The subject, Memorials, is as ancient as mankind. Without doubt our forefathers erected markers thousands of years before they learned to cook their food. Since the beginning of time, the workers in stone, with their iron pick, have written the very history of the world, not only in memorials, for every year new discoveries disclose hidden records of human lives, customs and languages preserved in stone. Eliminate the stone industry and the great past is almost a blank. Consequently it is a distinct pleasure to go over merely a handful of all the glowing examples still remaining. We are especially indebted to Harry A. Rives, of Buffalo, for the use of many illustrations and other valuable information, so ably set forth in his most excellent book, "Memorial Art, Ancient and Modern."

PYRAMIDS, OR KINGS' TOMBES.

There are forty scattered throughout Egypt. Cheops is 480 feet high, 758 feet wide and covers 13 acres of ground; and 100,000 men were employed over twenty years in its construction. Some stone weigh 500 tons. They are also found extensively in Hindoostan and Java and were built by the Ate Indians in Mexico. They are symbolic of death and are always erected on the western bank of a river, the "side of the setting sun," which is also synonymous with death. The name pyramid is derived from the Egyptian words "Py" and "Rana," meaning the mountain. This one is built on a solid ledge which has been carefully hewn to the curve of the earth's surface, or 8-inch convex to the mile, to avoid earth shocks and convulsions. They are set on the cardinal points of the compass and every angle has some bearing upon the heavenly bodies and the earth's axis and poles.

The king's burial chamber was situated in the central portion, usually low down, with a narrow concealed passage leading thereto. This chamber is 34 feet long by 17 feet wide. The opening was finally discovered on the northern exposure 47 feet above the base. One reason for their great size and strength is the Egyptian's strong belief in immortality. They endeavored every living thing and at death placed with body a "mummy," an image, sometimes of glass, stone, wood or terra cotta, believing as long as one remembered, immortality was assured; if both were lost it meant complete annihilation. These tombs were not built later than the sixth dynasty, or 3300 to 2600 B.C. Twenty miles northeast of the city of Mexico is one whose base is 500 feet. In Cheops, still larger one, whose dimensions are 1,488 feet base, 148 feet high, also placed according to the compass and built by the Ate Indians, showing that the earth's axis has not changed in 4,000 years.

THE SPHINX.

The Sphinx is 189 feet long and is carved out of the solid rock, save in a few places which are filled with a kind of cement. The Sphinx is the guardian of the towns and temples, and possessing a human head (or not) with the strength and body of the lion, was supposed to ward off the "evil spirit" or other enemies, at the door.

STONE COFFINS.

The stone coffin or sarcophagus containing the king's mummy case and mummy is a mammoth monolith 9 by 11 feet long, of limest, a land of mixed granite quarried at Syene, Aswan, and has both the color and hardness of iron and is built to represent the lower story of the king's dwelling house. It is according to the architecture of the period, the heroes or balls being built of reeds and clay, later of wood, then of stone. Similarly constructed ones are still found in Scotland and Ireland, "the Wattle Houses." The weight of the roof (in this moist climate) forced out these reeds, giving us the "cave or cavern" molder always used by the Egyptian architect and employed by others.

THE OBELISK.

The Obelisk is full of interest as a memorial, signifying "the power that can recreate," erected always on the east bank of a river, the "side of life," Japan using the idea to this day—the Land of the Rising Sun. It is supposed to be the slope of the sun's rays and possess the sun's life-giving power, constructed of red granite, about the color of the sun's rays in that particular atmosphere. It is slightly convex on surface and diminishes towards the top, where it is three-quarters of its lower width. Pyramids top called pyramid is as high as the pyramid is wide at the base; the pyramid is generally gilded or metalized. The obelisk is adorned with representations of the gods (generally the sun god) of the king who erected it. They never stand alone, but one on each side of the temple's entrance. The Romans removed two; that of St. John Lafayette, still standing in Rome, is 125 feet high without its pedestal, and weighs 440 tons. The second fell and was demolished. There is one in Paris, one in London, and one in New York, which is 70 feet high, was first erected by Queen Hatshepsut (1500 B.C.), was later taken to Alexandria, Egypt, and in 1880 presented by the Khedive of Egypt to the United States.

