"A CERTAIN POINT WITHIN A CIRCLE"

BY BRO. WILLIAM F. BOWE, PAST GRAND COMMANDER, GEORGIA

William Fairbanks Bowe was born August 9th, 1866, at Augusta, Georgia, his present home. During his boyhood he attended the private schools in that city of educational advantages and culture, until the age of fourteen years, when on account of his superabundant energy and the eagerness of youth he chose to enter the work-a-day world rather than pursue further his academic studies. He started his career as a true operative Mason. He served his time as a brick-layer and became a finished workman in that and the kindred crafts; was active during youth and early manhood in the civic organization that flourished in that day and time in his city and vicinity He was initiated as an Entered Apprentice, March 11, 1885, in Zerubbabel Lodge, Savannah and was raised in the same Lodge, June 11th, 1885.

He was always active in the local affairs of Masonry, passing through the chairs in both the Blue Lodge, Chapter, and Commandery, at the same time being an active member of Adoniram Council, R. and S. M., and also taking sympathetic interest in the affairs of the Eastern Star; he was a Trustee of the Masonic Hall in the city of Augusta for a period of fourteen years, serving as Chairman of the Building Committee of that body during the period of the erection of the present Masonic Hall. But his activities were not by any means confined to the local field. He was really the organizer and founder, as well as the first elected Master of Richmond Lodge, No. 412 F. & A. M. He served as local secretary of the State of Georgia for the Correspondence Circle of Quatuor Coronati Lodge No. 2,057, in London, since 1897, and has served with distinction and success as the Georgia head of two of the Grand Bodies, the Grand Commandery and the Grand Chapter.

PERMIT me to endeavor to present to your minds an historical view and the physical attributes of an ancient and important Masonic symbol, for the facts of which I am mainly indebted to the researches of Brother Sydney Klein. "A Certain Point within a Circle" is our subject. It is not even designated as the central point of the circle, but simply "A Certain Point within a Circle."

Dr. Anderson, in the Grand Lodge Constitutions of 1723, declares that "Pythagoras instituted a lodge of good Geometricians and communicated to them as a secret" "That amazing proposition which is the foundation of all Masonry." This announcement of very few words contains a number of assertions of very great import. Note them again, "Pythagoras instituted a lodge of good Geometricians and

communicated to them as a secret," "That amazing proposition which is the foundation of all Masonry."

The history of those ancient days leads us to believe this to be true and it probably occurred at the time he settled in the Dorian Colony at Cretona, Italy, where the Pythagorians are said to have first coined and used the word "Mathematics."

Like many unhistorical verities the symbol of "A Point within a Circle" comes to us from a past so remote that all knowledge of its origin is lost; and during its sojourning, its meaning and intention had been forgotten, and its real symbolism has been so changed that the interpretation now given to it by our Masonic Monitors is strained and insufficient and does not receive the approval of students of Masonry. Mackey does not give any historical reference to "The Point within a Circle," although he recites that, according to Higgins, "Circular Temples were in the very earliest ages universally erected in Cyclar Numbers to do honor to Deity," and that Oliver relates that the Druids erected a circle of about forty perpendicular stones, and in the center one stone of greater height than the others. To my mind there is no connection between these examples and our symbol of "A Point within a Circle."

McClenachen says there are found on ancient Egyptian monuments the figure of the point within the circle, and on each side of the circle an erect serpent. This figure is interpreted to mean: "The Alpha and Omega or the Egyptian omnipotent God surrounded by his creation, bounded by his limitless wisdom and power"; whether this interpretation is satisfactory or not to the ancient Egyptian I do not know.

It cannot be affirmed that this figure is or is not connected with our emblem, but in either event it does not affect the following historical fact, which is confidently believed to furnish the true explanation of our great Masonic symbol, "A Certain Point within a Circle."

In its travels down the corridors of time, the form of the emblem has been only slightly modified or added to; so the grave difficulty before us is to discover the teachings of the symbol, and I may here state my belief that **any present day symbol of Masonry that is not understood**, no matter how incongruous it may now appear, carries or conceals from the distant past some distinguishing element of Masonry.

