

THE PROBLEM OF OHIO MOUNDS

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INTRODUCTION.

No other ancient works of the United States have become so widely known or have excited so much interest as those of Ohio. This is due in part to their remarkable character but in a much greater degree to the "Ancient Monuments of the Mississippi Valley," by Messrs. Squier and Davis, in which these monuments are described and figured.

The constantly recurring question, "Who constructed these works?" has brought before the public a number of widely different theories, though the one which has been most generally accepted is that they originated with a people long since extinct or driven from the country, who had attained a culture status much in advance of that reached by the aborigines inhabiting the country at the time of its discovery by Europeans.

The opinion advanced in this paper, in support of which evidence will be presented, is that the ancient works of the State are due to Indians of several different tribes, and that some at least of

the typical works, were built by the ancestors of the modern Cherokees. The discussion will be limited chiefly to the latter proposition, as the limits of the paper will not permit a full presentation of all the data which might be brought forward in support of the theory, and the line of argument will be substantially as follows:

FIRST. A brief statement of the reasons for believing that the Indians were the authors of all the ancient monuments of the Mississippi Valley and Gulf States; consequently the Ohio mounds must have been built by Indians.

SECOND. Evidence that the Cherokees were mound builders after reaching their historic seats in East Tennessee and western North Carolina. This and the preceding positions are strengthened by the introduction of evidence showing that the Shawnees were the authors of a certain type of stone graves, and of mounds and other works connected therewith.

THIRD. A tracing of the Cherokees, by the mound testimony and by tradition, back to Ohio.

FOURTH. Reasons for believing that the Cherokees were the Tallegwi of tradition and the authors of some of the typical works of Ohio.

CHAPTER I.

THE HISTORICAL EVIDENCE.

Space will not permit any review here of the various theories in regard to the builders, or of the objections made to the theory that they were Indians, or of the historical evidence adducible in support of this theory. Simple declaration on these points must suffice.

The historical evidence is clear and undisputed that when the region in which the mounds appear was discovered by Europeans it was inhabited by Indians only. Of their previous history nothing is known except what is furnished by vague and uncertain traditions or inferred from the study of their languages and customs. On the other hand there is no historical or other evidence that any other race or people than the Indians ever occupied this region, or any part of it, previous to its discovery by Europeans at the close of the fifteenth century.

We enter the discussion, therefore, with at least a presumption in

favor of the conclusion that these works were built by the Indians—a presumption which has not received the consideration it deserves; indeed, it is so strong that it can be overcome only by showing that those mounds, or the specimens of art found in them, which were unquestionably the work of the builders, indicate an advancement in skill and knowledge entirely beyond that reached by the Indians previous to contact with Europeans. But all the genuine discoveries so far made in the explorations of the mounds tend to disprove this view.

If it can be shown that tribes occupying the mound region at the time they were first visited by Europeans used mounds, and in some cases built them, it will be a fair inference that all these structures are due to the same race until the contrary is proved.

The objection urged by many that the Indian has always been a restless nomad, spurning the restraints of agriculture, has been effectually answered, especially by Mr. Lucien Carr. [Footnote: Mounds of the Mississippi Valley Historically Considered.] History also bears us out in the assertion that at the time of the discovery nine tenths of the tribes in the mound district had fixed seats and local habitations, depending to a great extent for sustenance upon the cultivation of the soil. So far as the southern districts, now comprising the Gulf States, are concerned, it goes further and asserts over and over again that the tribes of that section were mound-builders when first encountered by the whites. To verify this assertion it is only necessary to read the chronicles of De Soto's expedition and the writings of the pioneer travelers and French missionaries to that section. This evidence proves conclusively not only that this had been a custom, but that it was continued into the eighteenth century.

Such statements as the following, attested by various contemporaneous authors, should suffice on this point:

The caciques of this country make a custom of raising near their dwellings very high hills, on which they sometimes build their houses. [Footnote: Biedma, Hist. Coll. La. vol. 2, p. 105.]

The Indians try to place their villages on elevated sites, but inasmuch as in Florida there are not many sites of this kind where they can conveniently build, they erect elevations themselves in the following manner, etc. [Footnote: Garcilasso de la Vega, Hist. Fla., ed. 1723, p. 69.]

The chief's house stood near the beach upon a very high mount made by hand for defense. [Footnote: Gentlemen of Elvas. Bradford Club series, vol. 5, p. 23.]

The last, which was on Tampa Bay, was most likely near Phillippi's

Point, where tradition fixes De Soto's landing place, and where a number of mounds and shell heaps have been found. One of these, opened by Mr. S. T. Walker, [Footnote: Smithsonian Report, 1879 (1880), pp. 392-422.] was found to consist of three layers. In the lower were "no ornaments and but little pottery, but in the middle and top layers, especially the latter, nearly every cranium was encircled by strings of colored beads, brass and copper ornaments; trinkets, etc. Among other curious objects were a pair of scissors and a fragment of looking-glass."

An earlier exploration is thus described: "The governor [De Soto] opened a large temple in the woods, in which were buried the chiefs of the country, and took from it a quantity of pearls which were spoiled by being buried in the ground." [Footnote: Biedma. Hist. Coll. La., vol. 2, p. 101.]

Another chronicler says: "This house stood on a high mound (cerro), similar to others we have already mentioned. Round about it was a roadway sufficiently broad for six men to walk abreast." [Footnote: Garcilasso de la Vega, Hist. Fla., ed. 1723, p. 139.] (There are good reasons for believing this to be the Etowah mound near Cartersville, Ga.) [Footnote: Thomas, Mag. Am. Hist., May, 1884, pp. 405, 406.]

The town of Talise is described as being strong in the extreme, inclosed by timber and earth. [Footnote: Garcilasso, Hist. Fla., p. 144.]

Herrera speaks of "a town of 400 houses, and a large square, where the cacique's house stood upon a mound made by art." [Footnote: Hist. Am., Stoven's transl., vol. 6, p. 5.]

Father Gravier [Footnote: Shea's Early French Voyages, pp. 126, 136.] speaks of mounds of the Akansea and "Tounika" villages.

M. La Harpe says "the cabins of the Yasous, Courois, Offogoula, and Ouspie [along the Yazoo about 1700] are dispersed over the country upon mounds of earth made with their own hands, from which it is inferred that these nations are very ancient and were formerly very numerous, although at the present time they hardly number two hundred and fifty persons." [Footnote: Lu Harpe, Hist. Coll. La., part 3, p. 106, New York, 1851.] (This seems to imply that there were numerous mounds unoccupied.) "In one of the Natches villages," says Dumont, "the house of the chief was placed on a mound." [Footnote: Mem. Hist. La., vol. 2, p. 109.]

Another writer says: "When the chief [of the Natchez] dies they demolish his cabin and then raise a new mound on which they build the cabin of him who is to replace him in this dignity." [Footnote: La Petit, Hist. Coll. La., vol. 3, pp. 141, 142, note.]

Also *Lettres edifiantes et curieuses*, vol. 1, pp. 260, 261. See Du Pratz. *Histoire Louisiane*, 1738, vol. 3, p. 16.]

According to Bartram, in the Cherokee town of Stico the council-house was on a mound, as also at Cowe. [Footnote: Bartram's *Travels*, pp. 345, 367.]

The same writer says [Footnote: *Ibid.*, p. 516.] the Choctaws raised mounds over their dead in case of communal burials.

It is apparent from Jefferson's language [Footnote: *Notes on Virginia*. 4th Am ed., 1801, pp. 142-147.] that the burial mounds of Virginia were of Indian origin.

These references, which might be indefinitely multiplied, are sufficient to bear out the assertion that history testifies that the southern tribes were accustomed to build mounds.

It is a matter of surprise that so little is to be found regarding the mounds in the older records of the Northern States. There is but one statement in the *Jesuit Relations* and no mention in the writings of the Recollects, so far as has been found, and yet one of the missionaries must have passed a good portion of the winter of 1700 in the very midst of the Cahokia group. Colden notes that "a round hill was sometimes raised over the grave in which a corpse had been deposited." [Footnote: *Hist. Five Nations*, introd., vol. 1, London, 1755, p. 16.] Carver noticed ancient earthworks on the Mississippi near Lake Pepin, but knew nothing of their origin. [Footnote: *Travels*, ed. 1796, Phila., p. 36; ed. 1779, London, p. 57.] Heckewelder observed some of these works near Detroit, which he was informed had been built by the Indians. An account of them was published in a Philadelphia periodical in 1780 or 1790. This description was afterwards given briefly in his "History of the Manners and Customs of the Indian Nations."

These older records mention facts which afford a reasonable explanation of some of the ancient monuments found in the northern section of the country; as for example the communal or tribal burials, where the bones and remains of all the dead of a village, region, or tribe, who had died since the last general burial (usually a period of eight to ten years) were collected and deposited in one common grave. This method, which was followed by some southern tribes, has been described by Bartram, [Footnote: *Travels* (1791), p.516.] Dumont, [Footnote: *Memoires Hist. La.*, vol. 1, p. 246.] Romans, [Footnote: *Nat. and Civil Hist. Fla.*, pp. 88-90.] and others, but most fully by Jean deo Brebeuf. [Footnote: In his account "Des ceremonies qu'ils [les Hurons] gardent en leur sepulture et de leur deuil," and "De la Feste solemnelle des morts."—*Jesuit Relations for 1636*, pp. 129-139. See translation in Thomas's "Burial Mounds of the Northern Section of the United

States," Fifth Annual Rept. Bur. Ethnol., p. 110. See also Lafitau, "Moeurs des Sauvages," vol. 2, pp. 447-455.]

It is a well-attested fact that northern as well as southern Indians were accustomed to erect palisades around their villages for defense against attack.

Some evidences of mound building by northern Indians may be found in the works of comparatively modern writers. Lewis C. Beck [Footnote: Gazetteer of the States of Ill. and Mo., p. 308.] affirms that "one of the largest mounds in this country has been thrown upon this stream [the Osage] within the last thirty or forty years by the Osages, near the great Osage village, in honor of one of their deceased chiefs." It is probable this is the mound referred to by Major Sibley, [Footnote: Featherstoubaugh, Excur. through Slave States, p. 70.] who says an Osage Indian informed him that a chief of his tribe having died while all the men were off on a hunt, he was buried in the usual manner, with his weapons, etc., and a small mound was raised over him. When the hunters returned this mound was enlarged at intervals, every man carrying materials, and so the work went on for a long time, and the mound, when finished, was dressed off to a conical form at the top. The old Indian further said he had been informed, and believed, that all the mounds had a similar origin.

Lewis and Clarke mention not only the erection of a mound over a modern chief, but also numerous earthworks, including mounds, which were known to be the work of contemporaneous Indians. [Footnote: Travels, Dublin ed., 1817, pp. 30, 31, 55, 67, 115, 117, 122-125, etc.]

L. V. Bierce [Footnote: Historical Reminiscences of Summit County, Ohio, p. 128.] states that when Nicksaw, an old Wyandotte Indian of Summit County, was killed, "the Indians buried him on the ground where he fell, and according to their custom raised a mound over him to commemorate the place and circumstances of his death. His grave is yet to be seen."

Another writer says: "It is related by intelligent Indian traders that a custom once prevailed among certain tribes, on the burial of a chief or brave of distinction, to consider his grave as entitled to the tribute of a portion of earth from each passer-by, which the traveler sedulously carried with him on his journey. Hence the first grave formed a nucleus around which, in the accumulation of the accustomed tributes thus paid, a mound was soon formed." [Footnote: Smith's History of Wisconsin, vol. 3, 1834, p. 245.]

The same author says [Footnote: Ibid., p. 262.] the tumulus at the Great Butte des Morts (Great Hill of the Dead) was raised over the

bones of Outagami (Fox Indian) warriors slain in battle with the French in 1706.

According to a Winnebago tradition, mounds in certain localities in Wisconsin were built by that tribe, and others by the Sacs and Foxes.[Footnote: Wis. Hist. Soc., Rept. I, pp. 88, 89.]