The large columns of the Temple of Baal, the columns of the pergola, are 60 feet high, in one solid block, and show the same influence as the later Greek. Baal was a Phoenician and Syrian god, worshipped as a "Supreme God," whose attribute was "power." Human sacrifice was used in connection with this worship. The temple is in Baalbek, a ruined town of Syria, situated 43 miles northeast from Damascus, so only little is known of its history.
A large stone, weighing 1,500 tons, intended for this temple, where other similar ones are found, is 69 feet long by 14 and 17 feet. It is a great way from the quarry and from the temple. It is all smoothly hewn. There is evidence to show even before this period that diamond and other jewel saws and drills were used, but as yet no satisfactory means of transportation has been discovered.

Petra, or the City of the Dead: Far out on the desert of Arabia is the burial place of the capital city of the Edomites, referred to in the Bible. Some of these tombs are so high that the coffins were hoisted by derricks or lowered from above.

Persians: King Darius, of the Medes and Persians. The tomb is a duplicate of his own palace, built by himself, and called his “Eternal Dwelling.” The “Beni Hasan” tombs in middle Egypt, probably about 500 years B.C., are among the oldest rock tombs remaining, and show the same influence as early Greek Doric architecture.

Early Greek period: Was very archaic and does not vary much from what has preceded. We get some knowledge of the times (581 B.C.) from Herodotus’ account of Xerxes’ Persian army, which was upwards of 2,000,000 fighting men, and with battle, slaver and women it exceeded five millions, with a navy of 1,200 ships or galley.

About 500 years B.C. dawned what is known as “The Golden Age.” The architecture, monuments, sculpture, everything attempted for the next several hundred years, might easily be called “masterpieces” — at least they have never been excelled, and are hardly likely to be. This period probably terminated about or soon after the death of Alexander the Great, 323 B.C.

The sarcophagus of Alexander (so-called): In 1887, while excavating for building material near Sidon, this magnificence of a sarcophagus was found, with others — not that it contained the body of Alexander, but that the carvings show scenes and exploits of his life. This is one of the finest examples known, showing influence of such sculptors as Lysippos and Praxiteles and others. It is a vast block of white Pentelic marble, 11 feet long by 5 feet 9 inches by 4 feet 8 inches, and the cover is 3 feet thick. The figures are splendidly arranged and exquisitely wrought and colored. The nudes like ivory. The garments and armor are accurately portrayed and tinted and the background is filled with flowing colored garments. The faces are brought out with color on the eyes and hair and so well done that the likeness of Alexander and others is easily discernible, shows Alexander at left fighting the Persians, also his general. On the other side is depicted a lion hunt. Alexander is saving life of a Persian who is being attacked. This relief, though smaller, is considered equal in every way to the famous frieze of the Parthenon. This sarcophagus embodies all the grandeur, nobility and perfection of Greek art and is considered one of our greatest inheritances.

The Tomb of Heliceus: Of all the marvelous art of the Greeks, none has excited more curiosity and admiration than this tomb, and from which we derive the word “mausoleum.” Erected to Mausolus, King of Caria, by his Queen Artemisia, 353 B.C. The Greeks considered this their finest, most striking example, and one of the “Seven Wonders of the World.” It was probably finished long after the king’s death, also the queen, and completed by the sculptors without remuneration. It was situated in a large oval in the center of the town, surrounded by the theatres and palaces, into which hundreds of rock-faced tombs have been carved. It was built of the choicest Parian marble and costly green stone and some parts were even polished. It was 140 feet high, with the peristyle of 36 Ionic columns, hundreds of figures, lions, horses and a quadriga by Pythens. Inside were two chambers above and below, with a colossal statue of Mausolus, while beneath the floor, in two sarcophagi, rested the king and the queen. The queen led battles with the king, also a sea fight in 401, and the frieze of Amazons was probably in her honor. The Knights of St. John in Jerusalem in 1402 used all loose stones and mortar to hold the present castle of Bodrun, to defend the coast of Rhodes and Smyrna, but they were later discovered and removed to the British museum, where a very large room is devoted to them. The Turks took away many rare pieces. The Romans conquering these people 200 years B.C. were astounded at its beauty and thereupon called all their best tombs “Mausolea.” Later expeditions found scarcely a sign remaining.