I shall only present one historical view of such a symbol: "A Certain Point within a Circle." In order that you may easily conceive the ideas which I will attempt to convey, I must ask you to believe a proposition upon which this view is largely predicated: namely, that the great secret of the ancient Mason was the knowledge of how to make a perfect square without the possibility of error.

Time will not permit the giving of reasons calculated to establish the probability of this foundation, and many eminent Masonic students do not believe that the reasons given are sufficient to establish it as a fact; but I assure you that a strong argument can be made in support of the contention that the Great Secret of ancient Masonry was the knowledge of how to make a perfect square without the possibility of error, which I shall hereafter designate as the "Knowledge of the Square."

Brother Sydney Klein, in his wonderful exposition of "The Great Symbol," expresses his belief that this "Knowledge of the Square" was referred to by Dr. Anderson in the Grand Lodge constitution of 1723 as that "Amazing proposition which is the foundation of all Masonry."

So, for the purpose of this discussion, it is assumed that all of my readers believe (temporarily at least) that the knowledge of how to make a perfect square without the possibility of error was a great Masonic secret known only to Masters of lodges and handed down by them to their successors with scrupulous secrecy, and it is worthy of consideration whether or not this knowledge was the secret intrusted to a new elected Master before he was inducted into the chair of K. S.

This knowledge of making perfect squares was known to the ancients; for Pamphalia, a female historian of the time of Nero, says that, "Thales, the Tutor of Pythagoras, learned in Egypt how to describe a right angled triangle in a Circle." Appolodorus says the same of Pythagoras. Plato, Proclus and many other ancient Greek writers refer to the right angled triangle as being Divine. The right angle of the square symbolizing the perfection of Deity. Your imagination may revel in the thought how ancient is the common Masonic saying, "To act by the square"--it means now, as foreshadowed by Plato, to live according to Divine Law.

It is important that during this exposition you should remember the fact that our ancient brethren probably approached the proposition of constructing a perfect square,

with feelings of awe, because of their belief that the process was a sacred mystery, or a sort of divination.

In Europe during the Dark Ages, say from A. D. 700 to 1300, the art of Geometry was entirely lost; but the knowledge of how to make a perfect square within a circle was not lost.

This Truth is worthy of an essay as to whether or not the "Knowledge of the Square" was preserved by Freemasonry during those dark days when the intellect of men had become depressed almost to oblivion.

I say advisedly that the knowledge was not lost, because there is preserved to us a doggerel rhyme called the Stone Mason's speech. The oldest copy is of date about A. D. 1500, but it is evidently the copy of an older original. With this long prelude I am now ready to endeavor to prove to you "that the point within a circle" was a significant symbol at a period at least previous to the year A. D. 1500.

"The Stone Mason's Speech" is, literally translated, as follows:

> What in stone-craft to see is
> Which no error nor bypath is
> But straight as a line; a line
> Through drawn the Circle, overall
> Thus findest thou three in four stand.
> And thus through one in the center go
> Also again out of the center in three
> Through the four in the Circle quite free
> The stone-craft and all the things
> To investigate makes the learning easy
> A point which in the Circle goes
> Which in the Square and three angles stand
> Hit ye the point then have ye done
> And come out of Need, Fear and Danger
> Herewith have ye the whole science
> Understand ye it not: so is it in vain
> All which ye learnt have;
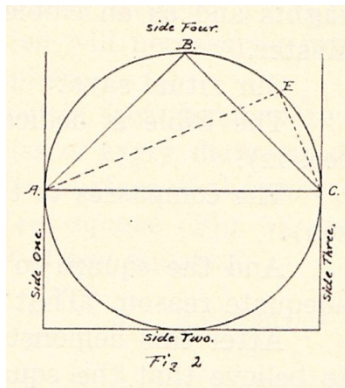> Of that bewail yourselves soon, therewith depart.

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Now this speech almost certainly refers to the "Point within a Circle," because every direction given in it is applicable to that symbol, and the result together with every fact in the speech is in exact accord with the demonstration which I will now give.