There is another Indian tradition, apparently founded on fact, that the Essex mounds in Clinton County, Mich., are the burying places of those killed in a battle between the Chippewas and Pottawatomies, which occurred not many generations ago. [Footnote: Smithsonian Report, part 1, 1884, p. 848.]

CHAPTER II.

SIMILARITY OF THE ARTS AND CUSTOMS OF THE MOUND BUILDERS TO THOSE OF INDIANS.

The historical evidence is, as we have seen, conclusive that some of the tribes of Indians were mound builders.

The explorations by the Bureau of Ethnology in the South and West have also brought to light so many corroborative facts that the question may be considered settled. These will shortly be given to the public; only a few can be noticed here, and that in a very brief and general way.

As the country was inhabited only by Indians at the time of its discovery, and as we have no evidence, unless derived from the mounds, of its having ever been occupied by any other people, every fact indicating a similarity between the arts, customs, and social life of the mound-builders and those of the red Indians, is an evidence of the identity of the two peoples. The greater the number of these resemblances, the greater the probability of the correctness of the theory, so long as we find nothing irreconcilable with it.

Architecture.—One of the first circumstances which strike the mind of the archaeologist who carefully studies these works as being very significant, is the entire absence of any evidence in them of architectural knowledge and skill approaching that exhibited by the ruins of Mexico and Central America, or even equaling that exhibited by the Pueblo Indians.

It is true that truncated pyramidal mounds of large size and somewhat regular proportions are found in certain sections, and

that some of these have ramps or roadways leading up to them. Yet when compared with the pyramids or teocalli of Mexico and Yucatan the differences in the manifestations of architectural skill are so great, and the resemblances are so faint and few, as to furnish no grounds whatever for attributing the two classes of works to the same people. The facts that the works of the one people consist chiefly of wrought and sculptured stone, and that such materials are wholly unknown to the other, forbid the idea of any relationship between the two. The difference between the two classes of monuments indicates a wide divergence—a complete step—in the culture status.

Mexico, Central America, and Peru are dotted with the ruins of stone edifices, but in all the mound-building area of the United States not the slightest vestige of one attributable to the people who erected the earthen structures is to be found. The utmost they attained in this direction was the construction of stone cairns, rude stone-walls, and vaults of cobble-stones and undressed blocks. This fact is too significant to be overlooked in this comparison, and should have its weight in forming a conclusion, especially when it is backed by numerous other important differences.

Though hundreds of groups of mounds marking the sites of ancient villages are to be seen scattered over the Mississippi Valley and Gulf States yet nowhere can there be found an ancient house. The inference is therefore irresistible that the houses of the mound-builders were constructed of perishable materials; consequently that the builders were not sufficiently advanced in art to use stone or brick in building, or else that they lived a roving, restless life that would not justify the time and trouble necessary to erect such permanent structures. As the last inference is irreconcilable with the magnitude and extent of many groups of these remains we are forced to the conclusion that the first is true.

One chief objection to the Indian origin of these works is, as already stated, that their builders must have been sedentary, depending largely upon agriculture for subsistence. It is evident, therefore, that they had dwellings of some sort, and as remains of neither stone nor brick structures are found which could have been used for this purpose, we must assume that their dwellings were constructed of perishable material, such as was supplied in abundance by the forest region in which they dwelt. It is therefore apparent that in this respect at least the dwellings of mound-builders were similar to those of Indians. But this is not all that can be said in reference to the houses of the former, for there still remain indications of their shape and character, although no complete examples are left for inspection. In various places, especially in Tennessee, Illinois, and southeast Missouri,

the sites of thousands of them are yet distinctly marked by little circular depressions with rings of earth around them. These remains give the form and size of one class of dwellings that was common in the regions named. Excavations in the center usually bring to light the ashes and hearth that mark the place where the fire was built, and occasionally unearth fragments of the vessels used in cooking, the bones of animals on whose flesh the inmates fed, and other articles pertaining to domestic use.

During the explorations of the Bureau in southeastern Missouri and Arkansas, finding the remains of houses in low, flat mounds was a common occurrence. Although the wood in most cases had disappeared, what had not been converted to coals and ashes having rotted away, yet the size and form, and, in part, the mode of construction, were clearly indicated. The hard-tramped, circular, earthen floor gave the size and form; the numerous fragments of burnt clay forming a layer over the floor—often taken by explorers for brick—revealed the method of plastering their dwellings; the charred remains of grass and twigs showed that it had been strengthened by this admixture; the impressions left on the inner face of these lumps of burnt plastering revealed the character of the lathing, which was in some cases branches and twigs, but in others split cane. The roof was thatched with grass or matting, the charred remains of which were found in more than one instance. In probably nine cases out of ten it was apparent these dwellings had been burned. This was found to be due to the custom of burying the dead in the floor and burning the dwelling over them, covering the remains with dirt often before the fire had ceased burning.

As a general rule the strata are found in this order: (1) a top layer of soil from 1 foot to 2 feet thick; (2) a layer of burnt clay from 3 to 12 inches thick (though usually varying from 4 to 8 inches) and broken into lumps, never in a uniform, unbroken layer; immediately below this (3) a thin layer of hardened muck or dark clay, though this does not always seem to be distinct. At this depth in the mounds of the eastern part of Arkansas are usually found one or more skeletons.

Take, for example, the following statement by Dr. Edward Palmer in regard to these beds:

As a general and almost universal rule, after removing a foot or two of top soil, a layer of burnt clay in a broken or fragmentary condition would be found, sometimes with impressions of grass or twigs, and easily crumbled, but often hard, and stamped, apparently, with an implement made of split reeds of comparatively large size. This layer was often a foot thick, and frequently burned to a brick-red or even to clinkers. Below this would be found more or less ashes, and often 6 inches of charred grass

immediately over the skeletons. These skeletons were found lying in all directions, some with the face up, others with it down, and others on the side. With each of these were one or more vessels of clay.

Remains of rectangular houses were also discovered, though much less frequent than other forms. These consisted of three rooms, two in front and one in rear. For example, Dr. Palmer found in a broad platform like elevation not more than 3 feet high the remains of a house of this form which he traced by the burnt clay. The lines of the upright walls were very apparent, as also the clay which must have fallen from them, and which raised the outer marginal lines considerably higher than the inner area. Dr. Palmer remarks:

The fire must have been very fierce, and the clay around the edges was evidently at some height above the door, as I judge from the irregular way in which it is scattered around the margins.

Excavations in the areas showed that they were covered with a layer of burnt clay, uneven and broken; immediately below this a layer of ashes 6 inches thick, and below this black loam. On these areas large trees were growing, one a poplar 3 feet in diameter. Below one of these floors were found a skeleton, some pottery, and a pipe. A large oak formerly stood at this point, but it has been blown down.

Subsequently the remains of another dwelling of precisely the same form, that is, two square rooms joined and a third of the same size immediately behind these two, were discovered in the same region by Colonel Norris. In this case remnants of the upright posts and reed lathing forming the walls were found, also the clay plastering.

Prof. G. C. Swallow [Footnote: 8th Rept. Peabody Museum, 1875, pp. 17, 18.] describes a room formed of poles, lathed with split cane, plastered with clay both inside and out, which he found in a mound in southeastern Missouri. Colonel Norris found parts of the decayed poles, plastering, and other remains of a similar house in a large mound in the same section.

From the statements of the early writers, a few of which are given here, it is evident that the houses of the Indians occupying this region when first visited by the whites were very similar to those of the mound-builders.

La Harpe, speaking of the tribes in some parts of Arkansas, says: "The Indians build their huts dome-fashion out of clay and reeds." Schoolcraft says the Pawnees formerly built similar houses. In Iberville's Journal [Footnote: Relation in Margry, Deconvertes,

4th part (March, 1699), p. 170] it is stated that the cabins of the Bayogoulas were round, about 30 feet in diameter, and plastered with clay to the height of a man. Adair says: "They are lathed with cane and plastered with mud from bottom to top within and without with a good covering of straw."

Henri de Tonty, the real hero of the French discoveries on the Mississippi, says the cabins of the Tensas were square, with the roof dome-shaped, and that the walls were plastered with clay to the height of 12 feet and were 2 feet thick. [Footnote: Relation of Henry de Tonty in Margry, *Decouvertes*, vol. 1, 1876, p. 600]

A description of the Indian square houses of this southern section by Du Pratz [Footnote: *Hist. La.*, vol. 2, French ed., 1758, pp. 173-175; English ed., 1764, p. 359.] is so exactly in point that I insert a translation of the whole, passage:

The cabins of the natives are all perfectly square; none of them are less than 15 feet in extent in every direction, but there are some which are more than 30. The following is their manner of building them: The natives go into the new forest to seek the trunks of young walnut trees of 4 inches in diameter and from 18 to 20 feet long; they plant the largest ones at the four corners to form the breadth and the dome; but before fixing the others they prepare the scaffolding; it consists of four poles fastened together at the top, the lower ends corresponding to the four corners; on these four poles others are fastened crosswise at a distance of a foot apart; this makes a ladder with four sides, or four ladders joined together.

This done, they fix the other poles in the ground in a straight line between those of the corners; when they are thus planted they are strongly bound to a pole which crosses them within each side [of the house]. For this purpose large splints of stalks are used to tie them at the height of 5 or 6 feet, according to the size of the cabin, which forms the walls; these standing poles are not more than 15 inches apart from each other; a young man then mounts to the end of one of the corner poles with a cord in his teeth; he fastens the cord to the pole, and as he mounts within, the pole bends, because those who are below draw the cord to bend the pole as much as is necessary; at the same time another young man fixes the pole of the opposite corner in the same way; the two poles being thus bent at a suitable height, they are fastened strongly and evenly. The same is done with the poles of the two other corners as they are crossed over the first ones. Finally all the other poles are joined at the point, which makes altogether the figure of a bower in a summer-house such as we have in France. After this work they fasten sticks on the lower sides or walls at a distance of about 8 inches across, as high as the pole of which I have spoken, which forms the length of the wall.

These sticks being thus fastened, they make mud walls of clay, in which they put a sufficient amount of Spanish moss; these walls are not more than 4 inches thick; they leave no opening but the door, which is only 2 feet in width by 4 in height; there are some much smaller. They then cover the frame-work which I have just described with mats of reeds, putting the smoothest on the inside of the cabin, taking care to fasten them together so that they are well joined.

After this they make large bundles of grass, of the tallest that can be found in the low lands, and which is 4 or 5 feet long; this is put on in the same way as straw which is used to cover thatched houses; the grass is fastened with large canes, and splints, also of canes. When the cabin is covered with grass they cover all with a matting of canes well bound together, and at the bottom they make a ring of "bind-weeds" all around the cabin, then they trim the grass evenly, and with this defense, however strong the wind may be, it can do nothing against the cabin. These coverings last twenty years without being repaired.

Numerous other references to the same effect might be given, but these are sufficient to show that the remains found in the mounds of the South are precisely what would result from the destruction by fire of the houses in use by the Indians when first encountered by Europeans.

It is admitted now by all archaeologists that the ancient works of New York are attributable to Indians, chiefly to the Iroquois tribes. This necessarily carries with it the inference that works of the same type, for instance those of northern Ohio and eastern Michigan, are due to Indians. It is also admitted that the mounds and burial pits of Canada are due, at least in part, to the Hurons. [Footnote: David Boyle, Ann. Rept. Canadian Institute, 1886-1887, pp. 9-17; Ibid., 1888, p. 57.]

Tribal divisions.—As the proofs that the mound-builders pertained to various tribes often at war with each other are now too numerous and strong to be longer denied, we may see in them evidences of a social condition similar to that of the Indians.

Similarity in burial customs.—There are perhaps no other remains of a barbarous or unenlightened people which give us so clear a conception of their superstitions and religious beliefs as do those which relate to the disposal of their dead. By the modes adopted for such disposal, and the relics found in the receptacles of the dead, we are enabled not only to understand something of these superstitions and beliefs, but also to judge of their culture status and to gain some knowledge of their arts, customs, and modes of life.