The Choragic monument at Lycurates, or the “Lantern of Demosthenes,” as it is called, because tradition claims Demosthenes came here to study, was erected by Lycurates at his own expense 334 B.C. on the street of the tripods, Athens, to support the tripod awarded him as director of the best musical entertainment given that year in Athens. Total height, 34 feet; base, 9 feet by 9 feet by 12 feet. Close cylindrical wall, with six Corinthian columns which project more than half way. The columns are 11½ feet high. The upper wall is decorated with tripods, and the entablature is cut from one piece. On the frieze, 10½ inches high, is depicted Dionysus with the pirates. Dionysus sits exasperating his panther while the satyrs punish the pirates with boughs and turn them into dolphins. The roof is a single block, with laurel leaves and running dog border. The frieze consists of three projections of anacrusus leaves and volutes, which supported the tripod. This is considered one of the most perfect ex-
amples of the Greek use of the Corinthian order.

The columns, like the arches, were erected principally by the Roman Senate, in honor of some great act—erected to commemorate military victory, building of military roads, bridges, viaducts, opening of ports, etc. Cneus Marcius, 439 B.C., was so honored for saving Rome from starvation. Rome contained at that time 500,000 people. Duffield's column was decorated with six bronze beaks of ships, taken from the Carthaginians. Augustus cast four bronze columns from the prows of Antony's ships in memory of the battle of Actium.

The gigantic column of Trajan was dedicated by the Senate as part of his forum A. D. 113. The architect was Appolodorus of Damascus. There are 24 great pieces of marble cemented together to look like one. It is 138 feet high. It is a spiral column, with an internal staircase containing 385 stairs. The column was presented by the Senate for having cut down the ridge between the Capitoline and Quirinal hills, thereby connecting the city. It is covered with the trophies of two Dacian wars, showing 25,000 figures in relief. Trajan constructed a bridge of 20 arches, 520 fathoms long, over the River Danube, or three times the width of the Thames at London, to conquer the Dacians.

Arches were first used as pedestals to support statues. They are generally triumphal arches. This "Arch of Titus" was erected on his return, after the capture of Jerusalem, 70 A.D. It is estimated 110,000 lives were lost in this siege. The seven golden candlesticks" of the tabernacle were among the trophies captured, also hundreds of thousands of Jews as slaves. There are examples of Arches in Africa, the Holy Land, Greece, Germany, France, Spain; in fact, everywhere the Roman legions advanced. There are still 130 remaining and as many more are in ruins.

The Appian Way was a quarter of a mile wide and sixteen miles long, one vast Westminster Abbey of tombs. Many of the roads leading from Rome contain similar cemeteries. The Romans built burial places outside the city's walls, but close by, for sacrifices and family gatherings, also because they were publicly prominent. In 1780, on this Way, in the catacomb of St. Hermes, was found Scipio's sarcophagus. It was taken to the Vatican, where it now is. One year later it was opened and the bones which it contained were removed to another monument. "Sarcophagus" is a misnomer today; it is taken from two Greek words, "Sarkos," meaning "flesh," and "Phagos," "to eat." Pliny says these coffins were carved of "Lapis Assuit," a
stone from Assos, Asia Minor, which because of its elastic properties would devour a body in three weeks. This sarcophagus is of early Doric architecture, representing a Roman altar, with Ionic volutes and laurel leaves, and is cut from coarse gray Peperino stone. The inscription, giving the name of the deceased, is painted on with vermilion. Having died 288 B. C., these Latin inscriptions are among the oldest in existence. Great numbers of stone coffins appear later, cut by the stone masons, who left the faces to be carved after the death of the purchaser.

The sarcophagus of Constantine was named after the daughter of Constantine the Great, who accepted Christianity 310 A.D., having been cured of a deadly disease by visiting the Christians in the catacombs and was buried in the one called St. Agnes. It is in the Vatican and is made of porphyry, which is a stone of fine grained base with quartz and felspar disseminating throughout. It is of red, green and purple varieties and very rare and highly prized as marble. The figures and designs are of Pagan origin, of that Roman period.