First, I establish the point (Figure 1) and with it as a center I describe the circumference and we have the symbol of the "Point within a Circle."
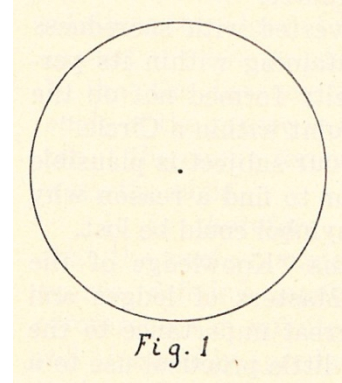
The speech directs: "A line through drawn the circle," draw line A-C through the center. "Overall thus findest thou three in four stand."

That is to say you must draw lines on three out of four sides; each line the length of the diameter, or three lines equal to A-C on three sides (draw lines number one, two and three), "And thus through One in the center go."

That is to say, from the center of line No. 1 draw a line (draw a line from the center of side No. 1 as A-B). "Also again out of the center which is in three," that is to say from the center of side three draw a line (draw a line from the center of side three as C-B). "Through the Four in the circle quite free."

That is to say the lines should be drawn **to the circumference** of the circle towards the side four which is quite free.

"The stonework-craft and all the things
To investigate makes the learning easy."

That is to say, any investigation into the matters pertaining to stone-craft are made easy by this "Knowledge of the Square."

"Now observe the result according to the speech, **"A point which in the circle goes, which in the square and three angles stands, gives you the whole science and you cannot go wrong."** That is to say the point within the circle is within the square of the two parallel lines and also within the triangle formed by the three angles, and you have accomplished the whole science, and therefore cannot go wrong.

This is an evident fact because no matter in what direction you draw the lines from A and C, provided they are exactly joined at the circumference of the circle, they

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will form a right angle or a perfect square, (see lines A-E and C-E) and, therefore, you can form an infinite number of right angles within the circle, every one of which will be a perfect square, and thus is accomplished the "Knowledge of the Square."

First a straight line,

Second a square,

Third a perfect knowledge of the square.

As the speech further sums up the result:

"Hit ye the point then have ye done

And come out of Need, Fear and Danger."

Perpendicular, square and center.

A right angled triangle invested with sacredness by our ancient brethren as containing within its perfect angle the attributes of Deity formed not on the center, but by the aid of the "Point within a Circle."

Now if this explanation of our subject is plausible or even possible, let us endeavor to find a reason why the meaning of so important a symbol could be lost.

We have assumed that this "Knowledge of the Square" was confined to the Masters of lodges and whilst this knowledge was of great importance to the Operative Mason it would be of little practical use to a speculative Mason. In time the explanation would be disused and the meaning of the ritual be lost--the same as the stone mason's speech is preserved, but its teachings disused and its intention forgotten.

Notwithstanding our loss of the symbolism of the square, we preserve the square as one of the Great Lights and as an emblem peculiarly belonging to the Master.

Our ritual says:

The Bible is dedicated to God (for a very good reason).

The compasses to the Craft (for a very good reason).

And the square to the Master for the totally inadequate reason, "That it is the emblem of his office."

After this demonstration we surely are compelled to believe that the square is dedicated to the Master for a far more noble and important purpose; and as a suggestive thought, in this connection, I leave with you a question: Is it not likely that the square may have originally been the emblem suspended over the Master's chair and

because it is the exact shape of the Greek letter "Gamma" or "G," that in the evolution of time the emblem finally became changed from the square to the letter "G"?

In the early days Masonry was patronized by the controlling minds of the monasteries and they attached a religious meaning to their principal emblems, and they would be certain to do so to their symbols whose meaning was lost; and the concept would be natural to them that the point within the circle represented the G.A.O.T.U. whose horizon of operative power is a circle of infinite extent, and likewise we derive from this solution of that "amazing proposition" the speculative theory that the infinite number of perfect squares generated by the power of "A certain Point within a Circle" must be emblematic of the infinite number of perfect attributes of Deity, whose all pervading power is symbolized by the "Point within the Circle."

