, and diminishes it at the syzgies.

The tendency of the sun's disturbance is to elongate the orbit of the moon in the line passing through the earth and the sun.

1. The squares of the velocities of precipitation from the planets to the sun vary as the cubes of the distances.

2. The acquired velocity at the time of precipitation varies directly as the square of the distance from which the body started, and inversely as the square root of the same.—*The True Doctrine of Orbits*, p. 133. By H. G. Rush. Lancaster, Pa. 1887.

(To be continued.)

Masonic Degrees.

Several questions have been asked in reference to the various degrees of Freemasonry, as to origin, number, names, and so forth. To reply to all such we have not room, but we can give some key-notes and the readers can look for details as per reference. The nomenclature of degrees is very varied. Many degrees are practised in a desultory form in various Lodges, Chapters, Councils, and Senates, but not as parts of a system. Some of the the degrees have become at present extinct, but they are all on record. The following 150 degrees we give as a first chapter taken from Rev. George Oliver's "Historical Landmarks," Vol. II, pp. 23-25. There is a diversity of opinion among masonic writers as to many of these degrees as to their *masonic* status. Those designated with a * are "Knight of."

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| Adoptive. { | 1. Adonhiramite Masonry, | 27. Cohens,* |
| | 2. Jephthah's Daughter, | 28. Constantinople,* |
| | 3. Ruth, | 29. Cross,* |
| | 4. Esther, | 30. Crowned Adept, or Master of
the Key of the Temple, |
| | 5. Martha, | 31. Diocesan, |
| | 6. Electra, | 32. Eagle,* |
| 7. African Architects, Order of | 33. Eagle,* and Sovereign Prince
of the Rose Croix de Here-
dom, | |
| 8. Alcantara, Knight of | | |
| 9. Annunciation of the Virgin
Mary, Knight of, | 34. East Order of, | |
| 10. Architect, | 35. East and West,* | |
| 11. Ark, and Dove, | 36. East,* or the Sword, | |
| 12. Axe, Royal, | 37. Eclectic Masonry, | |
| 13. Arch, Ninth,* | 38. Elected of the Truth, | |
| 14. Babylon, Red Cross Sword,* | 39. Elected,* | |
| 15. Banquet of Wisdom, | 40. Elected of Perignan, | |
| 16. Black Cross,* | 41. Elected Brother, | |
| 17. Black Mark,* | 42. Elected Grand Master, or
Illustrious Elected of, | |
| 18. Brazen Serpent,* | 43. Elysian Knight, | |
| 19. Burning Bush,* | 44. Emperor of Libanus, | |
| 20. Cabalistic Philosopher, | 45. English Harodim, | |
| 21. Calatrava,* | 46. Grand, Elect, Perfect, and
Sublime Mason, | |
| 22. Chief of Twelve Tribes, | 47. Grand Master Architect, | |
| 23. Chief of Tabernacle, | 48. Grand Patriarch, | |
| 24. Christ Order of, | 49. Grand Pontiff, | |
| 25. Christ,* | | |
| 26. Christian Mark,* and Guard
of the Conclave, | | |

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| 50. Grand, or Superintendent
Scotch Master, | 89. Masons, Order of True, |
| 51. Golden Key,* | 90. Past Master, |
| 52. Golden Lance,* | 91. Patmos,* |
| 53. Heavenly Band,* or Zodiac, | 92. Patriarch of the Great Light, |
| 54. Heroine of Jericho, | 93. Perfect Knight, |
| 55. Holy Ghost,* | 94. Perfect Master, |
| 56. Harmony Universal, | 95. Perfect Master Architect, |
| 57. Holy Sepulchre, or Grave, | 96. Perfect Prussian, |
| 58. Holy and Thrice Illustrious
Order of the Cross, | 97. Phœnix,* |
| 59. Initiated Brothers, | 98. Phi Beta Kappa, |
| 60. Intendant of the Buildings,
or Master in Israel, | 99. Philippian Order, |
| 61. Intimate Secretary, | 100. Preadamites, |
| 62. Illustrious Brothers, | 101. Prince of Jerusalem, |
| 63. Illuminated Theosophists, | 102. Prince of the Tabernacle, |
| 64. Joachim, Order of, | 103. Prince of Mercy, or Scotch
Trinitarian, |
| 65. John (St.), Baptist,* | 104. Prince of the Royal Secret, |
| 66. Jordan Pass, | 105. Provincial Master of the Red
Cross, |
| 67. Kadosh,* | 106. Provost and Judge, |
| 68. King of the World, | 107. Prussian Knights, or Noa-
chites, |
| 69. Knight Adept of the Eagle,
or Sun, | 108. Red Cross Knight, |
| 70. Knight Templar, | 109. Red Cross of Rome and Con-
stantine, |
| 71. Lazarus,* | 110. Redemption,* |
| 72. Lilies of the Valley,* | 111. Rose Croix,* |
| 73. Link, | 112. Rose Croix of the Grand
Rosary, |
| 74. Lion,* | 113. Rosy Cross Triple, |
| 75. Malta,* | 114. Royal Arch, |
| 76. Mahadon,* | 115. Royal Ark Mariners, |
| 77. Mark Master, | 116. Royal Master, |
| 78. Master of all the Degrees, | 117. Sacred Mountain,* |
| 79. Magnetic Rose,* | 118. Scotch Fellow Craft, |
| 80. Mediterranean Pass, | 119. Scotch Master, |
| 81. Melchizedek, or the Royal
Priest, | 120. Secret Master, |
| 82. Menatzchim, council of, | 121. Secret Monitor, |
| 83. Michael, (St.),* | 122. Select Master, |
| 84. Morning Star, or Hope,* | 123. Star,* |
| 85. Most Excellent Master, | 124. St. John, Friend of, |
| 86. Mother of Christ,* | 125. St. Stevens,* |
| 87. Ne plus ultra, | 126. St. John of Jerusalem,* |
| 88. New Jerusalem, Elected of, | 127. South,* |

128.	Sovereign Grand Inspector General,	140.	Three Kings,*	
129.	Sovereign Commander of the Temple at Jerusalem,	141.	Triple Period, or 3, 5, 7, and 9,*	
130.	Sublimes,	142.	Transparent Light,*	
131.	Sublime Knight Elected,	143.	The Friend of Truth, or the Aletophylote,	
132.	Sublime Master of the Luminous Ring,	144.	Two Eagles, Order of,	
133.	Sublime Porte,*	145.	Table of Emerald, Master of	
134.	Superexcellent Master,	146.	Venerable Grand Master of all Symbolical Lodges, Sovereign Prince of Masonry, Master advitam,	
Symbolic, Masonry,	{ 135. Entered Apprentice, 136. Fellow Craft, 137. Master Mason,	{ 147. Vessel, Order of, 148. White Cross,* 149. White Eagle, or Pelican,* 150. Wrestle.*		
			138.	Teutonic Knights,
			139.	Theoricus,

Theosophic Interpretation.

“All that is true is spiritual; no chapter in the Bible bears a physical meaning. For matter as it now exists shall cease, and all that is of it, but the word of the Lord shall endure forever. And how shall it endure except it be purely spiritual; since when matter ceases, it would then no longer be comprehensible?”—*The Mystery of the Ages contained in the Secret Doctrine of all Religions*, p. 433.

“*That which is lasting and true is for Spirit alone.*”

CONCERNING THE INTERPRETATION OF SCRIPTURE—A FRAGMENT.

PART I.

“If, therefore, they be Mystic Books, they ought also to have a Mystic Consideration. But the Fault of most Writers lieth in this,—that they distinguish not between the Books of Moses the Prophet, and those Books which are of a historical nature. And this is the more surprising, because not a few of such Critics have rightly discerned the Esoteric Character, if not indeed the true Interpretation, of the story of Eden; yet have they not applied to the Remainder of the Allegory the same Method which they found to fit the Beginning; but so soon as they are over the earlier Stanzas of the Poem, they would have the Rest of it to be of another Nature.

“It is, then, pretty well established and accepted of most Authors, that the Legend of Adam and Eve, and of the Miraculous Tree and the Fruit which was the Occasion of Death, is, like the Story of Eros

and Psyche, and so many others of all Religions, a Parable with a hidden, that is with a Mystic Meaning. But so also is the Legend which follows concerning the Story of Cain and Abel his Brother; the Story of the Flood; of the Ark; of the saving of the clean and unclean Beasts; of the Rainbow; of the twelve Children of Jacob; and, not stopping there, of the whole Relation concerning the Flight out of Egypt. For it is not to be supposed that the two Sacrifices offered to God by the Sons of Adam, were real Sacrifices, any more than it is to be supposed that the Apple which caused the Doom of Mankind, was a real Apple. It ought to be known, indeed, for the right Understanding of the Mystical Books, that in their Esoteric Sense they deal, not with material Things, but with Spiritual Realities; and that as Adam is not a Man, nor Eve a Woman, nor the Tree a Plant in its true Signification, so also are not the Beasts named in the same Books real Beasts, but that the Mystic Intention of them is implied. When, therefore, it is written that Abel took of the Firstlings of his Flock to offer unto the Lord, it is signified that he offered that which a Lamb implies, and which is the holiest and highest of Spiritual Gifts. Nor is Abel himself a real Person, but the Type and spiritual Presentation of the Race of the Prophets; of whom also Moses was a Member, together with the Patriarchs. Were the Prophets then, Shedders of Blood? God forbid! they dealt not with Things material, but with spiritual Significations. Their Lambs without Spot, their White Doves, their Goats, their Rams, and other Sacred Creatures, are so many Signs and Symbols of the various Graces and Gifts which a Mystic People should offer to Heaven. Without such Sacrifices is no Remission of Sin. But when the Mystic Sense was lost, then Carnage followed, the Prophets ceased out of the Land, and the Priests bore rule over the People. Then, when again the Voice of the Prophets arose, they were constrained to speak plainly, and declared in a Tongue foreign to their Method, that the Sacrifices of God are not the Flesh of Bulls, or the Blood of Goats, but holy Vows and sacred Thanksgivings, their Mystical Counterparts. As God is a Spirit, so also are His Sacrifices Spiritual. What Folly, what Ignorance, to offer material Flesh and Drink to pure Power and essential Being! Surely in vain have the Prophets spoken, and in vain have the Christs been manifested! "Why will you have Adam to be Spirit and Eve Matter, since the Mystical Books deal only with Spiritual Entities? The Tempter himself even is not Matter, but that which gives Matter the Precedence. Adam is, rather, intellectual Force: he is of Earth, Eve is the moral Conscience she is the Mother of the Living. Intellect, then, is the Male, and Intuition, the female Principle. And the Sons of Intuition, herself fallen, shall at last recover Truth and redeem all Things. By her Fault, indeed, is the moral Conscience of Humanity made subject to the Intellectual Force, and thereby all Manner of Evil and Confusion

abounds, since her desire is unto him, and he rules over her until now. But the End foretold by the Seer is not far off. Then shall the Woman be exalted, clothed with the Sun, and carried to the Throne of God. And her Sons shall make War with the Dragon, and have Victory over him. Intuition, therefore, pure and Virgin, shall be the Mother and Redemptress of her fallen Sons, whom she bore under Bondage to her Husband the Intellectual Force, who now hath Dominion. . . ."

PART II.

"Moses, therefore, knowing the Mysteries of the Egyptian Religion and having learned of their Occultists the value and Signification of all Sacred Birds and Beasts, delivered like Mysteries to his own People. But certain of the Sacred Animals of Egypt he retained not in Honour for Motives which were equally of Mystic Origin. And he taught his Initiated the spirit of the heavenly Hieroglyphs, and bade them, when they made Festival before God, to carry with them in Procession, with Music and with Dancing, such of the Sacred Animals as were, by their interior Significance, related to the Occasion. Now, of these Beasts, he chiefly selected Males of the first Year, without Spot or Blemish, to signify that it is beyond all Things Needful that Man should dedicate to the Lord his Intellect and his Reason, and this from the beginning and without the least Reserve. And that he was very wise in teaching this, is evident from the History of the World in all Ages, and particularly in these last Days. For what is it that has led Men to renounce the Realities of the Spirit, and to propagate false Theories and corrupt Sciences, denying all Things save the Appearance which can be apprehended by the outer Senses, and making themselves one with the Dust of the Ground? It is their Intellect which, being un-sanctified, has led them astray; it is the Force of the Mind in them, which, being corrupt, is the Cause of their own Ruin, and of that of their Disciples. As, then, the Intellect is apt to be the great Traitor against Heaven, so also is it the Force by which Men, following their pure Intuition, may also grasp and apprehend the Truth, For which Reason, it is written that the Christs are subject to their Mothers. Not that by any means the Intellect is to be dishonoured; for it is the Heir of all Things, if only it be truly begotten, and no Bastard.

"And, besides all these Symbols, Moses taught the People to have, beyond all Things, an abhorrence of Idolatry. What, then, is Idolatry and what are False Gods?

"To make an Idol, is to materialise Spiritual Mysteries. The Priests, then, were Idolators, who, coming after Moses, and committing to Writing those Things which he, by Word of Mouth, had delivered unto Israel, replaced the true Things signified, by their material Symbols, and shed innocent Blood on the pure Altars of the Lord.

"They also are Idolators, who understand the Things of Sense where the Things of the Spirit are alone implied, and who conceal the true Features of the Gods with material and spurious Presentations. Idolatry is Materialism, the common and original Sin of men, which replaces Spirit by Appearance, Substance by Illusion, and leads both the moral and intellectual Being into Error, so that they substitute the Nether for the Upper, and the Depth for the Height. It is that false Fruit which attracts the outer Senses, the Bait of the Serpent in the Beginning of the World. Unti the Mystic Man and Woman had eaten of this Fruit, they knew only the Things of the Spirit, and found them suffice. But after their Fall, they began to apprehend Matter also, and gave it the Preference, making themselves Idolators. And their Sin, and the Taint begotten of that false Fruit, have corrupted the Blood of the whole Race of Men, from which Corruption the Sons of God would have redeemed them."

PROBLEM OF ARCHEMEDES. It is stated Archemedes sent the following problem to the mathematicians of Alexandria :

The sun had a herd of bulls and cows, all of which were either white, grey, dun, or piebald ; the number of piebald bulls was less than the number of white bulls by $\frac{5}{8}$ of the number of grey bulls, it was less than the number of grey bulls by $\frac{9}{10}$ of the number of dun bulls, and it was less than the number of dun bulls by $\frac{1}{4}\frac{3}{8}$ of the number of white bulls ; the number of white cows was $\frac{7}{12}$ of the number of grey cattle (bull and cows) ; the number of grey cows was $\frac{9}{10}$ of the number of dun cattle ; the number of dun cows was $\frac{1}{3}\frac{1}{10}$ of the number of piebald cattle, and the number of piebald cows was $\frac{1}{4}\frac{3}{8}$ of the number of white cattle,

The problem was to find the composition of the herd.

Walter W. Rouse, in his " History of Mathematics, p. 67, says the solution of this problem, in lowest integers, is as follows :

white bulls,	10,366,482	white cows,	7,206,360
grey bulls,	7,460,514	grey cows,	4,893,246
dun bulls,	7,358,060	dun cows,	3,515,820
piebald bulls,	4,149,387	piebald cows,	5,439,213

The classical solution attributed to Archimedes is 80 times each of these numbers, as follows :

white bulls,	829,318,560	white cows,	576,508,800
grey bulls,	596,841,120	grey cows,	391,459,680
dun bulls,	588,644,800	dun cows,	281,265,600
piebald bulls,	331,950,960	piebald cows,	435,137,040
Total in the herd,	503,890,820	Total, Archimedes,	4,031,126,560

TABLE ON FOURTH DIMENSION. In reply to "AGNOSTIC," (Vol. VII, p. 72) "How is the table on fourth dimension formed? I will say that it is formed in a manner very similar to that of forming a table of figurate number. Considering 1 as the beginning of each horizontal row of numbers the following will be the various formulæ for finding any term :

For the first row, 2^{n-1} ; For the second row, $n(2^{n-1})$; For the third row, $\frac{n(n+1)(2^{n-1})}{1,2}$; For the fourth row, $\frac{n(n+1)(n+2)(2^{n-1})}{1.2.3}$; and so on as far as desirable ; n equalling the number of the term from the beginning of the row, which is desired.

I hope this will give "AGNOSTIC" sufficient information to believe something, and reveal his identity.

	Point.	Line.	Square.	Cube.	4th.	5th.	6th.	7th.	8th.	9th.	10th.	N.
Point,	1	2	4	8	16	32	64	128	256	512	1024	2nth
Line,	0	1	4	12	32	80	192	448	1024	2304	5120	x
Square,	0	0	1	6	24	80	240	672	1792	4608	11520	y
Cube,	0	0	0	1	8	40	160	560	1792	5376	15360	z
4th,	0	0	0	0	1	10	60	280	1120	4032	13440	m
5th,	0	0	0	0	0	1	12	84	448	2016	8064	p
6th,	0	0	0	0	0	0	1	14	112	672	3360	q
7th,	0	0	0	0	0	0	0	1	16	144	960	r
8th,	0	0	0	0	0	0	0	0	1	18	180	s
9th,	0	0	0	0	0	0	0	0	0	1	20	t
10th,	0	0	0	0	0	0	0	0	0	0	1	v
Nth,	0	0	0	0	0	0	0	0	0	0	0	w

B. A. MITCHELL, JR., Philadelphia, Pa.

OPSOPŒUS. (Vol. VII, p. 258.) In 1599, Johannis Opsopœus published at Paris an edition of the Greek text of the "Sibylline Oracles" with the Latin version of Castalio, and with brief prolegomena and notes. An English translation from the texts of Opsopœus and Gal læus was published in London in 1813, by John Floyer. This book is now out of print. A new translation was made by Milton S. Terry, and published in 1890, containing Books I to VIII, and XI to XIV. Books IX and X are lost.

Words Containing All the Vowels Once.

One of the Chaatauqua Circles of Providence, R. I., recently had a prize-hunt for words in the English language containing the vowels once each. Mary R. Noble, sent the result to the *American Notes and Queries* (Vol. VI, No. 23). We reprint the list. If it should be asked : Is there another word containing the vowels ? We should at once reply, " *unquestionably* there is."

VOWELS IN ORDER.

Abstemious,	Arsenious,	Materious,
Affectious,	Avenious,	Tragedious.
	Facetious,	

VOWELS IN REVERSE ORDER.

Duoliteral.

VOWELS IN IRREGULAR ORDER.

Abreuvour,	Cometarium,	Depuration,
Accounting,	Communicable,	Desudation,
Anxiousness,	Complutensian,	Diadelphous,
Ambilevous,	Compurgative,	Dicephalous,
Armigerous,	Compulsative,	Disaccustomed,
Assecution,	Commutative,	Disastrousness,
Astigerous,	Concubinage,	Discountable,
Astriferous,	Conduplicate,	Discourage,
Auterfoits,	Conglutinate,	Discountable,
Authorize,	Consultative,	Duodecimal,
Axiferous,	Continuable,	
	Continue,	Education,
Bacciferous,	Configure,	Elucidator,
Bicephalous,	Continuance,	Emulation,
Biconjugate,	Copulative,	Encouraging,
Binoculate,	Cupellation,	Equation,
Blandiloquent,	Countervail,	Equivocal,
Boutisale,	Customariness,	Eructation,
Buccellation.		Exculpation,
	Decrustation,	Exhumation,
Captiousness,	Decubation,	Expugnation,
Cautioned,	Decustation,	Exudation,
Coëquality,	Decussation,	Exultation.
Colliquate,	Degustation,	

Filaceous,	Outbreaking,	Stamineous,
Filamentous,	Outspreading.	Subordinate,
Flammiferous,		Superdominant,
Formulative.	Palpigerous,	Sustentation.
	Pandemonium,	
Gelatinous,	Peculation,	Tenacious.
Gesticulator,	Persuasion,	Tourmaline,
Glandiferous,	Pneumonia,	
Graciousness.	Precaution,	Ulceration,
Gramineous,	Perturbation,	Unaccomplished,
Grandiloquent,	Perlustration,	Uncontradicted,
Graniferous,	Permutation,	Uncongenial,
	Persultation,	Unconstrained,
Hippocentaur.	Protuberating,	Unforbearing,
		Unpoetical,
Importunate,		Unprofitable,
Incommutable,	Questionably.	Unreconcilably,
Inoculate.		Unsociable.
Inosculate,	Reassumption,	
Insupportable.	Recurvation,	Veracious,
	Refutation,	Vermiperous,
Jaspiderous.	Regulation,	Vexatious,
Journalize,	Reputation.	Vinacerous,
		Voluntariness,
Mensuration.	Saliferous,	Vulneration.
	Spaciousness,	
Numeration.	Speculation,	

We add the following seventeen words which now occur to us.

Authoritative,	Mendacious,	Unintentional,
Consequential,	Nefarious,	Unobjectionable,
Disadvantageous,	Precarious,	Unequivocal,
Encouraging,	Pertinacious,	Undiscoverable,
Efficacious,	Sacrilegious,	Unquestionably.
Instantaneous,	Simultaneous,	

PERSPIRATION. Dr. Erasmus Wilson, in his "Practical Treatise on Healthy Skin," states that the pores of the skin are apertures of little tubes about a quarter of an inch long; that upon an average there are about 2,800 of these tubes in every square inch, and that "the number of square inches of surface in a man of ordinary height and bulk is 2,500. The number of pores, therefore, is 7,000,000, and the number of inches of perspiratory tube 1,750,000, that is, 145,833 feet, or 48,600 yards, or nearly 28 miles."

DIGITAL FRACTIONS. [Some persons has exercised their ingenuity in placing the nine digits in the form of common fractions so to equal $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{1}{6}$, $\frac{1}{7}$, $\frac{1}{8}$, $\frac{1}{9}$, $\frac{1}{12}$. In each fraction four digits are to be used in the numerator and five digits in the denominator.

1. The nine digits can be arranged in nine different ways so as to equal one-half.

$$\begin{array}{cccccccc} \underline{6729} & \underline{7293} & \underline{7329} & \underline{6792} & \underline{9273} & \underline{6927} & \underline{9267} & \underline{7932} & \underline{9327} \\ 13458 & 14586 & 14658 & 13584 & 18546 & 13854 & 18534 & 15864 & 18654 \end{array}$$

2. Two different ways so as to equal one-third.

$$\begin{array}{cc} \underline{5832} & \underline{5823} \\ 17496 & 17469 \end{array}$$

3. Four different ways so as to equal one-fourth.

$$\begin{array}{cccc} \underline{4392} & \underline{5796} & \underline{7956} & \underline{3942} \\ 17568 & 23184 & 31824 & 15768 \end{array}$$

4. Ten different ways so as to equal one-fifth.

$$\begin{array}{cccccccccccc} \underline{2769} & \underline{3297} & \underline{2697} & \underline{2973} & \underline{6297} & \underline{3729} & \underline{2967} & \underline{9627} & \underline{9237} & \underline{9723} \\ 13845 & 16485 & 13485 & 14865 & 31485 & 18645 & 14835 & 48135 & 46185 & 48615 \end{array}$$

5. Three different ways so as to equal one-sixth.

$$\begin{array}{ccc} \underline{2943} & \underline{5697} & \underline{4653} \\ 17658 & 34182 & 27918 \end{array}$$

6. Six different ways so as to equal one-seventh.

$$\begin{array}{cccccc} \underline{2394} & \underline{2637} & \underline{4527} & \underline{5274} & \underline{5976} & \underline{7614} \\ 16758 & 18459 & 31689 & 36918 & 41832 & 53298 \end{array}$$

8. Twenty-eight ways so as to equal one-eighth.

$$\begin{array}{cccccccccccccccccccc} \underline{3187} & \underline{4589} & \underline{4591} & \underline{4691} & \underline{4769} & \underline{5237} & \underline{5371} & \underline{5839} & \underline{5916} & \underline{7123} \\ 25496 & 36712 & 36728 & 37528 & 38152 & 41896 & 42968 & 46712 & 47328 & 56984 \\ \underline{7312} & \underline{7421} & \underline{7416} & \underline{7941} & \underline{8419} & \underline{8932} & \underline{8954} & \underline{8174} & \underline{9156} & \underline{9158} \\ 58496 & 59368 & 59328 & 63528 & 67352 & 71456 & 71632 & 65392 & 73248 & 73264 \end{array}$$

<u>9182</u>	<u>9316</u>	<u>9321</u>	<u>9352</u>	<u>9421</u>	<u>9531</u>	<u>9541</u>	<u>9523</u>
73456	74528	74568	74816	75368	76248	76328	76184

8. Four different ways so as to equal one-ninth.

<u>6381</u>	<u>6471</u>	<u>7243</u>	<u>8361</u>
57429	58239	65187	75249

10. Three different ways so as to equal one-twelfth.

<u>3816</u>	<u>7461</u>	<u>7632</u>
45792	89532	91584

POURING PUZZLE. Three persons having robbed a man of a vessel of balsam, containing 24 ounces; and whilst running away they meet in the woods with a glass-seller of whom in a great hurry purchase three vessels. At last on reaching a place of safety they wish to divide the booty, but they find that their vessels contain 5, 11 and 13 ounces respectively. How can they divide the spoil into equal portions?

Problems like this can only be worked out by trial: there are several solutions, of which one is as follows:

The vessel can contain,	24	13	11	5
Their contents originally are,	24	0	0	0
First make their contents,	0	8	11	5
Second,	16	8	0	0
Third,	16	0	8	0
Fourth,	3	13	8	0
Fifth,	3	8	8	5
Last,	8	8	8	0

THE ARGUMENT OF SORITES. If Christ rose from the dead, it must have been through a divine power.

If Christ was raised from the dead by divine power, it proved that He was a prophet sent of God.

If He was a prophet sent of God, then all His predictions will be accomplished.

If all His predictions will be accomplished, then His prediction that the dead shall be raised will be accomplished.

Therefore, if Christ rose from the dead, the dead will be raised.

MISCELLANEOUS
 NOTES AND QUERIES,
 WITH ANSWERS.

" Evil is the dark son of Earth (Matter), and Good the fair daughter of Heaven (Spirit)."
 —Confucius.

VOL. VIII.

JUNE, 1891.

No. 6.

The Laws of Repetends.

. On p. 146 (Vol. V.) , there is an interesting table of Decimals of 81 , in which all the values of $\frac{1}{81}, \frac{2}{81}$ etc up to $\frac{80}{81}$ are arranged in groups, showing, among other things, that those having the same figures, have the figures in same order, although commencing with a different one each time.

Now 81 being a multiple number, we do not have all the groups of the same extent. Where the numerator is prime to 81 , we have the greatest number of decimals in the group (in this case, 9); but where the greatest common measure of the numerator and denominator is 3 , we have groups of 3 decimals; and where the greatest common measure is 9 , there are no groups at all.

When the denominator is a prime number, the groups (when there is more than one) are all of the same length. Thus in the case of 41 we can form 8 groups each containing 5 decimals, $\frac{1}{41} = .02439$; and accordingly our first group is $.02439, .24390, .43902, .39024$ and $.90243$, with numerators respectively of $1, 10, 18, 16$, and 37 . Another group is $.04878, .48780, .87804, .78048$ and $.80487$, with the numerators $2, 20, 36, 32$, and 33 .

The sum of all the numerators in a group is always equal either to the denominator or to a multiple of it. Thus the two groups of nu

merators above mentioned, sum respectively 82, and 123 which are both multiples of 41.

From these facts it is easy to see that the repetend of a prime number must consist of a number of figures equal to one less than the prime number itself, or else to an aliquot part thereof.

The length of repetends is a subject that has engaged the attention of many mathematicians. J. C. Burckhardt in his great work, "The Table of the Prime Factors of all Numbers up to 3,036,000," at the end of the first volume (*Table des Diviseurs*, Paris, 1817), gives the lengths of the repetends of all prime numbers up to 2,543. From this it appears that of the 165 repetends of prime numbers under 1,000, 105 fall short of the extreme limit, 60 of the numbers only having one less than the number itself. This result does not quite agree with the list quoted from Desmarest, (*NOTES AND QUERIES*, Vol. V, p. 144), in which there are evident errors; 147 not being a prime number, and 487 is omitted. Other numbers in Burckhardt's list, but not in Desmarest's list, are 149, 419, 461, 823, 937, and 971.

It is a well known fact in many cases the last half of a repetend is the complement of nines of the first half. It is a law that extends, to all prime numbers without exception, whose repetends consist of an even number of figures. Even when the repetend consists of an odd number of figures, it occasionally happens that if a certain number of the initial noughts be removed, the remainder of the repetend may be divided into the two complementary halves. Thus the repetend of 333667, is .000002997. If we remove the first three noughts the remaining 002 and 997 are complementary to one another, so with the repetend of 2906161 (which is .000000344196559), on removing the first 5 noughts; the first half of remainder, 03441, is complementary to the second half, 96559.

Every repetend (when the numerator is 1) is the aliquot part of a series of nines. Thus .142857 (the repetend of 7), is the $\frac{1}{7}$ of 999999; 27 (the repetend of 37 without the preliminary nought) is $\frac{1}{37}$ of 999; and so on. Such being the case, all the foregoing properties of recurring decimals and many others, directly depend on the prime factors of series of nines.

The following table will show numbers and prime factors of such :

Number.	=	Prime Factors.
9	=	$3 \cdot 3$
99	=	$3 \cdot 3 \cdot 11$
999	=	$3 \cdot 3 \cdot 3 \cdot 37$
9999	=	$3 \cdot 3 \cdot 11 \cdot 101$
99999	=	$3 \cdot 3 \cdot 41 \cdot 271$
999999	=	$3 \cdot 3 \cdot 3 \cdot 7 \cdot 11 \cdot 13 \cdot 37$
9999999	=	$3 \cdot 3 \cdot 239 \cdot 4649$
99999999	=	$3 \cdot 3 \cdot 11 \cdot 73 \cdot 101 \cdot 137$
999999999	=	$3 \cdot 3 \cdot 3 \cdot 3 \cdot 37 \cdot 333667$
9999999999	=	$3 \cdot 3 \cdot 11 \cdot 41 \cdot 271 \cdot 9091$
99999999999	=	$3 \cdot 3$ (rest unknown)
999999999999	=	$3 \cdot 3 \cdot 3 \cdot 7 \cdot 11 \cdot 13 \cdot 37 \cdot 101 \cdot 9901$

If we examine the above, we see that the first time a number, or a combination of numbers, appears in the table as a factor, is the criterion of the length of its repetend; the repetend containing exactly as many figures as there are nines in the corresponding number. Thus, 3 appears for the first time in the table as the factor of a single 9; hence the repetend of 3 has but one figure; 7 appears for the first time in the table as a factor of 999999; hence the repetend of 7 has 6 figures.

By observing the intervals at which factors recur we can make inference with regard to the repetends of some numbers not in the table. Thus 11 occurs alternately; 37 every third line; 11 and 37 will therefore come together at intervals of 6, which is the least common multiple of 2 and 3. Hence the repetend of 407 (*i. e.* 11×37) consists of 6 figures. This is borne out by the table; but we may also infer that the repetend of 511 (or 7×73) has 24 figures. That of 7 has 6 figures, and 7 appears consequently in every 6th line; 73, we see by table, has 8 figures and appears therefore in every 8th line; 7 and 73 consequently will appear together for the first time in the 24th line, 24 being the least common multiple of 6 and 8; 511, therefore, has 24 figures.

From the table we may find the repetend of any number, or combination of numbers therein, by multiplication. Multiply together all the other factors in the same line, and prefix noughts, if necessary, to make up the right number of figures. Thus the first time 7 appears in the table, is in the 6th line, in conjunction with 3, 3, 3, 11, 13, 37. Multiply these together and we get $3 \times 3 \times 3 \times 11 \times 13 \times 37 = 142857$,

which is the repetend of 7. 37 appears for the first time in 3rd line along with 3, 3 and 3; $3 \times 3 \times 3 = 27$; and 027 is the repetend of 37.

We can also tell from the table whether any number in it has a repetend whose two halves are complements to one another. Whenever a series of nines is multiplied by a number consisting of the same or a less number of figures, the product has this property, (noughts having to be prefixed in the latter case); but the property does not exist when the nines are multiplied by a greater number of figures.

The repetend of 7, as we have first seen, is $3 \times 3 \times 3 \times 11 \times 13 \times 37$.

Now if we turn to the third line, we see that $3 \times 3 \times 3 \times 37 = 999$.

Therefore the repetend of $7 = 999 \times (11 \times 13)$; $11 \times 13 = 143$ which has the same number of figures as 999; therefore the product has the complementary property in question; 259 (*i. e.* 7×37), we may also see from the 6th line, has a repetend with this property, for $3 \times 3 \times 11 = 99$ and $3 \times 13 = 39$, both with an equal number of figures; $99 \times 39 = 3861$ with the property in question. Prefixing 2 noughts, to make up the requisite number of figures, we get 003861, which is the repetend of 259. This is an instance where preliminary noughts have to be cancelled before the remainder of the repetend can be divided into its two complementary halves.

The repetend of the square of a prime number has the same ratio with regard to length as the square itself has to the root. Thus the repetend of 11 has two figures; hence that of 121 has 22; 7 gives 6 figures; consequently 49 gives $6 \times 7 = 42$.

There is only one exception to this rule and that is when a prime number appears for the first time, twice in the same line, in the table. 3, for example appears twice immediately—never alone in the table; consequently 3 and 9 both have the same length of repetend.

These instances, however very rarely occur. Desmarest (NOTES, & QUERIES, Vol. V. p. 144) found that the only other number, less than 1000, whose repetend was of the same length as that of its square, was 487. I tested this by the actual division of 1 by the square: $1 \div 237169$

The quotient began to repeat at the 487th figure — just as the quotient of $1 \div 487$ does.

T. S. BARRETT.

There was an omission of six numbers in the table on p. 144, Vol.

V, NOTES AND QUEERIES, which occurred in copying the table from Desmarest. The *sixty* numbers are as follows :

7	59	149	229	337	433	509	647	811	937
17	61	167	233	367	461	541	659	821	941
19	97	179	257	379	487	571	701	823	953
23	109	181	263	383	491	577	709	857	971
29	111	193	269	389	499	593	727	863	977
47	113	223	313	419	503	619	743	887	983

EDITOR.

The repetend of 487 is easily written down after obtaining the first *forty-five* decimal, simply by dividing these decimals by 2, commencing with the second figure and continuing to the 441st decimal, thus :

.00205 33880 90349 07597 53593 42915 81108 82956 87885
 0102 66940 45174 53798 76796 71457 90554 41478 43942
 5051 33470 22587 26899 38398 35728 95277 20739 21971
 2525 66735 11293 63449 69199 17864 47638 60369 60985
 6262 83367 55646 81724 84599 58932 23819 30184 80492
 8131 41683 77823 40862 42299 79466 11909 65092 40246
 4065 70841 88911 70431 21149 89733 05954 82546 20123
 2032 85420 94455 85215 60574 94866 52977 41273 10061
 6016 42710 47227 92607 80287 47433 26488 70636 55030
 8008 21355 23613 96303 90143 73716 63244 35318 27515
 4004 10677 51806 98151 95071 86858 31622 17659 13757
 7+

The repetend of 487×487 is as follows :

.00000 42164 02649 58742 50007 37870 46367 77993 75129 12733
 11436 14890 64759 72829 50132 60586 33295 24516 27320 60260
 82666 79034 78110 54564 46668 83108 66934 54878 16704 54401
 71354 60367 92329 52029 98705 56438 65766 60524 77347 37676
 50915 59183 53579 09338 91022 85711 87634 13430 928+

The above is the first half (243 figures) : the other half is complementary to these figures from nines.

The repetends, of 487 and 487^2 , are each obtained by a different process by abbreviation. By what process can the repetend of 487^3 be obtained by abbreviation?

EDITOR.

E. D. E. N. SOUTHWORTH'S FULL NAME. What is the full name of this story writer?

TILDIE.