The mortuary customs of the mound-builders, as gleaned from an examination of their burial mounds, ancient cemeteries, and other depositories of their dead, present so many striking resemblances to those of the Indians when first encountered by the whites, as to leave little room for doubt regarding their identity.

[Footnote: Evidence bearing on this point will be found in the paper on The Burial Mounds of the Northern Sections, by C. Thomas, in the Fifth Annual Report of the Bureau of Ethnology.] Nor is this similarity limited to the customs in the broad and general sense, but it is carried down to the more minute and striking peculiarities.

Among the general features in which resemblances are noted are the following:

The mound-builders were accustomed to dispose of their dead in many different ways; their modes of sepulture were also quite varied. The same statements will apply with equal force to the Indians.

"The commonest mode of burial among North American Indians," we are informed by Dr. H. C. Yarrow, [Footnote: First Annual Report Bureau of Ethnology, Smithsonian Institution, 1879-'80 (1881), p. 93.] "has been that of interment in the ground, and this has taken place in a number of ways." The different ways he mentions are, in pits, graves, or holes in the ground; in stone graves or cists; in mounds; beneath or in cabins, wigwams, houses or lodges, and in caves.

The most common method of burial among the mound-builders was by inhumation also, and all the different ways mentioned by Dr. Yarrow as practiced by the Indians were in vogue among the former. It was supposed for a long time that their chief and almost only place of depositing their dead was in the burial mounds, but more thorough explorations have revealed the fact that near most mound villages are cemeteries, often of considerable extent.

The chief value of this fact in this connection is that it forms one item of evidence against the theory held by some antiquarians that the mound-builders were Mexicans, as the usual mode of disposing of the dead by the latter was cremation. [Footnote: Clavigero, Hist. Mex., Cullen's transl., I, 325; Torquemada, Monarq. Ind., I, p.60, etc.] According to Brasseur de Bourbourg the Toltecs also practiced cremation. [Footnote: H.H. Bancroft, Native Races, vol. 2, 1882, p. 609.]

REMOVAL OF THE FLESH BEFORE BURIAL.—This practice appears to have been followed quite generally by both Indians and mound-builders.

That it was followed to a considerable extent by the mound builders of various sections is shown by the following evidence:

The confused masses of human bones frequently found in mounds show by their relation to each other that they must have been gathered together after the flesh had been removed, as this condition could not possibly have been assumed after burial in their natural state. Instances of this kind are so numerous and well known that it is scarcely necessary to present any evidence in support of the statement. The well-known instance referred to by Jefferson in his "Notes on Virginia" [Footnote: Fourth Am. ed., 1801, p. 143; p. 146, in 8th ed.] is one in point. "The appearance," he tells us, "certainly indicates that it [the barrow] has derived both origin and growth from the customary collections of bones and deposition of them together."

Notices of similar deposits have been observed as follows: In Wisconsin, by Mr. Armstrong; [Footnote: Smithsonian Rept., 1879, p. 337] in Florida, by James Bell [Footnote: Smithsonian Rept., 1881, p. 636.] and Mr. Walker; [Footnote: Smithsonian Rept., 1879, p. 398] in Cass County, Ill., by Mr. Snyder; [Footnote: Smithsonian Rept., 1881, p. 573.] in Georgia, by C. C. Jones. [Footnote: Antiq. So. Inds., p. 193.] Similar deposits have also been found by the assistants of the Bureau of Ethnology in Wisconsin, Illinois, northern Missouri, North Carolina, New York, and Arkansas.

Another proof of this custom was observed by Mr. J. D. Middleton and Colonel Morris in Wisconsin, northeastern Missouri, and Illinois. In numerous mounds the skeletons were found packed closely side by side, immediately beneath a layer of hard, mortar-like substance. The fact that this mortar had completely filled the interstices, and in many cases the skulls also, showed that it had been placed over them while in a plastic state, and as it must soon have hardened and assumed the condition in which it was found, it is evident the skeletons had been buried after the flesh was removed.

As additional evidence we may mention the fact that in stone graves, so small that the body of a full-grown individual could not by any possible means be pressed into them, the bones of adult individuals are sometimes found. Instances of this kind have occurred in Tennessee, Missouri, and southern Illinois.

From personal examination I conclude that most of the folded skeletons found in mounds were buried after the flesh had been removed, as the folding, to the extent noticed, could not possibly have been done with the flesh on them, and the positions in most cases were such that they could not have been assumed in

consequence of the decay of the flesh and settling of the mound.

The partial calcining of the bones in vaults and under layers of clay where the evidence shows that the fire was applied to the outside of the vault or above the clay layer, can be accounted for only on the supposition that the flesh had been removed before burial.

Other proofs that this custom prevailed among the mound builders in various sections of the country might be adduced.

That it was the custom of a number of Indian tribes, when first encountered by the whites, and even down to a comparatively modern date, to remove the flesh before final burial by suspending on scaffolds, depositing in charnel-houses, by temporary burial, or otherwise, is well known to all students of Indian habits and customs.

Heckewelder says, "The Nanticokes had the singular custom of removing the bones from the old burial place to a place of deposit in the country they now dwell in." [Footnote: *Hist. Manners and Customs Ind. Nations*, p. 75.]

The account by Breboeuf of the communal burial among the Hurons heretofore referred to is well known. [Footnote: *Jesuit Relations for 1636*. Transl. in *Fifth Ann. Rept. Bur. Ethnol.*, p. 110.] The same custom is alluded to by Lafitau. [Footnote: *Moeurs des Sauvages*, vol. 2, pp. 420-435.] Bartram observed it among the Choctaws. [Footnote: *Travels*, p. 516.] It is also mentioned by Bossu, [Footnote: *Travels through Louisiana*, p. 298.] by Adair, [Footnote: *Hist. Am. Indians*, p. 183.] by Barnard Romans, [Footnote: *Nat. Hist. Florida*, p. 90.] and others.

Burial beneath or in dwellings.—The evidence brought to light by the investigations of the Bureau of Ethnology, regarding a custom among the mound-builders of Arkansas and Mississippi, of burying in or under their dwellings, has been given, in part, in an article published in the *Magazine of American History*. [Footnote: February, 1884.] It is a well-attested historical fact that such was also the custom of the southern Indian tribes. Bartram affirms it to have been in vogue among the Muscogulgees or Creeks, [Footnote: *Travels*, p. 505.] and Barnard Romans says it was also practiced by the Chickasaws. [Footnote: *Nat. Hist. Florida*, p. 71] C C. Jones says that the Indians of Georgia "often interred beneath the floor of the cabin, and then burnt the hut of the deceased over his head;" [Footnote: *Antiq. So. Indians*, p. 203.] which furnishes a complete explanation of the fact observed by the Bureau explorers, mentioned in the article before alluded to.

Burial in a sitting or squatting posture.—It was a very common

practice among the mound-builders to bury their dead in a sitting or squatting posture. The examples of this kind are too numerous and too well known to require repetition. I may add that the yet unpublished reports of the Bureau show that this custom prevailed to a certain extent in Wisconsin, Iowa, Illinois, North Carolina, Missouri, Ohio, and West Virginia. Instances have also been observed elsewhere. [Footnote: Jones's *Antiq. So. Indians* (Georgia and Florida). pp. 183-185.] That the same custom was followed by several of the Indian tribes is attested by the following authorities: Bossu, [Footnote: *Travels*, vol. 1, p. 251.] Lawson, [Footnote: *Hist. Carolina*, p. 182.] Bartram, [Footnote: *Travels*, p. 515.] and Adair. [Footnote: *Hist. Am. Indians*, p. 182.]

The use of fire in burial ceremonies.—Another observance in which the burial customs of mound-builders corresponded with those of Indians was the use of fire in funeral ceremonies. The evidences of this custom are so common in mounds as to lead to the supposition that the mound-builders were in the habit of offering human sacrifices to their deities. Although charred and even almost wholly consumed human bones are often found, showing that bodies or skeletons were sometimes burned, it does not necessarily follow that they were offered as sacrifices. Moreover, judging from all the data in our possession, the weight of evidence seems to be decidedly against such conclusion.

Among the Indians fire appears to have been connected with the mortuary ceremonies in several ways. One use of it was to burn the flesh and softer portions of the body when removed from the bones. [Footnote: *Barnard Romans*, *Nat. Hist. Florida*, p. 90.] Breboeuf also mentions its use in connection with the communal burial of the Hurons. [Footnote: *Jesuit Relations for 1636*, p. 135.] According to M. B. Kent [Footnote: *Yarrow's Mort. Customs N. A. Indians*, 1st Ann. Rept. Bur. Ethnology (1881), P. 95.] it was the ancient custom of the Sacs and Foxes to burn a portion of the food of the burial feast to furnish subsistence for the spirit on its journey.

Pickett says [Footnote: *Hist. Alabama*, 3d ed., vol. 1, p. 140.] the Choctaws were in the habit of killing and cutting up their prisoners of war, after which the parts were burned. He adds further, in reference to their burial ceremonies: [Footnote: *Ibid.*, p. 142] "From all we have heard and read of the Choctaws, we are satisfied that it was their custom to take from the bone-house the skeletons, with which they repaired in funeral procession to the suburbs of the town, where they placed them on the ground in one heap, together with the property of the dead, such as pots, bows, arrows, ornaments, curiously-shaped stones for dressing deer skins, and a variety of other things. Over this heap they first threw charcoal and ashes, probably to preserve the bones, and the next operation was to cover all with earth. This

left a mound several feet high." This furnishes a complete explanation of the fact that uncharred human bones are frequently found in Southern mounds imbedded in charcoal and ashes.

Similarity of their stone implements and ornaments.—In addition to the special points of resemblance between the works of the two peoples, of which a few only have been mentioned, we are warranted in asserting that in all respects, so far as we can trace them correctly, there are to be found strong resemblances between the habits, customs, and arts of the mound-builders and those of the Indians previous to their change by contact with Europeans. Both made use of stone implements, and so precisely similar are the articles of this class that it is impossible to distinguish those made by the one people from those made by the other. So true is this that our best and most experienced archaeologists make no attempt to separate them, except where the conditions under which they are found furnish evidence for discrimination. Instead of burdening these pages with proofs of these statements by reference to particular finds and authorities, I call attention to the work of Dr. C. C. Abbott on the handiwork in stone, bone, and clay of the native races of the northern Atlantic sea board of America, entitled "Primitive Industry." As the area embraced in this work, as remarked by its author, "does not include any territory known to have been permanently occupied by the so-called mound-builders," the articles found here must be ascribed to the Indians unless, as suggested by Dr. Abbott, some of a more primitive type found in the Trenton gravel are to be attributed to an earlier and still ruder people. Examining those of the first class, which are ascribed to the Indians, we observe almost every type of stone articles found in the mounds and mound area; not only the rudely chipped scrapers, hoes, celts, knives, and spear and arrow heads, but also the polished or ground celts, axes, hammers, and chisels, or gouges.

Here we also find drills, awls, and perforators, slick stones and dressers, pipes of various forms and finish, discoidal stones and net sinkers, butterfly stones and other supposed ceremonial objects, masks or face figures and bird-shaped stones, gorgets, totems, pendants, trinkets, etc. Nor does the resemblance stop with types, but it is carried down to specific forms and finish, leaving absolutely no possible line of demarkation between these and the similar articles attributed to the mound-builders. So persistently true is this that had we stone articles alone to judge by, it is probable we should be forced to the conclusion, as held by some writers, that the former inhabitants of that portion of the United States east of the Rocky Mountains pertained to one nation, unless possibly the prevalence of certain types in particular sections should afford some data for tribal districting.

This strong similarity of the stone articles of the Atlantic coast to those of the mound area was noticed as early as 1820 by Caleb Atwater, who, knowing that the former were Indian manufactures, attributed the latter also to the same people although he held that the mounds were the work of the ancestors of the civilized nations of Mexico and Central America.

