

## That Ancient Square Unknown

What one symbol is most typical of Freemasonry as a whole? Mason and non-Mason alike, nine times out of ten, will answer, “The Square!”

Many learned writers on Freemasonry have denominated the square as the most important and vital, most typical and common symbol of the ancient Craft. Mackey terms it “one of the most important and significant symbols.” McBride said:

“In Masonry or building, the great dominant law is the law of the square.” Newton’s words glow: “Very early the square became an emblem of truth, justice and righteousness, and so it remains to this day, though uncountable ages have passed. Simple, familiar, eloquent; it brings from afar a sense of wonder of the dawn, and it still teaches a lesson we find it hard to learn.” Haywood speaks of: “ – Its history, so varied and so ancient, its use, so universal.”

MacKensie:

“An important emblem – passed into universal acceptance.” In his encyclopedia, Kenning copied Mackey’s phrase. Klein reverently denominates it “The Great Symbol.” I Kings, describing the Temple, states that “all the doors and the posts were square.”

It is impossible definitely to say that the square is the oldest symbol in Freemasonry; who may determine when the circle, triangle or square first impressed men’s minds? But the square is older than history. Newton speaks of the oldest building known to man: “ – A prehistoric tomb found in the sands at Hieraconpolis, is already right angled.”

Masonically the word “square” has the same three meanings given the syllable by the world: (1) The conception of right angledness – our ritual tells us that the square is an angle of ninety degrees, or the fourth of a circle; (2) The builder’s tool, one of our working tools, the Master’s own immovable jewel; (3) That quality of character which has made “a square man” synonymous not only with a member of our Fraternity, but with uprightness, honesty and dependability.

The earliest of the three meanings must have been the mathematical conception. As the French say, “it makes us furiously to think” to reflect upon the wisdom and reasoning powers of men

who lived five thousand years ago, that they knew the principles of geometry by which a square can be constructed.

Plato, greatest of the Greek philosophers, wrote over the porch of the house in which he taught: "Let no one who is ignorant of geometry enter my doors." Zenocrates, a follower of Plato, turned away an applicant for the teaching of the Academy, who was ignorant of geometry, with the words: "Depart, for thou has not the grip of philosophy." Geometry is so intimately interwoven with architecture and building that "geometry, or Masonry, originally synonymous terms" is a part of most rituals. The science of measurements is concerned with angles, the construction of figures, the solution of problems concerning both, and all the rest upon the construction of a right angle, the solutions which sprang from the Pythagorean Problem, our "Forty-Seventh Problem of Euclid," so prominent in the Master's Degree.

The ancient Greek name of the square was "gnomon," from whence comes our word "knowledge." The Greek letter "gamma" formed like a square standing on one leg, the other pointing to the right – in all probability derived from the square, and "gnomon," in turn, derived from the square which the philosophers knew was at the root of their mathematics.

Democritus, old philosopher, according to Clement of Alexandria, once exulted: "In the construction of plane figures with proof, no one has yet surpassed me, not even the Harpedonaptae of Egypt."

In the truth of his boast we have no interest, but much in the Harpedonaptae of Egypt. The name means, literally, "rope stretchers" or "Rope fasteners." In the Berlin museum is a deed, written on leather, dating back to 2,000 B.C. which speaks of the work of rope stretchers; how much older rope stretching may be, as a means of constructing a square, is unknown, although the earliest known mathematical hand-book (that of Ahmes, who lived in the sixteenth or seventeenth Hyskos dynasty in Egypt, and is apparently a copy of a much older work which scholars trace back to 3400 B.C.), does not mention rope stretching as a means of square construction. Most students in school days learned a dozen ways of erecting one line perpendicular to another. It seems strange that any other people were ever ignorant of such simple mathematics. Yet all knowledge had a beginning. Masons learn of Pythagorean's astonishment and delight at his discovery of the principle of the Forty-seventh Problem. Doubtless the first man who erected a square by stretching a rope was equally happy over his discovery.

Researchers into the manner of construction of pyramids, temples and monuments in Egypt reveal a very strong feeling on the part of the builders for the proper orientation of their structures. Successfully to place the building so that certain points, corners or openings might face the sun or a star at a particular time, required very exact measurements. Among these, the laying down of the cross axis at a right angle to the main axis of the structure was highly important.

It was this which the Harpedonaptae accomplished with a long rope. The cord was first marked off in twelve equal portions, possible by knots, more probably, by markers thrust into the body of the rope. The marked rope was then laid upon the line on which a perpendicular (right angle) was to be erected. The rope was pegged down at the third marker from the from one end, and another, four markers further on. This left two free ends, one three total parts long, one five total parts long. With these ends the Harpedonatae scribed two semi- circles. When the point where these two met, was connected to the first peg (three parts from the end of the rope, a perfect right angle, or square, resulted.

Authorities have differed and much discussion has been had, on the “true form” of the Masonic square; whether a simple square should be made with legs of equal length, and marked with divisions into feet and inches, or with one leg longer than the other and marked as are carpenter’s squares today. Mackey says:

“It is proper that its true form should be preserved. The French Masons have almost universally given it with one leg longer than the other, thus making it a carpenter’s square. The American Masons, following the delineations of Jeremy L. Cross, have, while generally preserving the equality of length in the legs, unnecessarily marked its surface with inches, thus making it an instrument for measuring length and breadth, which it is not. It is simply the “trying square” of a stonemason, and has a plain surface, the sides embracing an angle of ninety degrees, and it is intended only to test the accuracy of the sides of a stone, and to see that its edges subtend the same angle.”