Mrs. Southworth's christian name is *Emma Dorothy Eliza Neulette* Southworth. She says : "When I was born my people were too poor to give me anything else, so they gave me all those names."

CURIOS RESULTS IN NUMBERS. The following are some curious results that have developed in the course of performing operations in numbers :

The reciprocal of $2.5061843881+$ is $.3990129572+$

The logarithm of $2.5061843881+$ is $.3990129572+$

$$2.5061843881^{2.5061843881} = 10$$

$$.3990129572 + \text{logarithm of } .3990129572 = 0$$

$$.3990129572 + \text{logarithm of } 3.990129572 = 1$$

$$.3990129572 + \text{logarithm of } 39.90129572 = 2$$

$$.3990129572 + \text{logarithm of } 399.0129572 = 10$$

$$.3990129572 \sqrt{.3990129572} = \frac{1}{10}$$

$$2.5061843881 \times 3.990129572 = 10$$

$$.3990129572^{2.5061843881} = .25061843881 \times .3990129572$$

$$2.5061843881 \sqrt{10} = 2.5061843881$$

$$\frac{2.5061843881}{.3990129572} = \text{the square of } 2.5061843881$$

$$2 \times .3990129572 = .3990129562 - \text{logarithm of } .3990129572$$

Logarithm of $.3990129572 = - .3990129572$ which is generally

written $\overline{1.6009870428}$

T. S. BARRETT.

DEATH ON ANNIVERSARY OF BIRTH. (Vol. II, pp. 400, 490, 653, 559.) G. Seyffarth's Summary of "Biblical Chronology, Universal History, and Egyptian Archæology," p. 214, says, "August 3d (first day of the eleventh month), 1827 B. C., Moses died on the anniversary of his birth, 120 years old, in Mount Nebo. (Deut. xxxi, 2 ; xxxiv, 5.)"

DOUBLE NAMES OF THE PRESIDENTS. What were the full names of the doubled-named Presidents?

TILDIE.

John Quincy Adams,
William Henry Harrison,
James Knox Polk,
Ulysses Simpson Grant,

Rutherford Burchard Hayes,
James Abram Garfield,
Chester Alan Arthur.

ÆSCULAPIOS AND ASCLEPIOS. (Vol. VIII, p. 258.) The names Æsculapios and Asclepios are not easily accommodated with an etymology. If we might take liberties like E. Pococke, in his "India in Greece," it would appear easy enough to restore the digamma and spell it: "Vais'-kul-api," lord of the Vaisya or yeoman class. But, unfortunately, the divinity seems to have been Oriental and not Aryan. His serpent-symbol and mystic rites are Semitic or Æthiopic. In the "Fragments" imputed to Sanchronithôn he is made the eighth of the sons of Sylyk, or Sutech the Hittite-god, and is thus included among the Kabeiri as Esmun, or the Eighth. This divinity appears to have been the Baal Zebul of Phœnicia, the Haman or Moloch of Carthage, whose worshippers sacrificed their children to him as the Fire-Baal. The Egyptians had a god Emeph, Imopht, or Im-hotep, that was said to be the divinity Asclepios. The myth of Astronoê would assign to him the same *role* and character as Attis and Adonis, the emasculates. But nowhere did we find any Semitic or Eastern divinity with any such name. Asklepios was worshipped in Pelasgian and Dorian countries; his rites being only engrafted upon the Eleusinian Mysteries at a later period. The serpent was always inseparable from them. A temple of Asklepios without the snake would have been like the modern evolutionary universe with omnific force and no divinity. It is apparent, therefore, that this god was Oriental or "Turanian." The nearest approach to the name in Hebrew and Arabic would be by combining the words, *ais*, *kul* and *hi*, and it would require some ingenuity to define the compounded term. It is therefore more probably Pelasgic and "barbarous," in the Khitan or Hittite language it might be found to mean "the highest chief" or father — *Ata Ku Lab*.

A. WILDER.

KOSMOS. (Vol. VIII, p. 258.) Plutarch credits Pythagoras with first using the word Kosmos, in the sense of a "perfect arrangement." The Greek philosophic writers made the Kosmos to include the space included within the orbit of Saturn; beyond were the ætherial heavens.

A. WILDER.

WEDDING ANNIVERSARIES. 1th anniversary, iron; 5th, wooden; 10th, tin; 15th, crystal; 20th, china; 25th, silver; 30th, cotton; 35th, linen; 40th, woolen; 50th, golden; 75th, diamond.

Asteroids and Discoverers, 1887 - 1891.

Continued from NOTES AND QUERIES, Vol. V, p. 13

No.	Name.	Discovered.	Discoverer.
269.	Justitia,	Sept. 21, 1887	Palisa ₆₀ .
270.	Anahita,	Oct. 8,	Peters ₄₇ .
271.	Penthesilea,	Oct. 16,	Knoor ₄ .
272.	Antonia,	Feb. 3, 1888	Charlois ₂ .
273.	Atropos,	March 8,	Palisa ₆₁ .
274.	Philagoria,	April 3,	Palisa ₆₂ .
275.	Sapientia,	April 15,	Palisa ₆₃ .
276.	Adelheid,	April 17,	Palisa ₆₄ .
277.	Elvira,	May 3,	Charlois ₃ .
278.	Paulina,	May 16,	Palisa ₆₅ .
279.	Thule,	Oct. 25,	Palisa ₆₆ .
280.	Philia,	Oct. 29,	Palisa ₆₇ .
281.	Lucretia,	Oct. 31,	Palisa ₆₈ .
282.	Clorinda,	Jan. 28, 1889	Charlois ₄ .
283.	Emma,	Feb. 8,	Charlois ₆ .
284.	Amelia,	May 29,	Charlois ₅ .
285.	Regina,	Aug. 3,	Charlois ₇ .
286.	Iclea,	Aug. 3,	Palisa ₆₉ .
287.	Nephtis,	Aug. 25,	Peters ₄₈ .
288.	Glauke,	Feb. 20, 1890	Luther ₂₄ .
289.	Nenetta,	March 10,	Charlois ₈ .
290.	Bruna,	March 20,	Palisa ₇₀ .
291.	Alice,	April 25,	Palisa ₇₁ .
292.	Ludovica;	April 25,	Palisa ₇₂ .
293.	Brasilia,	May 22,	Charlois ₉ .
294.	Felicia,	July 15,	Charlois ₁₀ .
295.	Theresia,	Aug. 17,	Palisa ₇₃ .
296.	Phæetusa,	Aug. 21,	Charlois ₁₁ .
297.	Cecilia,	Sept. 9,	Charlois ₁₂ .
298.	Baptistina,	Sept. 9,	Charlois ₁₃ .
299.		Oct. 8,	Palisa ₇₄ .
300.	Geraldine,	Sept. 9,	Charlois ₁₄ .
301.		Nov. 16,	Palisa ₇₅ .
302.	Clarissa,	Nov. 14,	Charlois ₁₅ .
303.		Feb. 11, 1891	Charlois ₁₆ .
304.		Feb. 12,	Millosevich ₁ .
305.		Feb. 14,	Palisa ₇₆ .
306.		Feb. 16,	Charlois ₁₇ .
307.		March 1,	Millosevich ₂ .
308.		March 5,	Charlois ₁₈ .
309.		March 31,	Borrelly ₁₆ .
310.		April 8,	Palisa ₇₇ .

Waste Basket of Words.

(From Journal of American Folk-Lore, Vol. III, No. XI, 1890)

Cod.—To make fun of a person, by giving him false information. "Oh, you're just *codding* me!" — New England. Central Illinois.

Cud.—"He's a tough *cud*," *i. e.* a hard case. — Maine

Curru-muxes.—High jinks. "Cutting up your *currumuxes*." — Vt.

Dust.—Equivalent to "making tracks." "Get up and *dust*."

Hippins.—A child's diaper. — Virginia and West Virginia.

Hetcheling.—A "blowing up," or scolding. "I'll give you a *hetcheling*." — North Ohio, local. Derivation, from the *heckling* of flax.

Jamboree.—A merrymaking. "Have a regular *jamboree*." — Ohio.

Jobation.—A scolding. Equivalent to *hetcheling*. — New England.

Lallygag.—To "spoon," make love. — Maine.

Lunk-head.—A dunderhead, fool. — General.

Mogg.—To move slowly. "He *mogged* along." — Maine.

Slimpsy.—Slender.

Shackly.—Tumble-down. Also *ramshackly*. New England.

Skeezuks.—A worthless fellow, "scallawag." — New England. Ohio.

GEORGE M. HARMON, College Hill, Mass

Thank-ye-marm.—A dip-hole in the snow, calculated to give a jounce in coasting or sleighing. — West Massachusetts.

Also, in Massachusetts and New Hampshire, a popular name for the water-bars or open drains which run obliquely across the hill-roads.

Sagatiatē.—(Vol. iii. p. 64.) This word came into use here between 1853 and 1859, being used only in the phrase, "How does your corporosity *sagatiatē* the inclemency of the weather?" It was introduced by the Ethiopian Minstrels of the day, and like other catch-words had its short career. I do not think the expression has been heard here for many years. — HENRY PHILLIPS, JR., Phila.

A correspondent observes that *corporature* for "boby" was used in 1857, and suspects that *sagaciate*, as he has often spelled it, is a form of *saginate*, to fatten. Thus to *saginate* is "to hang down heavily as if oppressed by weight," *i. e.* fat. There would seem, however, to be no doubt that *sagatiatē* and *corporosity* are "factitious words."

HOMER. How many persons were there by this name? X.

There were many distinct Homers; this is an admitted fact. Xenophon, in his book, "De Equivocis," says there were several; the pseudo-Archilochus counts eight; Proclus counts three; all different from Archilochus's, and says there were many more who took the name out of admiration of the original Homer. But especially there were two: (1) Homer, the son of Euphron, (2) Homer, the son of Kretheis. So there were two Theseuses, three Æthras, and two Phalarises, to the sore confusion of the phil-Homerist, the mythologist,

and the philologist; three Kretheuses, two Amphions, three Æoluses, and two Cadmuses. So there were two Ascaniuses, two Æneases, two Cinyrases, two Musæuses, two Neleuses, two Europas, — one the ocean nymph, from whom Europe derived its name, and one *the* Europa; three Atyses, and two or three Mæons. So there were two Alcæus, of Messene; two Terpanders, — Terpander of Phocæa, and *the* Terpander; two Archilochuses, two Suidases, two Theocrituses, two Agamemnonns; two Stephanuses, — Stephanus Byzantius, and *the* Stephanus; two Demodocuses, — one of Lacedæmon, and one *the* Demodocus; two Pemiuses, — one Homer's more than father, and one Pemiuse of Ithaca; two Nonnuses, — Nonnus the poet, and Nonnus Abbas. So there were two Penelopes, — one the daughter of Callisto and mother of Pan, and one the *chaste* Penelope, defamed by her namesake's irregularities. So there were three Trophoniuses, — all the sons of Erginus, *i. e.*, workman; three Linuses, — Linus the son of Amphimarus, Linus the son of Apollo and Calliope, and Lius the son of Ismenius; two Tantaluses, — one the King of Egypt, and grandson of Neilus, and *the* Tantalus; two Typhons, — Typhon, King of Egypt, and *the* Typhon; two Hesiods, — one the poet, and one of whom we know nothing but that he was murdered; two Melissuses, — one the descendant of our Melissigenes, one an Athenian admiral; two Lycurguses, — one the lawgiver, one the orator; five or six Pelasguses, twelve Herculeuses, six Apollos, eight Simonideses, about the same number of Bacchuses, and any number of Helens, ten Bions, all poets; four Theons, all philosophers, besides four Theons, all sophists and three poetesses, all rejoicing in the distinguished cognomen of Fly (*Muia*). Manetho is a remarkable name enough, yet there were two Manethos. Oreibantius is yet more remarkable, yet there were two Oreibantiuses. There were even two Hyrnethos. And so on, and so on. (See "Life of Homer," by F. A. White, London, 1886.)

THE HYACINTH. (Vol. VI, p. 316.) Ajax and Ulysses disputed their claims to the arms of Achilles at the death of that hero. Ulysses won the arms, and this so infuriated Ajax that he became insane. When reason returned, Ajax from mortification and despair put an end to his own existence by stabbing himself to the heart. The blood which ran to the ground from the wound produced the flower called *hyacinthus*, of a red color, and on the petal of which may be traced lines the form of the letters "AI" the first two letters of the name "AIAS" (AJAX). The flower here meant appear to be identical with the *Lilium Margatou* (Imperial Margatou), and not the ordinary hyacinth. This was Ajax son of Telamon. (See Anthon's "Classical Dictionary," art. *Ajax*.)

Across the Dark Continent.

The Dark Continent has been crossed from coast to coast just sixteen times. Here is a complete chronological list:—

1802-1811, from Angola to Tete, on the lower Zambesi, by the Portuguese, Honorate da Casta.

1833-1848, from Mozambique to Benguela, by the Portuguese, F. J. Coimbra.

1853-1856, from Benguela to the mouth of the Rovuma, by the Portuguese, Silva Porto.

1854-1856, from San Paulo de Loando to Quillimane, by David Livingstone.

1865-1866, from Tripolis to the Gulf of Guinea, by the German, G. Rohlfs.

1873-1875 from Bagamoye to Benguela, by Cameron.

1874-1877, from Bagamoyo to the mouth of the Congo, by Henry M. Stanley.

1877-1879, from Benguela to Port Natal, by the Portuguese, Serpa Pinto.

1880-1882, from Suakim to the mouth of the Niger, by two Italians, Matteuci and Massari,

1883-1884, from San Paulo de Loando to Saadani, by the German, Major Wissman.

1882-1884, from Port Natal to Benguela, by the Scotch Missionary, Arnat.

1884-1885, from Mossamedes to Quillimane, by two Portuguese, Capello and Ivans.

1885-1886, from the Stanley Falls to Bagamoyo, by the Swede, Lieutenant Gleeruff.

1885-1887, from the mouth of the Congo to Quillimane, by the Austrian, Oscar Lenz.

1887-1889, from Angola to Mozambique, by the Frenchman, Captain Trevier.

1886-1890, from mouth of Congo to Bagamoyo, by Stanley.

The Curse Of Scotland.

There are twenty four reasons why the nine of diamonds is called unlucky.

Every reader has at some period of his or her life heard of the nine of diamonds referred to as "the curse of Scotland;" but why, perhaps you have never taken the time or trouble to ascertain.

In my "Repository of the Rare and the Wonderful" I find no less

than seventeen explanations of the origin of the expression, Southwick's "Quizzism and Its Key" gives eleven, seven of which are wholly different from the answers given in the work above referred to making in all twenty-four different accounts of the origin of the expression in the two works. Southwick traces it back to 1745, mentioning a caricature of that date which represents "the young chevalier" attempting to lead a herd of bulls laden with papal curses across the Tweed river with the nine of diamonds lying before them.

Perhaps the most satisfactory explanation of the enigma is that which refers it to the massacre of Glencoe. The order for that cruel deed was signed by the Earl of Stair, John Dalrymple, secretary of state for Scotland. The coat of arms of the Dalrymple family bears nine lozenges, resembling diamonds, on its shield. Thus it appears to have been with reference to them that the nine spots of diamonds were called "the curse of Scotland." The best and most likely of the other reasons for the origin of the expression are given below.

During the reign of Mary a thief attempted to steal the crown from Elizabeth castle, and succeeded in abstracting nine valuable diamonds from it. To replace these a heavy tax was laid on the people of Scotland, which impoverished them to such an extent that nine diamonds, whether on cloth, cards or real jewels, were spoken of as "Albion's curse."

In the game of Pope Joan the nine of diamonds in the pope, whom the Scotch Presbyterians consider a curse.

It is also said that the Duke of Cumberland wrote his inhuman orders at Culloden on the back of a card, the front of which was marked with nine diamonds.

The "Oracle, or Resolver of Questions," printed in 1770, says that the crown of Scotland had but nine diamonds, and that the Scotch people were too poor to add to the collection.

SHEHAMMEPHORASH—TETRAGRAMMATON—SHEMA. *The name.*
That is, the Holy and Ineffable NAME of God, represented by the four Hebrew letters YHYH; the *Shemhammephorash* of the Jewish Rabbins, and the *Shema* of the Samaritans, and the Greek *Tetragrammaton*; a name the mere utterance of which constituted a capital offence, according to the interpretation put upon the words used in Num. xxiv. 19, by the priests and Rabbins. Marvellous powers are attributed to it, in Rabbinic traditions. We are told that Moses spent forty days on Mount Sinai in learning it from the angel Saxael; that he killed the Egyptian by simply uttering against him this Name; that his rod, which it is said he obtained from Jethro, had inscribed upon it this Name, and through its potent power he was enabled to perform all his wonderful miracles; so revered was this Name that it was pronounced

but once a year by the high-priest on the day of Atonement when he entered the Holy of Holies, and the voice of the high-priest when he uttered it was heard as far as Jericho, and all the priests and people fell on the ground. It is asserted that Jesus stole it from the Temple, and by means of it performed His miracles; it is alleged that two letters of this Name inscribed by a cabalist on a tablet and thrown into the sea raised the storm which destroyed the fleet of Charles V. (A. D. 1542); further, that if any one writes this Name on the person of a prince, he is sure of his abiding favor. The true pronunciation of this word is now lost, however, and has been so since the destruction of the second temple; but if any one were able rightly and devoutly to pronounce it, he would thereby be able to create a world.

Sibylline Enigmas.

I.

It may be well to give the context of the Sibylline enigmas before offering an solution to these dark riddles. The whole paragraph read as following, as found in John Floyer's translation :

"God spoke thus from Heaven : O Noah ! be bold, and preach repentance to all persons, that all may be saved ; but if they be impudent, and dispise thee, I will destroy all flesh by a great inundation of water ; but it shall spring again from thee, as from a perpetual root. I command thee to make a wooded house, which shall not be corrupted by the waters ; I will give thee understanding and great skill to make it of a due length and breadth ; I will take care of all things, so as to save thee and all those who swim with thee. ' I am He who exists ; consider this in your mind ; I am clothed with the Heaven, and the sea is cast about me ; the Earth is my footstool, and the Air is spread round my body, and all the chorus of the Stars runs round me. My Name has nine Letters, and four Syllables ; Consider who I am ; the three first Syllables have each two Letters, the other has the rest ; and there are five Consonants. The Hundreds of all this number are twice eight, and thrice three Decades, with three sevens. He that knows who I am, shall not be ignorant of that Divine Wisdom which is from me."

In another translation reads last part reads as follows :

"I have nine letters ; I am composed of four syllables ; weigh it well in your mind. The first three syllables have each two letters ; the remaining letters are in the last syllable ; and there are five consonants. The whole number consists of twice eight hundreds, and three times three tens, and the addition of seven. If thou knowest who I am, thou shalt not be by me destitute of wisdom." — *Sibylline Oracles, Book 1, ls. 142-146.*

Floyer's translation has the following note on page 8 :

" God, who spoke to Noah, is called *Kúrios 'o Theos*, in Genesis, but these are not one word, and the numeral letters will make but 1154, therefore, the numbers here mentioned seem to me to show the duration of the antediluvian world. After the time God decreed the destruction of it, he said, in Genesis, it should continue 120 years; and the sense is, the centuries of the remaining years are twice eight, that is 16; thrice three tens, that is 90; and three times seven, that is 21; or in all 127 years. *'Egò eimi 'o òn* make 1793. But since no other Greek name of God has the numbers above mentioned, it is plain the Sibyl wrote in some eastern language.

Morellus thinks *anékphònos* is the word signified, which makes by the numeral letters 1696; and that seems probable, because it comes nearest to the age of the antediluvian world; and then this enigma was designed to express the ages of the old world."

The following is the foot-note to the enigma, found on page 39 of the translation of "The Sibylline Oracles," by Milton S. Terry, 1890, New York.

"The connection shows that the name intended must be some title or designation of the Creator, but no word has been discovered that fully meets the conditions of the puzzle. The nearest solution is found in the word *anékphònos*. This word has nine letters, four syllables, and five mutes, or consonants. The first three syllables have two letters each, and the sum of all the letters taken at their numeral value is 1,696. But the number stated in the text is twice 800, plus three times thirty (=90) and seven=1697. *anékphònos* must also be supposed to be a shortened form for *anékphònetos*, used in ecclesiastical Greek writers to denote the *unutterable* name, Jehovah. Another name proposed is *Theòs Solér*, but an obvious objection is that we have here two words, not, as the text suggests, one word of four syllables. Besides, these letters amount to only 1692. There is perhaps an error in the text. If for the words *with seven* we read *with two*, the numerical difficulty of the last-named solution would be met; or if we read *with six*, then the word *anékphònos* solves the problem."

II.

"He will come upon the earth, clothed with flesh, like mortal men; his name contains four vowels, and two consonants; two of the former are sounded together. I will declare the entire number; for he will declare to incredulous men his name containing eight units, eight tens, and as many hundred."—*Sibylline Oracles Book 1, ls., 320-280.*

The name Jesus in Greek *Jesoüs* contains four vowels and the con-

sonant *s* twice, and the numerical value of the all the letters make just 888, which no doubt solves this enigma. Floyer, however, has a note on page 16 of his translation :

“ If 888 be deducted from the vulgar year 3047, when Jesus was born, there will remain 2159, about which time the Sibyls might write, and then was the time of the Jewish prophecies under the Assyrian monarchy; and by this computation Jesus was to come after 888 years. Mahomet's name is computed in the Revelation by 666, in which time Antichrist was to come; and it is probable that Mahomet's name must be computed by the Arabian letters. The Greek will make 664, if it be written Mahometēs.”

This is irrelevant to the solution of the enigma. Floyer makes *Mahometēs* = 664, and *Mahometis* = 666; and *Mahometēs B* = 666, the latter Mahommed the Second, the Turkish Sultan who took Constantinople from the Greeks, A. D. 1453.

The seven modes of writing the name “ Mohammed ” in Euthymius and the Byzantine historians are :

Mōāmēt = 1186. Euthymius.

Mōāmēd = 890. Euthymius, Nicetas, Cedrenus.

Mōāmēth = 895. Euthymius, Cananus, Zonaras.

Mouāmēd = 560. Theophanes.

Mouāmēth = 565. Cons. sPorphrogenitus.

Mouchoumet = 1925. Cons. Porphyrogenitus. Euthymius, Nictetas, Cedrenus.

Machoumet = 1456. Cantacuzenus.

III.

“ I am not afraid of thieves; but my thefts are a terror to others, for my whole life is spent in theft. If you desire to know my name, three numbers will give it to you, which are forty, four hundred, and two hundred.”—*Kircher's Œdipus Ægyptiaca, Class I, Symbols, chap. iv, p. 31.*

The answer to this enigma is the Greek word *Mus*, mouse, which letters stand for 40, 400, 200.

IV.

“ He who is one of five hundred and fifteen will be able to give a gift worthy of my prayers.”—*Kircher's Œdipus Ægyptiaca, Class I, Symbols, chap., iv, p. 31.*

By the “ five hundred and fifteen,” it is said, is meant the Latin DVX, “ a leader,” the Roman numerals added making that number.

QUESTIONS.

1. Some persons, with a desire to divest the science of the stars of its pagan jargon and profanity, have been induced to alter both the names and figures of the constellations. In doing this, they have committed the opposite fault ; that of blending them with things sacred. The "Venerable Bebe," for example, instead of the profane names and figures of the twelve constellations of the Zodiac, substituted those of the *twelve apostles*. Julius Schillerius, following his example, completed the reformation in 1627, by giving Scripture names to all the constellations in the heavens. Weigelius, too, a celebrated professor of mathematics in the university of Jena, made a new order of constellations, by converting the firmament into a *CÆLUM HERALDICUM*, in which he introduced the arms of all the princes of Europe. — *Burritt's Geography of the Heavens*, p. 150.

Can any reader give the references to the works of the above writers, where the names can be found as above stated? F. K. ORR.

2. Where in Homer's Iliad is found the line or words translated, "The will of Jove was being accomplished." MAY.

3. *Chryse*, was the name of a harbor town in *Troas*; *Chryses* was the name of the priest of *Apollo* of that town, and *Chryseis* was the name of the daughter of the priest, her real name being *Astynome*, (See Iliad Boc : J.). Is there any history to show that this was the coast that Solomon sent his ships to for gold—"the gold of *Ophir*"?

R. K. D.

4. Give the English of this Saying of Poor Richard: *Nec sibi, sed toto, genitum se credere mundo*. (See Almanac for 1837.) B. C.

5. What was said to be the inscription on Homer's Grave? JOD.

6. What form of reasoning is meant by *Socratic Elenchus*, and *Socratic Sorites*? A. W. POOLE.

7. Can you give us what is said to be the "hand writing on the wall"? J. S. H.

8. Who was the pupil who read in School from Rev. IX. 11.

"And they had a king over them, *which is* the angel of the bottomless pit, whose name in the Hebrew tongue *is* Abaddon, but in the Greek tongue hath *his* name Napoleon."

9. What is the technical difference between an *axiom* and a *postulate*? TYRO.

MISCELLANEOUS
 NOTES AND QUERIES,
 WITH ANSWERS.

"Men were our masters to teach, but we learn silence from the Gods,"
 PLUTARCH.

VOL. VIII.

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NO. 7.

THE ALPHABET. The alphabet in a short sentence of 26 letters :

D. V. PIKE FLUNG J. Q. SCHWARTZ MY BOX.

This is a perfect compressed alphabet line, and far more sensible than those of Prof. Aug. DeMorgan and Dr. Wm. Whewell (N. AND Q., Vol. II, p. 362.) Now compare this line, when each letter is used once, with the proportion of letter employed, as laid for ordinary printing to express ourselves intelligently. Here is a font of 106,900 letters, the hundreds of each letter expressing the proportion :

a,	8,500	j,	400	s,	8,000
b,	1,600	k,	800	t,	9,000
c,	3,000	l,	4,000	u,	3,400
d,	4,400	m,	3,000	v,	1,200
e,	12,000	n,	8,000	w,	2,000
f,	2,500	o,	8,000	x,	400
g,	1,700	p,	1,700	y,	2,000
h,	6,400	q,	500	z,	200
i,	8,000	r,	6,200		

The English alphabet is found in each of the following stanzas :

God gives the grazing ox his meat,
 He quickly hears the sheep's low cry ;
 But man who tastes his finest wheat
 Should joy to lift his praises high.

Except with zeal we strive to win,
 God's just and holy love,
 *We cannot conquer strife and sin,
 Nor walk with Him above.

LABARINTH CF ST. BERNARD.

Labarintus a Divo Bernardo compositus quo bene vivit homo.

Dicere	Scis	Dicit	Scit	Audit	Non vult
Facere	Potes	Facit	Potest	Incunit	Non credit
Crederere	Audis	Credit	Audit	Credit	Non est
Dare	Habes	Dat	Habet	Miserequaerit	Non habet
Judicare	Vides	Judicat	Videt	Contemnit	Non debet
Noli	Omnia quae	Quia qui	Omnia quae	Saepe	Quod

LABARINTH OF ST. BERNARD. The writer of the "Table-talk," in the *Guardian*, gives the following curiosity, copied from a board hanging on the inside stair-case wall of the Latin Convent on the summit of Mount Carmel. This labarintus, it will be seen, consists of five maxims, *quo bene vivit homo*, which are to be thus deciphered :

The word "Noli," in the first lower rectangle, is the beginning of each precept ; "dicere," in the first upper rectangle, is the second word of the first precept ; "omnia quae," in the second lower rectangle, the third word, and "scis," at the top, the fourth word ; and so on zigzag, till we arrive at "non vult." The second maxim is brought out by the method, taking "facere" for the second word, and so on.

"Noli dicere omnia quae scis, quia qui dicit omnia quae scit, saepe audit quod non vult."

"Noli facere omnia quae potes, quia qui facit omnia quae potest, saepe incunit quod non credit."

"Noli credere omnia quae audis, quia qui credit omnia quae audit, saepe credit quod non est."

"Noli dare omnia quae habes, quia qui dat omnia quae habet, saepe misere quaerit quod non habet."

"Noli judicare omnia quae vides, quae qui judicat omnia quae videt, saepe contemnit quod non debet."

LATIN INSCRIPTION. The following is from a church-yard in Germany, and said to be a familiar passage of scripture from the Latin Vulgate translation. Who will tell us what it is and where found?

O quid tua te H.
 be bis bia abit
 ra ra ra
 es et in
 ram ram ram
 i i
 Mox eris quod ego nunc.

Taking the position of the words in the first line, which are placed *above* or *over* (super) those in the second, and noting the repetition of the syllables *ra* and *ram* thrice (ter), and the letter *i* twice (bis), the reading may be thus :

" O *superbe* quid *superbis*? tua *superbia* te *superabit*. *Terra* es es it *terram ibis*. Mox eris quod ego nunc.

A CIPHER. A French lawyer residing in the town of Mende, while searching in the library of La Fertè St. Aubin, discovered an old book entitled " Questions d' Avenir," by Galaos, a monk of the Abbey of Saint Benoit-sur-Loire. From this book are taken the following figures, which constitute a numerical prediction :

12·15·22·9·19—14·1·16·15·12·5·15·14—
 2·21·15·14·1·1·61·18·20·5—18·5·16·18·5·19·5 14·20·1·14·20—
 4·21—16·5·21·16·12·5—4·5—4·9·23—
 4·5·16·1·18·20·5·13·5·14 20·19—19·5·18·1—
 16·18·5·19·9·4·5·14·20—4·5—18·5·16·21·2·12·9·17·21·5—
 6·18·1·14·3·1·9·19·5—9·14·4·9·22·9·19·9·2·12·5—16·1·18—
 12·5—19·21·6·6·18·1·7·5—21·14·9·22·5·18·19·5·12—
 22·5·18·19—12·5—4·9·23—14·5·21·22·9·5·13·5—
 19·9·5·3·12·5

By taking each of the preceding figures as a letter, 1 as *a*, 2 as *b*, 3 as *c*, 12 as *l*, and so on we find the following sentence :

Louis Napoleon Buonaparte representant du peuple de dix departements, sera president de Republique Francaise, indivisible democratique, par le suffrage universel, vers le dix neuvieme siecle,

" Louis Napoleon Buonaparte, representative of the people from ten departments, will be president of the French Republique, indivisible, democratic, by universal suffrage, about the nineteenth century."

"KNOW THYSELF."—A PRAYER. O thou, my higher, my interior self, thou invisible and almost unknown, yet omnipotent power, I pray thee to aid me in knowing thee, and reveal to me thy secrets, which are the source of all true happiness, which I will fervently guard from the profane and give to those only who desire to walk in thy footsteps. Watch over and guide me until I thoroughly know and understand thee. Guard and guide my footsteps aright, and watch over this weak mortal body, and impress my mind when danger is near, should I be inclined to stray from thee. Guard this mortal body from harm, as a mother would guard and guide her young babe; watch over me without ceasing, and see that I stray not from divine truth, which is but another name for thyself. Thou hast already given me much, yet with all thy giving, give me wisdom and understanding. Amen.—*Occultism—The Key of Nature. Boston, June 1, 1891.*

THE PATER NOSTER. The first English of the "Lord's Prayer" that obtained much currency, was issued by Henry VIII, in his "Prymer," 1538, only two years after he had murdered Tyndale for making a good translation of the Bible, and trying to have it read in England. The prayer was as follows :

Our father whiche art in heuen, halowed be thy name. Let thy kyngdome cum vnto vs. Thy wyll be fulfilled as well in erthe, as it is in heuen. Gyve vs this daye our daylye breade. And forgyue vs our trespasses, as we forgyue them that trespass agaynst vs. And lede vs not in to temptacyon. But delyver vs from euyll. So be it.

QUOTATION FROM ELIAS THE PROPHET. (N. AND Q., Vol. VI, p. 277.) In addition to the words you quote, said to be from Elias the prophet (Rom. xi, 3), another cyclical quotation from him is found on pp. 31-32, of *The Book of Enoch*, "Enoch Restitutus," by David Murray, London, 1836. "He (Fabricius) says :

I will not, like Varro, divide the whole of time into that which is unknown, fabulous, and historic; but I will substitute for this division, the ancient tradition of the house of Elias, so celebrated among the Jews, according to which the duration of the world is divided into six millenaries; so that there should be two thousand void, or before the law of Moses; two thousand of the law; two thousand of the Messias.

Literally, the words of the tradition are as follows :

"The declaration of the progeny of Elias :
Six thousands of years, this is for ever ;
Two thousands, without order ;
Two thousands, the covenant ;
And two thousands, shall continue the Messias." X.

Per Annum.

THANKSGIVING DAY.

Hail, *August* day, which comes in crisp *November*,
 Let's all *March* forth to greet the natal morn—
May it equal Christmas, which comes in bleak *December*,
 When poultry and pigs get fat by eating corn.
May every *June* bug hide its ruptured head,
 And *few* lie dormant in the sun's bright ray ;
 And *Jane*, you airy creature, rise from your bed,
 And join in honor to Thanksgiving Day.
 Oh, who would be a ripe duck in the month of *Feb.*,
 Or, who, in *April*, stand out in the rain ?
Ex-cept ember days, we're ne'er caught in the web,
 In crossing Broadway and *kn-oct ober* twain.

DEATH OF LITTLE JANE.

Jan-e, a little saint, was sick and faint,
Feb refuge she had none ;
Mar malade seemed to make her worse,
Apr-icots were all gone.
May-be, she thought, in some fair field,
June-berries sweet may grow ;
July and *June*, they searched in vain,
Aug-menting all her woe.
Sept-imus failed to find a pill—
Oct-oroon slave was he ;
Nov ice, poor thing, at feeling ill,
Dec eased ere long was she.

LOGIC OF EARLY RISING.

“ He who would thrive, should rise at five.”

He who would thrive more, should rise at four.

He who would more thriving be,
 Should leave his bed at turn of three.

And who this latter would outdo,
 Will rouse him at the stroke of two.

He who would never be outdone,
 Must ever rise as soon as one.

He who would flourish best of all,
 Should never go to bed at all.

INPROMPTU QUOTATIONS.

- "These mighty motives, *January* the sage,
Maturely pondered in his riper age."—*Pope*.
- "*February 2* is Candlemas Day,
Half the corn, and half the hay."—*Old Almanac*.
- "The stormy *March* has come at last,
With wind, and cloud, and changing skies."—*Bryant*.
- "Sweet *April*, many a thought
Is wedded unto thee, as hearts are wed."—*Longfellow*.
- "No vernal blooms their torpid rocks array,
But winter lingering chills the lap of *May*."—*Goldsmith*.
- "These are thy pictures, *June*,
Brightest of summer months."—*Burleigh*.
- "And proofs as clear as founts in *July*,
When we see each grain of gravel."—*Shakespeare*.
- "It was *August* the third,
And soft was the skies."—*Harte*.
- "Up from the field ripe with corn,
In the cool *September* morn."—*Whittier*.
- "Then we turn us to our childhood,
In the bright days of *October*."—*Gunnison*.
- "No shade, no shine, no butterflies, no bees,
No fruits, no flowers, no leaves, *November*."—*Hood*.
- "It was in the bleak *December*,
And each separate dying ember."—*Poe*. X.

VOWEL E. We ever feel extreme feebleness, when we seek perfect excellence here. We well remember men everywhere err. Even when Eden's evergreen trees sheltered Eve, the serpent crept there. Yet, when tempted — when cheerlessness depresses — when helplessness fetters — when we seem deserted, then we remember Bethlehem; we beseech the redeemer's help. We ever need the rest the blessed expect. (58 words, 112 e's and no other vowel.)

A LONG NAME. The Dutch journals announced that King William has invested the Sultan of Djocjokata with the dignity of "Commander of the Order of the Lion of the Netherlands." The Sultan's name is composed of 59 letters, this :

Hamaukoewonosnopatingalagonabgurrachmansaydinupnotogomode,
the Fifth.

