SMITHSONIAN INSTITUTION
BUREAU OF AMERICAN ETHNOLOGY
BULLETIN 131

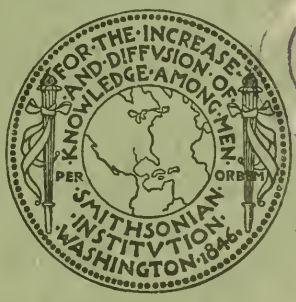
PEACHTREE MOUND AND VILLAGE SITE, CHEROKEE COUNTY NORTH CAROLINA

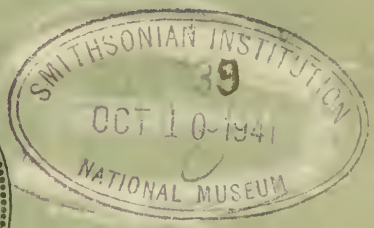
By
FRANK M. SETZLER
AND
JESSE D. JENNINGS

WITH APPENDIX

SKELETAL REMAINS FROM THE PEACHTREE SITE, NORTH CAROLINA

By T. D. STEWART





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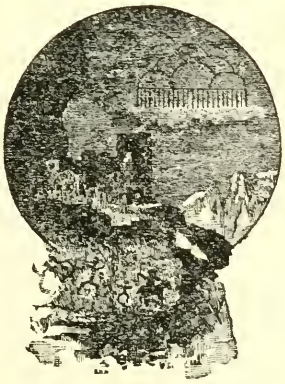

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LETTER OF TRANSMITTAL

SMITHSONIAN INSTITUTION,
BUREAU OF AMERICAN ETHNOLOGY.
Washington, D. C., June 20, 1940.

SIR: I have the honor to transmit herewith a manuscript entitled "Peachtree Mound and Village Site, Cherokee County, North Carolina," by Frank M. Setzler and Jesse D. Jennings, with appendix entitled "Skeletal Remains From the Peachtree Site, North Carolina," by T. D. Stewart, and to recommend that it be published as a bulletin of the Bureau of American Ethnology.

Very respectfully yours,

M. W. STIRLING, *Chief.*

DR. C. G. ABBOT,
Secretary of the Smithsonian Institution.

CONTENTS

ILLUSTRATIONS

PLATES

FIGURES

FOREWORD

As liaison officer between the Smithsonian Institution and the Civil Works Administration, my duties were equally divided among all of the archeological projects under the supervision of the Smithsonian in late December 1933 and the first half of 1934. I was particularly interested in the work near Murphy, N. C., but had little to do with the actual excavations at the Peachtree site. I assisted Mr. Jennings during the analysis of the specimens after they reached the Museum, and would have been assigned to write the report from his field notes if Mr. Jennings had not desired to use them for a thesis at the University of Chicago. His thesis, entitled "The Significance of the Peachtree Site in Southeastern Prehistory," served as the basis for this report. It has been changed from a theoretical discussion to a descriptive report, certain sections transposed and enlarged, others reduced. The bulk of the manuscript has been incorporated and due credit should rightfully be given to Mr. Jennings. This final report embodies the opinions and conclusions of both authors in 1935–36, although scattered references are made to publications appearing since 1936. We are well aware of the rapidly accumulating data from the Southeast which in a few years may modify some of the comparisons and reconstructions offered in our analysis.

FRANK M. SETZLER.

PEACHTREE MOUND AND VILLAGE SITE, CHEROKEE COUNTY, NORTH CAROLINA

By Frank M. Setzler and Jesse D. Jennings

INTRODUCTION

In December 1933 the Civil Works Administration assigned 11 archeological projects to the Smithsonian Institution for supervision and scientific direction. This was part of a large Government program for reducing unemployment. For several reasons the Institution was pleased to accept the responsibility this unusual opportunity afforded. First, it was eager that the results be as extensive and as scientifically complete as conditions would permit; second, it offered its archeologists an opportunity to extend their research, especially in the Southeast, which previously had been sadly neglected.

The choice of sites was necessarily limited by climatic and economic factors. All projects were launched within 2 weeks and accounted for the employment of 1,500 laborers. Besides this North Carolina project, seven were in Florida, under the immediate direction of M. W. Stirling, Chief, Bureau of American Ethnology, and one each in Georgia, Tennessee, and California.

Harry L. Hopkins, Julius Stone, and especially the late Morton M. Milford, all Federal CWA officials, greatly facilitated the work by their interest and cooperation here in the Washington office.

This report deals only with the excavation of the Peachtree Mound and village site near Murphy, N. C. (fig. 1). Work began December 21, 1933, and ended April 1, 1934. The project was under the administration of W. B. Colburn. His ability as coordinator in keeping the project functioning smoothly permitted Jesse D. Jennings to devote his entire time to directing the excavations. Cooperation was received from the State and local CWA officials, who furnished 104 men. Acknowledgments are due to William Moore, who permitted the excavation on his property, Burnham S. Colburn, F. O. Scroggs, R. Teems, Hobart Hughes, and other local men whose interest was a large factor in effecting a first-class job. The foremen and laborers performed their duties willingly and became considerably interested. In 1935 Hobart Hughes and Dale Lee again assisted by making two smaller excavations, giving a further check