Commenting on this, the Editor of “the Builder” wrote (May, 1928):

“This is one of the occasions when this eminent student ventured into a field beyond his own knowledge, and attempted to decide a matter of fact from insufficient data. For actually, there is not, and never has been, any essential difference between the squares used by carpenters and stone workers. At least not such difference as Mackey assumes. He seems to imply that French Masons were guilty of an innovation in making the square with unequal limbs. This is rather funny, because the French (and the Masons of Europe generally) have merely maintained the original form, while English speaking Masonry, or rather the designers of Masonic jewels and furnishings in English speaking countries, have introduced a new form for the sake, apparently, of its greater symmetry. From medieval times up till the end of the eighteenth century, all representations of Mason’s squares show one limb longer than the other. In looking over the series of Masonic designs of different dates it is possible to observe the gradual lengthening of the shorter limb and the shortening of the longer one, till it is sometimes difficult to be certain at first glance if there is any difference between them.

“There is absolute no difference in the use of the square in different crafts. In all the square is used to test work, but also to set it out. And a square with a graduated scale on it is at times just as great a convenience for the stonemason as for the carpenter. When workmen made their own

squares there would be no uniformity in size or proportions, and very few would be graduated, though apparently this was sometimes done. It is rather curious that the cut which illustrates this article in Mackey's Encyclopedia actually show a square with one limb longer than the other."

It is to be noted that old operative squares were either made wholly of wood, or of wood and metal, as indeed, small try squares are made today. Having one leg shorter than the other would materially reduce the chance of accident destroying the right angle which was the tools essential quality ... So that authorities who believe our equal legged squares not necessarily "true Masonic squares" have some practical reasons for their convictions.

It is of interest to recall McBride's explanation of the "center" as used in English Lodges, and the "point within a circle," familiar to us. He traces the medieval "secret of the square" to the use of the compasses to make the circle from which the square is laid out. Lines connecting a point, placed anywhere on the circumference of a circle, to the intersection with the circumference cut by a straight line passing through the center of the circle, forms a perfect square. McBride believed that our "point within a circle" was direct reference to this early operative method of correcting the angles in the wooden squares of operative cathedral builders, and that our present "two perpendicular lines" are a corruption of the two lines which connect points on the circle.

The symbolism of the square, as we know it, is also very old; just how ancient, as impossible to say as the age of the tool or the first conception of mathematical "square-ness." In 1880 the Master of Ionic Lodge No. 1781, at Amot, China, speaking on Freemasonry in China said:

"From time immemorial we find the square and compasses used by Chinese writers to symbolize precisely the same phrases of moral conduct as in our system of Freemasonry. The earliest passage known to me which bears upon the subject is to be found in the Book of History embracing the period reaching from the twenty-fourth to the seventh century before Christ. There is an account of a military expedition where we read:

"Ye Officers of government, apply the Compasses!"

"In another part of the same venerable record a Magistrate is spoken of as: 'A man of the level, or the level man.'

"The public discourses of Confucius provide us with several Masonic allusions of a more or less definite character. For instance, when recounting his own degrees of moral progress in life, the Master tells us that only at seventy-five years of age could he venture to follow the inclinations of his heart without fear of 'transgressing the limits of the square.' This would be 481 B.C., but it is in the words of the great follower, Mencius, who flourished nearly two hundred years later, that we meet with a fuller and more impressive Masonic phraseology. In one chapter we are taught that just as the most skilled artificers are unable, without the aid of the square and compasses, to produce perfect rectangles or perfect circles, so must all men apply these tools figuratively to their lives, and the level and the markingline besides, if they

would walk in the straight and even paths of wisdom, and keep themselves within the bounds of honor and virtue. In Book IV we read:

“The compasses and Square are the embodiment of the rectangular and the round, just as the prophets of old were the embodiment of the due relationship between man and man.”

In Book IV we find these words:

“The Master Mason, in teaching his apprentices, makes use of the compasses and the square. Ye who are engaged in the pursuit of wisdom must also make use of the compasses and the square.” In the “Great Learning,” admitted on all sides to date from between 300 to 400 years before Christ, in Chapter 10, we read that a man should abstain from doing unto others what he would not they should do unto him: “this,” adds the writer, “is called the principle of acting on the square.”

Independently of the Chinese, all peoples in all ages have thought of this fundamental angle, on which depends the solidity and lasting quality of buildings, as expressive of the virtues of honesty, uprightness and morality. Confucius, Plato, the Man of Galilee, stating the Golden Rule in positive form, all make the square an emblem of virtue.

In this very antiquity of the Craft’s greatest symbol is a deep lesson; the nature of a square is as unchanging as truth itself. It was always so, it will always be so. So, also, are those principles of mind and character symbolized by the square; the tenets of the builder’s guild expressed by a square. They have always been so, they will always be so. From their very nature they must ring as true on the farthest star as here.

So will Freemasonry always read it, that its gentle message perish not from the earth!

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