HOMER'S TOMBSTONE. (N. AND Q, Vol. VIII, p. 322.) "The Complete Life of Homer," by F. A. White, London, 1889, p. 121, gives the following as being on Homer's tombstone :

ENTHADE TENIERENKEFA
 LENKATAGAIKALUP(SE)
 ANDRONEROONKOSMETO
 R A Th E I O N O M E R O N
 TONTROIKONATEIPOIE
 SEIKOSMESENUSTERON
 ETESIDIAKOSIOIST(ESSA)
 RAKONTAGEG . R A E A T O
 V'TOOMH ROSOEUFRONOS

"Here Mother Earth the sacred head did hide,
 Whence sprang the *Iliad*—Homer, Greece's pride.

Two hundred and forty years after the Trojan war,
 Which he illustrated by his poesy, I Homer,
 The son of Euphon, erected this monument."

Herodotus says "this was written by the pseudo-Homer," when he came to Ios about 885 B. C. The epitaph on Homer, according to the translation of Grotius is as follows :

*Ista tegit tellum sacrum caput illud Homeri,
 Cantibus Heroum qui res caelestibus aequal.*

"The earth here covers the head of Divine Homer, whose poetry has immortalized heroes."

"AND THE WILL OF JOVE WAS BEING ACCOMPLISHED." (Vol. VIII, p. 322.) This is a translation of the fifth line of Book I of the *Iliad*. White quotes the line, "*And the scheme of Jove was accomplished.*"

POSTULATE. (Vol. VIII, p. 322.) *Postulatum*, that which is asked or assumed to prove something else. "According to some, the difference between axioms and postulates is analagous to that between theorems and problems: the former expressing truths which are self-evident, and from which other propositions may be deduced; the latter, operations which may esily be performed, and by the help of which more difficult constructions may be effected." There is a difference between a postulate and a hypothesis. When you lay down something which may be, although you have not proved it, and which is admitted by the learner or disputant, you make a hypothesis. The postulate not being assented to, may be contested during the discussion, and is only established by its conformity with all other ideas on the subject.—*McClintock & Strong's Cyclopædia*, Vol. VIII, p. 446.

Laws of Zaleucus.

A ruler (B. C. 1000) among the Locrians, who left behind him the following summary of his religious belief:—

1. Every man ought to be convinced of the existence of God. He who shall observe the order, harmony, and music of the universe cannot believe that chance has formed this splendid structure.

2. He should be master also of his own mind; he should purify his soul, by disengaging it from all evil inclinations; holding it essential that the supremely pure cannot be adored by the corrupt; and that the Divine has no likeness to those miserable human beings who allow themselves to be dazzled by magnificent ceremonies, or by sumptuous offerings. Virtue only, and the constant desire to do good, are pleasing in the eyes of Him.

3. He therefore who sincerely labors to be just and true in his principles, and conforms his daily life to those ends, will make himself beloved in the eyes of God.

4. Let every mortal man avoid what may lead him into disgrace before the Ruler of Heaven, more anxiously than the minor evil of poverty; for honor is bestowed by all the wise on him who prefers justice to mere wealth.

5. The many whom their violent passions drag into evil—men, women, children, citizens, common people—should be taught to have the Divine Ones before them, and to reflect often on the severe judgment which they shall be bound to execute on the sinful.

6. They should see perpetually before them the form of death' that fatal hour which awaits us all; an hour within the recollection of our past crimes will be attended with dread remorse; and when the doers of evil will repent that all their actions had not been subjected to the severe but salutary laws of entire equity.

7. Let each one therefore so rule his life, as if every moment of that life were to be the last; but if some evil power should at any time ensnare to the commission of crime a frail mortal, let him fly a suppliant at the feet of the altar; let him pray to Heaven to give him its assistance, and shield him from the power of all sin; let him entreat that he may be supported and led on in life by the Spirit of Beauty, whose counsels shall conduct him into virtuous thoughts and deeds, he while bringing vividly before his eyes the mildness, but the inflexible justice, of the Most High God.

Harmonies of Plane Figures.

CIRCLES AND SQUARES.

1.

The circumference of any square whatever, divided by the circumference of its inscribed circle, produces the same quotient, viz., $1,273+$, and this is *the square of the diameter* of another circle whose area equals one square. The square root is $1,1283+$, and this is the diameter of a circle whose area equals one square.

2.

The circumference of any circle whatever, divided by the circumference of its circumscribed square, produces the same quotient, viz., the $.78539+$, and this is the *area* of a circle whose diameter is one square.

3.

The area of any square divided by the area of its inscribed circle, also produces the square of the diameter of another circle whose area equals one square; viz., the quotient is always $1,273+$.

4.

The area of any circle, divided by the area of its circumscribed square, always produces the area of a circle whose diameter is one square, viz., $.78539+$.

5.

The circumference of one square, divided by the circumference of a circle whose area equals one square, produces the *diameter* of a circle whose area equals one square, viz., $1,1283+$.

6.

The circumference of a circle whose area equals one square, divided by the circumference of one square, produces the square root of the area of a circle whose diameter is one square, viz., $.88622+$.

7.

Twice the square root of the circumference of any given square, produces the circumference of another square, whose area equals the diameter of the given square.

8.

Twice the square root of the circumference of any given circle, produces the circumference of another circle whose area equals the diameter of the given circle.

9.

Twice the square root of the diameter of any given square is the diameter of another square, whose area equals the circumference of the given square.

10.

Twice the square root of the diameter of any given circle is the diameter of another circle, whose area equals the circumference of the given circle.

11.

Four times the square root of the area of any given circle equals the circumference of another circle, whose area is equal to the circumscribing square of the given circle.

12.

The area of a square inscribed in a circle is half the area of a square circumscribed about the same circle.

13.

The area of a circle inscribed in a square is one-half the area of a circle circumscribed about the same square.

14.

Half the circumference of any circle, multiplied by half its diameter, equals the area of the circle.

15.

Half the circumference of any square, multiplied by half its diameter, equals the area of the square.

16.

Half the circumference of any plane figure whatever, multiplied by half its diameter, equals the area of the figures. (diameter always being the diameter of the inscribed circle.)

17.

The difference of the circumferences of any two squares, divided by the difference of their diameters, produces the circumference of a square of one diameter, viz., 4.

18.

The difference of the circumferences of any two circles, divided by the difference of their diameters, produces the circumference of a circle of one diameter, viz., 3.14159†.

19.

The sum of the circumferences of any two squares, divided by the sum of their diameters, produces the circumference of a square of one diameter, 4.

20.

The sum of the circumferences of any two circles, divided by the sum of their diameters, produces the circumference of a circle of one diameter, viz., 3.14159+.

21.

The square root of the circumference of any given circle is the circumference of another circle, whose area equals one-fourth of the diameter of the given circle.

22.

The square root of the circumference of any given square, is the circumference of another square, whose area equals one-fourth of the diameter of the given square.

23.

To find a circle and a square whose areas shall be equal to each other. Take any square and its inscribed circle, that is, a square and a circle of the same diameter, and extract the square root of the circumference of each. Double the root from the square for the circumference of a *new square*, and double the root from the circle for the circumference of a *new circle*; then shall the areas of the new square and the new circle be equal to each other.

CIRCLES AND EQUILATERAL TRIANGLES.

24.

The area of a circle inscribed in an equilateral triangle is one-fourth of the area of a circle circumscribed about the same triangle.

25.

The area of an equilateral triangle inscribed in a circle is one-fourth of the area of an equilateral triangle circumscribed about the same circle.

26.

Twice the square root of the circumference of any given equilateral triangle is the circumference of another equilateral triangle whose area equals the diameter of the given triangle.

27.

Twice the square root of the diameter of any given equilateral triangle is the diameter of another equilateral triangle, whose area equals the circumference of the given triangle.

28.

In any equilateral triangle, the square of the perpendicular, divided by the square root of 3, equals the area of the triangle. And double the perpendicular multiplied by the square root of 3, equals the circumference of the triangle.

29.

To find a circle and an equilateral triangle, whose areas shall be equal to each other. Take an equilateral triangle and its inscribed circle — that is, a triangle and circle of the same diameter, and extract the square root of the circumference of each. Double the root from the triangle, for the circumference of a *new triangle*, and double the root from the circle for the circumference of a *new circle*; then shall the areas of the new triangle and the new circle be equal to each other.

30.

In the equilateral triangle, if the perpendicular is one, the circumference is *twice the square root of three*; but if the area is one, the perpendicular is *the square root of three twice extracted*, or the biquadratic root of three.

31.

In all equilateral triangles, the biquadratic root of three times the square of the area equals the perpendicular.

Thus, if the area of the triangle is 1, the square of the area is 1 and three times the square of the area is 3, and the square root of three, twice extracted, (the biquadratic root,)—viz., 1.316+, is the perpendicular.

Again, if the area of the triangle is 2, the square of it is 4, and three times the square is 12, and the square root of 12, twice extracted—viz., 1.8612+, is the perpendicular.

It follows, that in every equilateral triangle whose area is a whole number, the perpendicular twice squared will be a whole number, as the following ten examples will show :

If area is 1, the perpendicular is the square root twice extracted from	3.
If area is 2, the perpendicular is the square root twice extracted from	12.
If area is 3, the perpendicular is the square root twice extracted from	27.
If area is 4, the perpendicular is the square root twice extracted from	48.
If area is 5, the perpendicular is the square root twice extracted from	75.
If area is 6, the perpendicular is the square root twice extracted from	108.
If area is 7, the perpendicular is the square root twice extracted from	147.
If area is 8, the perpendicular is the square root twice extracted from	192.
If area is 9, the perpendicular is the square root twice extracted from	243.
If area is 10, the perpendicular is the square root twice extracted from	300

CIRCLES AND ALL POLYGONS.

32.

Twice the square root of the circumference of any given circle is the circumference of another circle whose area equals the diameter of the given circle.

33.

Twice the square root of the circumference of any given polygon is the circumference of another similar polygon, whose area equals the diameter of the given polygon.

34.

Twice the square root of the diameter of any given circle is the diameter of another circle, whose area equals the circumference of the given circle.

35.

Twice the square root of the diameter of any given polygon is the diameter of another similar polygon, whose area equals the circumference of the given polygon.

36.

To find a circle, whose area shall equal the area of a polygon, which is similar to any given polygon that can receive an inscribed circle. Extract the square root of the circumference of the given polygon, and also the square root of the circumference of the inscribed circle. Double the root from the polygon, for the circumference of a *new similar polygon*, and double the root from the circle for the circumference of a *new circle*; then shall the area of the new circle equal the area of the new polygon, which is similar to the given polygon.

SPHERES AND CUBES.

37.

The surface of a cube of one diameter, divided by the surface of its inscribed sphere, produces the square of the diameter of another sphere, whose surface equals the surface of the given cube.

38.

The surface of *any* cube, divided by the surface of its inscribed sphere, produces the square of the diameter of another sphere, whose surface equals the surface of a cube of one diameter.

39.

The surface of a sphere of one diameter, divided by the surface of its circumscribed cube, produces the solidity of the given sphere.

40.

The surface of *any* sphere, divided by the surface of its circumscribed cube, produces the solidity of a sphere of one diameter.

41.

The surface of any cube, divided by the surface of its inscribed sphere, produces the cube or third power of the diameter of a sphere, whose solidity is one, or equal to the solidity of a cube of one diameter.

42.

The solidity of any cube, divided by the solidity of its inscribed sphere, produces the cube or third power of the diameter of a sphere, whose solidity is equal to a cube of one diameter.

43.

The solidity of any sphere, divided by the solidity of its circumscribed cube, produces the solidity of a sphere of one diameter.

44.

The solidity of any given sphere, divided by the solidity of a sphere of one diameter, produces the solidity of the cube circumscribing the given sphere.

45.

The surface of a cube inscribed in a sphere, equals one-third of the surface of the cube circumscribed about the same sphere.

46.

The surface of a sphere inscribed in a cube, equals one-third of the surface of the sphere circumscribed about the same cube.

47.

If a sphere be inscribed in a cube and another sphere circumscribed about the cube, the square of the diameter of the inscribed sphere equals one-third of the square of the diameter of the circumscribed.

48.

If a cube be inscribed in a sphere and another cube circumscribed about the sphere, the square of the diameter of the inscribed cube equals one-third of the square of the diameter of the circumscribed.

49.

The cube root of the surface of a cube, whose diameter is six, equals the surface of a cube whose solidity is one.

50.

The cube root of the surface of a sphere, whose diameter is six, equals the surface of a sphere whose solidity is one, or equal to one cube.

51.

In both the cube and the sphere, if diameter is six, solidity equals the surface ; and if surface is six, solidity equals the diameter.

52.

In both the cube and the sphere, six times the solidity, divided by the diameter, equals the surface.

	53.	
If 1 is the diameter of a cube, the diameter of its circumscribed sphere is the square root of		3.
	54.	
If 2 is the diameter of a cube, the diameter of its circumscribed sphere is the square root of		12.
	55.	
If 3 is the diameter of a cube, the diameter of its circumscribed sphere is the square root of		27.
	56.	
If 4 is the diameter of a cube, the diameter of its circumscribed sphere is the square root of		48.
	57.	
If 5 is the diameter of a cube, the diameter of its circumscribed sphere is the square root of		75.
	58.	
If 6 is the diameter of a cube, the diameter of its circumscribed sphere is the square root of		108.
	59.	
If 7 is the diameter of a cube, the diameter of its circumscribed sphere is the square root of		147.
	60.	
If 8 is the diameter of a cube, the diameter of its circumscribed sphere is the square root of		192.
	61.	
If 9 is the diameter of a cube, the diameter of its circumscribed sphere is the square root of		243.
	62.	
If 10 is the diameter of a cube, the diameter of its circumscribed sphere is the square root of		300.

SPHERES AND TETRAHEDRONS.

63.

The surface of a tetrahedron of one diameter, divided by the surface of its inscribed sphere, produces the square of the diameter of another sphere, whose surface equals the surface of the given tetrahedron.

64.

The surface of *any* tetrahedron, divided by the surface of its inscribed sphere, produces the square of the diameter of another sphere, whose surface equals the surface of a tetrahedron of one diameter.

65.

The diameter of a sphere inscribed in a tetrahedron, equals half the perpendicular or height of the tetrahedron.

66.

The perpendicular of a tetrahedron inscribed in a sphere, equals two-thirds the diameter of the sphere.

67.

If a sphere be inscribed in a tetrahedron and another sphere circumscribed about the tetrahedron, the diameter of the inscribed sphere equals one-third the diameter of the circumscribed, the surface of the inscribed equals one-ninth of the surface of the circumscribed, and the solidity of the inscribed equals one twenty-seventh of the solidity of the circumscribed sphere.

68.

If a tetrahedron be inscribed in a sphere and another tetrahedron circumscribed about the sphere, the diameter of the inscribed tetrahedron equals one-third the diameter of the circumscribed; the surface of the inscribed equals one-ninth of the surface of the circumscribed, and the solidity of the inscribed equals one twenty-seventh of the solidity of the circumscribed tetrahedron.

69.

If the linear edge of a tetrahedron is 1, the surface equals the square root of 3.

70.

If the diameter of a tetrahedron is 1, the solidity equals the square root of 3.

71.

The height or perpendicular of a tetrahedron equals the square root of two-thirds the square of its linear edge.

72.

The surface of a tetrahedron of one diameter, divided by the surface of its inscribed sphere, or sphere of one diameter, produces the cube or third power of the diameter of a sphere whose solidity equals the solidity of the given tetrahedron.

73.

The surface of *any* tetrahedron, divided by the surface of its inscribed sphere, produces the cube or third power of the diameter of a sphere whose solidity equals the solidity of a tetrahedron of *one* diameter.

74.

The solidity of a tetrahedron, divided by the solidity of its inscribed sphere, produces the cube or third power of the diameter of a sphere whose solidity equals the solidity of a tetrahedron of one diameter.

75.

In both the sphere and tetrahedron, if diameter is six, solidity equals the surface; and if the surface is six, solidity equals the diameter.

76.

In both the sphere and tetrahedron, six times the solidity, divided by the diameter, equals the surface.

77.

If the surface of a tetrahedron is 6, the linear edge is the square root of 12, twice extracted, or the biquadratic root of 12. The linear edge also equals the diagonal of an octahedron, whose surface is 6.

SPHERES AND OCTAHEDRONS.

78.

In any octahedron, the square of the diameter equals two-thirds the square of the linear edge.

79.

In any octahedron, the square of the linear edge equals one-half the square of the diagonal.

80.

In any octahedron, the square of the diameter equals one-third the square of the diagonal.

81.

In both the sphere and octahedron, if diameter is 6, the solidity equals the surface ; and if surface is 6, the solidity equals the diameter.

82.

In both the sphere and octahedron, six times the solidity, divided by the diameter, equals the surface.

83.

The surface of an octahedron of one diameter, divided by the surface of its inscribed sphere, produces the square of the diameter of another sphere, whose surface equals the surface of the given octahedron.

84.

The surface of *any* octahedron, divided by the surface of its inscribed sphere, produces the square of the diameter of another sphere, whose surface equals the surface of an octahedron of one diameter.

85.

The solidity of an octahedron of one diameter, divided by the solidity of its inscribed sphere, produces the cube or third power of the diameter of another sphere, whose solidity equals the solidity of the given octahedron.

86.

The solidity of *any* octahedron, divided by the solidity of its inscribed sphere, produces the cube or third power of the diameter of another sphere, whose solidity equals the solidity of an octahedron of one diameter.

87.

If an octahedron be inscribed in a sphere, and another circumscribed about the sphere, the square of the diameter of the inscribed octahedron equals one-third of the square of the diameter of the circumscribed ; the square of the surface of the inscribed equals one-ninth the square of the surface of the circumscribed ; and the square of the solidity of the inscribed equals one twenty-seventh of the square of the solidity of the circumscribed octahedron.

88.

If a sphere be inscribed in an octahedron, and another sphere circumscribed about the octahedron, the square of the diameter of the inscribed sphere equals one-third the square of the diameter of the circumscribed; the square of the surface of the inscribed equals one-ninth the square of the surface of the circumscribed; and the square of the solidity of the inscribed equals one twenty-seventh of the square of the solidity of the circumscribed sphere.

89.

In the octahedron whose diameter is 1, the solidity equals half the square root of 3; the linear edge equals the square root of one and a-half, or 1.5; the diagonal equals the square root of 3; and the surface equals the square root of 27.

90.

In the octahedron whose diameter is 2, the linear edge equals the square root of 6; the diagonal equals the square root of 12; the solidity equals the square root of 48; and the surface equals the square root of 432. 48 is one-ninth of 432, and the square root of 48 is one-third the square root of 432.

91.

In the octahedron whose diameter is 3, the linear edge equals the square root of 13.5; the diagonal equals the square root of 27; the solidity equals the square root of 546.75; and the surface equals the square root of 2187. The square root of the last of these numbers is double the square root of the preceding number; therefore when the diameter of the octahedron is 3, the solidity equals half the surface.

92.

In the octahedron whose diameter is 4, the linear edge equals the square root of 24; the diagonal equals the square root of 48; and the solidity equals two-thirds the surface.

93.

In the octahedron whose diameter is 5, the linear edge equals the square root of 37.5; the diagonal equals the square root of 75; and the solidity equals five-sixths of the surface.

94.

In the octahedron whose diameter is 6, the linear edge equals the square root of 54; the diagonal equals the square root of 108, the solidity is the square root of 34992, and the surface is also the square root of 34992, viz., 187.06148+. Therefore when diameter is 6, the solidity equals the surface.

95.

In the octahedron whose *surface* is 6, the linear edge equals the square root of 3, *twice extracted*; the diagonal equals the square root of 12, *twice extracted*; the diameter equals the square root of 1.333333+, *twice extracted*; and the solidity also equals the square root of 1.333333+ *twice extracted*. Therefore when surface is 6, the solidity equals the diameter.

CUBES AND OCTAHEDRONS.

96.

In the cube whose diameter is 1, the diagonal equals the square root of 3.

97.

In the octahedron whose diameter is 1, the diagonal equals the square root of 3.

98.

In the cube whose diameter is 2, the diagonal equals the square root of 12.

99.

In the octahedron whose diameter is 2, the diagonal equals the square root of 12.

100.

In all cubes and octahedrons of equal diameters, the diameters are also equal.

TETRAHEDRONS AND OCTAHEDRONS.

101.

In the tetrahedron whose linear edge is 1, the surface equals the square root of 3.

102.

In the tetrahedron whose diagonal is 1, the surface equals the square root of 3.

103.

In the tetrahedron whose linear edge is 5, the surface equals the square root of 48.

104.

In the octahedron whose diagonal is 2, the surface equals the square root of 48.

105.

And universally, if the linear edge of a tetrahedron equals the diagonal of an octahedron, the surfaces of the two bodies are equal.

106.

If four tetrahedrons, whose faces are severally equal to the faces of an octahedron, be applied to four alternate faces of the octahedron, the whole will constitute a regular tetrahedron.

107.

If the linear edges of a tetrahedron be all equally bisected, and the four vertices or solid angles be taken away by planes cutting through the points of bisection, the part that is left will be a regular octahedron.

TETRAHEDRONS AND EQUILATERAL TRIANGLES.

108.

If the perpendicular of a tetrahedron be 1, the solidity equals one-sixteenth of the circumference of an equilateral triangle whose perpendicular is 1.

109.

If the perpendicular of a tetrahedron be 2, the solidity equals four-sixteenth of the circumference of an equilateral triangle whose perpendicular is 2.

110.

If the perpendicular of a tetrahedron be 3, the solidity equals nine-sixteenths of the circumference of an equilateral triangle whose perpendicular is 3.

111.

If the perpendicular of a tetrahedron be 4, the solidity equals sixteen-sixteenths, that is, it equals the circumference of an equilateral triangle whose perpendicular is 4.

112.

And universally, the circumference of any equilateral triangle, divided by 16, and multiplied by the square of its perpendicular, equals the solidity of a tetrahedron of the same perpendicular.

DIAMETER, SURFACE, AND SOLIDITY OF CYLINDERS AND CONES.

If the *diameter* of a cylinder or cone is 1, the solidity equals one-sixth of the whole surface.

If the diameter is 2, the solidity equals one-third of the surface.

If the diameter is 3, the solidity equals one-half of the surface.

If the diameter is 4, the solidity equals two-third of the surface.

If the diameter is 5, the solidity equals five-sixth of the surface.

If the diameter is 6, the solidity and surface are equal.

If the *surface* of a cylinder or cone equals 1, the solidity equals one-sixth of the diameter.

If the surface is 2, the solidity equals one-third of the diameter.

If the surface is 3, the solidity equals one-half of the diameter.

If the surface is 4, the solidity equals two-thirds of the diameter.

If the surface is 5, the solidity equals five-sixth of the diameter.

If the surface is 6, the solidity and diameter are equal.

There are but five regular polyhedrons, as follows :

1. The tetrahedron, or regular pyramid, bounded by four equilateral triangles.
2. The hexahedron, or cube, bounded by six sq ares.
3. The octahedron, bounded by eight equilateral triangles.
4. The dodecahedron, bounded by twelve regular pentagons.
5. The icosahedron, bounded by twenty equilateral triangles.

The following table shows the value of the diedral angle between two adjacent faces in any regular polyhedron :

Tetrahedron,	70° 31' 42"
Hexahedron,	90°
Octahedron,	109° 28' 18"
Dodecahedron,	116° 33' 54"
Icosahedron,	138° 11' 23"

ASTEROIDS. According to the *Astronomical Journal* of May 12, 1891, Asteroid No. 303, which Chalois supposed to be his 16th, proves to be Palisa's 21st (*Lacrimosa*, No. 208), therefore those numbered above 303 are one less, and the following table is corrected to date :

Asteroids and Discoverers, 1887 - 1891.

Continued from NOTES AND QUERIES, Vol. V, p. 13.

No.	Name.	Discovered.	Discoverer.
269.	Justitia,	Sept. 21, 1887,	Palisa ₆₀ .
270.	Anahita,	Oct. 8,	Peters ₄₇ .
271.	Penthesilea,	Oct. 16,	Knorre ₄ .
272.	Antonia,	Feb. 3, 1888,	Charlois ₂ .
273.	Atropos,	March 8,	Palisa ₆₁ .
274.	Philagoria,	April 3,	Palisa ₆₂ .
275.	Sapientia,	April 15,	Palisa ₆₈ .
276.	Adelheid,	April 17,	Palisa ₆₄ .
277.	Elvira,	May 3,	Charlois ₈ .
278.	Paulina,	May 16,	Palisa ₆₆ .
279.	Thule,	Oct. 25,	Palisa ₆₆ .
280.	Philia,	Oct. 29,	Palisa ₆₇ .
281.	Lucretia,	Oct. 31,	Palisa ₆₈ .
282.	Clorinda,	Jan. 28, 1889,	Charlois ₄ .
283.	Emma,	Feb. 8,	Charlois ₅ .
284.	Amelia,	May 29,	Charlois ₆ .
285.	Regina,	Aug. 3,	Charlois ₇ .
286.	Iclea,	Aug. 3,	Palisa ₆₉ .
287.	Nephtis,	Aug. 25,	Peters ₄₈ .
288.	Glauke,	Feb. 20, 1890,	Luther ₂₄ .
289.	Nenetta,	March 10,	Charlois ₈ .
290.	Bruna,	March 20,	Palisa ₇₀ .
291.	Alice,	April 25,	Palisa ₇₁ .
292.	Ludovica,	April 25,	Palisa ₇₂ .
293.	Brasilia,	May 22,	Charlois ₉ .
294.	Felicia,	July 15,	Charlois ₁₀ .
295.	Theresia,	Aug. 17,	Palisa ₇₈ .
296.	Phæetusa,	Aug. 21,	Charlois ₁₁ .
297.	Cecilia,	Sept. 9,	Charlois ₁₂ .
298.	Baptistina,	Sept. 9,	Charlois ₁₈ .
299.		Oct. 8,	Palisa ₇₄ .
300.	Geraldine,	Sept. 9,	Charlois ₁₄ .
301.		Nov. 16,	Palisa ₇₅ .
302.	Clarissa,	Nov. 14,	Charlois ₁₆ .
303.		Feb. 12, 1891,	Millosevich ₁ .
304.		Feb. 14,	Palisa ₇₆ .
305.		Feb. 16,	Charlois ₁₇ .
306.		March 1,	Millosevich ₂ .
307.		March 5,	Charlois ₁₈ .
308.		March 31,	Borrelly ₁₆ .
309.		April 6,	Palisa ₇₇ .

MISCELLANEOUS
NOTES AND QUERIES,
WITH ANSWERS.

" *The issues belong to God ; to do of right belongs to us.*"— ANONYMOUS.
" *Morals and Dogma,*" p. 320.

VOL. VIII.

AUGUST, 1891.

No. 8.

" LIFE IS A COMEDY." Where is this found? PHILANDER.

This correspondent is referred to a letter from Walpole to Sir Horace Mann, dated Arlington Street, December 31, 1769, in which Walpole says :

" I have often said, and oftener think, that *this World is a comedy to those who think, a tragedy to those who feel*,—a solution why Democritus laughed and Heraclitus wept."

And in another letter to the same, dated same place, March 5, 1772, Walpole says :

" Recollect what I have said to you, that *this World is a comedy to those who think, a tragedy to those who feel* !—*the quintessence of all I have learnt in fifty years.*"

SIMON PURE. Whence comes this expression ? PHILANDER.

See Mrs. Centlivre's Comedy, *A Bold Stroke for a Wife*, Act v, Sc. 1. Here will be found the *pretended* as well as the *real* Simon Pure figuring as characters in the house of Obadiah Prim.

PLATONIC LOVE. Where in Plato's works do we find his philosophy on this subject ? PHILANDER.

We do not know of any particular passage on which the common idea of " Platonic love " as adopted by Byron and some others. In the *Phædrus*, and more especially in the *Symposium* (x, 265, edition of Bipont), those who wish to know will find the philosophy in Greek.

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Notes About Names.

The legal name of a person, it has been decided by the Supreme Court of Indiana, consists of one Christian name and a surname; he may have as many middle names or initials as he chooses to take.

Among the odd names that have recently appeared in the newspapers may be mentioned those of J. Thad Toadvine, of Pocomoke City, Md., of Abraham Minbarabraham, of Paris; of Chaloner Alabaster, of the British consular service in China; of Professor Cassius Marcellus Clay Zedaker, of Youngstown, O., who is a poet; of Miss Circassia Wray Barrett, a young lady whose god-parents were the steamship of the Anchor line on which she was born and the surgeon thereof who superintended her debut; and of Miss Oattie Tottle, of St. Joseph, Mo., who has changed her name for another more mellifluous.

A lady, in Lansingburg, says that her grandmother's full name was Frances Caroline Constantia Maria Van Raeder Van Raes Van Outzorn Van Bram Van Helsdinger. This was a good deal of a name, longer and more sonorous than that of a colored nurse-maid over in Brooklyn who informed her employer that she was called Miss Minnie Loretta Progrete Under-the-Snow Sypher. But, after all, when one wants names he must have recourse to the *Almanach de Gotha*, and especially to the chapters devoted to the Hapsburgh of Tuscany, the Bourbons of Parma and the royal family of Portugal. Thus the seven children of the Archduke Charles Salvator, of Tuscany, have 105 names among them, an average of fifteen each, about the most formidable of them being the eighteen-months-old Archduchess Maria Immaculee Renira Josephine Ferdinande Theresa Leopoldina Antoinette Henrietta Frances Caroline Aloisa Januaria Christina Philomena Rosalie. But she is out done by some of her little cousins of Parma, and notably by the five-year-old Prince Joseph Maria Peter Paul Francis Robert Thomas of Aquinas Andrew Avellino Blasius Maure Charles Stanislaus Louis Phillip of Neri Leon Bernard Antonine Ferdinand. And even this is a comparatively abbreviated title compared with that of the second son of the King of Portugal - Prince Alphonso Henry Napoleon Maria Louis Peter of Alcantara Charles Humbert Amadeus Ferdinand Anthony Michael Raphael Gabriel Gonzago Xavier Francis of Assisi John Augustus Julius Volfando Ignatius of Braganza Savoy Bourbon Saxe-Coburg and Gotha.

Of people striving to get rid of their names Mr. Ludocovischi Katz von Kottek, of Piotrkow-Kuyawski, Portland, is probably the most deserving of sympathy. His ambition, it is set down in a petition to a San Francisco court, is to become "L. Katz," simply because, he says, "the meaning of the words 'Katz von Kottek' is 'cat of cats,' and that the name of L. Katz von Kottek is the occasion of great annoy-

ance to petitioner." Herr Julius Jackass, of Löhndorf, in Germany, has applied to have his name changed to Julius Couarge, his patronymic not being very surprising in a country where the announcement is made (in the Berlin *National Zeitung*) of First Lieutenant Sourherring and Miss Two-year-old-wild-boar. There is less reason for the application of a French druggist, M. Soulau, to be allowed to call himself Monsarrat de Lagarrigue, a name quite as sounding as the "Norfolk Howard" of immortal memory.

Among some of the curious names recently recorded in English periodicals we find that of "Sou'wester" given to a child baptized at Stone, near Dartford. His parents were hawkers, passing through the parish in a "house on wheels," and he was named after an uncle who had received a similar name from being born at sea during a sou'westerly gale. In the church-yard at Mappowder, Dorset, is a tombstone, conspicuously erected, to the memory of Repentance, wife of So-and-so, who died within the last twenty years. By way of coincidences in names it may be said that a Mr. A. J. Lewis represents Claiborne County in the Mississippi Legislature. Both are married men, both are Democrats, both are lawyers, both have been dealers in tombstones and both have local renown as poets.

It is worth saying that, in spite of Heywood's declaration in his poem the "Hierarchie of Blessed Angels"

I hold he loves me best who calls me "Tom"—

it has been legally ruled that it is disrespectful and insulting to call a man by his Christian name unless the parties have been intimately connected. A Massachusetts hotel-keeper discharged his clerk because that magnificent creature was by turns too lofty and too familiar and so repelled the guests of the house. The clerk sued for his salary for a year and damages, but was non-suited, the Supreme Court delivering the following judgment:

To address a person by his Christian name, unless the parties have been intimately connected, socially and otherwise, is uncalled-for familiarity and therefore, insulting to the party so addressed.

To address a party by his surname only shows a want of respect, and would imply that the party so addressed was beneath the party addressing; therefore it is discourteous, and would be considered insulting. To speak of employers by their surnames only shows a great want of respect on the part of the employee towards the employer.

While it may be customary for a person to address his junior clerks or under servants by their Christian or surnames, to address others so shows a want of respect, and the party so addressed would naturally evade contact in the future with any one who had previously so addressed him.

EQUAL SURFACE LAND PROJECTION.. What is meant by equal surface land projection ?
EDOUARD SCHNEIDER.

We understand it is supposed to be the center of the land surface of the globe. For instance, the Greeks claimed that Delphi occupied that position, and even called it the "navel of the earth." The Hebrews thought that Jerusalem was the center; the Englishmen said London was the center; and now it is claimed by pyramidists that the Great Pyramid of Gizeh occupies that place. (See C. Piazzi Smyth's "Life and Works at the Great Pyramid," Vols, I, II, III, 1867.)

SUITORS OF HELEN, AND SUITORS OF PENELOPE. Who were the suitors of Helen of Troy, and Penelope wife of Ulysses? JANES.

Anthon gives the names of the suitors of Helen in his "Classical Dictionary," p. 581, as follows :

Agapenor, son of Ancæus,	Menelaüs, son of Atreus,
Ajax, son Oileus,	Meriones, son of Molus,
Ajax, son of { Telamon,	Mnestheus, son of Peteus,
Teucer, son of {	Patroclus, son of Menæcius,
Amphilochus, son of Amphiaraus,	Philoctetes, son of Pæan.
Amphilochus, son of Cteatus,	Podalirius, son of {
Antilochus, son of Nestor,	Machaon, son of {
Asculaphus, son of } god Mars,	Æsculapius.
Ialmus, son of }	Polyxenus, son of Agasthenes,
Diomedes, son of Tydeus,	Polypætetes, son of Pirithoüs,
Elpenor, son of Chalcodon,	Protesilaüs, son of Iphiclus,
Emuelus, son of Admetus,	Schedius, son of Epistrophus,
Eurypylyus, son of Evemon,	Sthenelus, son of Capaneus,
Idomeneus, son of Deucalion,	Thalpius, son of Eurytus,
Leontus, son of Coronus,	Thoas, son of Andræmon,
Meges, son of Phileus,	Ulysses, son of Laërtes,

The names of the suitors of Penelope are found in the *Odyssey* of Homer, and Anthon's and Lempriere's classical dictionaries, *in loco*.

Amphimedon, son of Melantheus.	Eurymachus, son of Polybus,
Amphimonus, son of Nisus,	Eurynomus, son of Ægyptius,
Antinoüs, son of Eupheithes,	Leiodes,
Ctesippus, son of Polythereses,	Leocritus,
Demoptolemus,	Medon,
Elatus,	Melanthius, son of Dolius,
Euryades,	Peisander, son of Polyctor,
Eurydamus,	Phemius, son of Terpius,

The Lord's Prayer.