Mound and Indian Pottery.—The pottery of the mound-builders has often been referred to as proof of a higher culture status, and of an advance in art beyond that reached by the Indians. The vase with a bird figure found by Squier and Davis in an Ohio mound is presented in most works on American archaeology as an evidence of the advanced stage of the ceramic art among the mound-builders; but Dr. Rau, who examined the collection of these authors, says:

Having seen the best specimens of "mound" pottery obtained during the survey of Messrs. Squier and Davis, I do not hesitate to assert that the clay vessels fabricated at the Cahokia Creek were in every respect equal to those exhumed from the mounds of the Mississippi Valley, and Dr. Davis himself, who examined my specimens from the first-named locality, expressed the same opinion. [Footnote: Smithsonian Rept., 1866, p. 349.]

The Cahokia pottery which he found along the creek of that name (Madison County, Ill.) he ascribes to Indians, and believes it to be of comparatively recent origin.

Most of the mound pottery is mixed with pulverized shells, which is also true of most Indian pottery. [Footnote: Dumont, Mem. Hist. La., vol. 2, 1753, p. 271; Adair, Hist. Am. Indians, p. 424; Loskiel, Gesell. der Miss., p. 70, etc.] Du Pratz says that "the Natchez Indians make pots of an extraordinary size, cruses with a medium-sized opening, jars, bottles with long necks holding two pints, and pots or cruses for holding bear's oil;" [Footnote: Hist. La., p. 79.] also that they colored them a beautiful red by using ocher, which becomes red after burning.

As is well known, the bottle-shaped vase with a long neck is the typical form of clay vessels found in the mounds of Arkansas and southeastern Missouri, and is also common in the mounds and stone graves of middle Tennessee. Those colored or ornamented with red are often found in the mounds of the former sections. It is worthy of notice in this connection that the two localities—near Saint Genevieve, Mo., and near Shawneetown, Ill.—where so many fragments of large clay vessels used in making salt have been found, were occupied for a considerable time by the Shawnee Indians. As will hereafter be shown, there are reasons for believing this pottery was made by the Shawnees.

The statement so often made that the mound pottery, especially

that of Ohio, far excels that of the Indians is not justified by the facts.

Much more evidence of like tenor might be presented here, as, for example, the numerous instances in which articles of European manufacture have been found in mounds where their presence could not be attributed to intrusive burials, but the limits of the paper will not admit of this. I turn, therefore, to the problem before us, viz, "Who were the authors of the typical works of Ohio?"

As before stated, the answer is, "These works are attributable in part at least to the ancestors of the modern Cherokees."

As a connecting link between what has been given and the direct evidence that the Cherokees were mound-builders, and as having an important bearing upon both questions, the evidence derived from the box-shaped stone graves is introduced at this point.

CHAPTER III.

STONE GRAVES AND WHAT THEY TEACH.

In order to state clearly the argument based upon these works it is necessary to present a brief explanation.

There are several forms and varieties of stone graves or cists found in the mound area, some being of cobble stones, others of slabs; some round, others polygonal; some dome-shaped, others square, and others box shaped, or parallelograms. Reference is made at present only to the last mentioned—the box shaped type, made of stone slabs. If the evidence shows that this variety is found only in certain districts, pertains to a certain class of works, and is usually accompanied by certain types of art, we are warranted in using it as an ethnic characteristic, or as indicating the presence of particular tribes. If it can be shown that graves of this form are found in mounds attributed to the so-called mound-builders, and that certain tribes of Indians of historic times were also accustomed to bury in them, we are warranted in assuming that there was a continuity of custom from the mound-building age to historic times, or that graves found in the mounds are probably attributable to the same people (or allied tribes) found using them at a later date. This conclusion will be strengthened by finding that certain peculiar types of art are limited to the regions where these graves exist, and are found almost exclusively in connection with them.

These graves, as is well known, are formed of rough and unhewn slabs or flat pieces of stone, thus: First, in a pit some 2 or 3 feet deep and of the desired dimensions, dug for the purpose, a layer of stone is placed to form the floor; next, similar pieces are set on edge to form the sides and ends, over which other slabs are laid flat, forming the covering, the whole when finished making a rude, box-shaped coffin or sepulcher. Sometimes one or more of the six faces are wanting; occasionally the bottom consists of a layer of water-worn boulders; sometimes the top is not a single layer of slabs, but other pieces are laid over the joints, and sometimes they are placed shingle-fashion. These graves vary in length from 14 inches to 8 feet, and in width from 9 inches to 3 feet.

It is not an unusual thing to find a mound containing a number of those cists arranged in two, three, or more tiers. As a general rule, those not in mounds are near the surface of the ground, and in some instances even projecting above it. It is probable that no one who has examined them has failed to note their strong resemblance to the European mode of burial. Even Dr. Joseph Jones, who attributes them to some "ancient race," was forcibly reminded of this resemblance, as he remarks:

In looking at the rude stone coffins of Tennessee, I have again and again been impressed with the idea that in some former age this ancient race must have come in contact with Europeans and derived this mode of burial from them. [Footnote: Aboriginal Remains of Tennessee, pp. 34,35]

The presence of stone graves of the type under consideration in the vicinity of the site of some of the "over hill towns" of the Cherokees on the Little Tennessee River, presented a difficulty in the way of the theory here advanced, as it is well known that the Cherokees and Shawnees were inveterate enemies from time immemorial. But by referring to Schoolcraft's History of the Indians the following statement solves the riddle and confirms the theory:

A discontented portion of the Shawnee tribe from Virginia broke off from the nation, which removed to the Scioto country, in Ohio, about the year 1730, and formed a town known by the name of Lulbehrad, in what is now Clark County [Kentucky], about 30 miles east of this place [Lexington]. This tribe left this country about 1730 and went to East Tennessee, to the Cherokee Nation. [Footnote: Vol. 1, p. 301.]

Some years ago Mr. George E. Sellers discovered near the salt spring in Gallatin County, Ill., on the Saline River, fragments of clay vessels of unusually large size, which excited much interest

in the minds of antiquarians, not only because of the size of the vessels indicated by the fragments, but because they appeared to have been used by some prehistoric people in the manufacture of salt and because they bore impressions made by some textile fabric. In the same immediate locality were also discovered a number of box-shaped stone graves. That the latter were the work of the people who made the pottery Mr. Sellers demonstrated by finding that many of the graves were lined at the bottom with fragments of these large clay "salt pans." [Footnote: Popular Science Monthly, vol. II, 1877, pp. 573-584.]

Mention of this pottery had been made long previously by J. M. Peck in his "Gazetteer of Illinois." [Footnote: 1834, p. 52.]

He remarks that "about the Gallatin and Big Muddy Salines large fragments of earthenware are very frequently found under the surface of the earth. They appear to have been portions of large kettles used, probably, by the natives for obtaining salt."

The settlement of the Shawnees at Shawneetown, on the Ohio River, in Gallatin County, in comparatively modern times, is attested not only by history but by the name by which the town is still known. There is evidence on record that there was an older Shawneetown located at the very point where this "salt-kettle" pottery and these stone graves were found. This is mentioned in the American State Papers [Footnote: Public Lands, Class VIII, vol.2, p. 103, Gales and Seaton ed.] in the report relating to the famous claim of the Illinois and Wabash Land Companies. The deed presented was dated July 20, 1773, and recorded at Kaskaskia, September 2, 1773. In this mention is made of the "ancient Shawnee town" on Saline Creek, the exact locality of the stone graves and suit-kettle pottery. The modern Indian village at Shawneetown on the Ohio River had not then come into existence, and was but in its prime in 1806, when visited by Thomas Ashe. [Footnote: Travels in America, 1808, p. 265.]

As proof that the people of this tribe were in the habit of making salt the following evidence is presented: Collins, in his "History of Kentucky", [Footnote: Vol. 2, p. 55.] gives an account of the capture and adventures of Mrs. Mary Ingals, the first white woman known to have visited Kentucky. In this narrative occurs the following statement:

The first white woman in Kentucky was Mrs. Mary Ingals, nee Draper, who, in 1756 with her two little boys, her sister-in-law, Mrs. Draper, and others was taken prisoner by the Shawnee Indians, from her home on the top of the great Allegheny ridge, is now Montgomery County, W. Va. The captives were taken down the Kanawha, to the salt region, and, after a few days spent in making salt, to the Indian village at the mouth of Scioto River.

By the treaty of Fort Wayne, June 7, 1803, between the Delawares, Shawnees, and other tribes and the United States, it was agreed that in consideration of the relinquishment of title to "the great salt spring upon the Saline Creek, which falls into the Ohio below the mouth of the Wabash, with a quantity of land surrounding it, not exceeding 4 miles square," the United States should deliver "yearly, and every year for the use of said Indians, a quantity of salt not exceeding 150 bushels." [Footnote: Treaties of United States with Indian tribes, p. 97.]

Another very significant fact in this connection is that the fragments of large earthen vessels similar in character to those found in Gallatin County, Ill., have also been found in connection with the stone graves of the Cumberland Valley, and, furthermore, the impressions made by the textile fabrics show the same stitches as do the former. Another place where pottery of the same kind has been found is about the salt-lick near Saint Genevieve, Mo., a section inhabited for a time by Shawnees and Delawares. [Footnote: C.C. Royce in American Antiquarian, vol. 3, 1881, pp. 188, 189.]

Stone graves have been found in Washington County, Md. [Footnote: Smithsonian Report for 1882 (1884), p. 797.] History informs us that there were two Shawnee settlements in this region, one in the adjoining county of Maryland (Allegany), and another in the neighborhood of Winchester, Va. [Footnote: C. C. Royce in American Antiquarian, vol. 3, 1881, p. 186. Virginia State Papers, 1. p. 63.]

Mr. W. M. Taylor [Footnote: Smithsonian Report for 1877, p. 307. Mentions only known instance of mound with Delaware Village.] mentions some stone graves of the type under consideration as found on the Mahoning River, in Pennsylvania. An important item in this connection is that these graves were in a mound. He describes the mound as 35 feet in diameter and 5 feet high, having on one side a projection 35 feet long of the same height as the mound. Near by a cache was discovered containing twenty one iron implements, such as axes, hatchets, tomahawks, hoes, and wedges. He adds the significant statement that near the mound once stood the Indian (Delaware) village of Kush-kush-kee.

Graves of the same type have been discovered in Lee County, Va. [Footnote: Eleventh Report of the Peabody Museum, 1878, p. 208.] Others have been found in a mound on the Tennessee side, near the southern boundary of Scott County, Va. Allusion has already been made to the occasional presence of the Shawnees in this region. In the map of North America by John Senex, Chaonanon villages are indicated in this particular section.

The presence of these graves in any part of Ohio can easily be

accounted for on the theory advanced, by the well-known fact that both Shawnees and Delawares were located at various points in the region, and during the wars in which they were engaged were moving about from place to place; but the mention of a few coincidences may not be out of place.

In the *American Antiquarian* for July, 1881, is the description of one of these cists found in a mound in the eastern part of Montgomery County. Mr. Royce, in the article already referred to, states that there was a Shawnee village 3 miles north of Xenia, in the adjoining county, on Mad River, which flows into the Miami a short distance above the location of the mound.

Stone graves have been found in great numbers at various points along the Ohio from Portsmouth to Ripley, a region known to have been occupied at various times by the Shawnees.

Similar graves have been discovered in Ashland County. [Footnote: *Smithsonian Report* for 1877, pp. 261-267.] These, as will be seen by reference to the same report (page 504), are precisely in the locality of the former Delaware villages.

The evidence is deemed sufficient to show that the Shawnees and Delawares were accustomed to bury in stone graves of the type under consideration, and to indicate that the graves found south of the Ohio are to be attributed to the former tribe and those north to both tribes.

As graves of this kind are common over the west side of southern Illinois, from the mouth of the Illinois to the junction of the Ohio and Mississippi Rivers, attention is called to some evidence bearing on their origin.

Hunter, who traveled in the West, says that some of the Indians he met with during his captivity buried their dead in graves of this kind.

According to a statement made by Dr. Rau to Mr. C. C. Jones, and repeated to me personally, "it is a fact well remembered by many persons in this neighborhood [Monroe County, III.] that the Indians who inhabited this region during the early part of the present century (probably Kickapoos) buried their dead in stone coffins." [Footnote: *Antiquities So. Indians*, p. 220.]