Now in this representation, according to this method, we have the point within a circle, but instead of the Holy Bible on top we have the illustration of that "Amazing proposition which is the foundation of all Masonry"; but can we give any reason at all why these two perpendicular lines are characterized by us as representing the two Saints John?

As a thought that may induce some brother to make an investigation intended at least to disprove it, I suggest that in order for the ancient Mason to demonstrate "The Knowledge of the Square" he needed to use two straight edges, and in the sorcery of the operation they possibly were stood one on each side of the circle the same as these two perpendicular lines would be drawn.

And likewise, as has long been the custom of operative craftsmen to give names to certain implements of the craft, it is possible that during the construction of the Cathedrals by the building societies of Masons, that these two straight edges may have been named by them "St. John," especially so, since the operation of making perfect squares was a hidden mystery, it naturally would be accomplished with some element of mysticism.

Among present day geometricians the solution of this knowledge of the square is very simple, but even to this day few operative craftsmen are familiar with the process, although the reverse of the proposition is readily known to all pattern makers, and yet, strange as it may seem, when the pattern maker's task is submitted to the geometrician

it is equally incomprehensible to him as the knowledge of the square is to the operative craftsmen.

THE PATTERN MAKER'S PROBLEM

In order to demonstrate this I will make a physical exhibit. We have here a wheel six inches in diameter. It is desired to cut a mortise in a block of wood or stone or metal so that one-half of the wheel will perfectly fit the mortise. The problem is how to cut out the material with a perfect certainty that the wheel will accurately fit. I have here for

Fig 3
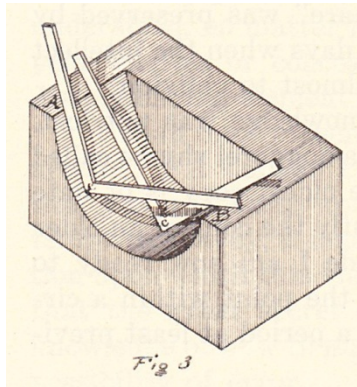
convenience a piece of wood in which is a mortise six inches wide and four inches deep. I will fill this mortise with plastic modellers' clay, because, of course, if we accurately cut out the clay we could do the same with either metal, wood or stone.

The distance A-B is six inches, being the same as the diameter of the wheel.

By placing the two outside edges of a square on the extremities of the proposed mortise, say points A and B, with the corner or outside angle of the square "C" as a pointer to guide the cutting, let the square slide around its sides resting continuously on the two points A and B, and it will be found that the point or outside angle of the square will perform a true semicircumference belonging to a diameter of six inches, (see Figure 3), and by testing our mortise with the six inch wheel we find that the fit is perfect. Having made a perfect semi-circle by the use of the square it is readily apparent that the same operation will make the remaining semi-circle, and by this means we can construct a perfect circle. For convenience I have already prepared the remaining semi-circle, and by joining them together we have the perfect figure as shown in Figure 4.

Fig. 4
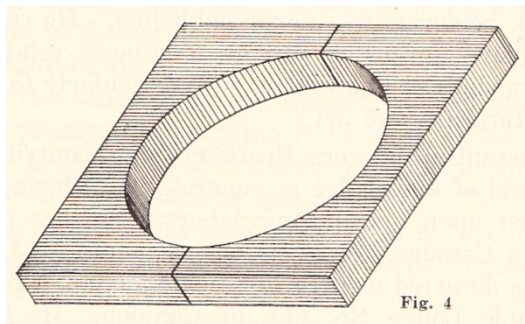
But the point within the circle is not seen for the circumference was made by the square and not by the compasses; and although the point is invisible, the Truth is self evident that it is there within the circle absolute and perfect on the center.

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Now it has been demonstrated by the "Knowledge of the Square" that an infinite number of right angles or perfect squares can be drawn within the circle, bounded by two parallel lines, and touching the circumference.