The following paraphrase of the Lord's Prayer in an acrostic, was made by Thomas Sturtevant, Jr., a soldier in the 26th Regiment United States Infantry, while a prisoner of war in the Province of Canada :

Our Lord and King who reigns enthroned on high,
 Father of light ! mysterious Deity !
 Who art the great I AM, the last, the first,
 Art righteous, holy, merciful and just,
 In realms of glory, scenes where angels sing,
 Heaven is the dwelling-place of God our King ;
 Hallowed thy name, which doth all names transcend,
 Be thou adored, our great Almighty Friend,
 Thy glory shines beyond creation's space,
 Named in the book of justice and of grace.
 Thy kingdom towers beyond the starry skies ;
 Kingdom asanic falls, but thine shall rise,
 Come, let thine empire, O Thou Holy One,
 Thy great and everlasting will be done !
 Will God make known his will, his power display ?
 Be it the work of mortals to obey.
 Done is the great, the wondrous work of love,
 On calvary's cross he died, but reigns above ;
 Earth bears the record in thy holy word,
 As heaven adores thy love, let earth, O Lord ;
 It shines transcendent in the eternal skies,
 Is praised in heaven—for man, the Saviour dies.
 In songs immortal angels laud his name,
 Heaven shouts with joy, and saints his love proclaim,
 Give us, O Lord, our food, nor cease to give
 Us that food on which our souls may live !
 This be our boon today, and days to come,
 Day without end in our eternal home ;
 Our needy souls supply from day to day,
 Daily assist and aid us when we pray.
 Bread though we ask, yet Lord, thy blessing lend,
 And make us grateful when thy gifts descend ;
 Forgive our sins which in destruction place
 Us the vile rebels of a rebel race ;
 Our follies, fruits, and trespasses forgive,
 Debts which we ne'er can pay, or thou receive ;
 As we, O Lord, our neighbors' faults overlook,
 We beg thou'd'st blot ours from thy memory's book,
 Forgive our enemies, extend thy grace,
 Our souls to save, e'en Adam's guilty race.
 Debtors to thee in gratitude and love,
 And in that duty paid by saints above,
 Lead us from sin, and in thy mercy raise
 Us from the tempter, and his hellish ways.
 Not in our own, but in his name who bled,
 Into thy ear we pour our every need.
 Temptation's fatal charms help us to shun,
 But may we conquer through thy conquering Son !
 Deliver us from all which can annoy
 Us in this world, and may our souls destroy.
 From all calamities which men betide,
 Evil and death, O turn our feet aside ;
 For we are mortal worms, and cleave to clay ;
 Thine 'tis to rule, and mortals to obey.
 Is not thy mercy, Lord, forever free ?
 The whole creation knows no God but thee.
 Kingdom and empire in thy presence fall ;
 The King eternal reigns, the King of all.
 Power is with thee, to thee be glory given,
 And be thy name adored in earth and heaven,
 The praise of saints and angels is thy own,
 Glory to thee the Everlasting One ;
 Forever be thy holy name adored ;
 Amen, Hosanna ! blessed be the Lord !

The Lord's Prayer.

"MY BOAST IS IN THE GLORIOUS CROSS OF CHRIST."

The following is a double accrostic. The italicized words being read downward on the left and upward on the right; while the initials read "My boast is in the glorious cross of Christ":

Make known the gospel truths *Our* Father kind,
Yield us thy grace, dear *Father*, from above.
Bless us with hearts *which* feelingly say *Amen*,
"Our life thou art for-ever, God of Love!"
Assuage our grief in love for Christ we pray,
Since the bright prince of *Heaven* and *glory* died,
Took all our sins and *hallowed* the display,
Infant *be-ing* first a man, and than was crucified.
Stupendous God! thy grace and *power* make known;
In *Jesus' name* let all the world rejoice,
Now labor in thy heavenly *kingdom* own,
That blessed *kingdom* for thy saints the choice.
How vile to *come* to thee is all our cry,
Enemies of *thy self* and all that's *thine*,
Graceless our *will* we live for vanity,
Loathing our *be-ing*, *evil* in design.
Oh God, thy will be *done*, from earth to heaven,
Reclining on the gospel let us live.
In earth from sin *deliver*-ed and forgiven.
Oh! as thyself but teach us to forgive!
Unless *it's* power temptation doth destroy,
Sure is our fall into the depths of woe.
Carnal in mind, we've not a glimpse of joy,
Repelling *heaven*, in us no hope can flow.
Oh, give us grace and lead us in thy ways;
Shine on us with thy love and give us peace.
Self and *this* sin that rise against us slay.
Oh, grant each day our *trespass*-es may cease,
Forgive our evil deeds that oft we do,
Convince us *daily* of them to our shame.
Help us with heavenly *bread*, forgive us, too,
Recurrent lusts, and we'll adore thy name,
In thy *forgive*-ness we as saints can die,
Since for us and our *trespasses* so high,
Thy Son, our Saviour, bled on Calvary.

The spirit of the Lord's Prayer is thus given by some persons:

A *filial* spirit—Father.

A *catholic* spirit—Our Father.

A *reverential* spirit—Hallowed be thy name.

A *missionary* spirit—Thy kingdom come.

An *obedient* spirit—Thy will be done on earth as it is in heaven.

A *dependent* spirit—Give us this day our daily bread.

A *forgiving* spirit—And forgive us our debts as we forgive our debtors.

A *cautious* spirit—And lead us not into temptation, but deliver us from evil.

A *confidential* and *adoring* spirit—For thine is the kingdom, the power, and the glory, forever. Amen.

PHILITIS, OR PHILITION. (Vol. VIII, p. 258.) Philitis or Philition is conjectured to have been a term to designate the Hyk-shos rulers of Egypt—probably the same as “Pelethite,” or “Philistine.” The elimination of the *s*, because of the offensive sibilation was not uncommon. The Assyrian *Tablets* denominate Ashdod and the country around it Philistia and the “Land of the Hittites.” This seems to imply that the “shepherds” or Hyk shos of Egypt were the “Turanian” people known as *Khitans*, or Hittites, and other coincidences apparently justify it. The Hittites revered a sacred throne, carried with them a tent-temple in their wars, and were careful to jump over a threshold. The only argument in regard to their agency in the building of the Great Pyramid is the sentence of Herodotus. The structure was many centuries older than the Hyk-shos occupation of Egypt, and if Herodotus came near the truth, we must have to suppose Kheops and the Fourth Dynasty to have been of that race. As he composed a Book of Worship and made innovations of a radical character, this is not impossible. There were reasons, however, for not letting Herodotus know, too.

Another matter may deserve our attention. The earlier books of the Bible speak of a people called *Rephaim*. The fourteenth chapter of Genesis places them east of the Jordan; and the second and third chapters of Deuteronomy have similar statements. The Emim were accounted “giants” or *Rephaim*; also the Zanzummim, and Og king of Bashan. The valley northward of Jerusalem was called the Valley of the *Rephaim*; the Anakim that dwelt around Hebron were also of the same people, and the Book of Joshua (xi, 22) states that they remained at Gath, Gaza, and Ashdod. The twenty-first chapter of First Samuel narrates the slaying of four “sons of the *Rephaim* in Gath,” to which number Goliath belonged. The term *Rephaim* is however also translated “giants,” “physicians,” “the dead.” Thus, King Asa when his feet were diseased, “sought not to the Lord,” *i. e.* to the priests of the temple, “but to *Rephaim*”; and Joseph in Egypt employed *Rephaim* to embalm his father.

Plainly enough the *Rephaim* of Palestine were a powerful and artistic race. The artisans of those times, however, were also called *Kyklopeans*, or Cyclops; and they wrought with the Phœnician art

and tools. They may have been Palasgians, and they certainly belonged to Syria and Philistia. Hence, if we are to suppose that the Rephaim of Hebron, and the Philistines to have been of the same stock as the Hykshos of Egypt (Numbers XIII, 22), and it would be no great stretch of the imagination to place the Homeric legend of Polyphemos in the same category. They were "sons of Poseidon the god of Lybia, and probably of the race of Shepherds or Hyk-shos expelled from Egypt. The Hykshos and Hittites were worshippers of Seth, Satoch, or Sedek, afterward the Egyptian Typhon; and Poseidon was worshipped by the Libyans and Grecians Pelasgians. All these peoples, it seems evident, were clearly related. A. WILDER.

OANNES. (Vol. VIII, p. 258.) I do not know of Dr. J. J. Garth Wilkinson's work "Oannes." The relation of Jesus to the archaic Fish-lore is attributed to a variety of causes. His birth it is said was announced by the messenger Gabriel at the time when the zodiacal sign Pisces became the sign of the opening of the Spring instead of the signs Taurus and Aries. This, however, is mythic. In the Talmud the Messiah is termed "Dag," or Fish. The sign of his advent, it was said, was the conjunction of the planets Jupiter and Saturn in the constellation Pieces. This might be the "Star in the East." But, passing by such frivolous notions, it may be taken into consideration that the Fish, and the Serpent, was a symbol of "wisdom," and of course of the Logos or Word by which it was made known to mankind. The mouth of the Fish, the *os tincoæ*, is the door of passage into the world. Hence a human figure in the mouth of a Fish was expressive of human birth. Many gods were depicted in this way. Vishnu is so represented in his avatâr as a Fish. The Kan-On of the Japanese is also pictured in this way. Lukianos mentions the goddess Der-Ketô, or Aiar-Gatis, in Phœnicia, as a woman above and a fish below. This was the Istar, or *Venus* of Askalon and Aphaka, the Astartê, or Ashtoreth-Karnaim of the Bible. The Dagon of Ashdod is said to have been also figured. The Hebrew word *sar* (1 Samuel v, 4), means what is left, also the *aidoia*; but not necessarily the fish. The term *Dag*, however, signifies a fish, and so *Dagon* may denote the fish personified, but Sanchuniathôn gives it the meaning of *Siton* or bread-corn. The Assyrian god of wisdom, the sea and underworld was

Hâa or Ho-Anna. The fish, serpent, and triangle were his symbols, and he was also called Odakon, or ud-duk-anna, the Lord ascending up the sky. He was god of the waters, and wisdom, as Vul or Ram-Ana (Rimuna) was god of the air and higher intelligence. The Dolphin was revered as the "Savior-Fish" and was often depicted with the Tree of Knowledge growing from its back, an ark or coffer beneath, and in the embrace of a youth. The Hebrew legend of Jonah was adopted from this figure. The god Hercules, it will be remembered, was made the subject of a similar the three days' experience. The word "nun" also signifies a fish; and some even give the same definition to "Ninip," "Ninas," "Nineveh." The Gnostics of the early centuries of our era retained much of the old symbolism. Their notions were more or less incorporated into the earlier christianity, and we find without surprise that the Fish-divinity as Lord of the Waters, and by metaphor prince of the ages, was made by Augustin of Hippo, the counterpart of Christ. "He is the Great Fish that lies in the midst of the waters." Hence the fish on the steeples of old meeting-houses, and perhaps the rite of baptism. A. WILDER, M. D.

Homer's Golden Chain.

"There is a nearer way to heaven than Homer's Chain."—THOS. BROWNE.

Where in Homer's poems does he mention a "golden chain," and what is the import of it? SELDEN C. BENJAMAN.

The golden chain of Homer has been, and still is a subject of much speculation among those who endeavor to give the esoteric meaning of the symbols of the ancients. This may be included among many other arcane subjects which are covered under the golden fleece, golden girdle, golden apples, Gordian knot, phœnix-period, sphinx's riddle, and the like. The following extracts from several translations of the *Iliad* give Homer as translated :

For if a golden cable ye hung from heaven above,
And all ye Gods and Goddesses grasped it, your strength to prove—
Yet Jove the sovereign Ruler should ye not hale from heaven,
Down to the earth, though much and long to hale me all had striven.
Iliad Bk. VIII, lines 19-22.—*Merivale's Trans.*

When ye a golden chain have dropt, which I aloft may grapple,
Then all ye gods and goddesses, lay hold and pull against me;
Yet never shall ye down so earth drag from the height of heaven
Jove, the supreme deviser; not, e'en ye toll your utmost.
—*Newman's Trans.*

Let down our golden everlasting chain,
Whose strong embrace holds heaven, and earth, and main;
Strive all, of mortal and immortal birth,
To drag, by this, the Thunderer down to earth;
Ye strive in vain! If I but stretch this hand,
I heave the gods, the ocean, and the land;
I fix the chain to great Olympus' height,
And the vast world hangs trembling in my sight!
For such I reign unbounded and above,
And such are men, and gods, compared to Jove.—*Pope's Trans.*

An illustrated article, on "The Golden Chain of Homerus, that is a description of nature and natural things" is now being published in the magazine entitled *Lucifer*, Vol. VII, 1891, in chapters, commencing with February, No. 42.

ALLITERATIVE QUOTATION. From whom is the following line quoted, found as an alliterative exercise for reading and pronunciation, in many of School the Readers?

"Up the high hill he heaves a huge round stone."

This line is from Homer's *Odyssey*, Book XI, l. 736 (*Pope's Translation*).

"I turned my eyes, and as I turned surveyed,
A mournful vision! the Slayphian shade;
With many a weary step, and many a groan,
Up the high hill he heaves a huge round stone;
The huge round stone, resulting with a bound,
Thunders impetuous down, and smokes along the ground."

"When AJAX strives some rock's vast weight to throw,
The line too labors, and the words move slow;
Not so when swift Camilla scours the plain,
Flies o'er the unbending corn, and skims along the main."
—*Pope's Essay on Criticism Part II, l. 760-773.*

CYCLIC POETS. Who are the "cyclic poets" spoken of in Herbert's "Nimrod," Kenéaly's "Apocalypse," Faber's "Cabiri," etc.?

MINERVA.

The Cyclic poets are Arctinus, Lesches, Agias, and Eugammon. It is not quite certain whether they wrote, Arctinus the "Æthiopsis," Lesches the "Ilias Parva," and Agias the "Nostoi," on the basis of Homer's works on those subjects or not. But any how their writing on these subjects is no proof that he did not write on them. It only proves that his previous works had perished. These lasted till the time of Pausanias. Ultimately, however, they too disappeared, and were replaced by the works, in Latin prose, of Septimius, and Probus, and in Greek verse of Coluthus, Tryphiodorus, and Alcibiades of Smyrna, commonly known as Quintus Smyrnæus.

When Did the Cali - Yuga Begin ?

" PHIDOMATH " asks this question (Vol. VII, p. 98 and we cannot do better than to print the following article from " Zadkiel's Legacy," (London, 1842), containing his *Essay on the Astronomical Knowledge of the Ancient Hindu Astrologers* :

In the treatise by Bramagupta, which still exists, and in the Sidhanta Sirómani, the work of a more recent writer, it is stated that the number of savan, or natural days, said to be contained in the Calpa, is 1,577,916,450,000.

Albumazar, an Arabian astrologer, states that " the Hindus reckoned from the flood to the Hejra 720,634,442,715 days."

In the 9th Vol. of " Asiatic Researches," p. 242, Mr. Davis thus constitutes the Hindu chronology:—

Years expired of the Calpa to the end of the

	YEARS.
Satya Yuga	1,970,784,000
Treta Yuga	1,296,000
Dwàpar Yuga	864,000

To the Cali Yuga, 1,972,944,000 years.

Then he says, that if the days in the Calpa be multiplied by the above number, and divided by 432,000,000, we shall find the quotient to be "exactly the number of days mentioned by *Albumazar* ; that is, it will be 720,634,442,715, without any fraction." But Mr. Davis has made an error, by taking one cipher too little in his divisor, which should be 4,320,000,000 instead of 432,000,000. Now, it becomes interesting to learn how the Hindus arrived at this particular divisor, or why they fixed on 12,000,000 " Divine " years* and it is obvious that it was by having observed it to be connected with a certain astronomical period, which we will presently examine. This they multiplied by the number of days in the sidereal year, and thus they produced the Savan, or number of natural days in the *Calpa*, or period from the creation until the commencement of the last Yuga, or Divine age.

Nothing can be clearer than that, if the calculation come out correct, " the poor, despised Hindu astrologers " had a degree of astronomical knowledge of which the Greeks and Romans never dreamed, and which has been excelled only very recently by modern astronomers, with all their refined instruments, telescopes, logarithms, and appliances to boot. The calculation does come out correct ; for if the above Calpa be divided by 4,320,000,000, the quotient will be the length of the year' 365.2584375 days ; which differs only in the third place of

* A Divine Year is 360 common years.

decimals from European astronomers. The following comparative amounts of the computed lengths of the year will show the accuracy of these very ancient calculations.

Length of the Sidereal Year in mean Solar Time.

	D.	H.	M.	S.
By the Hindus	365	: 6	: 12	: 9
By Ursino	365	: 6	: 9	: 12
By Sir J. Herschel . . .	365	: 6	: 9	: 10

Thus, the Hindus differed only 2 min. 57 sec. from the German astronomer, and 2 min. 59 sec. from Sir John Herschel.

And it is demonstrated, that the Hindus knew *exactly* the length of the year. We know, however, that the Greeks were ignorant of this important piece of astronomy.

The "astronomical period" is that of the *Divine Age*. The Treta Yuga has been shown to have been taken as 1,296,000 years, equal to the number of seconds in 360°, and that of the Dwâpar Yuga 864,000 years; the difference is 432,000 years: of which, it will be seen, the "divisor" before named is a multiple; $432,000 \times 10,000 = 4,320,000,000$

But it will appear that the sum of the Treta Yuga and the Dwâpar is equal to 2,160,000 years; and we shall see that a certain astr. nomical theory, which Mr. Colebrooke has condemned as "wholly unfounded" (*Asiatic Researches*, vol. ix, p. 364), is connected therewith, and proved to be extremely well conceived.

In speaking of the stars in the Great Bear, it is said in the *Brama Siddhânta* of *Sacalya*, that "their motion is eight liptas (minutes) in a year. Their distances from the ecliptic, north, were respectively 55°, 50°, 56°, 57°, 60°, and 60°. For moving in the north into different positions, the *Sages* employ 2700 years in revolving through the assemblage of asterisms; and hence their positions may be easily known at any particular time." These "sages" were termed *Rishis*, and we are told their names; viz. *Cratu*, *Pulaha*, *Putastya*, *Atri*, *Angiras*, *Vashishtha*, *Marichi*.

The seven *Rishis* were evidently the seven chief stars of the Great Bear, and we are informed that they remain in one asterism during 100 years. These are, of course, 100 *Divine* years, each of which is equal to 360, common years. If we multiply this 100 years by 360, we have 36,000; and as the *Rishis* took twelve times this period to go through the twelve asterisms or zodiacal signs, we get a multiple of the same "astronomical period," viz., 432,000 years, for $36,000 \times 12 = 432,000$. But we have seen that "the sages employ 2700 years in revolving through the assemblage of asterisms," and they are said to move eight minutes in a year. This being a "Divine" year, it follows

that they move eight minutes in 360 years, or one minute in 45 years. And as there are 21,600 minutes in a great circle, if we multiply this into 100 (the number of years they remain in each sign), we have 2,160,000, which is the "Divine age" again; and this Divine age, when repeated 2000 times, becomes 4,320,000,000 which we have seen to be the multiplier used with the number of days in the year to ascertain the great period of time the Hindus termed the *Calpa*, or days since the Creation. This number itself was called the "Calpa or grand period," when years were signified. See *The Mythology of the Hindus*, by C. Coleman, Esq.

Thus it is shown that the theory is not quite so unmeaning as the writer in the *Asiatic Researches* declares.

We will now proceed to examine the component parts of this Divine age of 2,160,000 years. It was divided into two portions, which consisted of 1,080,000 years each, called the *Maha Yuga*, or Great Age. And each of these were composed of four ages (all distinct astronomical periods); which is believed, to be the "four ages" so celebrated in antiquity.

	YEARS
1st Age	108,000
2d Age	216,000
3d Age	324,000
4th Age	432,000
	<i>Maha Yuga</i> , 1,080,000 years,

which, doubled, produces 2,160,000 years; the Divine Age.

The ratio of increase is found to be, as 1, 2, 3, 4: an arithmetical progression. It will be observed that there were four Vedas, or astronomical books, each of which treated of one *Maha Yuga*; which, repeated four times, give us 4,320,000 years, or 12,000 Divine years.

The Hindus had observed the spiral motion of the Pole of the earth, which causes the variation of the obliquity of the ecliptic, and to this motion allusion is made in the words "*moving in the north*" into different positions. They appear to have formed these "ages" on the theory which supposes that motion to be 1° in 6000 years; and as they conceived the precession of the equinoxes to make one complete revolution in 24,000 years, when each constellation returned to the same sign of the zodiac, they of course, believed that the Pole moved 4° in that period of time. The time, therefore, in which the poles would be reversed, that is, the North Pole, would come to point to that part of heaven where the South Pole did formerly, or traverse 180° , would be $\frac{180}{4} = 45 \times 24,000 = 1,080,000$, the extent of the *Maha Yuga*. If each "age" be multiplied by 4, we have the four Yugas:—

1st	108,000	$\times 4 =$	432,000, the <i>Cali Yuga</i> .
2d	216,000	$\times 4 =$	864,000, the <i>Dwáper Yuga</i> .
3d	324,000	$\times 4 =$	1,296,000, the <i>Treta Yuga</i> .
4th	432,000	$\times 4 =$	1,728,000, the <i>Satya Yuga</i> .
	<hr/>		
	1,080,000	$\times 4 =$	4,320,000, the Divine Age.

Thus we see how the Maha Yuga is composed of the sum of the four "ages" and how, when multiplied by 4, it produces the great period used by the Hindus (multiplying it by 1000), with the number of days in the year, to find the Savan or days in the Calpa, or age of the world.

It would seem, that the Hindus signified by the Cali Yuga the age of heat; the term cali being evidently the Hebrew *καλον*, calo, torreo, to scorch. And if we assume the Poles of the earth to revolve, then in the latitude of Cashgar, 36° (near to which the observations must have been made), there would be 18 revolutions of the constellations through the Zodiac (each taking 24,000 years to complete) during which the northern tropic (or path of the sun) would fall within the circle of perpetual apparition, being within 36° of the Pole, and passing daily above and below the Pole, as do the stars of Ursa Major now, and during all that time never setting to the inhabitants of 36° of north latitude. As above stated, 18 such revolutions; because the Poles, moving 4° in each, would require 18 such, to move from 36° on one side to 36° on the other side of a given point; since $36^\circ \times 2 = 72^\circ$, and $\frac{72}{4} = 18$. Now, $18 \times 24,000 = 432,000$ years, which is the length of the *Cali Yuga*; and whether founded in truth or not, is, at least, very possible, and may account for some geological phenomena at present unexplained. It demonstrates, at least, that a long series of astronomical observations must have existed among the Hindus, and that their old astrological notions, as connected with these ideas, "must be referred," to quote Mr. Davis, "to an antiquity which has not yet been ascertained." The other ages were formed upon similar principles. As the pole receded from the Sun, the tropic approached the zenith, which in lat. 36° it would reach in $4\frac{1}{2}$ revolutions, for $90^\circ - 72^\circ = 18$, and $\frac{18}{4} = 4\frac{1}{2}$. This number of revolutions of 24,000 years will be 108,000 years; which number, multiplied by 8, gives us the *Dwápar Yuga* of 864,000 years.

The tropic, or solar path, then receded from the zenith till it reached the equator, i. e. 36° ; but $\frac{36}{4} = 9$ revolutions of 24,000 or 216,000 years, which, if multiplied by six, gives us the *Treta Yuga*. The ecliptic now recedes from the equator, and approaches the horizon, and after passing 54 degrees (equal to $13\frac{1}{2}$ revolutions of the constellations), the path of the Sun was in the circle of perpetual occultation, and never rose above the horizon. But $13\frac{1}{2} \times 24,000 = 324,000$, which, multiplied by

four, gives 1,296,000, to which add 432,000, and we get 1,728,000 years, the Satya Yuga, or age of Darkness; so called from Sati, the South Pole. Thus, although a close investigation would throw more light on this interesting subject, it has gone far enough to show that the ancient Hindus were not dreaming when they spoke of these vast periods of time; but did, indeed, depict the principle of the great divisions of time, as formed by the combined motions of the pole and the precession of the equinoxes. Nor may we assert with Mr. Colebrooke, that theirs was "a pretended revolution of the stars in Ursa Major"; for we have no evidence, as yet, given by modern astronomers that the poles do not so revolve; and geological facts speaks much in favor of such a doctrine.

Concluding this essay in the words of Mr. Colebrooke: "respecting the age of Varáha Mihira's astrological treatise, it may be added, that he is cited by name in the Pancha tantra, the original of the fables of Pilpay, which were translated for Nushirvan more than 1200 years ago.

HIRAM ABIF. Where in the Bible is the name Hiram Abif found? I have searched in vain for this much revered name in Freemasonry, and desire light on the subject. W. W. H., M. D.

We will enlighten this disciple of Æsculapius and several others who no doubt have searched for our Grand Master. Hiram Abif is mentioned twice in the Bible—once by the name Hiram (First Kings VII, 13-14):

"And King Solomon sent and brought Hiram out of Tyre. He was a widow's son of the tribe of Naphtali, and his father was a man of Tyre, a worker in brass."

Once he is mentioned as Hiram my father's (Second Chronicles II, 13-14)—"my father" being one of the translated forms of the Hebrew word *Abif*:

"And now I have sent a cunning man, endued with understanding, of Hiram my father's, the son of a woman of the daughters of Dan, and his father was of Tyre, skillful to work in gold, and in silver, in brass, in iron, in stone, and in timber, in purple, in blue, and in fine linen, and in crimson; also to grave any manner of graving, and to find out every device which be put to him, with thy cunning men, and with the cunning men of my lord David thy father," (or David Abif.)

Hiram is only another form of Hiram or Hiram. Bishop Patrick thinks Hiram Abif was the son of the first husband of his mother, and that her second husband was a man of Tyre who was Hiram's step-father; his own father being a Naphthalian and his mother a Danite.

TRANSLATIONS OF THE ILIAD AND ODYSSEY. (Vol. VI, p. 332.)
Whose translation of the *Iliad* and *Odyssey* is the most copious with
notes, explanations, etc. ?

LEON.

We can only answer this question by giving the names of the translations in our possessions and by observation.

Iliad of Homer, translated into English Blank Verse. By William Cullen Bryant. Boston, 1870. Two vols. 4to.

Iliads of Homer, Prince of Poets, never before in any language truly translated, with a comment on some of his chief places ; done according to the Greek, (with introduction and notes by Richard Hooper, A. M.). By George Chapman. London, 1857. Two Vols.

Iliad and *Odyssey* of Homer. By William Cowper. Edited by Robert Southey, LL.D., Poet Laureate. London, 1855. Bohn's Library. Two Tols.

Iliad of Homer, rendered into English Blank Verse. By Edward Earl of Derby. London, 1896. Two Vols.

Iliads and *Odysseys* of Homer, translated out of Greek into English, with a large preface concerning the virtues of an heroic poem. By Thomas Hobbes of Malmesbury. London, 1844.

Achilles' Wrath, a composite translation of the first book of Homer's *Iliad*. By P. Roosevelt Johnson, M. D. Boston, 1875.

Iliad of Homer, faithfully translated into Unrhymed English Verse, with Homer's Pantheon. By Francis W. Newman. London, 1871.

Homer's *Iliad*, in English Rhymed Verse. By Charles Merivale. London, 1869. Two Vols.

Iliad and *Odyssey* of Homer, with notes by Rev. Theodore Alois Buckley, and Flaxman's designs. By Alexander Pope. London, Two Vols. "Chandos Classics."

Odyssey of Homer. By George Herbert Palmer. Boston and New York, 1891.

Translations of the *Iliad* have also been made by these and others :

Blackie, J. S.,	{	Connington, J.,	Simcox, E. M.,
Brandeth, T. S.,	{	Worsley, P. S.,	Smith, W. R.,
Caldcleugh, W. G.		Herschel, J. F. W.,	Sotheby, W.
Clark, T. C.,		Mackenzic, R. Shelton,	Watson, J. S.,
Cordery, J. G.,		Mumford, W.,	

A translation of the *Iliad* and *Odyssey* has been made by these :

Carey, H. F.,	Collins, W. Lucas,	Norgate, T. S.,
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"Zenodotus brought out the first annotated edition, 289 B. C. Aristophanes of Byzantium first devised the present system of accentuation, 200 B. C.

Aristarchus divided the "Iliad" into 24, and the "Odyssey" into 24 books, 156 B. C.

The oldest MS. (an Egyptian papyrus), containing a certain portion of Homer, was written about the same time.

The oldest MS. of the "Iliad" (Venetus A) was written in the 14th century.

The works of Homer were first printed at Florence, 1488 A. D., that is to say, over four centuries ago. This was the first book ever printed, except one psalm, and strange to say, the "Batrachomyomachia."

The best English translation of both "Iliad" and "Odyssey," in verse, are those of Chapman, Pope, and Cowper; in prose, that in Bohn's "Classical Library": of the "Iliad" only, those of Derby and Longfellow in verse, and Lang and others in prose; of the "Odyssey," those of Worsley in verse, and Butcher in prose.

Homer is probably the very first writer that enjoyed the distinction of being translated from one language into another. In consequence of the conquests of Alexander the Great, his works were translated, as Ælian informs us, into all the Oriental languages.

Livius Andronicus wrote an "Odyssey," supposed to be a free translation of Homer's in the third century before Christ.

Homer has been translated into almost all the modern European languages. The best translation is in German, by Voss.

The most valuable scholia to the "Iliad" were edited by Bekker, Berlin, 1825, in two vols. 4to. The most valuable scholia to the "Odyssey" were published by Buttmann, Berlin, 1821.

The most celebrated commentary ever written on any author is that by Eustathius on Homer, in two huge folio volumes. The best edition of the "Iliad" is by Heyne; the best of the "Odyssey" is by Nitzsch.

The best English edition of the "Iliad" is Paley's; of the "Odyssey" Haysman's. Buttmann's "Lexilogus," and Damm's "Lexicon Homericum," are the best Homeric word-books; the latter a being written in the last century of the positive, and the former as being written in the present century of the negative school.

Homer shares with the Shakespeare, Pope, Milton, Tennyson, and the Bible, the highest of literary honors, — a concordance.

The only complete translation of all his works — Iliad, Odyssey, Hymns, Epigrams. and Batrachomyomachia, is that in Bohn's Library

and even this does not contain the Fragments." (White's "Life of Homer.")

"Read Homer once and you can read no more,
For all books else appear so mean, so poor,
Være will seem prose; but still persist to read,
And Homer will be all the books you need."—*Duke of Buckingham*:

"Be Homer's works your study and delight,
Read them by day, and meditate by night;
Thence form your judgment, thence your maxims bring,
And trace the muses upward to their spring."
—*Pope's Essay on Criticism*, Bk. II, ls. 124-128.

"Three poets in three distant ages born,
Greece, Italy, and England did adorn;
The first in loftiness of thought surpassed,
The next in majesty, in both the last.
The force of nature could no further go;
To make a third, she joined the other two."—*Dryden*.

The three poets were Homer, Virgil and Milton.

THE MEANING OF π . Does the Greek letter π in mathematical books always mean the ratio of circumference to diameter, or the constant 3.141592+?

ALPHONZO.

It does not. The letter π , when used for the constant 3.141592+, is the initial of the word *periphery*, the circumference of a circle, and which is its ordinary use.

In that instructive work by Daniel Kirkwood, LL.D., on the "Asteroids, or Minor Planets between Mars and Jupiter," 1888, the letter π is the initial of the word *perihelion*, and λ stands for the longitude or the perihelion of the orbits of the asteroids.

In several other works π is used as the initial of *parallax* in various demonstrations where the solar equation is used a factor.

The late Prof. Benjamin Peirce adopted a new symbol, in 1870 (see "Linear Associative Algebra"), to represent the root of the imaginary quantity $\sqrt{-1}$, which he gives as follows:

$$\jmath = \sqrt{-1} \quad \varepsilon = 2.71828182845 + \quad \pi = 3.1215926535 +$$

$$\text{The "mysterious formula," } \jmath \jmath = \sqrt{\varepsilon^\pi} = 4.810477381 +$$

These constants seem to be mysteriously related. Hermann Schubert says, "in reality, $\varepsilon^{\pi\sqrt{-1}}$ is equal to a rational number, viz., -1 .

This formula and others are discussed in an article on "The Squaring of the Circle; an historical sketch of the problem from the earliest times to the present day," by Hermann Schubert, in *The Monist*, for January, 1891, pp. 197-228.

"VERMONT AUTOGRAPH AND REMARKER." This is the name of a remarkable paper *published* (not printed) at Huntington, Vt., from Jan., 1847, to July, 1851; and at Starksborough, from Dec., 1868, to Dec., 1869, and probably in the interim. The editor and publisher was James Johns, an intelligent farmer, who at his leisure took delight in penning his thoughts on local, state, and national questions. His sheet was a standard size $6\frac{1}{2} \times 8$ inches, folded once, 4 pages, 8 columns. Every word was written as plain as print and as exact with his own hand, and only one copy thus written. This was mailed as an exchange to several of the foremost newspapers of the day; one week to this paper, the next week to that paper, and so on to such as were fortunate enough to have it on its exchange list. Thus he received the leading newspapers of the day as regular weekly visitors to his sanctum, while each publisher received his irregularly, but each one received the only copy of the *Autograph and Remarker* published, as no duplicates were made. If all had been preserved and collected, a complete file would exist. The late John W. Moore, of Manchester, N. H., for forty years an editor and publisher, preserved the copies sent to his paper, 22 in number, and which are now in possession of his daughters. They are perfect in chirography, clear cut as print, no erasures of words nor letters, and as well written as type-writing of the present day.

"MAGNUS MAHARBA." I recently saw a reference to a book entitled "DE HISTORI OV MAGNUS MAHARBA AND CE BLAK DRAGUN." What was this book and when published? ANDREW BOND.

This book was published in "Nú-York, Printed for De Filolojikál Gemána, MDCCCLXVI." It was written "Bai Kristofur Kadmus." It was published just after the late rebellion, in English and rectified Saxon orthography. "Magnus Maharba" is simply *Abraham the Great*, and the "Blak Dragun" was southern slavery. The orthographic monitor on its title-page is: "Let evuri Letur hav its òn Sound, and let evuri Sound hav its òn Letur."—*Old Maksim*.

"FOOLS THAT DO NOT KNOW HOW MUCH MORE THE HALF IS THAN THE WHOLE." Whence comes this quotation? NOAH DAME.

Bartlett's "Familiar Quotations" gives this as from Hesiod's *Works and Days*, v, 40.

"GOODY BLAKE AND HARRY GILL." What is the foundation of the poem by William Wordsworth entitled "Goody Blake and Harry Gill" ?

BONUM.

Although Wordsworth calls this "a true story," yet most persons probably imagine that, as related by the poet, it is in a large degree a work of fiction. That Wordsworth himself regarded the punishment of the hard farmer as wrought by supernatural means is well known, and comes out clearly on a comparison between his poetic version of the event and the terse prosaic narrative by Dr. Erasmus Darwin in his "Zöonomia." Yet he story was true enough in all essential points as told by Wordsworth. The elder Darwin's account of the case runs simply thus:—"A young farmer in Warwickshire, finding his hedges broken and the sticks carried away, during a frosty season, determined to watch for the thief. He lay many cold hours under a hay-stack, and at length an old woman, like a witch in a play, approached and began to pull up the hedge; he waited till she had tied up her bottle of sticks, and was carrying them off, that he might convict her of the theft, and then springing from his concealment he seized his prey with violent threats. After some altercation, in which her load was left upon the ground, she kneeled upon the bottle" (*sic*, it is the old-fashioned word for a "bundle") "of sticks, and raising her arms to heaven beneath the bright moon, then at the full, spoke to the farmer, already shivering with cold, "*Heaven grant that thou mayest never know again the blessing to be warm.*" He complained of cold all the next day, and wore an upper coat, and in a few days another, and in a fortnight took to his bed, always saying nothing made him warm; he covered himself with very many blankets, and had a sieve over his face as he lay" (the benefit expected from this arrangement is not altogether obvious); "and from this one insane idea he kept his bed above twenty years, for fear of the cold air, till at length he died." It was unfortunate for him, by the way, that Turkish baths had not been introduced into England in his time! For probably if he had tried the radiating room of a Turkish *hammam*, he would have found that even the old woman's curse did not prevent him from knowing what it was to feel warm; and once recognising this, he would have been able, perhaps, to rise above the superstitious fears to which in reality the sensation of cold was due. The commonplace curse of an old woman whom even the least censorious can hardly regard as altogether worthy of absolute veneration, and who had probably exchanged some rather coarse abuse with Gill in the preceding "altercation," is rather amusingly changed by Wordsworth into a solemn appeal to heaven by a much injured victim (after all, it must be remembered that Gill had not hurt the old woman, and that a

farmer has some right to complain when his hedges are broken and the sticks removed) :—

Then Goody, who had nothing said,

(having, it should seem, very little to say)—

Her bundle from her lap let fall;
And kneeling on the sticks, she prayed
To God, who is the Judge of all;
She prayed, her withered hand uprearing,
While Harry held her by the arm—
“God ! that art never out of hearing,
Oh may he nevermore be warm !
The cold, cold moon above her head,
Thus on her knees did Goody pray;
Young Harry heard what she had said,
And icy cold he turned away.