Dr. Shoemaker, who resided on a farm near Columbia, in 1861, showed Dr. Rau, in one of his fields, the empty stone grave of an Indian who had been killed by one of his own tribe and interred there within the memory of some of the farmers of Monroe County. An old lady in Jackson County informed one of the Bureau assistants that she had seen an Indian buried in a grave of this

kind.

It is doubtful whether Dr. Rau is correct in ascribing these graves to the Kickapoos, as their most southern locality appears to have been in the region of Sangamon County. [Footnote: Reynolds's Hist. Illinois, p. 20.] It is more probable they were made by the Kaskaskias, Tamaroas, and Cahokias. Be this as it may, it is evident that they are due to some of the tribes of this section known as Illinois Indians, pertaining to the same branch of the Algonquin family as the Shawnees and Delawares.

That the stone graves of southern Illinois were made by the same people who built those of the Cumberland Valley, or closely allied tribes, is indicated not only by the character of the graves but by other very close and even remarkable resemblances in the construction and contents as well as in the form and size of the mounds; the presence of hut-rings in both localities, and the arrangement of the groups.

Taking all the corroborating facts together there are reasonable grounds for concluding that graves of the type now under consideration, although found in widely-separated localities, are attributable to the Shawnee Indians and their congeners, the Delawares and Illinois, and that those south of the Ohio are due entirely to the first named tribe. That they are the works of Indians must be admitted by all who are willing to be convinced by evidence.

The fact that in most cases (except when due to the Delawares, who are not known to have been mound-builders) the graves are connected with mounds, and in many instances are in mounds, sometimes in two, three, and even four tiers deep, proves beyond a doubt that the authors of these graves were mound-builders.

The importance and bearing of this evidence does not stop with what has been stated, for it is so interlocked with other facts relating to the works of the "veritable mound-builders" as to leave no hiatus into which the theory of a lost race or a "Toltec occupation" can possibly be thrust. It forms an unbroken chain connecting the mound-builders and historical Indians which no sophistry or reasoning can break. Not only are these graves found in mounds of considerable size, but they are also connected with one of the most noted groups in the United States, namely, the one on Colonel Tumlin's place, near Cartersville, Ga., known as the Etowah mounds, of which a full description will be found in the Fifth Annual Report of the Bureau of Ethnology.

In the smallest of the three large mounds of this group were found stone graves of precisely the type attributable, when found south of the Ohio, to the Shawnees. They were not in a situation where

they could be ascribed to intrusive burials, but in the bottom layer of a comparatively large mound with a thick and undisturbed layer of hard-packed clay above them. It is also worthy of notice that the locality is intermediate between the principal seat of the Shawnees in the Cumberland Valley, and their extreme eastern outposts in northeastern Georgia, where both tradition and stone graves indicate their settlement. The tradition regarding this settlement has been given elsewhere. [Footnote: *Am. Antiq.*, vol. 7, 1885, p. 133]

In these graves were found the remarkable figured copper plates and certain engraved shells, of which mention has been made by Mr. W. H. Holmes [Footnote: *Science*, vol. 3, 1884, pp. 436-438.] and by myself [Footnote: *Ibid.*, pp. 779-785.] in *Science*. It is a singular corroboration of the theory here advanced that the only other similar copper plates were found at Lebanon, Tenn., by Prof. F. W. Putnam; in a stone grave in a mound at Mill Creek, southern Illinois, by Mr. Earle; in a stone grave in Jackson County, Ill., by Mr. Thing; in a mound of Madison County, Ill., by Mr. H. R. Howland; and in a small mound at Peoria, Ill., by Maj. J. W. Powell. All, except the specimens found by Professor Putnam and Mr. Howland, were secured by the Bureau of Ethnology, and are now in the National Museum.

There can be but little doubt that the specimens obtained from simple stone graves by Professor Putnam and Mr. Thing are to be attributed to Indian burials, but surely not to Indian manufacture.

We have, therefore, two unbroken chains connecting the Indians of historic times with the "veritable mound builders," and the facts which form the links of these chains throw some additional light on the history of that mysterious people, the Shawnees.

It may be stated here that in the report relating to the claim of the Wabash Land Company [Footnote: *American State Papers*, Land Affairs, Appendix, p. 20.] is a statement giving a list of articles furnished the Indians, among which we notice nine ear wheels. These we suppose to be the same as the spool shaped ear ornaments found in stone graves and elsewhere.

The engraved shells also form a link which not only connects the mound-builders with historic times but corroborates the view advanced in regard to the Shawnees, and indicates also that the Cherokees were mound-builders. But before introducing this we will give the reasons for believing that the mounds of eastern Tennessee and western North Carolina are due to the last-named tribe.

CHAPTER IV.

THE CHEROKEES AS MOUND BUILDERS.

As the evidence on this point has to a large extent been presented in my article on "Burial Mounds of the Northern Section," [Footnote: Fifth Ann. Rept. Bur Ethnol] also in articles published in the Magazine of American History [Footnote: May, 1884, pp. 396-407] and in the American Naturalist, [Footnote: Vol. 18, 1884, pp. 232-240] it will be necessary here only to introduce a few additional items.

The iron implements which are alluded to in the above mentioned articles also in Science, [Footnote: Science, vol. 3, 1884, pp. 308-310] as found in a North Carolina mound, and which analysis shows were not meteoric, furnish conclusive evidence that the tumulus was built after the Europeans had reached America; and as it is shown in the same article that the Cherokees must have occupied the region from the time of its discovery up to its settlement by the whites it is more than probable they were the builders. A figure of one of the pieces is introduced here.

[Illustration with caption: Fig I Part of an iron blade from a North Carolina mound]

Additional and perhaps still stronger evidence, if stronger be needed, that the people of this tribe were the authors of most of the ancient works in western North Carolina and eastern Tennessee is to be found in certain discoveries made by the Bureau assistants in Monroe County, Tenn.

A careful exploration of the valley of the Little Tennessee River, from the point where it leaves the mountains to its confluence with the Holston, was made, and the various mound groups were located and surveyed. These were found to correspond down as far as the position of Fort London and even to the island below with the arrangement of the Cherokee "over-hill towns" as given by Timberlake in his map of the Cherokee country called "Over the Hills," [Footnote: Memoirs, 1765] a group for each town, and in the only available spots the valley for this distance affords. As these mounds when explored yielded precisely the kind of ornaments and implements used by the Cherokees, it is reasonable to believe they built them.

Ramsey also gives a map, [Footnote: Annals of Tennessee, p. 376] but his list evidently refers to a date corresponding with the close of their occupancy of this section. Bartram [Footnote: Travels, pp. 373.374.] gives a more complete list applying to an

earlier date. This evidently includes some on the Holston (his "Cherokee") River and some on the Tellico plains. This corresponds precisely with the result of the explorations by the Bureau as will be seen when the report is published. Some three or four groups were discovered in the region of Tellico plains, and five or six on the Little Tennessee below Fort London and on the Holston near the junction, one large mound and a group being on the "Big Island" mentioned in Bartram's list.

The largest of these groups is situated on the Little Tennessee above Fort London and corresponds with the position of the ancient "beloved town of Chota" ("Great Chote" of Bartram) as located by tradition and on both Timberlake's and Ramsey's maps. According to Ramsey, [Footnote: *Annals of Tennessee*, p. 157] at the time the pioneers, following in the wake of Daniel Boone near the close of the eighteenth century, were pouring over the mountains into the valley of the Watauga, a Mrs. Bean, who was captured by the Cherokees near Watauga, was brought to their town at this place and was bound, taken to the top of one of the mounds and about to be burned, when Nancy Ward, then exercising in the nation the functions of the Beloved or Pretty Woman, interfered and pronounced her pardon.

During the explorations of the mounds of this region a peculiar type of clay beds was found in several of the larger mounds. These were always saucer shaped, varying in diameter from 6 to 15 feet, and in thickness from 4 to 12 inches. In nearly every instance they were found in series, one above another, with a layer of coals and ashes between. The series usually consisted of from three to five beds, sometimes only two, decreasing in size from the lower one upward. These apparently marked the stages of the growth of the mound, the upper one always being near the present surface.

The large mound which is on the supposed site of Chota, and possibly the one on which Mrs. Bean was about to be burned, was thoroughly explored, and found to contain a series of these clay beds, which always showed the action of fire. In the center of some of these were found the charred remains of a stake, and about them the usual layer of coals and ashes, but, in this instance, immediately around where the stake stood were charred fragments of human bones.

As will be seen, when the report which is now in the hands of the printer is published, the burials in this mound were at various depths, and there is nothing shown to indicate separate and distinct periods, to lead to the belief that any of these were intrusive in the true sense. On the contrary, the evidence is pretty clear that all these burials were by one tribe or people. By the side of nearly every skeleton were one or more articles, as

shell masks, engraved shells, shell pins, shell beads, perforated shells, discoidal stones, polished celts, arrow-heads, spearheads, stone gorgets, bone implements, clay vessels, or copper hawkbells. The last were with the skeleton of a child found at the depth of 3 1/2 feet. They are precisely of the form of the ordinary sleigh-bell of the present day, with pebbles and shell-bead rattles.

That this child belonged to the people to whom the other burials are due will not be doubted by any one not wedded to a preconceived notion, and that the bells are the work of Europeans will also be admitted.

In another mound a little farther up the river, and one of a group probably marking the site of one of the "over-hill towns," were found two carved stone pipes of a comparatively modern Cherokee type.

The next argument is founded on the fact that in the ancient works of the region alluded to are discovered evidences of habits and customs similar to those of the Cherokees and some of the immediately surrounding tribes.

In the article heretofore referred to allusion is made to the evidence found in the mound opened by Professor Carr of its once having supported a building similar to the council-house observed by Bartram on a mound at the old Cherokee town Cowe. Both were built on mounds, both were circular, both were built on posts set in the ground at equal distances from each other, and each had a central pillar. As tending to confirm this statement of Bartram's, the following passage may be quoted, where, speaking of Colonel Christian's march against the Cherokee towns in 1770, Ramsey [Footnote: *Annals of Tennessee*, p. 169.] says that this officer found in the center of each town "a circular tower rudely built and covered with dirt, 30 feet in diameter, and about 20 feet high. This tower was used as a council-house, and as a place for celebrating the green-corn dance and other national ceremonials." In another mound the remains of posts apparently marking the site of a building were found. Mr. M. C. Read, of Hudson, Ohio, discovered similar evidences in a mound near Chattanooga, [Footnote: *Smithsonian Rept*, for 1867 (1868), p. 401.] and Mr. Gerard Fowke has quite recently found the same thing in a mound at Waverly, Ohio.

The shell ornaments to which allusion has been made, although occasionally bearing designs which are undoubtedly of the Mexican or Central American type, nevertheless furnish very strong evidence that the mounds of east Tennessee and western North Carolina were built by the Cherokees.

Lawson, who traveled through North Carolina in 1700, says

[Footnote: Hist. of N. C., Raleigh, reprint 1860, p. 315.] "they [the Indians] oftentimes make of this shell [a certain large sea shell] a sort of gorget, which they wear about their neck in a string so it hangs on their collar, whereon sometimes is engraven a cross or some odd sort of figure which comes next in their fancy."

According to Adair, the southern Indian priest wore upon his breast "an ornament made of a white conch-shell, with two holes bored in the middle of it, through which he ran the ends of an otter-skin strap, and fastened to the extremity of each, a buck-horn white button." [Footnote: Hist. Am. Indians, p. 84]

Beverly, speaking of the Indians of Virginia, says: "Of this shell they also make round tablets of about 4 inches in diameter, which they polish as smooth as the other, and sometimes they etch or grave thereon circles, stars, a half-moon, or any other figure suitable to their fancy." [Footnote: Hist. Virginia, London, 1705, p. 58]

[Illustration with caption: FIG. 2. Engraved shell gorget from a Tennessee mound.]