Catacombs: There are forty-three known catacombs, first discovered by accident in 1537. They are dug out of the lava rock called “Tufa” by diggers who were called “foyers,” and consist of subterranean passages and chambers with various levels, and one reaches a depth of 81 feet, or what would be a five-story tenement house inverted. They were stopped by the waters of the Tiber inundating. Here for ten generations, or 300 years, the early Christians worshipped and buried their dead. There are four million known graves. This is the catacomb of St. Agnes, one and one-quarter miles from the Port Pia, on the Via Nomentana, Agnes, because she would not marry a son of a Roman prefect, but preferred Christianity, was first tormented and then thrown into the arena and became a martyr at the early age of 13 years. This catacomb has been a shrine much worshiped by the women. The catacomb of St. Callistus in all its rambling passages is estimated to be 60 miles long, or the entire length of Italy. From these catacombs we get our first Christian symbols. The passages are lined with crypts, sealed with a shutter, upon which have been crudely inscribed some symbol, such as the fish, the anchor, the dove, or the “Christina.”

Constantine the Great became emperor in 306 A.D. Six years later was converted to Christianity, having seen a cross in the heavens. He tore down pagan temples and built Christian churches in Romanesque and Byzantine architecture, with all their details, altars, crosses, tombs, etc.

Theodoric the Great: King of the Goths and of Italy. This tomb was built about 330 A.D., is situated just outside the walls of Ravenna, and was probably influenced by Hadrian’s tomb and not unlike the round towers of Ireland. It is made of Istrian marble, is decagon or ten sided, and its diameter is 45 feet, with arches and crypts. The upper story is 35 feet in diameter, while inside it is 30 feet, is drum shaped and had coupled columns on each side of the rectangular recesses. The roof is one piece 35 feet in diameter, 3 feet high, and weighs upward of 300 tons. The twelve buttresses, like dormer windows, were left rough, by which means it was hoisted into place. Later these were finished and upon each stood a statue of one of the twelve apostles. Theodoric began to influence the Romanesque architecture with the Gothic; some very early examples remain in Spain. Gothic architecture is said to have sprung from the groves. “The Groves were God’s first temples,” and probably of Druid origin. The columns are the tree trunks, the houghs the groined arches, and the corbels, branches of leaves and the ivy and grape vines entwining complete the feeling. Spreading west and north, it became, and still is, the prevailing church architecture.

English crosses consist of memorial crosses, market crosses, weeping crosses, boundary, preaching, butter and poultry crosses, etc. Coventry cross was regilded in 1668, requiring 15,403 books of gold. A fine was levied of 3 shillings and 4 pence for sweeping within the square without sprinkling. The Chichester cross was considered the most elaborate of all English crosses. There were 5,000 such crosses in England before the Reformation. Some were torn down by Cromwell, others removed by orders of Parliament. The Waltham cross was erected by King Edward I, 1291. Edward when in the Holy Lands was stabbed by a Saracen with a poisoned dagger. Queen Eleanor, who was with him, rushed to his side, sucked the poisoned wound and saved the king’s life. The Queen Eleanor crosses are 15 in number. Besides being the mother of 15 children, the queen was generally in the battle front with the king. While fighting in the north the queen left London to join the army, was taken suddenly ill and died. Being winter, and 159 miles from London, the funeral procession rested every night, or fifteen times, and on each spot where the body lay the king ordered a cross placed. This Charing cross was the last step before Westminster Abbey, but is now the very center of London.

The Celtic Crosses: There are 300 localities in England, 280 in Scotland, 60 in Ireland, 53 in Wales, 20 in the Isle of Man, where have been found Christian stones executed before the Norman invasion, or about the year 1000 A.D. Cross at Monasterboice, County Louth, Ireland: The total height is 17 feet; the inscriptions are always very short. On one it says, “Pray for the soul of Maredach, by whom this cross was made.” He was the abbot at the monastery and died 924 A. D. Celtic designs on the stones are evidently copied and carried out by the monks from their manuscript, such as the book of Kells, the book of Aranagh, and the book of Lindsfarne, and the book of Darrow. In the book of Aranagh 138 interlacements have been found in a space 3½ inch by 3½ inch, and the rendering of the line is perfect. These designs were drawn free hand on the stone, then drilled along the line, then connected. The different patterns are too numerous to mention and many of the best examples have been found face inward, built into the walls by the Normans.

In closing, let all bear in mind that the mistakes of the doctors are buried, while ours remain in view till eternity, and in striving for better designs and workmanship we shall better ourselves financially and render a good account of our stewardship, even as they did in the past; and so I think you, hoping each succeeding year will bring you fuller returns and better business.