KILKENNY CATS. During the rebellion which occurred in Ireland in 1798, or it may be in 1803, Kilkenny was garrisoned by a troop of Hessian soldiers, who amused themselves in barracks by tying two cats together by their tails and throwing them across a clothes line to fight. The officers hearing of this cruel practice, resolved to stop it. As he entered the room one of the troopers, seizing a sword, cut the tails, in two as the animals hung across the line. The two cats escaped minus their tails, through the open window, and when the officer inquired the meaning of the two bleeding tails being left in the room, he was coolly told that two cats had been fighting, and had devoured each other all but the tails.

HONEYMOON. The word “Honeymoon” is traceable to Teutonic origin. Among the Teutons was a favorite drink, called “Metheglin.” It was made of mead and honey, and was like that of the European countries. These honeyed drinks were used more especially at marriage festivals, which were kept up among the nobility one lunar month, the festive board being well supplied with metheglin. “Honah moon” signified the moon or *moonath* of the marriage festival.

Alaric, the Goth, celebrated by Southey’s poem, died on his wedding night from too free indulgence in the honeyed drink.

WHERE WAS THE GARDEN OF EDEN? It has been a matter of various speculation, and is one of those questions which will never be decided. The Mahometans believe it was one of the seven heavens, from which Adam was cast down upon the earth after the fall.

“Some place it in the third heaven,” says Dr. Clark, “others in the fourth; some within the orbit of the moon, others in the moon itself; some in the middle regions of the air, or beyond the earth’s attraction; some on the earth, others under the earth, and others within the earth.

Hymn to the Flowers. By HORACE SMITH.

Day-stars that ope your eyes with morn, to twinkle
 From rainbow galaxies of earth's creation,
 And dewdrops on her lowly alters sprinkle
 As a libation!

Ye matin worshipers, who, bending lowly
 Before the uprisen sun God's lidless eye,
 Throw from your chalices a pure and holy
 Incense on high!

Ye bright mosses, that with storied beauty
 The floor of nature's temple tessellate,
 What numerous emblems of instructive duty
 Your forms create!

In the sweet-scented pictures, heavenly Artist,
 With which thou paintest Nature's wide-spread hall,
 What a delightful lesson thou impartest
 Of love to all!

Not useless are ye, Flowers, though made for pleasure,
 Blooming in field and wood by day and night;
 From every source your presence bids me treasure
 Harmless delight.

"Thou wert not, Solomon, in all thy glory,
 Arrayed," the lilies cry, "in robes like ours;
 How vain your grandeur! ah, how transitory
 Are human powers!

'Neath cloistered boughs each floral bell that swingeth
 And tolls its perfume on the passing air,
 Makes Sabbath in the fields, and ever ringeth
 A call to prayer;

Not to the dome where crumbling arch and column
 Attest the feebleness of mortal hand,
 But to that fane, most catholic and solemn,
 Which God hath planned;

To the cathedral, boundless as our wonder,
 Whose quenchless lamps the sun and moon supply,
 Its choir the winds and waves, its organ thunder,
 Its dome the sky.

There, as in solitude and shade I wander
 Through the green aisles, or, stretched along the sod
 Awed by the silence, reverently ponder
 The ways of God;

Your voiceless lips (O, flowers are living preachers,
 Each cup a Pulpit, every leaf a book)
 Supplying to my fancy numerous teachers
 From loneliest nook.

Ephemeral sages! what instructors hoary
 For such a world of thought could furnish scope?
 Each fading calyx a "Memento Mori,"
 Yet fount of Hope.

Posthumous glories, angel-like collection,
 Upraised from seed or bulb interred in earth,
 Ye are to me a type of resurrection
 And second birth.

Floral apostles, that in dewy splendor
 Weep without woe and blush without a crime,
 O, let me deeply learn and ne'er surrender
 Your love sublime.

Were I, O God! in churchless lands remaining,
 Far from all voice of teachers or divines,
 My soul would find in flowers of thy ordaining
 Priests, sermons, shrines,

QUESTIONS.

1. The following stanza is from the *Mind-Cure Journal*, p. 169, June, 1885. From what poem is it taken, and who is the author?

“ From Socrates and Plato she culls bright hope ;
From Dante, Swedenborg, and Schelling draws ;
From Coleridge, Spenser, Longfellow, and Pope,
And Emerson to cheer and aid our cause.” Q.

2. Has Duport's "Gnomologia Homericæ" been translated into English? If so, by whom, where, and when? G. G. E.

3. Which are the 72 verses in the book of Psalms which contain the four-lettered name of God, and the three-lettered names of the 72 angels? The verses are said to have been collected by the Hebrew priests for the Urim and Thummim. JOSEPH.

4. What is the etymology of the name *Gouverneur* the christian name of Gouverneur Morris? R. K. D.

5. A clergyman recently spoke emphatically of the punishments of Ixion, Sisyphus, Tantalus, Tityus, and others. Please explain what these punishments were. CYNTHIA.

6. The following Latin motto appears on the title-page of a book entitled "Echo Colloquii," by Benedict Hilarion. Please translate it into English for us:

" Angustis, Augusta, viis petit ardua virtus,
Non datur, ad cœlum currere lata via." ZOE.

7. What are "Strobic Circles" which were exhibited to the British Association for the Advancement of Science in 1877, by Professor S. Thompson? Some designate them as "illusions of motion." T.

8. Has the promised work of Professor E. N. Hosford been published wherein he claims to establish that the site of the long lost New England city known by the name of *Norumbega* was at Waltham and Weston, Mass.? WALTER KILGORE.

9. What is the meaning of the name *Zarathrushtra* the original form of Zoroaster? LIGHT.

10. Who is the author of the following stanza? P. C. R.

Seize upon truth wherever found,
On Christian or on heathen ground,
Among your friends, among your foes,
The plant's divine where'er it grows."

11. From what work of Plato and where did the evangelist John take the first verses of his gospel? "In the beginning was the Word," i. e. the Logos. ALEXANDER.

QUESTIONS.

1. Where can be found the entire sonnet addressed to Sir John F. W. Herschel in 1816, from which the following lines are quoted :

" And how the One of Time, of Space the Three,
Might in the Chain of Symbol girdled be." H.

2. What is the meaning of the terms *apcentron* and *pericentron* as used by Samuel Elliott Coues in his works. Webster does not give these words. J. J. J.

3. Where in the Bible is the last time mentioned any reference of the "Lost Ten Tribes"? YOSEF.

4. Who was the author of the "New Gospel of Peace by St. Benjamin," published just subsequent to the late war? BONUM.

5. Who is the author of the quotation occasionally seen in theologic books : O.

"The only serious omen of future ill being is ill doing; the only sure token of future well being is well doing."

6. From what poem is the following Latin distich, given on page 150 of Burritt's "Geography of the Heavens"? O.

"Sunt aries, taurus, gemini, cancer, leo, virgo,
Libraque, scorpius, arciteneus, caper, amphora, pisces."

7. (a) What is the ancient name of "Manchester"? Also, New Hampshire?

(b) What is the meaning of the names Agamemnon, Achilles, Nestor, Odysseus, Diomedes, Phoenix; Priam, Hector, Paris, Deiphobus, Æneas, Andromache, Creusa, etc. E. GARDEN.

7. Are there any Lodges of the "Strict Observance" now working in the United States or its Territories? KURMAVIL.

8. Who can explain the esoteric meaning said to connect Genesis 11, 23, with John 19, 26: where it is said that the 20th word in each verse is "Woman"; Eva and Maria; "Thou art Eva, and I am Adam." HERMIT.

9. What is the import of the word *Beka* as given in the Book of Enoch LXVIII, 19-20?

"The principal part of the oath which the Most High, dwelling in glory, revealed to the holy ones; its name is Beka"?

Z.

10. What are the ninety names of God, and where found, which the Arabians have for the Deity? Z.

11. Who is the patron Saint David in the calendar for March 1? Who is the first person in history known by the name *Silvester*? Z.

MISCELLANEOUS
 NOTES AND QUERIES,
 WITH ANSWERS.

The Supreme Intelligible is to be apprehended with the flower of the intellect.
 —ZOROASTER.

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SORTES SANCTORUM. Rev. E. Cobham Brewer informs us in his recently published work, "The Historic Note-Book," page 840, that when he had ready his work, "Dictionary of Miracles" for the printer, he consulted the Bible by way of *sortes sanctorum* as to whether he should publish the book. He opened the Bible at random and his finger touched Ezra iv, 22: "Take heed now that ye fail not to do this."

Besides the two works mentioned Dr. Brewer has compiled three other works "Dictionary of Phrase and Fable," "The Reader's Handbook," and a "Guide to Scientific Knowledge of Things Familiar." All these works are replete with entertaining and useful information.

THE DOXOLOGY. In the reign of Constantine the Great there were our forms of the doxology in use:

1. Glory be to the Father, *and* to the Son, *and* to the Holy Ghost.
 2. Glory be to the Father, *and* to the Son, *in* the Holy Ghost.
 3. Glory be to the Father, *in* the Son, and *in* the Holy Ghost.
 4. Glory be to the Father, *by* the Son, and *in* the Holy Ghost.
- (Philostorgius, Book III., chap. xiii.)

COUNTIES IN THE UNITED STATES NAMED FROM THE PRESIDENTS. 27 counties named Washington, besides cities and towns innumerable; 43 named Jefferson; 21 named Jackson; 17 named Lincoln, Madison, and Monroe; 12 named Polk; 10 named Grant; 9 named Adams, and Harrison; 4 named Garfield, Pierce, and Van Buren.

NABOTH'S VINEYARD. A possession coveted by others. Thus in 1885, when half the nations of Europe were swooping down upon places for colonies or annexation, it was said that 'Germany, France, and Italy were looking about for a Naboth's vineyard,' that is a part of the world which they could appropriate. Of course the allusion is to King Ahab in I Kings xxi.

Astral Origin of the Zodiacal Signs.

Ancient Jewish and Arabian writers preserve the tradition that astronomy commenced in the family of Seth; that they invented the twelve signs, gave emblems for the constellations, and names of the stars. The ancient name of each star, its constellation and appropriate zodiacal sign, as then given, illustrate the fact of God's curse on the serpent, after man's fall, "It shall bruise thy head," (Gen. iii, 15.)

But these records of man's fall, way of recovery, and consequent blessings, as illustrated by astronomy, were soon obscured by the mists of a fabulous mythology. The Christian student, however, may rejoice that this science can be rescued from Pagan darkness, impurity, and superstition, so that even a child may learn to view the starry firmament, as reflecting the purity, wisdom, truth, and love of his infinite Creator. Naturally, and spiritually, as by "a voice," "The heavens declare the glory of God."

The Hebrews have a tradition, that at the creation of man the sun was in the sign Virgo. They therefore begin their civil year from September 14th, in this sign. Looking at the celestial globe, we see—

- ♍ VIRGO. Whose ancient name is Bethulah, a virgin, or branch—a woman carrying a branch or ear of corn, denoting the promised "Seed." (Gen. iii, 15; Jer. xiii, 5; Zech. iii, 8.)
- ♎ Libra. Ancient name Mozanaim, the scales—a price weighed in them, the Surety's infinite merits, the purchase of a man's salvation. (Zech. xi, 12, 13; Matt. xxvi, 15.)
- ♏ SCORPION. Ancient name Akrah, the scorpion, or the conflict. This represents the serpent in his "enmity" ready to bruise Christ's heel. (Gen. iii, 15.)
- ♐ SAGITTARIUS. Ancient name Kesith, the archer. An arrow is on the bow-string to illustrate the sure coming of the promised "Seed." (Isaiah xlix, 2, 3.)
- ♑ CAPRICORNUS. Ancient name Gedi, the kid, cut off, or slain. In this emblem the kid of sacrifice is united to a fish; a fish being the signification of multitude, the sign itself denoting Christ, the Sacrifice, whose blood would be "shed for many." When our Redeemer was born, the winter solstice was among the stars of Capricorn. (Isa. liii, 12; Matt. xxvi, 28.)
- ♒ AQUARIUS. Ancient name Deli, the water-urn, or the pouring out (Isaiah xl, 15). Denotes the results of the Atonement, in our risen Lord, pouring the "gift of God" the "living water,"

on the Church, emblemized by a fish. (Act, ii ; Joel ii, 28, 29 ; John iv. 10.)

- ♋ PISCES. Ancient name Dagim, the fishes, multitude (Gen. xviii, 16). An emblem of Believers in all ages of the Church, united in one common bond of faith and love ; united also to their Messiah the Lamb, and resembling the fishes of the sea in multitude. (Gen. ix, 27 ; xii, 3 Ps. lxxvii.)
- ♈ ARIES. Hebrew name Taleh, the lamb, sent forth, is the sacrifice provided from the beginning. 'The sun was in this sign, and "darkened," when the "Lamb of God" died on the Cross. Gen. xxii, 8 ; Exod. xii, 3-6 ; Matt xxvii, 45, 46 ; Luke xxiii, 45 ; John i, 29 ; Rev. xiii, 8.)
- ♉ TAURUS. Ancient name Shur, coming to rule. This represents the *living* Sacrifice, but in an attitude of victory. The bull emblemizes rule, dominion. To our glorified Saviour the Father gave "all power in heaven and in earth." (Matt. xxviii, 18.)
- ♊ GEMINI, the twins. Ancient name Thaumim, the united. An arrow is in the hand of one of the twins ; it seems to intimate the Son of Man's sure and *second* coming. The branch held by the other twin expresses Christ's title of "The Branch." (Zech. iii, 8 ; Matt, xxiv, 27.)
- ♋ CANCER, the crab. Ancient name Sartan, who holds, or binds. The crab typifies possession, but it succeeded the Egyptian Scarabæus, which figure, it is believed, preceded a still more ancient one, connected with cattle, denoting also possession. (Gen. xlix, 11 ; John xii, 14, 15.) Such emblems express in a certain way Christ's hold or possession of His redeemed people, the reward of His finished work. The Scarabæus, one of them, like the English rose-beetle, lives long under ground as a grub. It then is transformed, emerges, and spreads beautiful wings, like the butterfly rising as towards heaven—an emblem of the Resurrection. (Job xiv, 13, 15 ; xix, 25-27 ; Isa. liii, 11.)
- ♌ LEO. Ancient name Arie, the lion, coming, leaping forth. This is He who cometh, "Son of God," the "Seed of the woman," "mighty to save." In the Egyptian remains, His foot is over the head of the prostrate serpent. "Lion of the tribe of Judah," He comes for the destruction of His enemies, and the salvation of His people. Amen ! even so, come Lord Jesus." (Isa. lxxviii, 1 ; lxiv, 1-4 ; lxvi, 5 ; Hos. xi, 10 ; Rev. v, 5 ; xxii, 20.)

PERSONAL APPEARANCE OF MAHOMET. For the personal appearance and private life of Mahomet, we must rely on the Arabian writers, who dwell with fond and proud satisfaction on the graces and intellectual gifts with which nature had endowed him. He was of a middle stature, of a clear, fair skin, and ruddy complexion. His head and features, though large, were well proportioned; he had a prominent forehead, large dark-brown eyes, an aquiline nose, and a thick bushy beard. His mouth, though rather wide, was handsomely formed, and adorned with teeth white as pearls, the upper row not closely set but in regular order—which appeared when he smiled, and gave an agreeable expression to his countenance. He had a quick ear, and a fine sonorous voice. His dark eyebrows approached each other without meeting. His hair fell partly in ringlets about his temples, and partly hung down between his shoulders. To prevent whiteness, the supposed effect of Satanic influence, he stained it, as the Arabs often do still, of a shining reddish colour. His frame was muscular and compact robust rather than corpulent. When he walked, he carried a staff, in imitation of the other prophets, and had a singular affectation of being thought to resemble Abraham. The assertion of the Greeks and Christians, that he was subject to epilepsy, must be ascribed to ignorance or malice.

NAPOLEON'S BEES. — Napoleon I., wishing to have some regal emblem more ancient than the *fleur-de lys*, is said to have adopted the bee under the following circumstances. When the tomb of Childeric (the father of Clovis) was opened in 1653, there were found, besides the skeletons of his horse and page, his arms, etc., a great number of models of what the French heralds mistook for bees. These were "of the purest gold, their wings being inlaid with a red stone, like cornelian."

These "bees" were accordingly sprinkled over the imperial robe as emblematical of enterprise and activity. But these small ornaments resembling bees were only what in French are called *fleurons*, supposed to have been attached to the harness of the war horse. Handfuls of them were found when the tomb was opened at Tournay, and sent to Louis XIV. They were deposited upon a green ground at Versailles, which was adopted by Napoleon as the original Merovingian color.

ANAGRAMS ON "NOTES AND QUERIES." The following anagrams were formed 35 years ago :

- | | |
|-------------------------|--------------------------|
| 1. A Question-Sender. | 6. No end as I request. |
| 2. O send in a Request. | 7. A—n's nose quite red. |
| 3. Queens and Tories. | 8. Stand queer noise. |
| 4. Tires no sad Queen. | 9. Dan. Stone, Esquire. |
| 5. Ends a Queen's riot. | |

Modes of Execution. A contributor to *American Notes and Queries* summarizes the modes of execution in different countries as follows :

Austria, gallows, public.	Oldenburg, musket, public.
Bavaria, guillotine, private.	Portugal, gallows, public.
Belgium, guillotine, public.	Prussia, sword, private.
Brunswick, axe, private.	Russia, musket, gallows, or sword, public.
China, sword or cord, public.	Saxony, guillotine, private.
Denmark, guillotine, public.	Spain, garrote, public.
Ecuador, musket, public.	Switzerland :
France, guillotine, private.	Fifteen cantons, sword, public.
Great Britain, gallows, private.	Two cantons, guillotine, public.
Hanover, guillotine, private.	Two cantons, guillotine, private.
Italy, capital punishment abolished.	United States, other than New York gallows, mostly private.
Netherlands, gallows, public.	

HOLY COAT OF TREVES. Said to be spun from the wool of a lamb by the Virgin Mary, and woven in a grey coat by St. Helena on the Mount of Olives. Christ wore it at the crucifixion. It came into the hands of a Jew, who threw it into the sea because the blood-stains would not wash out, and a whale swallowed it. The whale being caught by a fisherman, the grey coat found in its belly was sold for thirty pieces of silver to Orendel, son of Eygel, a Christian king of Treves. Orendel deposited the coat in a stone coffin, where, being discovered, it became a venerable relic exhibited to the faithful every twenty-five years.

TEN VIRTUES OF THE VIRGIN. In Catholic theology.

1. Chastity. Because she is the queen of virgins.
2. Prudence. Shows in the Annunciation.
3. Humility. Even when chosen for the mother of the Messiah, she called herself "the handmaid of the Lord."
4. Faith. She believed and doubted not what the angel announced.
5. Piety. Shown by her retirement, silence and submission.
6. Obedience. She submitted to the will of God.
7. Poverty. She despised the grandeur and wealth of the world.
8. Patience. In bearing the pain of her travail.
9. Charity. In offering her son a sacrifice for the salvation of man.
10. Compassion. In that a sword pierced her own heart out of compassion to her son.

" IN THIS WORLD A MAN MUST BE EITHER ANVIL OR HAMMER."

—Longfellow.

Introgyrant Figures.

T. Perronet Thompson, author of "Geometry without Axioms," attempted the collecting of conditions under which figures of various kinds may be turned about certain points and be what may be termed *introgyrant*, or turn upon their own ground without change of place. For the information of those who are not disposed to go into details, the following is the result of his conclusions :

"A solid may be described, all the points in whose surface shall be equidistant from a given point within ; such a solid is called a sphere.

A sphere may be turned in any manner whatsoever about its centre, without change of place. Consequences deducible from this are, that if two spheres touch one another externally, they touch only in a point and if they are turned as one body about the two centers which remain at rest, the point of contact remains unmoved. Hence if about two assigned points be described a succession of spheres touching one another, any number of intermediate points may be determined that shall be desired, which, on the whole being turned about the two centers, shall be without change of place ; and if this be extended to imagining one sphere to increase continuously in magnitude and the other to decrease, till the increasing sphere meets the other point, and vice versa, the line described by their point of contact will, on being turned about its extremities, be without change of place throughout ; such a line is called a straight line. If two equal spheres be placed touching one another externally, and about their centers be described two other greater spheres equal to one another, and a straight line of unlimited length be drawn from the point of contact of the two smaller spheres through any point in the intersection of the others ; this straight line, on the whole being turned about the two centres of the spheres, will describe a surface in which any two points being taken, the straight line between them, with its prolongation either way, may be demonstrated to lie wholly in that surface. A surface of this kind is called a plane. From these, all the relations of straight lines and planes may be inferred.

If in this there is any novelty and truth, it is surprising that a property which was the foundation of the Platonic notion of the perfection of the sphere, should not have been sooner carried into its consequences."

The part relating to the disputed principle of *parallel lines* he gives as follows :

"If a *lessera* (or quadrilateral rectilinear plane figure of which two of the opposite sides are equal to one another and make equal interior angles with a side between them which shall be called the base) has

the angles at the base less than right angles, the angles opposite to the base cannot be right angles, And this because, if a number of such figures are placed side by side, it may be demonstrated that a straight line of unlimited length which shall travel continuously from one of the angular points in the series of bases, along the straight line formed by the junction of two sides, keeping ever at right angles to it, cannot cease to cut the bases and make angles at the point of section all severally greater than a given angle, before it has reached the series made by the sides opposite to the bases ; which is inconsistent with those sides forming one straight line as must be the case if the angles opposite to the bases in the tesseræ were right angles. Whence may be inferred that the three angles of every triangle are not less than two right angles ; and Euclid's Axiom.

So that, if this be true, the principle of the quadraneity of nature, which has been hunted for so many centuries, is neither mystical, nor metaphysical, nor analytical, but is to be detected in an experiment on the squareness of a piece of paper, much like what a school-girl performs as preliminary to the composition of a fly-cage."

ZOROASTER, OR ZARATHRUSHTRA. (Vol. VIII, p. 371.) According to Dr. Wilhelm Geiger and Dr. Fr. von Spiegel's work on the "Age of the Avesta and Zoroaster," the etymology of the name Zoroaster or Zarathrushtra is much disputed. M. Windischmann collected many forms of the names, among them are these, from a note on page 80 of the above work :

Zärtusht, Zarāduhasht, Zärtuhasht, Zārhusht, Zarātush, Zarādusht, Zartusht, Zārdusht, Zārdhasht, Zarahtusht, Zarahdusht, Zārdisht, and Zardisht.

George Rawlinson explains it to mean "descendant from Venus."

Dr. F. Müller makes it to mean "possessing courageous camels."

Burnouf explains it *fulvos camelos habens*, "possessing yellow camels."

Roth makes the name to mean "a goldsmith."

Haug explain the name as "he who has an excellent heart," or the "excellent panegyric poet or singer," but later on he abandoned this as untenable (Essays, first edition, 1862, p. 252, Note).

There is also much controversy as to the time he lived.

"Zoroaster is the only man of whom we have heard that he laughed on the very day of his birth. His brain also is said to have throbbed so violently that no hand could be laid upon his head — a presage of future wisdom."—*Pliny's Natural History*, VII, 16.

EDGEWORTH.

Ringing the Changes.

"A little genius now and then is relished by the brightest men."

PUNCTUATION.

I saw a peacock with a fiery tail;
I saw a blazing star that dropped down hail;
I saw a cloud begirt with ivy round;
I saw a sturdy oak creep on the ground;
I saw a plover swallow on a whale;
I saw the brackish sea brim full of ale;
I saw a phial glass sixteen yards deep;
I saw a well full of men's tears to weep;
I saw men's eyes all on a flame of fire;
I saw a house high as the moon or higher;
I saw the radiant sun at midnight;
I saw the man who saw this dreadful sight.

THE HENGLISHMAN.

Whereas by you I have been driven
From 'ouse, from 'ome, from 'ope, from 'eaven,
And placed by your most learned society,
In Hexile, Hangulsh, and Hanxiety;
Nay, changed without one just pretence,
With Harrogance and Himpudence—
I here demand full restitution,
And beg you'll mend your Heclecticon.

WANT OF A PENNY,

For want of a penny the nail was lost;
For want of a nail the shoe was lost;
For the want of a shoe the horse was lost;
For want of a horse the rider was lost;
For want of a rider the battle was lost;
For want of the battle the kingdom was lost;
All for the want of a penny.

HARMONIC MNEMONICS.

All the G and A keys
Are between the black *threes*,
And 'tween the *twos* are all the D's.
Then on the *right* side of all the *threes*
Will be found the B's and C's;
But on the *left* side of the *threes*
Are all the F's and all the E's.

HOW, WHEN, AND WHERE.

If you your lips would keep from slips,
Five things observe with care:
Of whom you speak, to whom you speak,
And *how*, and *when*, and *where*.

THAT LAST STILL NIGHT.

Amid the moist and coldest frosts,
With barest wrists and stoutest boasts,
He thrusts his flats against the posts,
And still insists he sees the ghosts.

THE ILIAD AND ODYSSEY.

That Homer should a bankrupt be
Is not so very Odd, d'ye see,
If it be true, as I'm instructed,
That ill he had his books conducted.

A SIGH FOR A CIPHER.

U 0 a 0 but I 0 U,
O 0 no 0 but O 0 me;
O let not my 0 a 0 go,
But give U 0 I 0 U so.

(You *sigh* for a cipher but I *sigh* for you;
O *sigh* for no cipher, but O *sigh* for me:
O let not *n.y* *sigh* for a cipher go,
But give *sigh* for *sigh*, for I *sigh* for you so.

OUGH!

"Wife, make me some dumplings of dough,
They're better than meat for my cough,
Pray let them be boiled till hot through,
But not till they're heavy or tough.
Now I must be off to the plough,
And the boys (when they've had enough)
Must keep the flies off with a bough
While the old mare drinks at the trough."

SHE SAW I SAW ESAU.

I saw Esau kissing Kate,
And the fact is we all three saw;
For I saw Esau, he saw me,
And she saw I saw Esau.

STRANGE SIGHTS.

I saw a cow—slip through the fence,
A house—fly in a store;
I saw a wood—chuck up the road,
And a stone—pick on the floor.

A BIOGRAPHY.

He was a man—was born of Nun,
A father—Nun he had before him,
Nun came to life—death came to Nun,
His epitaph—Nun is o'er him.

A LOVE LETTER.

I thee, read see that me.
Love is down will I'll have
But that and you have you'll
One and up and you if

A PALINDROME

"Revel, but lately born to fame,
He is his race's great retriever;
Reverse the letters of his name,
And 'gainst oppression be's the lever."

SIBILATION.

Surpassing sweet, seraphic strains she sings,
Softening sad spirits sympathetic strings;
Such soul-subduing sounds, so strangely soothing,
She seems some salutif spirit, sorrow soothing.

UNITED WE STAND, UNTIED WE FALL.

"U nite and untie are the same—so say yo U.
N ot in wedlock I, ween, has this unity bee N.
I n the drama of marriage each wandering gou T,
T o a new face would fly—all except you and I,—
E ach seeking to alter the *spell* in their scen E."

THE FOURTH DIMENSION. (Vol. IV, 325; VI, p. 362; VII, 51, 51*, 72, 117; VIII, 302.) How is the table on the "fourth dimension" formed? AGNOSTIC.

	Point	Line	Square	Cube
Point	<i>a</i> 1	<i>b</i> 2	<i>c</i> 4	<i>d</i> 8
Line	<i>e</i> 0	<i>f</i> 1	<i>g</i> 4	<i>h</i> 12
Square	<i>i</i> 0	<i>j</i> 0	<i>k</i> 1	<i>l</i> 6
Cube	<i>m</i> 0	<i>n</i> 0	<i>o</i> 0	<i>p</i> 1

The starting point is a table of the point, line, square, and cube :

In this table the properties of any of these four are read in the vertical columns. Thus, the square has 4 points, 4 lines, 1 square, and no cube.

A slight examination of this table will show :

1. That the number of points (or angles, extremities) in any dimension is found by raising 2 to the power represented by the numerical position of the required dimension, thus :

1st dimension,
2d "
3d "
4th "
Nth "

Line $2^1 = 2$ number of points.
Square $2^2 = 4$ " "
Cube $2^3 = 8$ " "
4th $2^4 = 16$ " "
Nth $2^n = 2^n$ " "

2. That the number in any square is equal to the sum of twice the number horizontally preceding it and the number immediately above the doubled number. (The squares in the small table have been lettered to facilitate reference.) Thus, the number in *l* is found to be equal to twice the number in *k* plus the number in *g*, or $(2 \times 1) + 4 = 6$.

To construct the table then, we rule off the spaces into horizontal and vertical columns, remembering that the table is to be read vertically. The first horizontal column will continue from the cube onward to contain the various powers of two, the exponent being always the same as the number representing the corresponding dimension, (thus, 2^{20} is the number of points in the 20th dimension, etc.), up to 2^n for Nth, or any dimension. Then copy in the squares already known. We find by rule 1 that there must be 16 points in the 4th dimension.

	Points	Lines	Squares	Cubes	4th	5th		Nth
Points	<i>a</i> 1	<i>b</i> 2	<i>c</i> 4	<i>d</i> 8	16	32		2^n
Lines	<i>e</i> 0	<i>f</i> 1	<i>g</i> 4	<i>h</i> 12	32	80		$2^{n-1} + 2x$, or x
Squares	<i>i</i> 0	<i>j</i> 0	<i>k</i> 1	<i>l</i> 6	24	80		y
Cubes	<i>m</i> 0	<i>n</i> 0	<i>o</i> 0	<i>p</i> 1	8	40		z
4th	0	0	0	0	1	10		m
5th	0	0	0	0	0	1		$p \text{ \&c.}$

How many lines? This number will occupy the next square to the right of square *h*. It will therefore be $(2 \times 12) + 8 = 24 + 8 = 32$.

How many squares? $2l + h = (2 \times 6) + 12 = 12 + 12 = 24$.

How many cubes? $2p + l = (2 \times 1) + 6 = 2 + 6 = 8$.

How many 4th? $(2 \times 0) + p = (2 \times 0) + 1 = 0 + 1 = 1$, which is evidently correct.

In making the tables it would be well to make the words indicating the horizontal columns plural, as above, thus avoiding any confusion as to which column is to be read.

To those who are curious in these matters and who have more time than I in following them out, I call attention to the curious manner in

which numbers duplicate themselves and in various ways ; thus :

We find in the column of squares (vertical) two 4's ; in the 5th two 80's ; in the 8th two 1792's, and so on in each third column.

In the 5th and 4th dimensions 32 occurs paired, and so 1024 in the 10th and 8th dimensions, etc.

In vertical columns we find frequently a number followed by one-half itself, thus : in the cube column we find 12, 6 ; in the 5th 80, 40 ; in the 7th 560, 280, and so in each odd-numbered dimension.

A very curious thing about the table is that an error in the table is not persistent for the whole table ; it affects a part of the table only and soon eliminate itself. Thus, in the table as first published by myself, in some way I wrote 60 for 80 as the number of squares in the 5th dimension ; the error was confined to a space represented by a right-angled triangle with the right angle in the N column. I should be pleased to see some discussion on this very curious table.

L. H. AYMÉ, Chicago, Ill.

ANCIENT NAME OF "MANCHESTER." (Vol. VIII, p. 372.) Lippincott & Co.'s "Geographical Dictionary" says the ancient name of Manchester is *Mancunium*. The Latin name of New Hampshire is *Neo Hantoniensis* found on the seal of the State.

SAINT DAVID OF MARCH 1. (Vol. VIII, p. 372.) David was the son of Xantus, Prince of of Cereticu, now Cardiganshire, by Malearia, a nun. Educated for, and ordained, a priest he retired to the Isle of Wight, embraced an ascetic life. He founded twelve convents in Wales. In 577 the Archbishop Caerleon resigned his see to David. Died in 642 after having reached the advanced age of 146 years. The Welsh regard him as their patron saint and annually hold festive meetings on March 1. The Welsh wear leeks in their hats on Saint David's Day.

"NEW GOSPEL OF PEACE." (Vol. VIII, p. 272.) Richard Grant White was the author of the "New Gospel of Peace, according to St. Benjamin." There were Books I to IV. New York, 1863-1866.

"The Chronicles of Gotham," by the same author, were published in 1871, in the same quaint style.

"Revelations, a companion to the 'New Gospel of Peace,' appeared in 1863, immediately after Book I was published.

"Book of the Prophet Stephen, Son of Douglas," appeared in 1864.

Quadrature of the Circle.

EXTRACT FROM THE COSMOGRAPHIC WORKS OF P. A. I. ADAM.

[I send you Mons. Adam's solution (?) of the "quadrature of the circle," translated by myself from the original French, sent to the World's Columbian Exposition. In all figures, notation, etc., the original has been followed strictly. Its fallacy is very evident, but I send it to add to the collection. LOUIS H. AYMÉ, Chicago, Ill.]

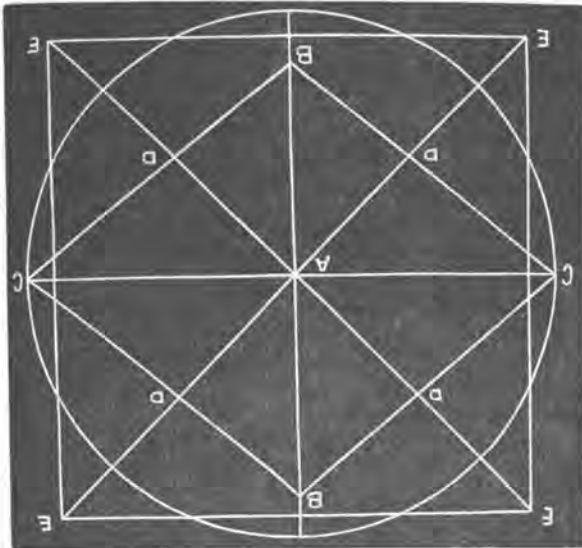
The area of every great circle is equal to the circumference multiplied by half the radius, or the quarter of the diameter: therefore to the semi-circumference by the radius, or the quarter of the circumference by the diameter.

$$360^\circ \times 28^\circ 64,70 = 10,312^\circ 92$$

$$180^\circ \times 57^\circ 29,40 = 10,312^\circ 92$$

$$90^\circ \times 114^\circ 58,80 = 10,312^\circ 92$$

Before and since the time of Archimedes it has been sought to construct geometrically the length of a circumference of known radius, or the side of a square having the same area as that of a circle of known radius—the problem of the quadrature of the circle, said to be impossible of solution. However in mathematics everything is possible.



Problem : — Establish geometrically a square which shall have the same area as a circle of given radius. Drawing and measurement are both easy.

Example : — Any opening of a compass being $57^{\circ}29,40$, the circle described with this radius will contain 360° which divided into four quadrants will give an equal number of quarter circles. From the center A , after fixing the 45th degree of each of the radii $A-B$, $A-B$, draw straight lines to the 45th degree from the points C , C ; also draw and prolong four radii distant 45 degrees from $A-B$, $A-B$. Now double the distance $A-D$, thus obtained, and the points, E , E , E , E , will be obtained as the corners or angles of a square area equal to that comprised in the circle :

$$101^{\circ}55,25,48 \times 101^{\circ}55,25,48 = 10,312^{\circ}92.0005$$

with a radius of any length in metres, kilometres, myriametres, etc., the procedure is the same.