Now it so happens that a considerable number of shell gorgets have been found in the mounds of western North Carolina and east Tennessee, agreeing so closely with those brief descriptions, as may be seen the figures of some of them given here (see Figs. 2 and 3), as to leave no doubt that they belong to the same type as those alluded to by the writers whose words have just been quoted. Some of them were found in the North Carolina mound from which the iron articles were obtained and in connection with these articles. Some of these shells were smooth and without any devices engraved upon them, but with holes for inserting the strings by which they were to be held in position; others were engraved with figures, which, as will be seen by reference to the cuts referred to, might readily be taken for stars and half-moons, and one among the number with a cross engraved upon it.

The evidence that these relics were the work of Indians found in possession of the country at the time of its discovery by Europeans, is therefore too strong to be put aside by mere conjectures or inferences. If they were the work of Indians, they must have been used by the Cherokees and buried with their dead. It is true that some of the engraved figures present a puzzling problem in the fact that they bear unmistakable evidences of pertaining to Mexican and Central American types, but no explanation of this which contradicts the preceding evidences that these shells had been in the hands of Indians can be accepted.

[Fig. 3: Shell gorget with engraving of coiled serpent]

In these mounds were also found a large number of nicely carved soapstone pipes, usually with the stem made in connection with the bowl, though some were without this addition, consisting only of the bowl with a hole for inserting a cane or wooden stem. While some, as will hereafter be shown, closely resemble one of the ancient Ohio types, others are precisely of the form common a few years back, and some of them have the remains of burnt tobacco yet clinging to them.

Adair, in his "History of the North American Indians," [Footnote: P. 433.] says:

"They make beautiful stone pipes and the Cherokees the best of any of the Indians, for their mountainous country contain many different sorts and colors of soils proper for such uses. They easily form them with their tomahawks and afterwards finish them in any desired form with their knives, the pipes being of a very soft quality till they are smoked with and used with the fire, when they become quite hard. They are often full a span long and the bowls are about half as large again as our English pipes. The fore part of each commonly runs out with a sharp peak 2 or 3 fingers broad and a quarter of an inch thick."

Not only were pipes made of soapstone found in these mounds, but two or three were found precisely of the form mentioned by Adair, with the fore part running out in front of the bowl (see Fig. 5, p. 39).

Jones says: [Footnote: Antiq. So. Indians, p. 400.]

It has been more than hinted at by at least one person whose statement is entitled to every belief, that among the Cherokees dwelling in the mountains there existed certain artists whose professed occupation was the manufacture of stone pipes, which were by them transported to the coast and there bartered away for articles of use and ornament foreign to and highly esteemed among the members of their own tribe.

This not only strengthens the conclusions drawn from the presence of such pipes in the mounds alluded to, but may also assist in explaining the presence of the copper and iron ornaments in them.

During the fall of 1886 a farmer of east Tennessee while examining a cave with a view to storing potatoes in it during the winter unearthed a well preserved human skeleton which was found to be wrapped in a large piece of cane matting. This, which measures about 6 by 4 feet, with the exception of a tear at one corner is perfectly sound and pliant and has a large submarginal stripe running around it. Inclosed with the skeleton was a piece of cloth

made of flax, about 14 by 20 inches, almost uninjured but apparently unfinished. The stitch in which it is woven is precisely that imprinted on mound pottery of the type shown in Fig. 96 in Mr. Holmes's paper on the mound-builders' textile fabrics reproduced here in Fig. 4. [Footnote: Fifth Ann. Rept. Bur. Ethnol., p. 415, Fig. 96.]

[Illustration with caption: FIG. 4. Twined fabric impressed on a piece of pottery obtained from a mound in Jefferson County, Tennessee.]

Although the earth of the cave contains salts which would aid in preserving anything buried in it, these articles can not be assigned to any very ancient date, especially when it is added that with them were the remains of a dog from which the skin had not all rotted away.

These were presumably placed here by the Cherokees of modern times, and they form a link not easily broken between the prehistoric and historic days.

It is probable that few persons after reading this evidence will doubt that the mounds alluded to were built by the Cherokees. Let us therefore see to what results this leads.

In the first place it shows that a powerful and active tribe in the interior of the country, in contact with the tribes of the North on one side and with those of the South on the other, were mound-builders. It is reasonable to conclude, therefore, that they had derived this custom from their neighbors on one side or the other, or that they had, to some extent at least, introduced it among them. Beyond question it indicates that the mound-building era had not closed previous to the discovery of the continent by Europeans. [Footnote: Since the above was in type one of the assistants of the Ethnological Bureau discovered in a small mound in east Tennessee a stone with letters of the Cherokee alphabet rudely carved upon it. It was not an intensive burial, hence it is evident that the mound must have been built since 1820, or that Guess was not the author of the Cherokee alphabet.]

CHAPTER V.

THE CHEROKEES AND THE TALLEGWI.

The ancient works of Ohio, with their "altar mounds," "sacred enclosures," and "mathematically accurate" but mysterious circles

and squares, are still pointed to as impregnable to the attacks of this Indian theory. That the rays of light falling upon their origin are few and dim, is admitted; still, we are not left wholly in the dark.

If the proof be satisfactory that the mounds of the southern half of the United States and a portion of those of the Upper Mississippi Valley are of Indian origin, there should be very strong evidence in the opposite direction in regard to those of Ohio to lead to the belief that they are of a different race. Even should the evidence fail to indicate the tribe or tribes by whom they were built, this will not justify the assertion that they are not of Indian origin.

If the evidence relating to these works has nothing decidedly opposed to the theory in it, then the presumption must be in favor of the view that the authors were Indians, for the reasons heretofore given. The burden of proof is on those who deny this, and not on those who assert it.

It is legitimate, therefore, to assume, until evidence to the contrary is produced, that the Ohio works were made by Indians.

The geographical position of the defensive works connected with these remains indicates, as has been often remarked by writers on this subject, a pressure from northern hordes which finally resulted in driving the inhabitants of the fertile valleys of the Miami, Scioto, and Muskingum, southward, possibly into the Gulf States, where they became incorporated with the tribes of that section. [Footnote: Force: "To what race did the mound-builders belong?" p. 74, etc.] If this is assumed as correct it only tends to confirm the theory of an Indian origin.

But the decision is not left to mere assumption and the indications mentioned, as there are other and more direct evidences bearing upon this point to be found in the works of art and modes of burial in this region. That the mound-builders of Ohio made and used the pipe is proven by the large number of pipes found in the mounds, and that they cultivated tobacco may reasonably be inferred from this fact.

The general use of the pipe among the mound-builders is another evidence of their relation to the Indians; while, on the other hand, this fact and the forms of the pipes indicate that they were not connected with the Nahua, Maya, or Pueblo tribes.

Although varied indefinitely by the addition of animal and other figures, the typical or simple form of the pipe of the Ohio mound-builders appears to have been that represented by Squier and Davis [Footnote: Ancient Monuments of the Mississippi Valley, 1847, p.

179.] in their Fig. 68; and by Rau in *Smithsonian Contributions to Knowledge*, No. 287. [Footnote: 1876, p. 47, Fig. 177.] The peculiar feature is the broad, flat, and slightly-curved base or stem, which projects beyond the bowl to an extent usually equal to the perforated end. Reference has already been made to the statement by Adair that the Cherokees were accustomed to carve, from the soft stone found in the country, "pipes, full a span long, with the fore part commonly running out with a short peak two or three fingers broad and a quarter of an inch thick." But he adds further, as if intending to describe the typical form of the Ohio pipe, "on both sides of the bowl lengthwise." This addition is important, as it has been asserted [Footnote: Young *Mineralogist and Antiquarian*, 1885, No. 10. p. 79.] that no mention can be found of the manufacture or use of pipes of this form by the Indians, or that they had any knowledge of this form.

E. A. Barber says: [Footnote: *Am. Nat.*, vol. 16, 1882, pp. 265, 266]

The earliest stone pipes from the mounds were always carved from a single piece, and consist of a flat curved base, of variable length and width, with the bowl rising from the center of the convex side (*Anc. Mon.*, p. 227).

The typical mound pipe is the Monitor form, as it may be termed, possessing a short, cylindrical urn, or spool-shaped bowl, rising from the center of a flat and slightly-curved base. [Footnote: For examples of this form see Rau: *Smithsonian Contributions to Knowledge*, No. 287, p. 47, Fig. 177.]

Accepting this statement as proof that the "Monitor" pipe is generally understood to be the oldest type of the mound-builders' pipe, it is easy to trace the modifications which brought into use the simple form of the modern Indian pipe. For example, there is one of the form shown in Fig. 5, from Hamilton County, Ohio; another from a large mound in Kanawha Valley, West Virginia; [Footnote: *Science*. 1884, vol. 3, p. 619.] several taken from Indian graves in Essex County, Mass.; [Footnote: Abbott, *Prim. Industry*, 1881, Fig. 313, p. 319; *Bull. Essex Inst.*, vol. 3, 1872, p. 123.] another found in the grave of a Seneca Indian in the valley of the Genesee; [Footnote: Morgan, *League of the Iroquois*, p. 356.] and others found by the representatives of the Bureau of Ethnology in the mounds of western North Carolina.

[Illustration with caption: FIG. 5. Pipe from Hamilton County, Ohio.]

So far, the modification consists in simply shortening the forward projection of the stem or base, the bowl remaining perpendicular. The next modification is shown in Fig. 6, which represents a type

less common than the preceding, but found in several localities, as, for example, in Hamilton County, Ohio; mounds in Sullivan County, east Tennessee (by the Bureau); and in Virginia.

[Footnote: Rau: Smithsonian Contributions to Knowledge, No. 287, p. 50, Fig. 190.] In these, although retaining the broad or winged stem, we see the bowl assuming the forward slope and in some instances (as some of those found in the mounds in Sullivan County, Tenn.) the projection of the stem is reduced to a simple rim or is entirely wanting.

[Illustration with caption: FIG. 6. Pipe from Hamilton County, Ohio.]

[Illustration with caption: FIG. 7. Pipe from Sullivan County, Tennessee.]

The next step brings us to what may be considered the typical form of the modern pipe, shown in Fig. 8. This pattern, according to Dr. Abbott, [Footnote: Prim. Industry, 1861, p. 329.] is seldom found in New England or the Middle States, "except of a much smaller size and made of clay." He figures one from Isle of Wight County, Va., "made of compact steatite." A large number of this form were found in the North Carolina mounds, some with stems almost or quite a foot in length.

[Illustration with caption: FIG. 8. Pipe from Caldwell County, North Carolina.]

It is hardly necessary to add that among the specimens obtained from various localities can be found every possible gradation, from the ancient Ohio type to the modern form last mentioned. There is, therefore, in this peculiar line of art and custom an unbroken chain connecting the mound-builders of Ohio with the Indians of historic times, and in the same facts is evidence, which strengthens the argument, disconnecting the makers from the Mexican and Central American artisans.

As this evidence appears to point to the Cherokees as the authors of some of the typical mounds of Ohio, it may be as well to introduce here a summary of the data which bear upon this question.

Reasons which are thought well-nigh conclusive have already been presented for believing that the people of this tribe were mound-builders, and that they had migrated in pre-Columbian times from some point north of the locality in which they were encountered by Europeans. Taking up the thread of their history where it was dropped, the following reasons are offered as a basis for the conclusion that their home was for a time on the Ohio, and that this was the region from which they migrated to their historic

locality.

As already shown, their general movement in historic times, though limited, has been southward. Their traditions also claim that their migrations previous to the advent of the whites had been in the same direction from some point northward, not indicated in that given by Lederer, but in that recorded by Haywood, from the valley of the Ohio. But it is proper to bear in mind that the tradition given by Lederer expressly distinguishes them from the Virginia tribes, which necessitates looking more to the west for their former home. Haywood connects them, without any authority, with the Virginia tribes, but the tradition he gives contradicts this and places them on the Ohio.