And we now also know from the explanation of the pattern maker's problem that if the edges of a perfect square are kept in touch with the two parallel lines and caused to occupy an infinite number of locations, that the extreme angle of the square originally thought to contain the perfection of Deity, and (in this proposition) always under control of the power of the center will describe the line of a true circle, which will always be the circumference of the "Point within a Circle," and both of these propositions are true no matter how great the distance between the two parallel lines.

Therefore, it is obvious that if the distance of the two parallel lines is infinite then the circumference is also infinite and the point within the circle is always on the center.

The existence of Deity has been beautifully defined by Hermes Trismegitus, an Egyptian of the period 15 B.C., who says: "God is a circle whose center is everywhere, but whose circumference is nowhere to be found." This abstruse thought can be analyzed and proven to be conformable to our present exposition of "A Certain Point within a Circle."

I will not invade the vast field of speculative thought borne upon our minds by the demonstration of that "Amazing proposition," although, a contemplation of the process of creating a perfect circle by means of the square alone, naturally leads our minds to inquire into the speculative properties of the square. I will be content merely to continue the physical process or principle to its logical conclusion.

We have proven that if the edges of the square are operated as described against any two points that the right angle of the square will describe a circumference line belonging to a diameter, at the extremities of which those two points are located.

Now, if during the process of making this circumference the right angle of the square is caused to rotate into an infinite number of planes, that is to say if the square is caused to move against the points and is also at the same time rotated in such manner that its perfect angle
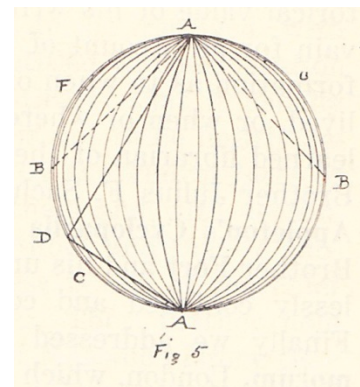
will pass - through every point possible for it to do, **then every such point** will be in a circumference line belonging to a diameter equal in length to the distance between these two points.

It will be observed that in whatever direction the right angle of the square is moved even if during its rotations the edges of the square are continually moved against the two points A and B, that the distance from the angle of the square to the center of the circumference is always the same.

It is therefore obvious that the perfect angle of the square defining similar circumferences in infinite planes will inevitably produce the surface of a sphere.

Which is to say, that it is proven by this operation that while the edges of the square are moved against the two points and the right angle of the square at the same time is rotated into every possible place **every such place** will be exactly the same distance from the center, therefore the right angle or extreme point of the square during this operation will necessarily produce the surface of a perfect sphere.

Hence we derive the geometric fact that any two lines drawn from the extremities of **every diameter** of a sphere and exactly joined at the surface of the sphere will form a **right angle** or **perfect square** (Fig. 5) and we learn again the "Knowledge of the Square."

A – A	Extremities	A – D – A		Right angle
B – B	of	B – A – B		of
C – C	Diameters	C – F – C		Perfect Square
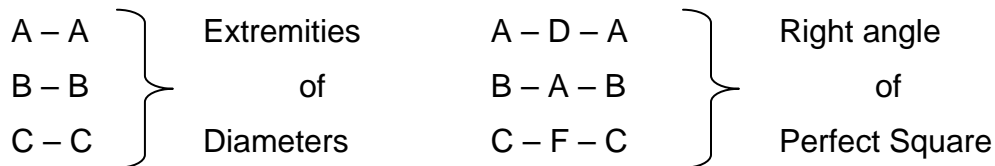
These Truths impress upon our minds the concept that if the central points of the parallel lines are an infinite distance apart, then every right angled triangle or square formed within the circle or **within** the **sphere**, by the demonstration of that "Amazing proposition," will be infinite.

Also that the circumference line generated by the right angle of the square whose edges are in touch with those distant points, as demonstrated by the pattern maker's problem, will be infinite. But our wonder is yet more astoundingly excited when we conceive the great Truth:

That the sphere designed and created by the evolutions of the perfect square constantly in touch with those two points of infinite distance, directed by the power of

the center will be infinity itself and the invisible point within this sphere will be absolute and perfect.

> Transcribers note: Not sure why this is in the Two Steps, but it is really neat!