E. g.—Given a radius of 50 metres. Then the circumference will be, the diameter (100 metres) $\times 3.1416 = 314.16$ metres, which being divided into four quadrants will give as many quarter circles, all equal, of an area of 314.16 metres $\times 25 = 7.854$ metres.

From the center A , draw straight lines through the 39th 27 of each quadrant. Fix the 39th 27 point of the radii $A-B$, $A-B$; from C , C , draw four straight lines; then doubling the four distances from the center A , to D , D , D , D , the points E , E , E , E , are reached, the four right angles of a square of equal area to that of the circumference of the circle :

$$88^{\text{m}}.62,28 \times 88^{\text{m}}.62,28 = 7,854 \text{ metres } 0006.$$

The 101 degree 55,25,48 being applied to all lengths, a simpler method of procedure is as follows :

If the radius is of 114 metres 58,80, the chord ("ouverture") of each degree being 2 metres; then :

$$2 \times 101^{\circ}55,25,48 = 203 \text{ metres } 10,50,96 \times 203 \text{ metres } 10,50,96 \\ = 41,251 \text{ metres } 68$$

of area equal to that comprised by the circumference of a circle 229 metres 17,60 in diameter; that is to say,

$$\text{circumference } 720 \times 57^{\circ}29,40 = 41,251 \text{ metres } 68.$$

NAPIERIAN, NATURAL, AND COMMON LOGARITHMS. Florian Cajori has shown in an article in Artemas Martin's *Mathematical Magazine* for January, 1890, that Napierian logarithms differ from natural logarithms. He says that Davies, Ficklin, Greenleaf, Loomis, Ray, Robinson, Schuyler, Stoddard and Henkle, Thomson and Quimby, Wells, and many other writers on algebra state that Lord Napier selected $2.718281828459045235360+$ for the base of his system; and that J. M. Peirce pointed out the error, that Napier's logarithms differ from natural logarithms. The modulus of Napier's logarithms is not equal to 1, but nearly to -1 . Napier did not calculate his logarithms to any base. The base for a system of logarithms was suggested to mathematicians later. John Speidell was the first person to calculate logarithms to the base $\epsilon = 2.718281828459045235360+$, and published his *New Logarithms* in 1619, five years after the appearance of Napier's system. The calculation of logarithms is too lengthy for space in this article.

The following table gives the three kinds of logarithms for the numbers 1 to 10 :

No.	Napierian Logarithm.	Natural Logarithm.	Common Logarithm.
1	161180956.509	0.0000000	0.0000000
2	154249484.703	0.6931472	0.3010299
3	150194833.622	1.0986123	0.4771212
4	147318012.551	1.3862944	0.6020599
5	145086378.135	1.6094379	0.6989700
6	143263361.701	1.7917595	0.7781512
7	141721856.726	1.9459101	0.8450980
8	140886543.936	2.0794415	0.9030899
9	139208711.043	2.1972246	0.9542425
10	138155105.579	2.3025851	1.0000000

HOW TO CALCULATE THE VALUE OF ϵ . Several inquiries which have been made center into this subject, and we have for the sake of simplicity devoted one full page to the numerical result. Beginning with 1 for a dividend, and 1 for a divisor, divide the successive decimal-quotients by the arithmetical series, and add the entire quotients, and the sum is the value of ϵ , which is the base of the natural system of logarithms. The following page gives the process to 54 decimals :

MISCELLANEOUS
 NOTES AND QUERIES,
 WITH ANSWERS.

"Everything comes to the man who in silence can wait."—HIDDEN WAY.

VOL. VIII.

OCTOBER, 1891.

No. 10.

Waste - Basket of Words.

[From Journal of American Folk-Lore, Vol. IV, No. XIII, 1891.]

Catch.— Food improperly cooked or otherwise ruined. I think this is the Marblehead pronunciation of *culch*.

Clitch.— A most expressive word, meaning to stick, to catch. It is not the same as "clutch."

Crimmy.— Chilly. An old fisherman says: "Ain't it too crimmy to go sailen'?" or; "It's a crimmy night."

Culch.— This word, when applied to human beings, has a secondary sense of disgust. "He's a mean old culch!" The epithet is the worst which can be used.

Froach.— A piece of clumsy and imperfect needle-work, what would elsewhere be termed a botch.

Grommet.— The name given by fishermen to a ring formed by a strand of a rope.

Grout.— A sour, crabbed wild apple. *Grout ale* is a heavy and thick ale.

Grouty.— Crabbed, ill-tempered; in this sense universal in New England. Applied to ale, it signifies muddy and thick. Probably derived from the foregoing.

Grummet.— A crumb or small piece of bread. A woman says to her child: "Don't let fall no grummets." Derivation from *crummet*, a little crumb.

Pixie-lated.— Confused, bewildered (*pixie-led*).

Planchment.— Ceiling. Now seldom heard. An old woman says: "The roof wets so, I'm afraid the planchment'll fall." From *planché*, that is, boarded.

Spuael.— To throw stones, to pelt. "Squael him," that is, throw stones at him. — Alice Morse Earle.

Indian River Names.

Many persons suppose that the quaint and musical Indian names in American geographical nomenclature are wholly unlike anything else in the human language. There is a belief also that the aboriginal titles of our waters are the coinage and application of the rude savages found here in the 15th and 16th centuries. Both these ideas are erroneous, says the *New York Times*. The great majority of the old aboriginal names of America have what appears to be a prototype, if not the real congener, existing in many of the ancient languages of the old world, and even among the names of the recently discovered races of Central Africa there are numerous analogies and identities with our native Indian appellations.

In fact, the river names show so many analogies with the appellations of the old world that they confirm the belief, in minds best informed on the subject, that the American prehistoric man himself sprang from the old world races. The man is not *sui generis*—that is evident.

Many words from the oldest languages known—Hebrew and Chinese are found in our ancient Indian appellations. Yuba is in the Hebrew a term for water. We have two rivers named Yuba in California, and in South America a river and lake have the name written Ubi.

France has the river Ubaye and Africa has Yubi. The Russian empire has the river name Ubi or Obi—either being correct. Yeor or Yar is a word for river in Hebrew, and in the Russian also. Yair, Yare, and Yor are river names in England, France, and Central America. We have also Yar-agua in America. Australia has Yarra-Yarra (how like our Walla Walla in Oregon), Africa has Yari-ba, China has Yarroo, and Scotland has Yarrow.

The Old Hebrew name of the Nile was Yeor. Garra is in India, Garha is in Hindustan, Garoo is in China, Gara is in Ireland, Garry is in Scotland, Garry (Gera) is in Germany, Gaure in France, Gore in Central Africa, and we have in America Garra, Gauri-ba, Garo-ga and other garas. And these names are all considered native in the countries where found. The word Sur or Saa-ra is used in Hebrew synonymous with our term water. The river names of the world in Sara are almost countless. Sara is a river in Russia, in France (Saar), and in Switzerland. Sara is a river and bayou in Louisiana. We have also in America, in water nomenclature, Sara-nac, Sara-ree, Saratoga, and other saras. Our word Saratoga—no one questioning the fact that it is native American—is precisely the same thing as the Russian Saralowka. Sara-nika or Latin Saronica—like our Saronæca—was the ancient name of the Ægean sea. Sarabat and Sarawak are in Asia and Saragossa is in Spain.

Our name Washita, anciently written in French Ouachita, is strik

ingly like the Polish name Ouchitza. Another curious name—which no one not versed in such matters would ever suppose had anything like it elsewhere—is the central African lake name Ujjiji, every one of whose letters except one requires the dot in writing. But Spain has an Uj-ji-jai, and South America has the river Ju-ju-y. These are all doubtless corruptions of an older word.

The Russian name Wolga, or Volga—either one correct—has its analogy in the Alabama river name Wolkee. The name Yazoo of Mississippi is duplicated in Yazwa of Russia and in Yazzi of Central Africa.

One name Catawba—unquestionably Southern Indian is precisely the same as the Arabian name Kataba—this perhaps thousand of years older than the American word. Central Africa gives a duplicate in Katiba. Central Africa has the river Monongah; in America we have the river name Monongahela, with its dialectic suffix “ela,” the significance of which is unknown. Central Africa has also the Congo. In America we have the Congaree, and also the Concho. The word Ganga (the true word for the name Ganges) is a Hindu word for river. Congo and Ganga are identities. Both Ganga and Konki are rivers in Asia. Central Africa has the Lo-Wando, or simply the “River Wando,” Lo given by Stanley and Livingstone as a term for river or water. We have Wando, a river in South Carolina. The Hindu language shows that Wando, ondo, hondo or indoo are all the same—an oriental term for deep waters or the sea. The Spanish language has hondo for lake. We have not only the river name Wondo, but there is in Central America the name Honduras. Ondo-rochi—this is really Ondo-ri—was the Indian name of Lake George.

Africa has Ruaun; in Virginia we have Rivanna. Africa has Kariba; we have Cariba and Caribbee. Africa has Kyoga; we have Cuyogo and Cuvahoga and Kiokee, all pure Indian words. Denmark has the same word written Kiogee. Africa has Luri; we have Luray, and Europe has it both Loo-ri and Lu roo. We have Tennessee, or, as it was originally written Tenassa; Asia has Tenassarim. Our word was the Indian name of a river; Tenassarim has many rivers. Tokeo or Tocoa is in the Hebrew, Tokoi is in the Chinese, Tokay is in Hungary, while Tocoa and Tuccoa are in our Indian. Unaka is in the Indian (the word is found also as unacul); unique is in French.

Our word for water, from the German, is seen in the Indian river name Watcree. The German river names Wari (Werre and Werra) and English Wear are reproduced in the Indian Uwharrie of North Carolina. Shocho and Socon are in the Hebrew, Sacosoco, Shochoe and Soccoro are in the Indian, while Socco is in the Italian.

Lena is in Russia and Prussia, Lena and Lenapa and Lena-wa are American, Lenai is in the Sandwich Islands and Lanho—which is the same thing—is in China. Too-la is a deep river in China; Tula is a deep lake in California. Narra, or Na-ri, is in America, in Russia

and in India—river names. The term as nara or na-ri is in many river or other water names all over the world. We have it in Narragansett, Narrawan in Assyria, and Narrawando in Africa. The double synonyms are seen in these names. The term nachar, or nichar, is Hebrew for river. We find it as Nichar, Niger, and otherwise in river names in many places in the world.

Our word Nicaragua shows it with its Spanish suffix. We have the name Chile; China has a Chee-lee, Chicobea is in the Fiji islands, Chicapa is in Mexico, and Chicopee is in Massachusetts. The term massa, which we see in our New England name, originally applying to water, the bay, is found in water nomenclature in many languages.

It is in the Hebrew ("the waters of Massa and Meribah," Exodus, xvii., 7); Massacucoli is a lake in Italy, and Massarooney is a river in South American Guiana.

Onega is in Russia, Oneida is in New York. Russia has Ouon, New York has Onondaga. Russia has Yenessee and New York has Genessee. Sinu is in Germany, Sinu and Sinew are in America, and Sinou is in Africa. Central Africa has Kanzoz-ola, while we have the word as Kansas. We have Utah and Eutaw. Italy has Uta.

Russia has Ouda and Ooda, and France Oude. The writing in Germany is Oder. In Italy the name is Addr. These are doubtless all the same thing etymologically, as the old Sanskrit word for water, uda or oode, and the Slavonic woda. Many Sanskrit words for water are seen in the Indian names of rivers—Apa, Uda, and Ogha being conspicuous. The Celtic term Acha is reproduced in the Indian river word Hatchie, the same as Italian Aci. Kusan corruptions are Ouchee or, as written in one Indian creek name, Uchee, and Oosa or Ouse, and yet Ousa and Ouse are given by authorities as old Anglo-Saxon terms for water or rivers. There is an Oosa, a prehistoric river name in Russia, and there are scores of the Ooses and Ousas in the Indian names of waters. A volume would not exhaust the long list of the likenesses in the Indian river names to those of the old world.

QUOTATION : (Vol. VIII, p. 370.) "The only serious omen of future ill being is ill doing; the only sure token of future well being is well doing." This quotation is found in the singular work entitled "Miranda : a Book of Wonders Hitherto Unheeded," by Emanuel Filopanti, born on April 20, 1812. The words are found on page 371.

"FIRST GENTLEMAN OF EUROPE." (Vol. I, p. 285.) Barnes's "Brief History of Mediæval and Modern Peoples," p. 277, says that George IV (1820-1830) was styled the "First Gentleman of Europe," for his courtly manners and exquisite dress.

ERIDANUS. (N. AND Q., Vol. VIII, p. 274.) What river does the constellation Eridanus commemorate, and what does the word mean?
ALLEN GREENE.

Eridanus, a Southern constellation, extends from Rigel, a first-magnitude star in Orion, to Achernar, also a first-magnitude star in the constellation of the Phoenix. Eudoxos of Cnidos, 4th century B. C., in his uranographic chart, calls it Eridanos Potamos, "the River Eridanus, called sometimes simply the river, *Amnis, Fluvius*." The mundane stream, Eridanus, figures in the myth of Phaëthon. When, in his attempt to drive the chariot of the Sun, he partially set the world on fire, Phaëthon was by Zeus thunder-stricken, hurled lifeless into the Eridanus. The sisters of Phaëthon were at the same time changed into poplars that wept tears of amber. See Ovid *Metamorphoses*, ii, 1-408; Hyginus, *Fabulae*, 154; Fulgentius, *Mythologiarum*, i. 15; Virgil, *Ecloga*, vi. 62, and *Aeneid*, x. 189-93. The Eridanus, as a mundane stream was popularly considered, among the Greeks and Romans as being the river Padus or Po, in Northern Italy.

Hyginus (*loc. cit.*) alleges that Pherekydes, the logographer, about 470 B. C., was the first to identify the Eridanus with the Padus or Po. In this he was followed by Euripides, B. C. 428 (*Hippolytos*, 737), and subsequently by all the geographers except Strabo, who rejects the story of the Eridanus in Italy as mythical (Strabo, v. i. 9). The reason for the identification of the Padus and the Eridanus seems to be this: In the Greek myth the amber teams of the Heliades were connected with the Eridanus; and as amber was imported into Greece from the upper extremity of the Adriatic Sea, Eridanus was naturally identified with the great river of Northern Italy, which flows into this part of the Adriatic (See Robert Brown, Jr., *Eridanus*, p. 34).

It has been supposed that the name Eridanus was originally applied by the Greeks to a large river on the north of Europe, on the shores of which amber was produced, and some have thought that the Vistula or other river in Northern Germany may have been intended.

Aeschylus identified the Eridanus with the Rhodanus, and located it in Iberia or Spain, so Pliny tells us (*Hist. Nat.*, xxxvii, 2, II). See also Smith's *Dictionary of Greek and Roman Geography*, Vol. I, p. 849.

Isaac Taylor (*Words and Places*, 206-9) has given the phrase "the

strong flowing" as the probable meaning, in Aryan, of Eridanus. Robert Brown, Jr., in his monograph on "Eridanus, River and Constellation," London, 1883, argues that the Eridanus stream had originally no reference to a European river, but to a great Asiatic river which he identifies with the Euphrates. In explanation of why some have connected the Nile with the Eridanus, he instances the belief anciently held that the Nile was identical with the Euphrates. Among the Akkadians the great terrestrial ocean, which was sometimes regarded as a river, was called Arra or Aria, *Aria* meaning "river" in the Akkadian tongue. *Dan* signifies "strong" in the same language; and Mr. Brown thinks it not far-fetched to read Eridanus in Arra-dan or Ariadan, "the Strong river." For a full discussion of all points connected with Eridanus, both as constellation and as river, the work of Robert Brown, Jr. above named, should be consulted.

WM. EMMETTE COLEMAN.

THE PRAYER OF CYRUS (Isaiah XLV, 1). Where can the prayer of Cyrus be found, said to have been uttered on his death-bed? W.

This notable prayer is found in the "Cyropædia" of Xenophon Lib. VIII, cap. 7, and is as follows:

"Thou, Father Zeus, and Thou Sun, and all ye Gods, accept these sacrifices and thank-offerings presented on account of the accomplishment of many and honorable works, and because you have pointed out to me both by sacrificial signs, and by signs in the heavens, and by auguries, and by ominous messages, what things I ought and what I ought not to do. Many thanks are also due to you, because I have also learned your watchful care, and have never in my season of prosperity been high-minded above what becomes man. And now I beseech you to give happiness to my children, and wife, and friends, and country; and such a life as ye have granted me, so grant me a like death."

LOST TEN TRIBES. (Vol. VIII, p. 370.) We are informed by a reader of N. AND Q. that a modern clergyman claims that the last mentioned place in the Bible of the "Lost Ten Tribes" is in Second Kings XVII, 6. One of our biblical commentators, we think Scott, says Jesus no doubt meant the "Lost Ten Tribes" when he said,

"Other sheep I have, which are not of this fold; them also I must bring, and they shall hear my voice; and there shall be one fold, and one shepherd" (John X, 16).

Stone of Scone.

(Vol. VII, p. 72.)

Tradition relates that the sacred stone was brought from the hill of Tara in Ireland, and placed in the minster of Scone by Kenneth II.

The Irish claimed to have received it by miracle. Popularly it was supposed to be the stone upon which Jacob slept at Bethel, carried thence by his sons when they went into Egypt, and conveyed by the daughter of Pharaoh and her Greek husband to Spain. Upon it laws were given, and from it justice was administered. It seems now to be regarded as the emblem of justice, loyalty, and national perpetuity.

Did you ever hear of the curious throne
Where the monarchs of England all are crowned,
Beneath whose seat is the stone of Scone,
Ancient and sacred and world-renowned?

'Tis only a battered osaken chair,
Massive and ugly, yet once it shone
With colors and gilding, wondrous fair,
And all because of the stone of Scone.

In the Abbey of Westminster it stands,—
Four couchant lions its sturdy feet,
And treasure, and lives, and goodly lands
Were the price of the relic beneath its seat.

Plantagenet Edward, of his line,
The first and the bravest, at Dunbar
Vanquished his Scottish foe, lang syne,
And the stone of Scone was the spoil of war.

And nearly six hundred years have sped,
Since the chair in the Abbey's aisle found room,
And the race of Edward all are dead,—
A pinch of dust in the sprig of broom.

And where are the roses, red and white?
And the Tudor plumes, and the bonnet blue?
And stalwart Cromwell, the Roundhead knight?
And William of Orange, brave and true?

One by one, in the centuries flown,
Sitting a space in that ancient chair,
Over the sacred stone of Scone,
They have sworn to be leal to England there.

And one by one, they have put aside
Mace of office or jeweled crown;
And king and commoner, side by side,
"Ashes to ashes," have laid them down.

And still 'neath the minsters arches high,
Touched by the dim light strange and fair,
For the kings that are coming by and by,
Waits the stone of Scone, on the old oak chair.

MORE OLD BIBLES. The description of ancient Bibles in the recent issues are especially interesting to many of your readers. I have in my possession a Bible printed in two volumes, which weigh together 36 pounds; each volume is $19\frac{3}{4}$ inches long, 12 inches wide, and $4\frac{1}{2}$ inches thick: the wooden covers are $\frac{7}{8}$ of an inch in thickness. I do not think there is a duplicate of it in America, and wish you would insert my address so as to hear from a biblical scholar or any one else posted on the subject.

It is a German Bible with Latin and English notes, issued by Hendrick & Jacob Keur of Amsterdam, Holland, in 1686. It is highly illustrated, some of the engravings are two feet square, some on silver, some wood cuts. The two hemispheres of the world, surrounded with fabulous imaginary images, are found near the first page. The representations of the Garden of Eden, with Adam and Eve enjoying all its splendors, surrounded by the multitudinous birds, animals, reptiles and insects, is a master study. The departure of the twain from Eden is also a study worthy of Hogarth's time to enjoy. In the first the dual representations of humanity have nothing on them to keep them warm; in the second the fall seems to have been approaching, and several fig leaves are used as habiliments. Some rare old masters were engaged in making the delineations, such as P. P. Rubens.

I have a portion of another Bible, which was printed in 1480, only 40 years after the discovery of printing. It is the Latin Vulgate. There is no versification, head of each chapter illuminated by hand; every capital through the whole work is touched by a painter.

C. A. GREENE, M. D., 178 Tremont St., Boston, Mass.

A CURIOUS OLD BIBLE. I notice a number of articles from different persons in relation to old Bibles. I have a Bible "Imprinted at London by Christopher Baker, printer to the queene's most excellent majestie, 1583." It measures 17 inches in length, $11\frac{1}{2}$ in width, 6 inches thick. The corners of the covers are bound with brass plate 2 inches square with another plate in the centre of each cover to protect them from wear. Upon the first page is the picture of the garden of Eden. In the midst of the garden is the tree of knowledge of good and evil, with the old serpent with his tail wound around the trunk of the tree with the main part of his body interwoven among its branches with his head hanging down on a level with the woman's head as she stands upon the left side of the tree, holding in her left hand some of the fruit of the tree, while the man stands at the right side of the tree with the fruit in his left hand. Interwoven in the branches are these words, "Created good and faire, by breache of law a snare." Then winding around the serpent are these words, "Dust for to eat, must be my meat;" from the woman's left hand, which holds the fruit are these

words, "Desire to knowe, hath wrought our woe;" then from the left hand of the man are these words, "By tasting this, the exile of blisse."

The woman holds in her right hand, "By promise made restored we be through faith;" (those two last words are written upon her breast, whilst upon the man's breast are these words), "In Christ's death" (then in his right hand), "To pleasures of eternity"; around about them are the lion and the bear, the ox and the sheep, the elephant and rhinoceros, monkey and frog, porcupine and hog, turtle and alligator, the goat and fox, with others too numerous to mention, all chiming in to make one happy family. P.

A PROBLEM. A courier starts from the rear of an army, 25 miles long, and rides to the head, the army being on the advance; arriving at the head he immediately turns around and rides back to the rear; at the moment he reaches it the whole the whole army has advanced 15 miles. Query: What distance did the courier travel going and returning? L. H. A.

THE HYACINTHUS, OR DELPHINIUM (*Rocket Larkspur*). Vol. VIII, p. 529.) The name of "AIAS" (AJAX), according to Thomas Browne ("Garden of Cyrus, chap. III), is found on the Rocket Larkspur, known in technical botany as *Delphinium Ajacis*. Mrs. Almira H. Lincoln ("Lectures on Botany," p. 97, appendix), thus describes it: "Rocket Larkspur, b. Au. ☺. Nectary 1-leafed, stem simple. 1 f. Ex."

The ancients associated many of their heroes and their deeds, and other matters with flowers, and the phenomena of nature. Thus some could see Aaron's mitre in henbane (*hyoscyamus*). The *Narcissus poeticus* is associated with the beautiful youth Narcissus who became enamored of himself on beholding his own reflection in the fountain and was changed into that flower, usually found growing on the margin of streams, bending over the same. PHLOX.

THE ENNOBLED DEITIES. Who were considered by the classics the ennobled deities or councillors of Jove? X.

These were the superior deities who formed the senate of the gods. They were called *Di majorum gentium*, or *Di consentes*. Reckoning Jupiter, one there were twelve, and these are enumerated by Ennius in two hexameters, thus:

"Juno, Vesta, Minerva, Ceres Diana, Venus, Mars,
Mercurius, Jovis, Neptunus, Vulcanus, Apollo."

That Ichthic Acrostic.

(Vol. III, p. 137 ; VII, pp. 190-191, 209.)

I have been much interested in the "Ichthic Acrostic," and its translation, and have made some search for other translations. I find the following in St. Augustine's work, "The City of God," Vol. II, p. 242. I think it reads more smoothly, and therefore send it to you, with some of St. Augustine's speculations, to place in your magazine. Both translations will then be in the same serial P. H. R.

"Jesus Christ the Son of God, the Saviour."

"These verses, of which the initial letters yield that meaning, contain what follows as translated by some one into good rhythm :

I Judgment shall moisten the earth with the sweat of its standard,
H Ever enduring, behold the kind shall come through the ages,
M Sent to be here in the flesh, and judge at the last of the world.
O O God, the believing and faithless alike shall behold thee,
P Uplifted with saints, when at last the ages are ended,
M Sisted before him are souls in the flesh for his judgment.

N Hid in thick vapors, the while desolate lieth the earth,
P Rejected by men are the idols and long hidden treasures ;
E Earth is consumed by the fire, and it searcheth the ocean and heaven ;
I Issuing forth, it destroyeth the terrible portals of hell.
M Saints in their body and soul freedom and light shall inherit ;
H Those who are guilty shall burn in fire and brimstone forever.
M Occult actions revealing, each one shall publish his secrets ;
O Secrets of every man's heart God shall reveal in the light.

O Then shall be weeping and wailing, yea, and gnashing of teeth ;
E Eclipsed is the sun, and silenced the stars in their chorus.
O Over and gone is the splendor of moonlight, melted the heaven.
P Uplifted by him are the valleys, and cast down the mountains.

P Utterly gone among men are distinctions of lofty and lowly.
I Into the plains rush the hills, the skies and oceans are mingled.
O O, what an end of all things ! earth broken in pieces shall perish ;
M Swelling together at once shall the waters and flames flow in rivers.

M Sounding, the archangel's trumpet shall peal down from heaven,
O Over the wicked who groan in their guilt and their manifold sorrows.
H Trembling, the earth shall be opened, revealing chaos and hell.
H Every king before God shall stand in that day to be judged.
P Rivers of fire and brimstone shall fall from the heavens.

IESOUS CH REISTOS THEOU UIOS SOTER. (ICHTHUS.)

In these Latin verses the meaning of the Greek is correctly given, although not in the exact order of the lines as connected with the initial letters; for in three of them, the fifth, eighteenth, and nineteenth, were the Greek letter ω occurs, Latin words could not be found beginning with the corresponding letter, and yielding a suitable meaning. So that if we note down together the initial letters of all the lines in our Latin translation except those three in which we retain the letter ω in the proper place, they will express in five Greek words this meaning, "Jesus Christ the Son of God, the Saviour." And the verses are twenty-seven, which is the cube of three. For three times three are nine; and nine itself, if tripled so as to rise from the superficial square to the cube, comes to twenty-seven. But if you join the initial letters of these five Greek words, 'Iesous Christòs Theòu uiòs sòtér, which mean, "Jesus Christ the Son of God, the Saviour," they will make the word Ichthùs, that is "fish," in which word Christ is mystically understood, because He was able to live, that is, to exist, without sin in the abyss of this mortality as in the depth of waters."

TEN MYSTERIES. What are the ten so-called myeteries, which the religious monks are said to conceal from the profane? INRI.

We are not clear as to what particular mysteries the inquirer refers. E. V. Kenealy, in his esoteric work, "The Book of God," Vol. II, p. 77, thus enumerates one set of ten mysteries :

- | | |
|---|--|
| 1. The Unity of God. | 7. The Palingenesis, or new birth. |
| 2. The Holy Spirit. | 8. The Martyrdom of the Messenger. |
| 3. The Messengers. | 9. Alternate destruction and reproduction of worlds. |
| 4. The Naronic Cycle, or the Secret of God. | 10. The final absorption into Bliss. |
| 5. The lapse of Spirits. | |
| 6. Transmigration. | |

Each of these stages of knowledge was called a gate; so that there were altogether nine gates to be passed through before the portals of heaven were reached. In some places the martyrdom of the messengers was not considered a secret, and this would reduce the number to eight gates; again numbers 3 and 4 were sometimes treated as one, which would make really but seven gates.

One of the admonitions to the candidate was: "Remember what you have been taught in the mysteries, and then you will, at length, understand how far this matter can be carried."

'TWICE BORN. What poet was said to be twice born? INRI.

This was said of Hesiod. According to Pausanius (IX, c. 31) he was son of Dius and Pycimeda and reputed to be a prophet. He was murdered in the temple of Nemean Jove and thrown into the sea, but the dolphins brought the body back to shore, and it was buried in the "Minyan Orchomenos." He was regarded as one of the mystically regenerated, and the poet Pindar wrote this inscription for him :

"Farewell, thou wisest teacher of mankind,
Hesiod, twice born, and twice to death resigned."

His age and history are altogether mystical and his obscure poem, which has come down to us, perhaps with some interpolations, is one of the oldest poems in existence. He himself says he was born in the *iron age*, which is the *Chronos 'Iōnikos*, or time of Serug, and had seen no part of the *Chronos 'Erōikos*.

This question reminds us also of those lines of Ovid's, (Addison's translation), which has the Messianic idea, under the name of the God Æsculapius :

Once, as the Sacred Infant, she surveyed,
The God was kindled in the raving maid;
And thus she uttered her prophetic tale:
Hail, great Physician of the World, all hail!
Hail, mighty Infant, who in years to come,
Shalt heal the nations, and defraud the tomb;
Swift be thy growth, thy triumphs unconfined,
Make kingdoms thicker, and increase mankind.
Thy daring art shall animate the dead,
Then shalt thou die—but from the dark abode
Rise up victorious and be twice a God.

ZODIACAL LATIN DISTICH. (Vol. VIII, p. 370.) The two pentameters containing the names of the signs of the zodiac :

"Sunt aries, taurus, gemini, cancer, leo, virgo,
Libraque, scorpius, arctenens, caper, amphora, pisces."

are from the the Roman poet Ausonius,

SIZES OF MOLECULES. From various considerations it has been independently estimated by Joseph Loschmidt (1865), by G. Johnstone Stoney (1868), by William Thompson (1870), and by J. Clerk Maxwell (1873), that the effective size of the molecule is probably not smaller than the thousand-millionth of an inch, nor larger than three or four times this dimension ; which is about the twenty-thousandth of a medium wave-length of light. Small as this dimension is, we may reflect that by what may be called the second power of our best microscopes, it would be easily visible, supposing that light-waves were capable of optical efficiency at this degree of subdivision and amplification.

A MARE'S NEST. NIGHT-MARE. Whence comes these expressions so commonly heard ?

JONATHAN.

The name of the mare is not uncommon among our obsolete superstitions. Ceres Erinnyes, who went raving through the world, was Hippa ; she was the great mother expelled from the City of the Three Worlds, who has not yet found a place in which to establish her reign of horror ; hence the proverbial expression of "finding the mare's nest." Yet there was a custom of pretending to finding Ceres Hippa, for at harvest time they dressed up an image of straw, called a corn baby (Brande's "Pop. Antiquities," p. 341-343), and shouted "I have her." "What have you?" "A mare, a mare, a mare!" Hence a witch signifies one who neighs like a horse, and a horse-shoe was thought to be a preservative against her. Ominous dreams were said to come from a Night *Hag*, or a Night *Mare*. (See Rev. A. Herbert's "Nimrod," Vol. II, p. 631-632.)

THE MAHATMAS. Who are the *Mahatmas* ?

ANTONY.

The Mahatmas (Great Souls) are the highest adepts in occultism and all theosophic wisdom and science. All over the world there have ever existed occultists, and occult fraternities ; but the brotherhood of Thibet, whose head-quarters is in the fastnesses of the Himalayan mountains, is, it is said, regarded as incomparably the highest of such associations. The elevation which constitutes a Mahatma "Brother," or "Master," as they are usually styled, is only attained after prolonged and weary probation, and anxious ordeals of terrible severity. The great end and purpose of adeptship is the attainment of spiritual development. Oriental esoteric knowledge, which until of late, when the world is considered ripe for some of it to be divulged, has been most jealously guarded, long antedates the passage through earth-life of Gautama Buddha. It is worthy of note that the great European Mystic, Emanuel Swedenborg, speaks of the "Lost Books of Jehovah," which, if search were made for them, would be found in Great Tartary.

Practical Buddhism may be summarized thus : To see, feel, speak, behave, live, act, think, and aspire. This is the absolute direction to attain to the Absolute—Nirvana. Buddha and Christ are but manifestation of the divine principles—Buddha, Nirvana ; Christ, heaven,

Fifteen Articles.

" Fyflous artyculus they there swozton,
And fyftens poynts there they wroztom."

ARTICLE 1. The Master must be steadfast, trusty, and true; provide victuals for his men, and pay their wages punctually.

2. Every Master shall attend the Grand Lodge when duly summoned, unless he have a good and reasonable excuse.

3. No Master shall take an Apprentice for less than seven years

4. The son of a bondman shall not be admitted as an Apprentice, lest, when he be introduced into the lodge, any of the brethren should be offended.

5. A candidate must be without blemish, and have the full and proper use of his limbs; for a maimed man can do the craft no good.

6. The Master shall take especial care, in the admission of an Apprentice, that he do his lord no prejudice.

7. He shall harbor no thief or thief's retainer, lest the craft should come to shame.

8. If he unknowingly employ an imperfect man, he shall discharge him from the work when his inability is discovered.

9. No Master shall undertake a work that he is not able to finish to his lord's profit and the credit of his lodge.

10. A brother shall not supplant his fellow in the work, unless he be incapable of doing it himself; then he may lawfully finish it, that pleasure and profit may be the mutual result.

11. A Mason shall not be obliged to work after the sun has set.

12. Nor shall he decry the work of a brother or fellow, but shall deal honestly and truly by him, under a penalty of not less than ten pounds.

13. The Master shall instruct his Apprentice faithfully, and make him a perfect workman.

14. He shall teach him all the secrets of his trade.

16. And shall guard him against the commission of perjury, and all other offences by which the craft may be brought to shame.

PLURES CONSTITUTIONES.

POINT 1. Every Mason shall cultivate brotherly love and the love of God, and frequent holy church.

2. The workmen shall labor diligently on work days, that he may deserve his holidays.

3. Every Apprentice shall keep his Master's counsel, and not betray the secrets of his lodge.

4. No man shall be false to the craft, or entertain a prejudice against his Master or Fellows.

5. Every workman shall receive his wages meekly, and without scruple; and should the Master think proper to dismiss him from the work, he shall have due notice of the same before high XII.

6. If any dispute arise among the brethren, it shall be settled on a holiday, that the work be not neglected, and God's law fulfilled.

7. No person shall debauch, or have carnal knowledge of the wife, daughter, or concubine of his Master or Fellows.

8. He shall be true to his Master, and a just mediator in all disputes and quarrels.

9. The steward shall provide good cheer against the hour of refreshment, and each fellow shall punctually defray his share of the reckoning, the steward rendering a true and correct account.

10. If a Mason live amiss, or slander his brother, so as to bring the craft to shame, he shall have no further maintenance among the brethren, but shall be summoned to the next Grand Lodge; and if he refuse to appear, he shall be expelled.

11. If a brother see his fellow hewing a stone, and likely to spoil it by unskillful workmanship, he shall teach him to amend it, with fair words and brotherly speeches.

12. The General Assembly, or Grand Lodge, shall consist of Masters and Fellows, Lords, Knights and Squires, Mayor and Sheriff, to make new laws, and to confirm old ones when necessary.

13. Every brother shall swear fealty, and if he violate his oath, he shall not be succored or assisted by any of the fraternity.

14. He shall make oath to keep secrets, to be steadfast and true to all the ordinances of the Grand Lodge, to the King and Holy Church, and to all the several points herein specified.

15. And if any brother break his oath, he shall be committed to prison, and forfeit his goods and chattels to the King.

“SEIZE ON TRUTH WHEREVER FOUND.” (Vol. VIII, 369.) In a treatise on “The Improvement of the Mind,” by Isaac Watts, D. D., chapter IV, ¶ XIII, on “Reading and Books,” I find:

“Seize upon truth, where'er 'tis found,
On Christian or on Heathen ground;
Among your friends, among your foes,
The flower's divine where'er it grows;
Neglect the prickles, and assume the rose.”

It is not marked as an extract and *Isaac Watts* was undoubtedly its author. N. B. W.

QUESTIONS.

1. Dr. Wait, in "Oriental Antiquities," p. 214, gives the following quotation in the Sanscrit. What is the English of the words? X.

"Āhō ! Sivā ! Īsā ! Ād'hisā ! Ādyē sēvā !"

2. Rev. A. Herbert tells us ("Nimrod," Vol. II, p. 552) that the following maxim put into the mouth of Ulysses, contains the whole of the *Odyssey* in two lines. Will some reader state where in Homer's works they are found: X.