The chief hostile pressure against them of which we have any knowledge was from the Iroquois of the north. This testimony is further strengthened by the linguistic evidence, as it has been ascertained that the language of this tribe belongs to the Iroquoian stock. Mr. Horatio Hale, a competent authority on this subject, in an article on Indian migrations published in the *American Antiquarian*, [Footnote: *Am. Antiquarian*, vol. 5, 1883, p. 26] remarks as follows:

Following the same course of migration from the northeast to the southwest, which leads us from the Hurons of eastern Canada to the Tuscaroras of central North Carolina, we come to the Cherokees of northern Alabama and Georgia. A connection between their language and that of the Iroquois has long been suspected. Gallatin, in his "Synopsis of Indian Languages," remarks on this subject: "Dr. Barton thought that the Cherokee language belonged to the Iroquois family, and on this point I am inclined to be of the same opinion. The affinities are few and remote, but there is a similarity in the general termination of the syllables, in the pronunciation and accent, which has struck some of the native Cherokees."

The difficulty arising from this lack of knowledge is now removed, and with it all uncertainty disappears. The similarity of the two tongues, apparent enough in many of their words, is most strikingly shown, as might be expected, in their grammatical structure, and especially in the affixed pronouns, which in both languages play so important a part.

More complete vocabularies of the Cherokee language than have hitherto been accessible have recently come into possession of the Bureau of Ethnology, and their study serves to confirm the above conclusion that the Cherokees are an offshoot of Iroquoian stock.

On the other hand, the testimony of the mounds all taken together or considered generally (if the conclusion that the Cherokees were the authors of the North Carolina and East Tennessee mounds be

accepted) seems to isolate them from all other mound-building people of that portion of the United States east of the Rocky Mountains. Nevertheless there are certain remains of art which indicate an intimate relation with the authors of the stone graves, as the engraved shells, while there are others which lead to the opinion that there was a more intimate relation with the mound-builders of Ohio, especially of the Scioto Valley. One of these is furnished by the stone pipes so common in the Ohio mounds, the manufacture of which appears also to have been a favorite pursuit of the Cherokees in both ancient and modern times.

In order to make the force of this argument clear it is necessary to enter somewhat further into details. In the first place, nearly all of the pipes of this type so far discovered have been found in a belt commencing with eastern Iowa, thence running eastward through northern Illinois, through Indiana, and embracing the southern half of Ohio; thence, bending southward, including the valley of the Great Kanawha, eastern Tennessee, and western North Carolina, to the northern boundary of Georgia. It is not known that this type in any of its modifications prevailed or was even in use at any point south of this belt. Pipes in the form of birds and other animals are not uncommon, as may be seen by reference to Pl. XXIII of Jones's *Antiquities of the Southern Indians*, but the platform is a feature wholly unknown there, as are also the derivatives from it. This is so literally true as to render it strange, even on the supposition here advanced; only a single one (near Nashville, Tenn.), so far as known, having been found in the entire South outside of the Cherokee country.

This fact, as is readily seen, stands in direct opposition to the idea advanced by some that the mound-builders of Ohio when driven from their homes moved southward, and became incorporated with the tribes of the Gulf States, as it is scarcely possible such sturdy smokers as they must have been would all at once have abandoned their favorite pipe.

Some specimens have been found north and east of this belt, chiefly in New York and Massachusetts, but they are too few to induce the belief that the tribes occupying the sections where they were found were in the habit of manufacturing them or accustomed to their use; possibly the region of Essex, Mass., may prove to be an isolated and singular exception.

How can we account for the fact that they were confined to this belt except upon the theory that they were made and used by a single tribe, or at most by two or three cognate tribes? If this be admitted it gives as a result the line of migration of the tribe, or tribes, by whom they were made; and the gradual modification of the form indicates the direction of the movement.

In the region of eastern Iowa and northern Illinois, as will be seen by reference to the Proceedings of the Davenport Academy of Natural Sciences [Footnote: Vol. 1, 1876, Pl. IV.] and the Smithsonian Report for 1882, [Footnote: Smithsonian Report for 1882 (1884), Figs. 4-8, pp. 689-692] the original slightly-carved platform base appears to be the only form found.

Moving eastward from that section, a break occurs, and none of the type are found until the western border of Ohio is reached, indicating a migration by the tribe to a great distance. From this point eastward and over a large portion of the State, to the western part of West Virginia, the works of the tribe are found in numerous localities, showing this to have long been their home.

In this region the modifications begin, as heretofore shown, and continue along the belt mentioned through West Virginia, culminating in the modern form in western North Carolina and East Tennessee.

As pipes of this form have never been found in connection with the stone graves, there are just grounds for eliminating the Shawnees from the supposed authors of the Ohio works. On the other hand, the engraved shells are limited almost exclusively to the works of the Shawnees and Cherokees (taking for granted that the former were the authors of the box-shaped stone graves south of the Ohio and the latter of the works in western North Carolina and East Tennessee), but are wanting in the Ohio mounds. It follows, therefore, if the theory here advanced (that the Cherokees constructed some of the typical works of Ohio) be sustained, that these specimens of art are of Southern origin, as the figures indicate, and that the Cherokees began using them only after they had reached their historical locality.

Other reasons for eliminating the Shawnees and other Southern tribes from the supposed authors of the typical Ohio works are furnished by the character, form, and ornamentation of the pottery of the two sections, which are readily distinguished from each other.

That the Cherokees and Shawnees were distinct tribes, and that the few similarities in customs and art between them were due to vicinage and intercourse are well-known historical facts. But there is nothing of this kind to forbid the supposition that the former were the authors of some of the Ohio works. Moreover, the evidence that they came from a more northern locality, added to that furnished by the pipes, seems to connect them with the Ohio mound-builders. In addition to this there is the tradition of the Delawares, given by Heckewelder, which appears to relate to no known tribe unless it be the Cherokees. Although this tradition

has often been mentioned in works relating to Indians and kindred subjects, it is repeated here that the reader may judge for himself as to its bearing on the subject now under consideration:

The Leni Lenape (according to the tradition handed down to them by their ancestors) resided many hundred years ago in a very distant country in the western part of the American continent. For some reason which I do not find accounted for, they determined on migrating to the eastward, and accordingly set out together in a body. After a very long journey and many nights' encampments [Footnote: "Many Nights' encampment" is a halt of one year at a place.] by the way, they at length arrived on the Namaesi-Sipu, [Footnote: The Mississippi or The River of Fish; Namaes, a fish, and Sipu a river.] where they fell in with the Mengwe, [Footnote: The Iroquois, or Five Nations.] who had likewise emigrated from a distant country, and had struck upon this river somewhat higher up. Their object was the same with that of the Delawares; they were proceeding on to the eastward, until they should find a country that pleased them. The spies which the Lenape had sent forward for the purpose of reconnoitring, had long before their arrival discovered that the country east of the Mississippi was inhabited by a very powerful nation who had many large towns built on the great rivers flowing through their land. Those people (as I was told) called themselves Talligew or Tallgewi. Many wonderful things are told of this famous people. They are said to have been remarkably tall and stout, and there is a tradition that there were giants among them, people of a much larger size than the tallest of the Lenape. It is related that they had built to themselves regular fortifications or intrenchments, from whence they would sally out, but were generally repulsed. I have seen many of the fortifications said to have been built by them, two of which, in particular, were remarkable. One of them was near the mouth of the river Huron, which empties itself into the Lake St. Clair, on the north side of that lake, at the distance of about 20 miles northeast of Detroit. This spot of ground was, in the year 1776, owned and occupied by a Mr. Tucker. The other works, properly intrenchments, being walls or banks of earth regularly thrown up, with a deep ditch on the outside, were on the Huron River, east of the Sandusky, about six or eight miles from Lake Erie. Outside of the gateway of each of these two intrenchments, which lay within a mile of each other, were a number of large flat mounds in which, the Indian pilot said, were buried hundreds of the slain Talligewi, whom I shall hereafter, with Colonel Gibson, call Alligewi. Of these intrenchments Mr. Abraham Steiner, who was with me at the time when I saw them, gave a very accurate description, which was published at Philadelphia in 1789 or 1790, in some periodical work the name of which I can not at present remember.

When the Lenape arrived on the banks of the Mississippi they sent

a message to the Alligewi to request permission to settle themselves in their neighborhood. This was refused them, but they obtained leave to pass through the country and seek a settlement farther to the eastward. They accordingly began to cross the Namaesi-Sipu, when the Alligewi, seeing that their numbers were so very great, and in fact they consisted of many thousands, made a furious attack upon those who had crossed, threatening them all with destruction, if they dared to persist in coming over to their side of the river. Fired at the treachery of these people, and the great loss of men they had sustained, and besides, not being prepared for a conflict, the Lenapi consulted on what was to be done; whether to retreat in the best manner they could, or to try their strength, and let the enemy see that they were not cowards, but men, and too high-minded to suffer themselves to be driven off before they had made a trial of their strength and were convinced that the enemy was too powerful for them. The Mengwe, who had hitherto been satisfied with being spectators from a distance, offered to join them, on condition that, after conquering the country, they should be entitled to share it with them; their proposal was accepted, and the resolution was taken by the two nations, to conquer or die.

Having thus united their forces the Lenape and Mengwe declared war against the Alligewi, and great battles were fought in which many warriors fell on both sides. The enemy fortified their large towns and erected fortifications, especially on large rivers and near lakes, where they were successfully attacked and sometimes stormed by the allies. An engagement took place in which hundreds fell, who were afterwards buried in holes or laid together in heaps and covered over with earth. No quarter was given, so that the Alligewi at last, finding that their destruction was inevitable if they persisted in their obstinacy, abandoned the country to the conquerors and fled down the Mississippi River, from whence they never returned.

The war which was carried on with this nation lasted many years, during which the Lenape lost a great number of their warriors, while the Mengwe would always hang back in the rear leaving them to face the enemy. In the end the conquerors divided the country between themselves. The Mengwe made choice of the lands in the vicinity of the great lakes and on their tributary streams, and the Lenape took possession of the country to the south. For a long period of time, some say many hundred years, the two nations resided peacefully in this country and increased very fast. Some of their most enterprising huntsmen and warriors crossed the great swamps, and falling on streams running to the eastward followed them down to the great bay river (meaning the Susquehanna, which they call the great bay river from where the west branch falls into the main stream), thence into the bay itself, which we call Chesapeake. As they pursued their travels, partly by land and

partly by water, sometimes near and at other times on the great salt-water lake, as they call the sea, they discovered the great river which we call the Delaware.

This quotation, although not the entire tradition as given by Heckewelder, will suffice for the present purpose.

The traces of the name of these mound-builders, which are still preserved in the name "Allegheny," applied to a river and the mountains of Pennsylvania, and the fact that the Delawares down to the time Heckewelder composed his work called the Allegheny River "Allegewi Sipu," or river of the Allegewi, furnish evidence that there is at least a vein of truth in this tradition. If it has any foundation in fact there must have been a people to whom the name "Talleghi" [Footnote: There appears to be no real foundation for the name Allegewi, this form being a mere supposition of Colonel Gibson, suggested by the name the Lenape applied to the Allegheny River and Mountains.] was applied, for on this the whole tradition hangs. Who were they? In what tribe and by what name shall we identify them? That they were mound-builders is positively asserted, and the writer explains what he means by referring to certain mounds and inclosures, which are well known at the present day, which he says the Indians informed him were built by this people.

It is all-important to bear in mind the fact that when this tradition was first made known, and the mounds mentioned were attributed to this people, these ancient works were almost unknown to the investigating minds of the country. This forbids the supposition that the tradition was warped or shaped to fit a theory in regard to the origin of these antiquities.

Following the tradition it is fair to conclude, notwithstanding the fact that Heckewelder interpreted "Namaesi Sipu" by Mississippi, that the principal seats of this tribe or nation were in the region of the Ohio and the western slope of the Allegheny Mountains, and hence it is not wholly a gratuitous supposition to believe they were the authors of some of the principal ancient works of eastern Ohio (including those of the Scioto Valley) and the western part of West Virginia. Moreover, there is the statement by Haywood, already referred to, that the Cherokees had a tradition that in former times they dwelt on the Ohio and built mounds.

