

est covering 40 acres, these have earth walls from 3 to 6 feet high and widest at the base; 16 openings exist at regular intervals, at one side is a covered way, formed by high walls (21 feet it is said) 120 feet in length, leading down to the river by a gentle slope.

On the valley of the Paint Creek, near Chillicothe, is to be seen one of the most interesting of these ancient fortifications, it is situated upon a hill 130 acres in extent, and at least 300 feet high. The ascent is very steep and is accessible only on one side; around this plateau of elevated ground extends a stone wall. It is said no engineer could have selected a stronger position. On the little Miami and its tributaries and in Ohio, several of these strongholds are said to have existed in which the walls were disposed in a parallel manner as in a gridiron.

Enough has been said to shew that the kind of stronghold erected by these ancients were not of the meaner sort—however the earth works seem to be possessed of the greatest durability—for they have been protected by a growth of forest or thick grass, while the stone structures have crumbled—in most cases—to a mass of ruins, only intelligible to the penetrating glance of the antiquarian.

The Indians themselves know nothing of the origin of these tombs or the people by whom they were erected, but they hold them in traditional veneration. The Tumuli are massive and pyramidal in form, and some contain a vault within which the remains of the dead are laid—these vaults are usually built of stones placed one above another without any cement, sometimes of wood, or of both combined. The mounds are of various sizes, from 3 to 90 feet in height and from 100 to 700 feet in circumference at the base. In the top there exists altars of baked clay or stone in the shape of large basins, varying from 19 inches to 17 yards in length, but the average is from 2 to 3 yards.

Messrs. Squier and Davis examined a number of these and found the basin to contain usually ashes and remains of calcined human bones, with sometimes a few ornaments, this leads to the belief that the ancient people sometimes burned their dead.

In the larger burial mounds the vaulted chamber usually contains a raised pedestal or altar upon which is laid the human remains. These skeletons are usually covered with sheets of mica, and carefully placed around them are found ornaments, and utensils of various descriptions;—one was discovered near Utah in which a polished silver breast plate lay upon the skeleton—at each side of its head lay what appears to have been two tapers extending upwards—while between the feet was found an earthen vessel of remote antiquity.

Some of the vaults have a stone pavement floor, while others are vaulted and

floored with what appears to have been a species of brick or fire clay. In the Southern States funeral urns have frequently been discovered within tumuli of this kind, also beds of charcoal from which it is inferred that fire was used in their funeral rites. In these monuments also have been found ornaments of silver, brass, stone or bone and ornamented beads made of shells, also pieces of silex, quartz, garnet and obsidian, points of arrows, tools of copper, marine shells, sculptures of human heads, or of different animals, fragments of beautiful pottery ornamented with brilliantly colored paintings of butterflies, animals, &c. &c., and several other things indicating a knowledge of art.

Very valuable discoveries have been made in New Grenada, of this kind, where arms, idols and medals were found enclosed in tombs of people whose successors have disappeared for many centuries, and whose enormous wealth is reported by tradition. The archæologists of Panama declare these works of art to belong to very remote Antiquity, and acknowledge them to possess characteristics of both Chinese and Egyptian art.

Domenech describes enclosures made of earth, situated on low flats of circular, elliptical or quadrangular form, but in all cases regular. About 300 yards in circumference, and having one single entrance. Independently of these there are a multitude of small circles about fifty yards in circumference, near which are grouped mounds that appear to have served as altars. The large circles extend over a surface of fifty acres, and are connected with rectangular enclosures by means of broad avenues. These walls are all made of earth. The religious feelings which actuated the authors of these immense and numerous structures, can alone account for their erection.

The learned Abbe Domenech writes of them in these words “If religion were out of the question, it would be difficult to account for the object of works like those of Newark which extend with their avenues over a space of more than four square miles, and to which only the great temples of Abury and Stonehenge in England, and Carnac in Brittany, can be compared.

#### PROBABLE AGE OF THESE RUINS.

In the valleys of the Ohio, and the Mississippi, where the tumuli and ancient fortifications are found in the greatest number, trees of enormous growth have grown up upon them, the age of which furnish the surest data on which to form a judgement as to the period when these different structures were abandoned.

In 1787 Dr. Cutler found trees of immense size on the ruins of Marietta. Many of those cut down were hollow, but one in which decay had only just commenced,