"Nate Deā, quō fata trahunt requahuntque sequamur.
Quicquid erit, superanda omnis fortuna ferendo est."

3. Paul I. Hershon says every pious Jew repeats every morning and evening, after reciting the creed, the words of Jacob (Gen. XLIX, 18), three times in Hebrew, and three times in Chaldee, and each time the words are transposed. Will some one explain why the words are transposed? ISAAC.

"I have waited for Thy salvation, O Lord !"
For Thy salvation have I waited, O Lord !
O Lord ! for Thy salvation, have I waited.
I have waited, O Lord ! for Thy salvation.
For Thy salvation, O Lord ! have I waited.
O Lord ! I have waited for Thy salvation.

6. From whom comes these lines found quoted in Hutchinson's "Spirit of Masonry," p. 109, New York, 1855: H.

"I prepare my sepulchre;
I make my grave in the pollutions of the earth;
I am under the shadow of death."

7. From what poem and author came the frequently quoted line,

"For much he knew, but everything knew ill." H

8. Some divine gave utterance to the following conclusion of the whole matter. Who was he and where found? H.

"Every place that is not Heaven, may be regarded as Hell."

9. From what is the oft repeated distich paraphrased? INO.

"Early to bed, and early to rise,
Will make a man healthy, wealthy, and wise."

MISCELLANEOUS
 NOTES AND QUERIES,
 WITH ANSWERS.

" *The beginning of wisdom is the beginning of supernatural power.*"
 —PARACELSUS.

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No. 11.

Derivation of the Word Religion Examined.

Words shift their meanings when forced into new lines of thought, and after travelling in the new company awhile become clothed with false attributes, which are foreign to their origin. These are made to assume to be part of, and to give force to, the new attraction; but there is a genius in lingual construction that revolts at this pseudoism, finches at the misuse of its terms, and tries (often successfully) to recover the lost integrity, for

Ever the truth comes uppermost,
 And ever is justice done.

To illustrate this, let me mention one of the more abused instances found in the company of English words — "Religion." It is a word that no more means what it is claimed to mean by clergymen and some dictionaries, than John Bull's christmas pudding (innocent of plums) is a plum pudding. The interests of that great workshop of morals, and safety hereafter, the *Church*, required to have the christian virtues based on obligation and freedom of choice, and to give emphasis to this demand, twisted the word into meaning (radically) the bondage of obedience, and the freedom begotton of choice. Thus if one asked the meaning of this word, reference was made either to the Latin for "obligation," or the Latin for "freewill." Let us see with what injustice. The verb *religo* (to bind fast) makes *religatus*, its participle, and any English word evolved from it would take the shape of *relegation*. So likewise the verb *relego* (to choose once more) would have *relectus* for its participle, and evolve for its equation in English *relection*. Thus neither *religo* nor *relego* furnish the *unde*

derivatur of this English word Religion. Obviously we must go somewhere else to find it.

The Roman legion (Latin *legio*) was made up of ten Roman cohorts of five hundred soldiers each. Thus when some five thousand soldiers were massed they were called a legion — selected or chosen by the Roman governor from the people at large.

The echoing tramp of many feet
Made halt to hear the words.

It was natural then when soldiers of the cross mustered in, the army of the Lord, so numerously, to think of them as Legions, for that is what they were as General Booth so well understood ; and there can be no objection made to the wish of christendom to have Religion mean professional belief, and the observance of rites and ceremonies for the soul's salvation. The point of objection is to the wrong done in attempting to legitimize spurious offspring, and deliberately falsifying its birthright.

The word Religion is derived from the genitive case of the Latin noun *religio* which is *religionis* and which anglicized becomes Religion, assembling. "That and nothing more." C. B. B.

THE LOGOS. "In the beginning was the *Logos*." (Vol. VIII, p. 369.) Our correspondent "ALEXANDER" desires to know from where John took the "*En arche en ho Logos*" with which he opens his gospel. The same words are found the *Rig-Veda* many years older than Plato, with which no doubt John was acquainted. The word *Logos* appears all through the works of Philo the Jew, a mystic, a cotemporary with John ; yet according to McClintock and Strong, Philo's *Logos* differed from John's *Logos*. John's *Word* "was with God, and was God." Philo's *Word* was the "original independent existence of matter (the *stuff, hyle*) of the world before it was framed." Philo's *Logos* cries, "Heaven and earth cannot contain me ; how much less can a human being." The *Word* in the Targums is MeMRaH.

CODEx GUELPHERBYTANUS. (Vol. VII, p. 146.) The codex that is known as the Guelpherbytanus is thus described in McClintock & Strong's "Cyclopædia," Vol. v, p. 726 :

"Q, *Codex Guelpherbytanus*, B, another palimpsest, containing fragments of Luke's and John's Gospels, discovered by Knittel, and published with other fragments by Tischendorf, in his *Monum. Sacra*, 1869."

Twenty-Five False Messiahs.

The following are the twenty-five false Messiahs that are said to have arose from time to time in this era, according to McClintock & Strong's "Cyclopædia," Vol. VI, pp. 141-144 ; and Buck's "Theological Dictionary," pp. 590-595 :

1. Simeon who surnamed himself Bar-cocheba, "son of a star," appeared in the reign of Hadrian A. D. 130, claiming to fulfill the prophecy of Balaam (Num. XXIV, 17), took Jerusalem in 132, and was slain in 135.

2. Moses Cretensis arose in the reign of Theodosius the Younger 434, and pretended to be a second Moses sent to deliver the Jews who dwelt in Crete, promising to divide the sea and give them a safe passage through it. He escape from them soon as his promises failed.

3. Dunaan, who called himself the son of Moses, appeared in the reign of Justinian about 520. He entered a city of Arabia Felix and greatly oppressed the Christians, was taken prisoner and put to death by Elesban an Ethiôpean general.

4. One Julian was set up by the Jews and Samaritans as a King and Messiah in the reign of Justinian 529. These Jews and Samaritans rebelled against Justinian. Julian was captured, put to death.

5. Serenus arose in Spain as a Messiah in the time of Leo the Isaurian, about 721. Large numbers followed him, but all his pretensions came to naught.

6. In 1137, there appeared a Messiah in France who was put to death and several of his followers. Name not given.

7. In 1138, the Persians were disturbed by a Jew who called himself a Messiah. He collected a large army, was captured, put to death, and his followers maltreated. Name not given.

8. In 1157, a Messiah stirred up the Jews at Cordova, in Spain, collecting that scattered people preparatory to colonizing the entire world for the millenium. He soon collapsed, and nearly all the Jews in Spain were destroyed. Name not given.

9. David Alroi (Alroy) arose in the kingdom of Fez, in 1167, and brought great trouble and persecution on the Jews and they were soon scattered throughout the country.

10. In 1167 there appeared in Arabia a prophet who claimed to work miracles. The king asked him for a sign to attest his miracles. He responded, "Cut off my head and I will return to life again." The king took him at his word and decapitated him, but he did not reanimate. Name not given.

11. About 1170, a Jew who dwelt beyond the Euphrates, called himself the Messiah and drew large multitudes of people around him. He said he had been a leper and had been cured in one night, and that was the proof of his mission. Name not given.

12. In 1174 a magician arose in Persia who seduced many of the common people and brought the Jews into great tribulations. Name not given.

13. David Almosser, a great cabalist, arose in 1176, in Moravia. He claimed to make himself invisible, but he was soon taken and put to death, and a heavy tax laid upon the Jews.

14. David-el-David appeared in Persia in 1199 as the Messiah of Reform of the twelfth century. He was a man of great learning, soon raised an army against the king, was taken, imprisoned, escaped, retaken, and beheaded.

15. Ismael Sophus arose in 1497, in Spain, and deluded many of the Jews. He soon perished and his followers were dispersed.

16. Pfefferkorn, a Jew of Cologne, pretended to be the Messiah. He afterwards turned his claims and said he was of the sect called Christians.

A German Rabbi, Ascher Lämlein, in 1502, gave himself out as a forerunner of an approaching Messiah, and called the people to repentance and urged an immediate removal to the East. He claimed the succeeding year would see them marshaled under the banner of the Messiah the "King of the Jews." He made many converts, both among Jews and Christians. He died suddenly and his followers scattered, some to the Christian cross and some to other sects.

17. David Reubeni, in the reign of Charles V of Portugal, suddenly appeared at the court of the king, about 1520, and found favor, and was sent as an ambassador to Clement VII in 1523-25, and was held in distinction at the papal court. He was joined by one Solomon Molcho who had set up as the prophet of the movement. Both were imprisoned, the former escaping, and the latter was burnt at the stake in 1532.

18. In 1615, there arose a Messiah in the East Indies, who was largely followed by the Portugese Jews who were scattered over the country. Name not given.

19. In 1624, there arose in the Low Countries a man who declared himself to be the Messiah of the family of David, and of the line of Nathan. He promised to destroy Rome and to overthrow the kingdom of Antichrist and the Turkish empire. Name not given.

20. In 1666, one Sabbathai Zebi, the greatest of all Jewish pretenders, made a great noise, and gained a great number of proselytes. He was born at Smyrna, and imposed on the Jews as "King of the

kings of the earth," and had many followers, some of which exist at the present time. He saved himself from being shot by three poisonous arrows by embracing Islamism.

21. Mordecai, a Jew of Germany, appeared in 1682, and made a considerable number of converts. He was soon detected and obliged to flee from Italy into Poland to save his life.

22. Frank, by birth a Polish Jew, appeared about 1750, came suddenly to the front endeavoring to revive the principles of Sabbathai Sebi with a new creed. He flourished as "Baron Frank." His funeral was attended by 800, and a cross set up over his tomb.

23. Moses Chayim Luzzatto, styled "Jekuthiel," flourished in Amsterdam about 1744. He actually believed himself to be the predicted Messiah of the Jews. He was a learned man.

24. Ari Shocher made his appearance in the far East, at Sena, at the beginning of this century. This was at Yemen. He claimed to do miracles; it is said his face shone like the sun; that the words, "Son of David" was engraved upon his hand; that he was invulnerable, and the like. He was waylaid and murdered, yet his followers say, he appeared in another form after the murder.

25. Jekuthiel, King of Israel, appeared in 1872, as a new Messiah, in Berlin. His seal bore the words, "*Lo bechail velo becoach ki im beruchi, amar Adonai Zabaoth*" ("Not with power, nor with force, but with my Spirit, says the Lord Zabaoth" — Zech. iv, 6). He disappeared suddenly. His name is found in I Chronicles iv, 18.

AMERICAN POSTAGE STAMPS. Each denomination of stamp contains a different head. There are twelve denominations, and twelve heads of American worthies :

- 1-cent. Benjamin Franklin, 1706-1790 (printer).
- 2-cent. Andrew Jackson, 1767-1845 (7th president).
- 3-cent. George Washington, 1732-1799 (1st president).
- 5-cent. Zachary Taylor, 1786-1850 (11th president).
- 6-cent. Abraham Lincoln, 1809-1865 (14th president).
- 7-cent. Edwin Stanton, 1815-1869 (statesman).
- 10-cent. Thomas Jefferson, 1743-1826 (3d president).
- 12-cent. Henry Clay, 1777-1852 (statesman).
- 15-cent. Daniel Webster, 1782-1852 (statesman).
- 24-cent. Winfield Scott, 1786-1866 (general).
- 30-cent. Alexander Hamilton, 1757-1804 (statesman).
- 90 cent. Matthew Calbraith Perry, 1795-1858 (naval officer).

Inscription on the Temple of Isis, at Sais.

A correspondent desires information as to the translation of the inscription on the temple of Isis, at Sais, in Egypt. We will give a page or two the various translations as they occur to us from such works as our library affords, so that the reader can observe the several forms of translation.

1. This is according to Plutarch, as given by Godfrey Higgins, in *Anacalypsis, an attempt to draw aside the Veil of the Saitic Isis*, Vol. I, p. 436-437, New York, 1878.

<i>Isis ego imi panto gegonos, kai on kai</i>	I, Isis, am all that has been,
<i>esomenon, kai to emon penlon</i>	that is or shall be ;
<i>oudeis ton thne</i>	no mortal man
<i>ton ape</i>	hath ever
<i>kalu</i>	me un-
<i>psie</i>	veil-
<i>n.</i>	ed.

2. Dr. Edward V. Kenealy says Plutarch either did not know, or dared not venture to transcribe the whole inscription, He gives it in *The Book of God, the Apocalypse of Adam-Oannes*, Vol. I, p. 29 :

I am All that is ; I am All that hath been ;
 I am All that will forever be ;
 And my Veil no mortal hath drawn aside.
The fruit that I brought forth was the Sun.

The vow of Arrius Babinus, as mentioned by Montfauçon, was :

To thee, Goddess Isis, who art One and All Things.

3. W. Winwood Reade, in his work, *The Veil of Isis, or the Mysteries of the Druids*, p. 10, gives the inscription thus :

“I am all that has been, that is, that shall be, and none among mortals has yet dared to raise my veil.”

Mr. Reade says that beneath this veil are concealed all the mysteries and learning of the past. He further says :

“ A young scholar, his fingers covered with the dust of venerable folios, his eyes weary and reddened by nightly toil, will now attempt to lift a corner of this mysterious and sacred covering.”

4. Anthon, in his *Classical Dictionary*, p. 688, gives the inscription :

“ I am all that has been, or that shall be ; no mortal hath hitherto taken off my veil.”

Apuleius, as quoted by Anthon, invokes her by the names of Eleusinian Ceres, Celestial Venus, and Proserpina ; she answers him by a general explanation of these names, as follows :

“ I am Nature, the parent of all things, the sovereign of the elements, the primary progeny of time, the most exalted of the deities, the first of the heavenly gods and goddesses, the queen of the shades, the uniform countenance ; who dispose with my rod the numerous lights of heaven, the salubrious breezes of the sea, and the mournful silence of the dead ; whose single deity the whole world venerates in many forms, with various rites and many names. The Egyptians, skilled in ancient lore, worship me with proper ceremonies, and call me by my true name, Queen Isis.”—*Metamorphoses* II, p. 257.

5. McClintock & Strong, in their *Cyclopædia*, have several forms :

“ I am the all, that has been, is, and shall be, and my cloak has no mortal lifted yet.”—Vol. IV, p. 689.

“ I am all that was, and is, and is to be ; no mortal has lifted up my veil ; and the fruit which I brought forth is the sun.”—Vol. IV, p. 930.

The power and greatness of Osiris is expressed in the following inscription said to have been found on an ancient monument erected to Osiris :

“ Saturn the youngest of the gods, was my father ; I am Osiris, who conducted a large and numerous army as far as the deserts of India, and travelled over the greatest part of the world, and visited the streams of the Ister, and the remote shores of the ocean, diffusing benevolence to all the inhabitants of the earth.”

Rules of Sir Matthew Hale.

The following eighteen rules were formulated by Chief Justice Hale as a guide for his conduct as a judge. They ought to be inscribed in letters of gold on the walls of Westminster Hall, as a lesson to those entrusted with the administration of justice.

" Things necessary to be continually had in remembrance.

1. That in the administration of justice I am intrusted for God, the King, and the country; and therefore,

2. That it be done: Firstly, uprightly; Secondly, deliberately; Thirdly, resolutely.

3. That I rest not upon my own understanding or strength, but implore and rest upon the direction and strength of God.

4. That in the execution of justice I carefully lay aside my own passions, and not give way to them, however provoked.

5. That I be wholly intent upon the business I am about, remitting all other cares and thoughts as unreasonable and interruptions (and while on the bench, not writing letters or reading newspapers).

6. That I suffer not myself to be prepossessed with any judgment at all, till the whole business and both parties be heard.

7. That I never engage myself in the beginning of any cause, but reserve myself unprejudiced till the whole be heard.

8. That in business capital, though my nature prompt me to pity, yet to consider there is a pity also due the country.

9. That I be not too rigid in matters purely conscientious where all the harm is diversity of judgment.

10. That I be not biased with compassion to the poor, or favor to favor to the rich, in point of justice.

11. That popular or court applause or distaste have no influence in anything I do, in point of distribution of justice.

12. Not to be solicitous what men will say or think, as long as I keep myself exactly according to the rule of justice.

13. If in criminals it be a measuring cast, to incline to mercy and acquittal.

14. In criminals, that consist merely in words, where no more harm ensues, moderation is no justice.

15. In criminals of blood, if the fact be evident, severity is justice.

16. To abhor all private solicitations, of what kind soever, and by whomsoever in matters depending.

17. To charge my servants:

Firstly, Not to interpose in any matter whatsoever.

Secondly, Not to take more than their own fees.

Thirdly, Not to give any undue precedence to causes.

Fourthly, Not to recommend counsel.

18. To be short and sparing at meals, that I may be the fitter for business."

(From the original in Hale's own handwriting. I could only wish that, further, he had given a caution against interrupting counsel, and against loquacity on the bench, with a repetition of Lord Bacon's maxim: "A much-speaking judge is a no well-tuned cymbal.")—"Lives of the Chief Justices of England," by John Lord Campbell.

POPES NAMED JOHN. How many Popes have there been whose name were John? GODLOVE.

A reference to the line of succession of the Popes reveals a rather remarkable list of Popes named *John*, there being 23.

John I, VIII, X, and XI were imprisoned. John II, III, V, VI, VII, XV, and XX were nonentities. John IV, and XXII were charged with heresies. John XI had Sergius III for a rival Pope. John XII, XIII, XIV, XIX and XXIII were deposed. John XVI, and XVII were expelled. John XVIII abdicated. John XXI was accidentally killed.

HEBREW NAMES. Was the name *Solomon* the real word-name by which he was known or called in his day? HENRY.

J. W. Ethridge, in his work, "Jerusalem and Tiberias; Sora and Cordova," p. VII, says that the patriarchs, prophets, and kings would scarcely recognize their own names were they to see them in the modern versions of our scriptures. For examples: Moses for *Mushe*, Enoch for *Chanok*, Eleazar for *Elasar*, Solomon for *Shelomo*, Rebekah for *Rivkah*, Nehemiah for *Nechem'ya*, Zephaniah for *Tsephan'ya*, Zechariah for *Zekar'ya*, Ezekiel for *Yechesekel*, Isaiah for *Yeshayah*, Jeremiah for *Yerem'ya*.

RE-INCARNATION. What are some of the strongest expressions of modern divines that seem to favor the doctrine of re-incarnation, or metempsychosis? PSYCHO.

"Behold I will send you Elijah the prophet before the coming of the great and dreadful day of the Lord."—*Mal.* IV, 5.

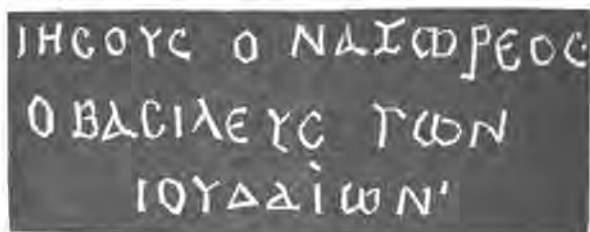
"Elias truly shall first come and restore all things."—*Jesus.*—*Matt.* XVII, 10.

"This is Elias, which was to come."—*Jesus.*—*Matt.* XI, 14.

"Adam, and Enoch, and Noah, might in outward appearance be different men, but they were really the *selfsame* divine person who had been promised as the seed of the woman, successively animating various human bodies."—*Origin of Pagan Idolatry*, by Rev. Geo. S. Faber, Vol. III, 612-613.

THE GREEK INSCRIPTION ON THE CROSS. What was the Greek inscription on the cross ?
-HORATIO.

The following is a fac-simile of the inscription, taken by Dr. Adam Clark from a copy of the *Codex Bezae*, which was first delineated in the fourth century, and resembles the autographs of the earliest ages of christianity : •



It is known that the Greek Σ (S) was anciently constructed like the Roman C, and was so used for several centuries ; and therefore the Greek *IHC* of the Eastern church was afterwards changed by its rival of the West to the Roman *IHS*. The above inscription in Roman capitals is

IESOUS O NAZOREOS, O BASILEUS TON IOUDAION.

The letters *IHS* are *IES* of the first word. This is also written *YES*, and its numerals in Greek (Y 400, E 8, S 200) amount to 608, which is a cycle of years said to be connected with the advent of the incarnations ; of this see Higgins' "Anacalypsis," Vol. I, p. 462.

Many modern clergymen claim that *IHS* was derived as a monogram from the initials of *Jesus Hominum Salvator*. The Knightly Orders derive their *IHS* from the initials of *In Hoc Signo*.

Several other monograms are derived from *IESOUC XPISTOC*, *JESUS CHRIST*, such as *IC-XC*, and *CHC* ; also, *CHR* with the *X* engraved over *P*. (See Didron's "Iconography," p. 212.)

Query. On the title-page of Geo. R. Gliddon's work "Otia Ægyptiaca ; or Discourses on Egyptian Archæology and Hieroglyphical Discovery," is the following monosyllabic distich. What is the English ?

Qui si fa quel che si sa ;
E si sa quel che si fa

H.

ORACLES. I have from time to time observed that you speak of, and quote from, the ancient Oracles, some called Sibylline Oracles, and others. Can you name some of the literature on the subject ?

HAVEN RODWORTH.

The available works on what are known as the heathen or ancient oracles are somewhat scarce. A new translation of the "Sibylline Oracles" has been recently made by Milton S. Terry, and published in New York and Cincinnati, in 1890. Those at our command are as follows :

The History of Oracles, in Two Dissertations, wherein is proved : I. That the Oracles were not given out by *Dæmons*, but were invented and supported by the *Craft* of the *Pagan Priests* II. That the Oracles did not cease at the coming of Jesus Christ, but subsisted four hundred years after it, till the entire abolition of *Paganism*. By M. de Fontenelle, member of the Royal Academies of Paris. Translated from the best edition of the original French, by S. Whateley. London. 1750. 12mo ; old calf ; pp. 218.

An Answer to Mr. de Fontenelle's History of Oracles ; in which Mr. *Van-Dale's* System concerning the authors of the Heathen Oracles, and the cause and time of their silence is confuted ; and the opinion of the Fathers upon that subject vindicated. Translated from the French by a Priest of the *Church* of England. With Reflections upon the Remarks of *Mr. Le Clerc*, in his "Bibliothèque Choisie," in a Preface. To which is prefixed a Letter to the Translator. London. 1709. 8vo ; old calf ; pp. 244.

Gleanings of Antiquities ; containing a Discourse on Oracles, giving an account of the Sibylline Oracles ; with an uncommon explication of Virgil's Fourth Eclogue, and some other parts of his works relating to them. To which is added an account of the Oracles delivered at *Delphos*, and in other Temples of the Gentiles ; and the rise and cessation of Oracles, both among the Jews and Gentiles. By John Beaumont, *Gent*. London. 1724. 8vo ; old calf ; pp. 145.

The Sibylline Oracles. Translated from the best Greek copies and, compared with the Sacred Prophecies, especially with *Daniel* and the *Revelations*, and with so much History as plainly shews, that many of the Sibyl's Predictions are exactly fulfilled, with answers to the objections usually made against them. By John Floyer, Knight. London. 1713. 12mo ; old calf ; pp. 320.

A Vindication of the Sibylline Oracles. To which are added the *Genuine Oracles* themselves ; with the Ancient Citations from them ; in their Originals, and in English ; and a few brief notes. By William Whiston, M. A. "Is He the God of the Jews only ? Is He not also

of the Gentiles ? Yes, of the Gentiles also."—*Romans* III, 29. London. 1715. 8vo ; old calf ; pp. 103.

Sibylline Oracles. A review of "Sibyllina Oracvla," by D. Iohanne Opsopœo Brettano, MDCVII. Sibylliæ Liber XIV, by Angelo Maio, MDCCCXVII. A Vindication of the Sibylline Oracles, by William Whiston, 1715. 8vo. pamphlet ; pp. 28. This review was written by J. M. S., and published in 1848.

The Sibylline Oracles. Translated from the Greek into English blank verse, by Milton S. Terry. New York and Cincinnati. 1890. 8vo ; cloth pp. 269.

The following inscription is found on the sepulchre of the Cumæan Sibyl Hierophile, in the grove of Smintheus, according to the Alexandrians who called her the guardian of the Sminthean Apollo :

" I am the wise interpreter of Apollo, *Sibylla*,
 Though here I lie mouldering in a marble mound,
 Under the power of iron destiny I inherit this footstool.
 But still I lie beside the nymphs, and this Mercury defends me.
 This the reward, since I wait the behests of Apollo."

" A STAR OUT OF JACOB." NUM. XXVI, 17. (Vol. VIII, p. 242.) A Jew in the reign of Hadrian A. D. 130, who bore the name of Simeon Bar-cocheba, which latter name means "son of a star," applied to himself the prophecy of Balaam, "There shall come a star out of Jacob," and incited the Jews to revolt against the emperor. He passed for the Messiah and was supported by Akiba the chief of the Sanhedrim. He issued coins which were inscribed "Freedom of Jerusalem." He took Jerusalem A. D. 132. A coin in the British Museum bears the inscription in old Hebrew, "For the deliverance of Jerusalem," and on which is engraved a star. Münter concludes from the temple also engraved on it that Bar-cocheba actually commenced the rebuilding of the temple. The enemies of Bar-cocheba changed his name in to Bar-cozeba which means "son of a lie."

THE ARVAL BROTHERS. (Vol. VIII, p. 258.) According to Herbert (*Nimrod*, Vol. III, p. 210), on the authority of Aulus Gellius, the Arval Brothers were the twelve sons of Acca Laurentia, one of whom being dead, Romulus agreed to supply his place. In this story we have the Egyptian religion of the twelve Dii Consentes, and it might seem as if the founders had got some inkling of the reprobation of

Dan and consequent election of Ephraim. The "twelve fratres aruales" are the twelve Salii, or dancing priests. Learned men have spoken of the "Song of the Arval Brothers" as a specimen of Latinity more ancient than the *Saliaric Poems*, most strangely failing to see that the son is no more nor less than a *Saliaric* poem.

1. That the priests tripudiate as they sung it.
2. From the word *sali* in the third invocation.
3. From the address to the Mamurius Veturius in the last.
4. From the fourth and nameless Deity of the Arvale Fratres, being he to whom the ancile or consecrated shield was dedicated.

SONG OF THE ARVAL BROTHERS.

- | | |
|--|---|
| <ol style="list-style-type: none"> 1. Enos Laia jurate ! 2. Neve luer Vemarmar
Sins Incurrer eiu pleorae !
Satur infere Mars ! | <ol style="list-style-type: none"> 3. Lumen sali, ata Berber ! 4. Semunes alternai,
Ad vo capit cunctos ! 5. Enos Mamor Juvato !
Triompe ! Triompe ! Triompe ! |
|--|---|

TRANSLATION OF THE SONG.

- | | |
|--|--|
| <ol style="list-style-type: none"> 1. Oh ye Three Dii Lares help us ! 2. And thou, O Evil-Marmar,
Let not thy poison invade more;
Be saturated, Oh Mars. | <ol style="list-style-type: none"> 4. Stop the advancing edge,
Or threshold of the sea. 1. Ye alternate semi-gods,
Receive us all unto yourselves. 5. Asalet us, Mamor. |
|--|--|

The song is not only *Saliaric*, but also *Masonic*. The exclamation, "Triompe, Triompe, Triompe!" refers to the division of tongues which was trinal in respect to the families of the three Noachidæ, and the word means the "three voices" from God.

Winnipeg Orthographies.

- | | |
|------------------------------|-----------------------------|
| Quinipigon—Verendrye, 1734. | Winipic—Mackenzie, 1789. |
| Ouinipique—Dobbs, 1742. | Winipick—Harmon, 1800. |
| Vnipigon—Galissoniere, 1750. | Winipic—Lord Selkirk, 1816. |
| Ounipeg—Bougainville, 1757. | Winepic—Ross Cox, 1817. |
| Ouinipigon—Jefferys, 1760. | Winnipic—Schoolcraft, 1820. |
| Ounipique—French map, 1776. | Winnipeek—Keating, 1823. |
| Winnipeck—Carver, 1768. | Winnipeg—Beltrami, 1823. |
| Winnipegogon—Henry, 1775. | Winnipeg—Capt. Back, 1833. |

The name is derived from WIN, *dirty*, and NEPE, *water*. A green vegetable growth is found in the water in the summer months. Lake Winnipeg was formerly called Christineaux Lac and Lac Bourbon, Little Winnipeg was called Winnipigoosis. N. B. W.

THE CELTS, OR KELTS. Who were the Celts or Kelts? ORR.

A race that at one time peopled almost all Western Europe. They possessed France, much of Germany, most of Spain and Portugal, Ireland, Wales, Cornwall, and Britany. The Celts of France were called Gaels (Gauls), those of Britain and Belgica were called Cymri. Druidism was properly Cymric. After the Saxon and Danish invasions England largely became Teutonic, and after the Norman conquest it became still more so. In Ireland and the Highlands of Scotland we still find Gaels; but in Wales and Low Britany we find Cymri.. Kelt and Gael are mere varieties of the same word Kelt-ai, Galat-ai, Galli, Gaul, Gael.

ABRACADABRA. (Vol. VII, 146.) Abraxas was a word used by the Basilidians to designate their supreme god. Mystical and cabalistic powers were ascribed to it. It is compounded of the Greek letters, *ABRAXAS*, and was early adopted as a charm. The singular word *abracadabra* is supposed to be derived from *abraxas*, and to be endowed with magical potency when written in the form of a triangle,

A B R A C A D A B R A
 A B R A C A D A B R
 A B R A C A D A B
 A B R A C A D A
 A B R A C A D
 A B R A C A
 A B R A C
 A B R A
 A B R
 A B
 A

and suspended from the neck by a linen thread. According to Serenus Samonicus diseases were cured when worn in this manner.

C. W. King, in "The Gnostics and their Remains," pp. 81, 233, says the normal invocation, ABLANATHALBA ("Thou art our Father"), addressed to Iao, becomes by a slight corruption, due to the Latin pronunciation, the long-famous charm ABRACADABRA. On the latter page, however, he gives it *ABLANATHANALBA*, and says the word was written with some variations. He observes that it is from the Syriac *Ab*, Father; *lanu*, to us; *atha*, thou art.

This word on the *Abrahas* stones encircles Phœbus in his quadriga, holding in one hand the terrestrial globe, and the other raised in the gesture of command. Under this solar symbol *Meihras*, or the "Sun of Righteousness" (Malachi iv, 2) is understood. There is an occult meaning attached to these names. *Belenus* is another of these arcane words. They each means the sun, and each is numerically composed of 365, as follows :

A = 1	B = 2	M = 40
B = 2	E = 8	E = 5
R = 100	L = 30	I = 10
A = 1	E = 5	TH = 9
X = 60	N = 50	R = 100
A = 1	O = 70	A = 1
S = 200	S = 200	S = 200
365	365	365

Basnage says the word *abracadabra* is of Egyptian origin ; Beausobre says it is Greek ; Grotendorf says it is Persian, or Pehlevi origin. On Greek amulets it is inscribed ABRACADABRA, and hence it is said to be pronounced *Abrasadabra*, by Grotendorf. He derives it from the Persian *Abrahas*, the name of the Supreme Being and a Chaldee word meaning *the utterance*, so that the meaning of the word is "the divine oracle." Grotendorf says it corresponds to the Thibetan and Mongolian *Hommani Pene-Hum*, which is the *Om, mani padme, hum* of the Buddhists. The word ABLANATHANALBA is a palindrome and is written in several forms :

<p>A B L A N A T H A N A L B A B L A N A T H A N A L B L A N A T H A N A L A N A T H A N A N A T H A N A T H A T H A T H A N A T H A N A N A T H A N A L A N A T H A N A L B L A N A T H A N A L B A B L A N A T H A N A L B A</p>	<p>A B L A N A T H A N A L B A B B B B L L L L A A A A N N N N A A A A T H T H A A A A N N N N A A A A L L L L B B B B A B L A N A T H A N A L B A</p>
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Intimations of Immortality.

BY WILLIAM WORDSWORTH.

Our birth is but a sleep and a forgetting ;
The soul that rises with us, our life's star,
Hath had elsewhere its setting,
And cometh from afar.
Not in entire forgetfulness
And not in utter nakedness,
But trailing clouds of glory do we come
From God who is our home.
Heaven lies about us in our infancy ;
Shades of the prison house begin to close
Upon the growing boy ;
But he beholds the light, and whence it flows
He sees it in his joy.
The youth who daily from the East
Must travel, still is nature's priest,
And by the vision splendid
Is on his way attended.
At length the man perceives it die away
And fade into the light of common day.

Seven Pillars of Hypothesis of Pre-existence.

[From "*Lux Orientalis*," by Joseph Glanvil.]

1. All the divine designs and actions are carried on in pure and infinite goodness.
2. There is an exact geometrical justice that runs through the universe, and is interwoven in the contexture of things.
3. Things are carried to their proper place and state by the congruity of their natures ; where this fails we may suppose arbitrary management.
4. The souls of men are capable of living in other bodies terrestrial ; and never act but in some body or other.
5. The soul in every state hath such a body as is fittest to those faculties and operations that it is most inclined to exercise.
6. The powers and faculties of the soul are either spiritual or intellectual, or sensitive or plastic.
7. By the same degree that the higher powers are invigorated, the lower are abated, as to their proper exercise.

MISCELLANEOUS

NOTES AND QUERIES,

WITH ANSWERS.

"The last of crimes which is forgotten is that of announcing new truths."
—THOMAS.

Vol. VIII.

DECEMBER, 1891.

No. 12.

Asteroids and Discoverers, 1887 - 1891.

Continued from NOTES AND QUERIES, Vol. VIII, p. 346.

No.	Name.	Discovered.	Discoverer.
299.		Oct. 8,	Palisa ₇₄ .
300.	Geraldine,	Sept. 9,	Charlois ₁₄ .
301.		Nov. 16,	Palisa ₇₅ .
302.	Clarissa,	Nov. 14,	Charlois ₁₅ .
303.		Feb. 12, 1891,	Millosevich ₁ .
304.		Feb. 14,	Palisa ₇₆ .
305.		Feb. 16,	Charlois ₁₇ .
306.		March 1,	Millosevich ₂ .
307.		March 5,	Charlois ₁₈ .
308.		March 31,	Borrelly ₁₀ .
309.		April 6,	Palisa ₇₇ .
310.		June 11,	Charlois ₁₉ .
311.		Aug. 14,	Palisa ₇₇ .
312.		Aug. 23,	Charlois ₂₀ .
313.		Aug. 30,	Palisa ₇₈ .
314.		Sept. 1,	Charlois ₂₁ .
315.		Sept. 4,	Palisa ₇₉ .
316.		Sept. 4,	Palisa ₈₀ .
317.		Sept. 8,	Charlois ₂₂ .
318.		Sept. 11,	Charlois ₂₈ .

The above table brings down the table of asteroids to No. 311, discovered Sept. 11; the names of 299, 301, 303-318 are not yet given.

SYBIL, OR SIBYL. (Vol. VIII, p. 274.) In answer to "INQUIRER," who asks for the spelling of the word *Sibyl*, we have examined the book referred to, and observe that the change from spelling the word *Sybil* to *Sibyl* begins on page 65, thus indicating that the author, or proof-reader, became convinced that the form *Sybil* was wrong, as the book appears to be printed in *eighths* according to the *signatures*. Anthon and other classic authorities give the Greek word *Sibylla*. The recent translation of the "Sibylline Oracles," by Milton F. Terry, Chicago, 1890, p. 209, has the form *Sybil* once, in a note, but we think it is a slip of the typo.

"CECROPIA'S PILLARED STATE"—POEM. (Vol. I, p. 221.) A correspondent ("L. C. Mc.") in August, 1863, sent the question asking for the authorship of the poem commencing,

" Heard ye those loud contending waves,
That shook Cecropia's pillared state."