These data, though slender, when combined with the apparent similarity between the name Talleghi and Cherokee or Chellakee, and the character of the works and traditions of the latter, furnish some ground for assuming that the two were one and the same people. But this assumption necessitates the further inference that the pressure which drove them southward is to be

attributed to some other people than the Iroquois as known to history, as this movement must have taken place previous to the time the latter attained their ascendancy. It is probable that Mr. Hale is correct in deciding that the "Namaesi Sipu" of the tradition was not the Mississippi. [Footnote: *Am. Antiquarian*, vol. 5, 1883, p. 117.] His suggestion that it was that portion of the great river of the North (the St. Lawrence) which connects Lake Huron with Lake Erie, seems also to be more in conformity with the tradition and other data than any other which has been offered. If this supposition is accepted it would lead to the inference that the Talamatau, the people who joined the Delawares in their war on the Tallegwi, were Hurons or Huron-Iroquois previous to separation. That the reader may have the benefit of Mr. Hale's views on this question, the following quotation from the article mentioned is given:

The country from which the Lenape migrated was Shinaki, the "land of fir trees," not in the West but in the far North, evidently the woody region north of Lake Superior. The people who joined them in the war against the Allighewi (or Tallegwi, as they are called in this record), were the Talamatan, a name meaning "not of themselves," whom Mr. Squier identifies with the Hurons, and no doubt correctly, if we understand by this name the Huron-Iroquois people, as they existed before their separation. The river which they crossed was the Messusipu, the Great River, beyond which the Tallegwi were found "possessing the East." That this river was not our Mississippi is evident from the fact that the works of the mound-builders extended far to the westward of the latter river, and would have been encountered by the invading nations, if they had approached it from the west, long before they arrived at its banks. The "Great River" was apparently the upper St. Lawrence, and most probably that portion of it which flows from Lake Huron to Lake Erie, and which is commonly known as the Detroit River. Near this river, according to Heckewelder, at a point west of Lake St. Clair, and also at another place just south of Lake Erie, some desperate conflicts took place. Hundreds of the slain Tallegwi, as he was told, were buried under mounds in that vicinity. This precisely accords with Cusick's statement that the people of the great southern empire had "almost penetrated to Lake Erie" at the time when the war began. Of course in coming to the Detroit River from the region north of Lake Superior, the Algonquins would be advancing from the west to the east. It is quite conceivable that, after many generations and many wanderings, they may themselves have forgotten which was the true Messusipu, or Great River, of their traditionary tales.

The passage already quoted from Cusick's narrative informs us that the contest lasted "perhaps one hundred years." In close agreement with this statement the Delaware record makes it endure during the terms of four head-chiefs, who in succession presided in the

Lenape councils. From what we know historically of Indian customs the average terms of such chiefs may be computed at about twenty-five years. The following extract from the record [Footnote: The Bark Record of the Leni Lenape.] gives their names and probably the fullest account of the conflict which we shall ever possess:

"Some went to the East, and the Tallegwi killed a portion.

"Then all of one mind exclaimed, War! War!

"The Talamatan (not-of-themselves) and the Nitilowan [allied north-people] go united (to the war).

"Kinnepehend (Sharp-Looking) was the leader, and they went over the river. And they took all that was there and despoiled and slew the Tallegwi.

"Pimokhasuwi (Stirring-about) was next chief, and then the Tallegwi were much too strong.

"Tenchekensit (Open-path) followed, and many towns were given up to him.

"Paganchihiella was chief, and the Tallegwi all went southward.

"South of the Lakes they (the Lenape) settled their council-fire, and north of the Lakes were their friends the Talamatan (Hurons!)."

There can be no reasonable doubt that the Alleghewi or Tallegwi, who have given their name to the Allegheny River and Mountains, were the mound-builders.

This supposition brings the pressing hordes to the northwest of the Ohio mound-builders, which is the direction, Colonel Force concludes, from the geographical position of the defensive works, they must have come.

The number of defensive works erected during the contest shows it must have been long and obstinate, and that the nation which could thus resist the attack of the northern hordes must have been strong in numbers and fertile in resources. But resistance proved in vain; they were compelled at last, according to the tradition, to leave the graves of their ancestors and flee southward in search of a place of safety.

Here the Delaware tradition drops them, but the echo comes up from the hills of East Tennessee and North Carolina in the form of the Cherokee tradition already mentioned, telling us where they found a resting place, and the mound testimony furnishes the

intermediate link.

If they stopped for a time on New River and the head of the Holston, as Haywood conjectures, [Footnote: Nat. and Aborig. Hist. Tenn., p. 223.—See Thomas, "Cherokees probably mound-builders," Magazine Am. Hist., May. 1884, p. 398.] their line of retreat was in all likelihood up the valley of the Great Kanawha. This supposition agrees also with the fact that no traces of them are found in the ancient works of Kentucky or middle Tennessee. In truth, the works along the Ohio River from Portsmouth to Cincinnati and throughout northern Kentucky pertain to entirely different types from those of Ohio, most of them to a type found in no other section.

On the contrary, it happens precisely in accordance with the theory advanced and the Cherokee traditions, that we find in the Kanawha Valley, near the city of Charleston, a very extensive group of ancient works stretching along the banks of the stream for more than two miles, consisting of quite large as well as small mounds, of circular and rectangular inclosures, etc. A careful survey of this group has been made and a number of the tumuli, including the larger ones, have been explored by the representatives of the Bureau.

The result of these explorations has been to bring to light some very important data bearing upon the question now under consideration. In fact we find here what seems to be beyond all reasonable doubt the connecting link between the typical works of Ohio and those of East Tennessee and North Carolina ascribed to the Cherokees.

The little stone vaults in the shape of bee-hives noticed and figured in the articles in Science and the American Naturalist, before referred to, discovered by the Bureau assistants in Caldwell County, N. C., and Sullivan County, Tenn., are so unusual as to justify the belief that they are the work of a particular tribe, or at least pertain to an ethnic type. Yet under one of the large mounds at Charleston, on the bottom of a pit dug in the original soil, a number of vaults of precisely the same form were found, placed, like those of the Sullivan County mound, in a circle. But, though covering human remains moldered back to dust, they were of hardened clay instead of stone. Nevertheless, the similarity in form, size, use, and conditions under which they were found is remarkable, and, as they have been found only at the points mentioned, the probability is suggested that the builders in the two sections were related.

There is another link equally strong. In a number of the larger mounds on the sites of the "over-hill towns," in Blount and Loudon Counties, Tenn., saucer-shaped beds of burnt clay, one above

another, alternating with layers of coals and ashes, were found. Similar beds were also found in the mounds at Charleston. These are also unusual, and, so far as I am aware, have been found only in these two localities. Possibly they are outgrowths of the clay altars of the Ohio mounds, and, if so, reveal to us the probable use of these strange structures. They were places where captives were tortured and burned, the most common sacrifices the Indians were accustomed to make. Be this supposition worthy of consideration or not, it is a fact worthy of notice in this connection that in one of the large mounds in this Kanawha group one of the so-called "clay altars" was found at the bottom of precisely the same pattern as those found by Squier and Davis in the mounds of Ohio.

In these mounds were also found wooden vaults, constructed in exactly the same manner as that in the lower part of the Grave Creek mound; also others of the pattern of those found in the Ohio mounds, in which bark wrappings were used to enshroud the dead. Hammered copper bracelets, hematite celts and hemispheres, and mica plates, so characteristic of the Ohio tumuli, were also discovered here; and, as in East Tennessee and Ohio, we find at the bottom of mounds in this locality the post-holes or little pits which have recently excited considerable attention. We see another connecting link in the circular and rectangular inclosures, not combined as in Ohio, but analogous, and, considering the restricted area of the narrow valley, bearing as strong resemblance as might be expected if the builders of the two localities were one people.

It would be unreasonable to assume that all these similarities in customs, most of which are abnormal, are but accidental coincidences due to necessity and environment. On the contrary it will probably be conceded that the testimony adduced and the reasons presented justify the conclusion that the ancestors of the Cherokees were the builders of some at least of the typical works of Ohio; or, at any rate, that they entitle this conclusion to favorable consideration. Few, if any, will longer doubt that the Cherokees were mound builders in their historic seats in North Carolina and Tennessee. Starting with this basis, and taking the mound testimony, of which not even a tithe has been presented, the tradition of the Cherokees, the statement of Haywood, the Delaware tradition as given by Heckewelder, the Bark Record as published by Brinton and interpreted by Hale, and the close resemblance between the names Tallegwi and Chellakee, it would seem that there can remain little doubt that the two peoples were identical.

It is at least apparent that the ancient works of the Kanawha Valley and other parts of West Virginia are more nearly related to those of Ohio than to those of any other region, and hence they may justly be attributed to the same or cognate tribes. The

general movement, therefore, must have been southward as indicated, and the exit of the Ohio mound-builders was, in all probability, up the Kanawha Valley on the same line that the Cherokees appear to have followed in reaching their historical locality. It is a singular fact and worthy of being mentioned here, that among the Cherokee names signed to the treaty made between the United States and this tribe at Tellico, in 1798, are the following: [Footnote: *Treaties between the United States of America and the several Indian tribes* (1837), p. 182.] Tallotuskee, Chellokee, Yonaheguah, Keenakunnah, and Teekakatoheunah, which strongly suggest relationship to names found in the Allegheny region, although the latter come to us through the Delaware tongue.

If the hypothesis here advanced be correct, it is apparent that the Cherokees entered the immediate valley of the Mississippi from the northwest, striking it in the region of Iowa. This supposition is strengthened not only by the similarity in the forms of the pipes found in the two sections, but also in the structure and contents of many of the mounds found along the Mississippi in the region of western Illinois. So striking is this that it has been remarked by explorers whose opinions could not have been biased by this theory.

Mr. William McAdams, in an address to the American Association for the Advancement of Science, remarks: "Mounds, such as are here described, in the American Bottom and low-lands of Illinois are seldom, if ever, found on the bluffs. On the rich bottom lands of the Illinois River, within 50 miles of its mouth, I have seen great numbers of them and examined several. The people who built them are probably connected with the Ohio mound-builders, although in this vicinity they seem not to have made many earthen embankments, or walls inclosing areas of land, as is common in Ohio. Their manner of burial was similar to the Ohio mound-builders, however, and in this particular they had customs similar to the mound-builders of Europe." [Footnote: *Proc. Am. Assoc. Adv. Sci.*, 29th (Boston) meeting, 1880 (1881), p. 715.] One which he opened in Calhoun County, presented the regular form of the Ohio "altar."

A mound in Franklin County, Ind., described and figured by Dr. G. W. Homsher, [Footnote: *Smithsonian Report for 1882* (1884), p. 722.] presents some features strongly resembling those of the North Carolina mounds.

The works of Cuyahoga County and other sections of northern Ohio bordering the lake, and consisting chiefly of inclosures and defensive walls, are of the same type as those of New York, and may be attributed to people of the Iroquoian stock. Possibly they may be the works of the Eries who, we are informed, built

inclosures. If such conclusion be accepted it serves to strengthen the opinion that this lost tribe was related to the Iroquois. The works of this type are also found along the eastern portion of Michigan as far north as Ogemaw County.

The box shaped stone graves of the State are due to the Delawares and Shawnees, chiefly the former, who continued to bury in sepulchers of this type after their return from the East. Those in Ashland and some other counties, as is well known, mark the location of villages of this tribe. Those along the Ohio, which are chiefly sporadic, are probably Shawnee burial places, and older than those of the Delawares. The bands of the Shawnees which settled in the Scioto Valley appear to have abandoned this method of burial.

There are certain mounds consisting entirely or in part of stone, and also stone graves or vaults of a peculiar type, found in the extreme southern portions of the State and in the northern part of Kentucky, which can not be connected with any other works, and probably owe their origin to a people who either became extinct or merged into some other tribe so far back that no tradition of them now remains.

Recently a resurvey of the remaining circular, square, and octagonal works of Ohio has been made by the Bureau agents. The result will be given in a future bulletin.