No answer has been received to this query. We have received the same question from W. C. Jones, St. Louis, Mo. The poem is found in "Town's (Salem) Fourth Reader" (revised edition), Portland, 1852, p. 64, where it is given as an exercise to illustrate *transition*; but the author's name does not appear. Can some of our readers enlighten us all on the authorship?

JESUS-PAPER. What kind of paper is that known as *Jesus-paper*?

Webster's "Unabridged" readily gives the information: "A large-sized French printing paper, corresponding in size to imperial; so called because formerly marked with the characters *I. H. S.*, meaning Jesus."

SEPTEM-TRI-ONES. (Vol. VIII, p. 274.) Herbert's "Nimrod," Vol. I, p. 9, says "the incarnation of the entire Triad is not unknown in the Pagan fables. It occurs in the triplicity of Apollo and Diana; and all the Seven who sailed with Noah to the Arctic Mountain were called Septem Tri-Ones, the Seven Triunals." Hence, the triple word was applied to the seven stars forming the Great Dipper.

PARANATELLON. (Vol. VIII, p. 242.) The word *paranateillon* is not found in Webster's "Unabridged," but this word is found in Wm. Drummond's work entitled "Œdipus Judaicus," in an article on the "Forty-Ninth of Genesis." He gives a learned dissertation on the origin and meaning of the Signs of the Hebrew Zodiac, and on Leo he has the following :

The sceptre shall not depart from Judah, nor a lawgiver from between his feet, until Shiloh come ; and unto him shall the gathering of the people be.—Genesis XLIX, 10.

The constellation of Cepheus, king Æthiopia, is still represented as a man with a crown on his head, and with a sceptre in his hand. This constellation rises, according to Columella, on the 7th of the Ides of July. Thus Cepheus in the course of some days comes to rise under Leo, of which it continues to be the *paranateillon* until the sun enters into the sign of Scorpius.

The word *mehukek* which we translate "a lawgiver," is shown by Bochart to be a corruption of *hyk* which was the old Ærhian word for "King." Hence Jacob thus distinctly says :

The constellation represented by a King bearing a sceptre, shall not cease to be the paranateillon of the Lion, which is the sign of Judah, until Shiloh come.

The King with his sceptre sets about the time that Scorpius rises, and then ceases to be the *paranateillon* of the Lion.

This much says Drummond. Hence, it would appear *signally* that Cepheus arose set *cosmically* with the Lion, and *acronically* with Scorpius. Drummond thinks that *Shiloh* has an astronomical allusion to *Cepheus* the King. Inasmuch as the word *paranateillon* is not of familiar use, we will add that Drummond uses the form of the word *paratanellon* also, in the same article and in the same sense as *paranateillon*. Which is the correct word ?

THE SECRET DOCTRINE. The *Catechesis Arcani*, or Secret Doctrine, having been enquired for, and as it is a document containing much information concerning the mysteries, and rites of the primitive church, we have appended it entire to this number. It is full of esoterism of which the fathers of the church were more or less acquainted with, and some of them seem to be well versed in it, but held it to be a sacred duty to say but little about the covered meaning.

THE ARK-BORN MAN. (Vol. VII, p. 98.) A note on page 37, in Herbert's "Nimrod," Vol. II, says, "*Kybelc* is the Ark, and as Cush was begotten in the Ark, his posterity were in a peculiar sense descended from that ship. He is also called "ark-born" in the same work. The word for Ark is *Theba*, from which comes *Thebes*. Hence, ark-begotten, secretly-begotten. Some say Cush was born the day that the rainbow appeared. The meaning of Thebes is arkite, arcane, or secret (Vol. VII, p. 194).

CESSATION OF ORACLES. (Vol. VIII, p. 242.) Eusebius was the writer who stated that all oracles ceased at the birth of Jesus Christ. He made the statement based on some remark of Porphyry.

" An Hebrew child, a god, whom Gods adore,
Has bid me leave these shrines and go to hell,
So that my oracles you'll hear no more;
Away, then, from my altar, and farewell."

ORDER OF THE GOLDEN FLEECE. (Vol. VII, p. 162.) This Order was instituted January 10th, 1829, at Burges, by Philip the Good, Duke of Burgundy and Brabant, and Count of Flanders, on the day of his marriage with his third wife, the Infanta Isabella of Portugal. The ancient motto of the Order was *Autrc n'auray*, "I will have no other." The Sovereign of the order can admit any person, without chivalric proof, as the fundamental code says: "That whoever is the object of the choice of the Sovereign, possesses, in virtue of his so being, every requisite which may entitle him to admission therein." A badge—a golden fleece—suspended from a flintstone proper, was worn from a flame-colored ribbon. At first the Order was attached by alienable rights to the Dukes of Burgundy, as Counts of Flanders.

This Order of the Golden Fleece has nothing to do with that mystical Fleece for which the expedition of the Argonauts was made under Jason in ancient classic history.

NATIONAL FLOWERS. (Vol. VII, p. 72.) The national flowers of the leaning nations are as follows :

Athens,	The Violet.	Ireland,	Shamrock-leaf.
Canada,	Sugar Maple.	Prussia,	Linden.
England,	Red Rose.	Saxony,	Mignonette.
Florence,	Giglio (Lily)	Scotland,	Thistle.
France,	Iris Lily.	Walcs,	Leek-leaf.

Labyrinth of St. Bernard.

Labyrinthus a Divo Bernardo compositus quo bene vivit homo.

Dicere	Scis	Dicit	Scit	Audit	Non vult
Facere	Potes	Facit	Potest	Incudit	Non credit
Crederere	Audis	Credit	Audit	Credit	Non est
Dare	Habes	Dat	Habet	Miserequaerit	Non habet
Judicare	Vides	Judicat	Videt	Contemnit	Non debet
Noli	Omnia quae	Quia qui	Omnia quae	Saepe	Quod

“ Noli dicere omnia quae scis, quia qui dicit omnia quae scit, saepe audit quod non vult.”

“ Noli facere omnia quae potes, quia qui facit omnia quae potest, saepe incunt quod non credit.”

“ Noli credere omnia quae audis, quia qui credit omnia quae audit, saepe credit quod non est.”

“ Noli dare omnia quae habes, quia qui dat omnia quae habet, saepe misere quaerit quod non habet.”

“ Noli judicare omnia quae vides, quae qui judicat omnia quae videt, saepe contemnit quod non debet.”

The following is a concise and clear translation of the Labyrinth of St. Bernard :

1. Be unwilling to tell all you know, because he who tells all he knows, often hears what he does not wish.

2. Do not wish to do all you can, because he who does all he is able, frequently forges that which he does not believe.

3. Be unwilling to believe all you hear, because he who believes all he hears, often trusts that which is not (true).

4. Do not give all you possess, because he who gives all he has oftentimes diligently seeks what he has not.

5. Do not judge all you see, because he who judges all he sees, often condemns that which he ought not.

WILL-POWER. Can a person will to live when nature ceases to furnish the vital force?

ACHSAH.

This is a somewhat strange question to propose to our readers, yet we give it a place, and our readers speak for themselves. We give an initial word from Dr. George M. Beard who is an authority on matters of the mind, will and the like :

"The force of the will is a potent element in determining longevity. This single point must be granted without argument, that of two men everyway alike and similarly circumstanced, the one who has the greater courage and grit will be the longer-lived. One does not need to practice medicine long to learn that men die who might just as well live if they resolved to live, and that myriad who are invalids could become strong if they had the native or acquired will to vow they would do so. There are those who have no other quality favorable to life, and whose bodily organs are nearly all diseased, to whom each day is a day of pain, and who are beset by life-shortning influences, yet do live by will alone."

"ACHSAH", should read that singular little work, published by G. P. Putnam's Sons, 1883, entitled "The Possibility of Not Dying," by Hyland C. Kirk.

LOST TEN TRIBES. (Vol. VIII, p. 370.) The form of this question leaves the writer's meaning a little indefinite to me. The writers of the Bible do not seem even to have regarded the "Ten Tribes" as *lost*. It is rather singular that *ten* are enumerated. There were said to have been twelve, or dividing the "children of Joseph," thirteen. Of these, Levi, Judah, Benjamin, and Simeon, belonging in the southern monarchy, were not departed into Media. Again, Second Chron. xxx, 6, speaks of "a remnant that are escaped out of the hands of the kings of Assyria," of which were (xxx, 18) "a multitude of the people, even many of Ephraim and Manasseh, Issachar and Zebulun." So Second Kings xvii, 6, gives the last mention of the Assyrian conquest, while the books of Isaiah and Zephaniah seem to refer to them as continuing to exist.

A. WILDER.

RINGING THE CHANGES. (Vol. VIII, p. 378.) Referring to "Ringing the Changes," in the September No. 1891, I send the following: A cockney being charged with not knowing how to spell "saloon," refuted the accusation as follows: "Ho yea hi oo—there's a hess, and a hay, and a hell, and two hoes, and a hen."

PRIGGLES.

SANSKRIT QUOTATION. (Vol. VIII, 402.) The translation of the Sanskrit quotation.

“Āhō ! Sivā̄ ! Īsā̄ ! Ād'hisā̄ ! Ādyē sēvā̄ ! ”

is thus given by Rev. Geo. Oliver, in “ History of Initiation,” p. 101 :

“ Hail ! O Siva ! Lord ! Supreme ! Salutation to the first existent ! ”

This is similar to the cry which according to Strabo originated in the East, when the worshippers of Bacchus in unison vociferated :

“ Evoe ! Sabai ! Bacchi ! Hues ! Attes ! ”

All of which are names of Bacchus. It is quite probable, however, that these species of invocation were borrowed from the patriarchal worship of the Hebrews (Ex. xxxiv, 6, 7). where God announced his divinity by ten appellations.

ZARATHUSTRA, NOT ZARATHURSTRA. (Vol. VIII, 369). Zarathustra, not Zarathurstra, is the purest form, and meant in the original, “ All Pure,” or “ All Light.”

The record relates that his mother was obsessed before she conceived and was not allowed to wake from her unconscious trance during the time of maternity, and her soul was oft taken to high heaven, to behold its glories. Thus the child was *All Light*, and on the day the infant Zarathustra was born the angel left, and Too'che — the mother—proclaimed that *no man* was the father of the child, but that she conceived of, or from the “ All Light.” So believing because of the trance as related.

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“ FOR MUCH HE KNEW, BUT EVERYTHING KNEW ILL.” (Vol. VIII, p. 402.) This questioner will find the line he quotes on page 642 of Anthon's “ Classical Dictionary,” where it is related that it is a line from one of the lost works of Homer entitled *Margites* (“ The Block-head”). It is said by Harpocration that Callimachus greatly admired this poem, and Dio Chrysostom says Zeno wrote a commentary on it. Two other similar lines have been preserved by Aristotle, and one in the scoliast to the *Birds of Arpisthanes*, verse v. Anthon does not quote these referred to.

GOLDEN MOTTOES.

A vain man's motto,	Win gold and wear it.
A generous man's motto,	Win gold and share it.
A miser's motto,	Win gold and spare it.
A profligate's motto,	Win gold and spend it.
A broker's motto,	Win gold and lend it.
A fool's motto,	Win gold and end it.
A gambler's motto,	Win gold and loose it.
A sailor's motto,	Win gold and cruise it.
A wise man's motto,	Win gold and use it.

RHYME AND RHYTHM.

- FAME—A meteor dazzling with its distant glare.
 WEALTH—A source of trouble and consuming care.
 PLEASURE—A gleam of sunshine passing soon away.
 LOVE—A morning stream whose memory gilds the day.
 FAITH—An anchor dropped beyond the vale of death.
 HOPE—A lone star beaming o'er the barren heath.
 CHARITY—A stream meandering from the fount of love.
 BIBLE—A guide to realms of endless joy above.
 RELIGION—A key which opens wide the gates of Heaven.
 DEATH—A knife by which the ties of earth are riven.
 EARTH—A desert through which pilgrims wend their way.
 GRAVE—A home of rest when ends life's weary day.
 RESURRECTION—A sudden waking from a quiet dream.
 HEAVEN—A land of joy, of light and love supreme.

“ For one word a man is often deemed to be wise, and for one word he is often deemed to be foolish ; we ought to be careful indeed what we say.”—CONFUCIUS.

CATECHESIS ARCANI.

(*The Secret Discipline*)

OF ANCIENT ECCLESIASTICAL HISTORY EXPLAINED, BY THEODORE TEMPLE.

There is no one at all acquainted with Freemasonry but must have been struck with the constant reference which it has to the Temple built by Solomon, accompanied with allusions to the Gospel History; through the application of this reference, and the pertinency of these allusions by those who, to show the antiquity of the sacredness of the Institution, have written or declaimed on the subject, has often served to increase, rather than to remove, the incredulity of the uninitiated.

To explain what has been very imperfectly understood in this respect and reconcile what has seemed to be contradictory and inconsistent, is the design of this dissertation.

A difficulty, however, is met at the outset, occasioned by the want of *written records* relative to the origin and primitive history of Freemasonry; the particulars of which, having been transmitted only by *tradition*, have sometimes been incorrectly recapitulated, and, at length, are become exceedingly obscure; so that the authorities which I am about to cite in corroboration of my statements, must be collected from *incidental* imitations given in the writings of the fathers, principally within five centuries from the introduction of Christianity. These, however, when collected and summed up, will be found to furnish evidence that this secret society is filiated to Christianity; and, of course, that its professions are not without foundation.

In the parting advice which our blessed Lord gave to his disciples, was this direction, "Take heed to yourselves, for they shall deliver you up to councils, and in the synagogues ye shall be beaten, and ye shall be brought before rulers and kings for a testimony against them."

Soon afterwards, they realized the troubles of which he forewarned them; and "being persecuted unto strange cities," were obliged to use

great caution, and adopt discreet measures of personal safety, by appointing the meetings of the faithful to be holden in private places, and under the concealment of darkness.

Commissioned to "go into all the world, and preach the gospel to every creature," they went forth, and preached in the name of Christ among all nations, beginning at Jerusalem.

Their first object was to make converts ; their next to gather churches or societies of believers ; and their third, to provide places for their assembling. As early as the second century, those who were employed in the last service were formed into a distinct association ; and, as they were to travel into distant regions, found it expedient to adopt certain means of recognition, should they meet with those who were engaged in the same cause, but with whom they had not been personally acquainted, "that they might strengthen each other's hands in the work of the house of God."

Moreover, as their undertaking excited popular opposition, they deemed it prudent to hold their meetings for devising measures of co-operation in places where they should neither be interrupted nor overheard. And because false bretheren might unawares be introduced, coming in privily to spy out their liberty, that they might bring them into bondage by an arrest from the magistrate, the faithful guarded against their intrusion, having determined not to give them place by condescension during the hour devoted to consultation. Lest, after all their precaution, covins and eaves-droppers might be near, still more effectually to cover the design of their fellowship from those who might divulge its object to their enemies, or indiscreetly talk about it to such as were not yet entirely attached to the cause, they avoided direct reference to their undertaking, and conversed together *figuratively and by the use of symbols*. Thus as their object was *to build in every land A HOUSE FOR RELIGIOUS WORSHIP*, in respect to its *spiritual edification* "upon the foundation of the apostles and prophets, JESUS CHRIST being the chief corner stone," and, as to its *material fabric and use*, an edifice or temple, for the assemblies of the saints, *they adopted allusions to the building of the Temple of Solomon*. The blessed JESUS, who, after the death of Joseph, had passed under the designation of "the widow's son," they personified by HIRAM ABIFF; from the traditionary account of whose fate, they borrowed allusions to that of their master. Thus, the outrage of the fellow-craftsmen to obtain advancement to which they were not entitled, they symbolized with the treacherous Judas ; and they received from those to whom they imparted a knowledge of these typical references, and of the purpose for which they were adopted, and the objects to which they applied, a solemn declaration, that, *rather than betray their LORD, or abandon his cause, they would suffer a similar fate to that of the traitor,—who "fall-*

ing head-long, after his strangulation, burst asunder in the midst, and all his bowels gushed out."

The *ineffable and mysterious name*, which the high priest could utter only in a whisper, as his password through the veil into the *sanctum sanctorum*, and which the Jews never dared to pronounce, but substituted for it ADONAI, was said to be lost at the death of our Saviour, when "the veil of the temple was rent in twain;" but recovered in the exclamation of Thomas on beholding the raised body of his master, and thenceforward adopted as the hailing word of the Fraternity.

The apostacy of Judas is quoted in the ritual of Freemasonry, where to the question, "Why should eleven make a lodge?" it is answered, "Because there were but eleven apostles when Judas betrayed Christ."

By a very singular *lapsus lingue*, the moderns have substituted in the third degree for *TUMBOCHEIN*, to be entombed.

This, in the ancient *Catechesis Arcani*, was the *pass-word*, from the symbolical representation of the state of death, to the restored and undying existence. Happy those, who, having gone through its preparatory form, are able to say, "We know that we have passed from death unto life, because we love the brethren. Still happier those, who, "planted together in the likeness of the death of CHRIST, shall be raised also in the likeness of his resurrection.

As those who went forth "to teach and to preach," divided their converts into three classes, the CATECHUMENS, COMPETENTS, and BELIEVERS, so they whose destination was "to build churches," formed three grades, or degrees,—*Katharoi*, PURI, those who entered by divesting themselves of all impurities, and every thing offensive; *Mnémenoi*, INITIATI, initiated; and *Teleioi* and *Teteleiómenoi* (past-masters) PERFECTI, those who were raised to the sublime degree. These terms, or appellations, became a little varied, as the members of the Order, in process of time, assumed the distinctive character of *actual workmen*.

The place which they procured and fitted up for assembling was, at first, an *upper chamber*, *Uperbon*. Of this many eminent writers have largely treated, and, particularly, a good account is given in a dissertation of the learned Dr. LEE, published in his Posthumous Works, vol. i. p. 261. Whether the word "Lodge" originated in the circumstance that the meetings were held in a lodging chamber, I pretend not to say; but the fact that meetings of the Masonic Fraternity have ever been held in such places, is of some consequence, as collateral confirmation of the statements which I have been making.

They being watched with jealousy, rendered such retired apartments peculiarly necessary to the early Christians. "Persecution was always attended with poverty, paucity of believers, and unsettled hopes; so that either they needed not stately and sumptuous buildings, or they

were not able to erect them ; or at least they had no invitation and encouragement to do it, whilst they were daily under apprehensions of seeing them plundered or demolished almost as soon as they had erected them."

They were even subject to the necessity of having their meetings under arches, and *the Royal Arch* of *TITUS* at Rome, decorated with representations of the spoils of the temple at Jerusalem, was a selected place. They congregated, also, in subterranean vaults, and even in tombs ; as is evident both from the Canons of the Council of *Eliberis*, which was held in the heat of the *Dioclesian* persecution, and often mentions their assembling in such places ; as also from the *Edicts* of the persecuting Emperors, forbidding Christians to hold assemblies in the cemeteries.

During the reign of those Emperors who distinguished themselves by their moderation, the Christians ventured to quit their vaults and catacombs, and erected some buildings which were set apart for the public worship of God ; but as they were in perpetual fear of persecution, even when they did not suffer it, as the Emperors were idolaters, they did not dare to give their churches an air of grandeur, lest the jealousies of the infidels should raise a new storm against them.

"In more peaceable times," *EUSEBIUS* remarks, lib. viii. c. 1. "the number of Christians so grew and multiplied in fifty years, that their ancient churches were not large enough to receive them, and therefore they erected from the foundations more ample and spacious ones in every city."

More certain and explicit accounts of such edifices occur during the third century. In the beginning of it, *TERTULLIAN* gives a description of them as standing on high and conspicuous places, towards the east ; and signifies that there was a distinction of places suited to the different orders and classes of those who assembled in them.

About the middle of the third century persecution against Christianity ceased ; and no fears or menaces of any kind deterred men from embracing it. Some distinguished officers of the Emperor's household at Rome openly professed it ; and the number of Churches there was computed to amount to forty. In the provinces, the lieutenant and subordinate governors could not but be actuated by a similar spirit of toleration and indulgence ; and hence either many new sacred fabrics were erected, or the old ones enlarged.

In the time of the Emperor *Constantine*, orders were given for forwarding and completing these works ; so that, according to *EUSEBIUS*, numerous churches were built in various regions, and some of a magnificent kind. Such were the stately structures erected by the Emperor at Jerusalem, Antioch, Tyre, as well as his own imperial city, *Constantinople* ; for, having transferred thither the seat of empire, he judged

it incumbent on him to give an unequalled splendor to it; at the same time, bestowing all suitable elegance on those others of inferior class which he raised elsewhere.

Those who may be disposed to investigate the subject of ecclesiastical architecture, and the erection of churches in those early times, and the companies or associations engaged in their erection, I refer to the treatise of PAULUS SILENTIARIUS, and his learned commentator DU FRESNE, which may be found at the end of JOH. CINNAMUS, among the Byzantine Historians, published at Paris, 1670; also to EVAGRIUS, lib. iv. c. 31; PROCOPIUS, *de aedif. Justin.* lib. i. c. 1. and AGATHIAS, lib. v.

I have said that the association formed for the purpose of erecting churches, was obliged, at first to use a greater caution, and adopt measures of co-operation under a greater guard of secrecy, than was necessary for others of the Christian community, because to carry those measures into effect, was at once to combat the prevailing religious institutions of the Gentiles; and whatever was to be done must be so concerted as not unnecessarily to excite popular prejudice and opposition, or bring into exercise the authority of the civil magistrate.

Why this association should retain its secret meetings, its mysteries, and its symbols, after those prejudices had subsided and that opposition had ceased, is not very apparent. I have *charity* to believe that to the members of the Fraternity there appeared *then* sufficient reason for preserving the Order under all its ancient rites; and if I had not this charity for them, and for their successors *now*, though I understood all the mysteries they possessed, and all the knowledge of circumstances in which they were placed, my investigations, and the spirit in which I pursue them, would be in vain. I quit, therefore, this digression, and return to my principal aim, which was to show that *there actually existed a class, or order of men, among the early Christians, who were initiated into its certain MYSTERIES, which they were bound by a solemn promise not to disclose, nor even to converse about but with such as had received them under the same sanctions.* And I trust that it will be apparent, that these associates, though bearing, in progressive times, different names, such as,

ALELPHOIKAISYNERGOI, Brethren and companions in labour;

OIKONOMOI MYSTERION, Stewards of the Mysteries;

PARAMONARIOI, Superintendents;

MUTHOLATRIOI, Devotees of the Secret;

ARCHITEKTONOI, Architects.

There may be traced the LATOMI LIBERI, MURATORI LIBERI, and FREE MASONS, of after times.

Whoever is conversant with the works of the fathers, must have

seen repeated references to the DISCIPLINE OF THE SECRET, and perceived a difficulty in accounting for such a discrimination among professed Christians as it occasioned. Of the nature of the *mysteries* belonging to it, and of the causes which gave rise to an institution so exclusive as that in which they were guarded, there have been various conjectures, opinions, and disputes among writers upon Ecclesiastical Antiquities. "But these contentions" (says TIDAL, in his notes on MOSHEIM), "instead of elucidating, have rather tended to throw additional obscurity over a thing of itself sufficiently intricate, and that seems as it were to have set illustration at defiance." The Roman Catholics have explained it as referring to *the mystery of the mass*; and other theologians, still more ignorant of its true import, and not troubling themselves to trace it out, have pretty generally conceded to them this application. "But," (says BINGHAM.) "when this discipline was introduced into the Christian church, it was done for different reasons than those which the Romanists pretend." Surely it could not relate to the admission of participants of the eucharist, as some have declared, "understanding neither what they say, nor whereof they affirm;" for that ordinance, from the first, had been partaken by all believers, —men, women, and even children. None were excluded who professed a faith in CHRIST, and assembled with those who were distinguished as his followers. Whereas, to the *mysteries* of which I am treating, women and children were not admitted at all.

Some modern writers, unwilling to yield the point to the Catholics, have suggested that it was a part of the ancient discipline, or method of training up those who were to exercise the higher functions of Christian confessors. But ought we to suppose that the teachers of the religion of that Divine Instructor, who declared, "I spake openly to the world, and in secret I have said nothing," should have private communications relative to doctrine or precept, to be imparted only under solemn sanctions, in the most cautious manner, to a select few—when the directions given to them were to "go into all the world, and preach the gospel to every creature?" This DISCIPLINE OF THE SECRET, therefore, *could have no relation to the prescribed and usual method of teaching*, which was general, undisguised, and explicit; and addressed to "every one who had ears to hear."

Some remarks of Archbishop WHATELY on this subject, are so striking, that I must adorn my page by their insertion. Having spoken of the passages in the Epistles of Saint Paul, which characterize the Christian religion as containing MYSTERIES, he says, "this the Apostle does in manifest allusion to the mysteries of the ancient Pagan religions, with which, in this respect, he contrasts Christianity; inasmuch as in this last, there was not, as among the Pagans, a distinction between

the initiated and uninitiated—a revelation to some of the worshippers of certain holy secrets, from which the rest were excluded ; nor *great mysteries* and *lesser mysteries* (as the Eleusinian), in which different persons were initiated ; but, on the contrary, the *great mysteries* of the Christian faith (*Mega Mysterion*) were made known, as far as it is expedient and possible for man to know them, to all alike, whether Jew or Gentile, who were but willing to embrace the truth : and “ to know the fellowship ” (i. e., the common participation) of the mystery, was offered to all. There was not one system of religion for a certain favoured few, and another for the mass of believers ; but “ the great mystery of godliness ” was made accessible, gradually indeed in proportion as they were able to bear it, but universally. To all Christ’s disciples it was “ given to know the mysteries of the kingdom of heaven ; ” there was one Lord, one faith, one baptism ; and, though with diversity of gifts one and the same spirit sanctifying the church, and dwelling in all its members.”

We must, therefore, explicitly state, that the DISCIPLINE OF THE SECRET had no discriminating reference to Christian doctrines or precepts, to opinions of faith, to principles of conduct, or to rules of life and manners, but to *engagements to undertake, and exertions to accomplish a specific object* ; and what that was has already been mentioned.

By MYSTERY, in the ecclesiastical use and sense, is meant, *something secret, uncommunicated ; religious rites or ceremonies* ; or as defined by ELIAS CRETENSIS, in his Commentary on GREGORY NAZIANZEN, “ *Those things which are transacted by us in solemn festivals are called MYSTERIES, the knowledge of which is attained by superior illumination, &c., and imparted only under the guard of special caution, restrictions, and injunctions of secrecy.* ”

The *obligation* which was at first, and still is, exacted from the initiates, was not of the nature of the solemn OATH which is administered in courts of justice, called by the Greeks *Orchos*, and by the Latins *jusjurandum* ; but a *sacramentum*, i. e., protestation, something declared by a solemn or holy mind ; and of the precise nature, as well as name, of the promise or engagement made by soldiers to be true to their commander. Thus, in the first century, PLINY reports in his letter to the Emperor TRAJAN, that the Christians were wont to meet together in the night, and bind themselves by *an obligation of fealty, “ sacramentum ; ”* and HERODIAN, at the beginning of the third century, says, “ We retain still the military engagement, which is a sacred obligation of the Roman nobility.” As this immediately preceded the communication of the holy mystery, the terms *sacrament* and *mystery* were used as synonymous, or of like import ; thus, the person who had received the knowledge of the mystery, was said to have received the

sacrament. And so, in ecclesiastical history, the word *mysterion* in the Greek, was rendered *sacramentum* in the Latin, writers; but through modern writers a mistake runs concerning what the ancients called *sacramentum*, as though it meant the *eucharist*; whereas it means only *the obligation of the initiated*. Still, there is a bearing upon its original designation in the terms by which it is now defined—"an outward and visible sign of an inward and spiritual grace."

I now proceed to quote from the Christian fathers some passages referring to this recondite discipline, the mysteries, and the adepts.

In the *Apostolic Constitutions*, which are ascribed to CLEMENT, the fellow-laborer of Saint Peter and Saint Paul, there is this injunction,—"These regulations must on no account be communicated to all sorts of persons, because of the mysteries contained in them." And it is made a part of the deacon's office, not only to see that the uninitiated, *amnetoi*, have retired before the presiding officer speaks, but to keep the doors, that none, who are *uninitiated*, should enter during the time of the obligation, a service still performed by deacons in the masonic lodges. Nor can it be doubted of whom are required the qualifications "*irreproachable and well reported; of a sound mind and body, having no blemish or defect, neither maimed nor mutilated.*"

ST. CLEMENT of ALEXANDRIA, one of the most eminent fathers of the church, who wrote towards the end of the second century, frequently compares this SECRET DISCIPLINE with the Heathen mysteries, and their interior and recondite wisdom; and defends it by a reference to what the wisest aspired to and honored. He promises that he would advert to some of the chief or leading points of this venerable knowledge in his *STROMATA*, but represents himself as bound not openly to make known, or explain the whole of it, lest, according to the proverb "he should put a sword into the hands of a child." To any one who might be at a loss to account for his declining to make publicly known and in a great measure altogether concealing, a species of knowledge confessedly of high import, he replies, that it was not to be comprehended except by minds that had been purged and delivered from the dominion of the passions; that there would, moreover, be a danger in it lest occasion might be given to *contentious persons*, for cavilling and insult. Many other passages of this kind are to be met with in St. CLEMENT, by any who will but diligently explore his *Stromata*.

I make another extract from this ancient writer, which may elucidate the frequent references in Freemasonry to the *east*, *the place of light* and to the construction of churches, so that the altar should be at the east.

"As the East is the image of the new-born day, and thence the light is diffused, dispelling the darkness; and inasmuch as, to those who

are involved in ignorance, the being brought to light by the opening day of the knowledge of truth, is as the rising sun; so devotion should be paid by facing the east; and ancient temples were so built that the worshippers who stood looking at the monuments should be taught to turn towards the east."

Another reason, indeed, is assigned by St. BASIL in the xcii, *Canon*, and by ATHANASIUS, *qust. ad. Antiochum*, q. xxvii., "Because Christ made his appearance on earth in the east, and there ascended into heaven, and there will appear again at the last day; so that the faithful who look for his glorious appearing should pray towards the east."

TERTULLIAN, in the second century, after repelling, in his most admirable *Apology*, the vile accusations brought against the Order, says, "If we do all in private, how came you to know what is done?"

Not from one of ourselves; for none are admitted to religious mysteries *without an oath of secrecy*. We appeal to your Thracian and Eleusinian mysteries. And we are especially bound to this caution, because, if we proved faithless, we should not only provoke heaven, but draw upon our heads the utmost rigor of human displeasure.

And how should strangers betray us? They know nothing but by report and hearsay; for, *hence ye profane!* is the prohibition from all holy mysteries. And as to the evidence from common fame, you know how little it is to be depended upon; and yet this fame is the only evidence you produce against us; and she is, moreover, the worst evidence, because she has continued so many years to publish and to insinuate into the minds of men these wicked stories, and yet is still as far from proving them."

Reprobating their injustice, he says, "Because they know little or nothing of our principles, they despise and condemn them, and endeavour to batten that virtue and goodness, which is so conspicuous in us, with imagined vices and impurities: whereas it would be more just to judge of our *secret actions* by those that appear, than to condemn what is evidently good and praiseworthy upon suspicion of private faults."

MINUCIUS FELIX wrote a learned and eloquent defence of the Christian religion, which Dr. LARDNER thinks was published about A. D. 210. This work is in the form of a dialogue between Cæcilius Natalis, a heathen, and Octavius Januarius, a Christian, in which MINUCIUS was judge. Among other things, Cæcilius states, that "the Christians know one another by secret signs, and love one another almost before they are acquainted."

ORIGEN, who wrote about the commencement of the third century, in reply to the cavil of Celsus that there was among the Christians a

secret doctrine, Kryphion dogma, says, "that inasmuch as the essential and important doctrines and principles of Christianity were openly taught, it was foolish to object that there were other things which were recondite, and not disclosed to all; for this is common to the Christian discipline with that of the philosophers, where some things are exterior, and some interior, for it is enough that he says it was so with some of the disciples of Pythagoras, who were taught in private what it was not suitable to communicate to unpurified ears; nay, neither to the Greeks, nor barbarians, is it considered wrong that their mysteries are hidden. Rashly and unjustly, therefore, does he criminate the Christians for having something occult."

From the recovered fragment of a Disputation of ARCHELAUS, who was Bishop of Mesopotamia, in 278, the following extract is made;— it is part of an address to a newly admitted member. "These mysteries the Church now communicates to him who has passed through the introductory grade. They are not explained to the Gentiles at all; nor are they taught openly in the hearing of catechumens but much that is spoken, is in disguised terms, that the *faithful (PISTOI)* who possess the knowledge, may be still more informed, and those who are not acquainted with it suffer no disadvantage."

St. CYRIL, of Jerusalem, in the beginning of the fourth century, in his *Catechesis*, which is allowed to be the most ancient and best digested abridgment of Christian institutes, says, "The Lord spake in parables to his hearers in general, but to his disciples he explained in private the parables and comparisons of which he had made use in public.

The splendors of glory is for those who are early enlightened; obscurity and darkness are the portion of unbelievers and the ignorant.

Just so the church discovers its mysteries to those who have advanced beyond the class of catechumens, — we employ obscure terms to others."

St. BASIL, surnamed *the Great*, Bishop of Cæsarea, about the middle of the fourth century, remarks, "We receive the dogmas transmitted to us by writing, and those which have descended to us from the apostles beneath the mystery of oral tradition;—for several things have been handed to us without writing, lest the vulgar, too familiar with our dogmas, should lose a due respect for them."—"This is what the uninitiated are not permitted to contemplate; and how should it ever be coming to write and circulate an account among the people?"

These secrets he calls *aporreta*, *not to be divulged*, but locked up in silence. Referring to the charitable institutions for the reception of sojourners, he exclaims, "What injustice can be attributed to us by the erection of lodges for the reception of sojourners who come to us, and for the relief of indigent and distressed brethren?"

St. GREGORY NAZIANZEN, one of the greatest ornaments of the Greek church, and Bishop of Constantinople in 379, says, "You have heard as much of the mystery as we are allowed to speak openly in the ears of all; the rest will be communicated to you in private, and that you must retain within yourself."—"Our mysteries are not to be expressed to strangers." Referring to those who censured, he remarked, "In this only they show their piety, that they condemn others as deficient in godliness."

St. AMBROSE, Archbishop of Milan, at the close of the fourth century, declares, "All the mystery should be kept concealed, guarded by a faithful silence, lest it should be inconsiderately divulged to the ears of the profane." And in his book *on the Mysteries* (c. i., n. 2). "It is not given to all to contemplate the depth of our mysteries; the Levites we exclude from them, at first, that they may not be seen by those who cannot preserve them." In his comment upon the verse in Psalm cxvii, "*I have hidden thy words in my heart, that I may not sin,*" he remarks, "He sins against GOD who divulges to the unworthy the mysteries, confided to him. The danger is not merely of violating truth but of telling truth, if he allow himself to give hints of them to those from whom they ought to be concealed." And he opposes such indiscretion by the words of our Saviour, "Beware of casting your pearls before swine."

St. AUGUSTINE, Bishop of Hyppo, in 395, says, "Having dismissed the catechumens, we have retained you only to be our hearers; because, besides those things which belong to all Christians in common, we are now to discourse to you of sublime mysteries, which none are qualified to hear but those who by the master's favor are made partakers of them. You ought, therefore, to attend to them with the greater reverence, by how much more sublime those principles are, which are committed only to the approved, than those which others are wont to hear." And he declares that to have taught them openly would be a betraying of them.

St. CHRYSOSTOM, Bishop of Constantinople, in 399, expresses himself as follows, on the secrecy of the mysteries. "I wish to speak openly, but I dare not, on account of those who are not initiated. These persons render explanations more difficult for us, by obliging us either to speak in obscure terms, or to unveil the things which are secret:"—but adds, "I shall, therefore, avail myself of *disguised terms,*" discoursing *ouneskiasmenos, adumbratim.*—"When the holy mysteries are celebrated, we drive away all uninitiated persons, and then shut the doors."

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