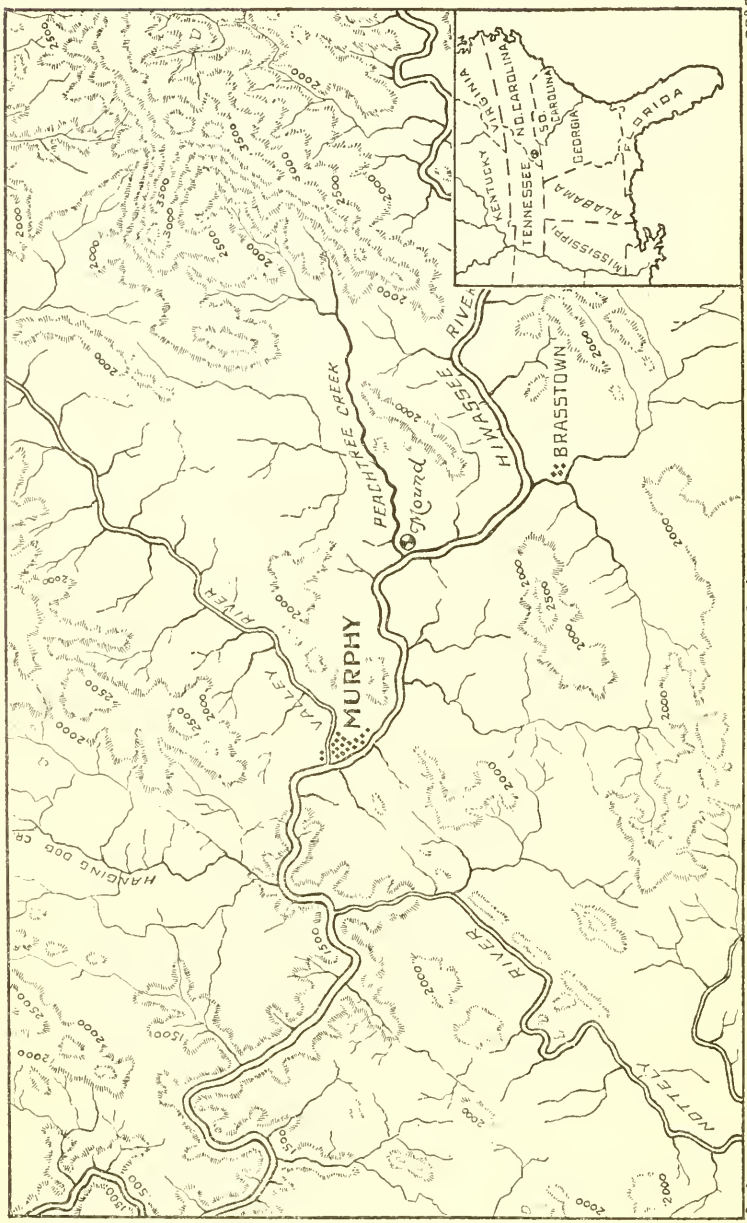

FIGURE 1.—Map of southwestern North Carolina. Inset gives location with regard to the Southeastern States.

on the occurrence of certain pottery types. Jane Noyes Chase, Dale Lee, and Carl Gudat completed the drafting and sketches used in this report. The pictorial survey, established in the Department of Anthropology at the University of Chicago under Prof. Fay-Cooper Cole, provided funds for Mr. Jennings to make the necessary study and analysis of the material after it reached the United States National Museum.

GENERAL ARCHEOLOGICAL PICTURE IN THE SOUTHEAST

Except for the work in Florida by the Bureau of American Ethnology, no definite program of archeological research in the Southeast had been undertaken by any of the larger research institutions; explorations had been more or less haphazard with the exception of the pioneer efforts and accomplishments of the late Clarence B. Moore. Mr. Moore, associated for a time with the Academy of Natural Sciences of Philadelphia, sampled practically every important site, particularly along the navigable streams, in South Carolina, Georgia, Florida, Alabama, Mississippi, Louisiana, Arkansas, Tennessee, and Kentucky. His published reports (Moore, 1892–1918), especially the series (vols. 10, 11, 12, 13. 14, and 16) in the Journal of the Academy of Natural Sciences of Philadelphia, have served as a basis for most of the subsequent explorations. Through his efforts and interest in this practically untouched field, numerous aboriginal cultures were revealed by the unexcelled illustrations in his publications. A few men preceded Moore, such as Charles C. Jones, Jr. (1873), G. P. Thruston (1890), and Cyrus Thomas (1894), each contributing valuable data, but none as extensive in scope or amount of exploration. Since then various men, such as C. S. Brown (1926); D. I. Bushnell, Jr. (1919, 1920, 1922, 1927); H. B. Collins, Jr. (1932); J. W. Fewkes (1925); J. A. Ford (1935, 1936); G. Fowke (1910, 1922, 1928); M. R. Harrington (1922); G. G. Heye, F. W. Hodge, and George H. Pepper (1918); W. H. Holmes (1884, 1886, 1896, 1903); J. Mooney (1889, 1894, 1900); W. K. Moorehead (1932); W. E. Myer (1928); N. C. Nelson (1918); F. M. Setzler (1933); F. G. Speck (1907); M. W. Stirling (1935); J. R. Swanton (1911, 1922, 1928); W. M. Walker (1936); and W. S. Webb (1938) have contributed to the reconstruction of various phases of the aboriginal cultures. For the most part these men specialized on certain problems within one or another of the Southern States. Numerous ethnologists and historians have also materially assisted in the elucidation of aboriginal problems.

No archeological area, except perhaps the Pueblo region of our Southwest, is more blessed with direct ethnological and historical accounts pertaining to the organization and movements of Indian

tribes than the general Southeast. For this reason every effort should be and is being made to interpret archeological data from these early historical reports. This procedure is the only sound method for determining the ancestors of our historic Indian tribes and properly interpreting the few remaining indestructible fragments of their material culture.

Archeological techniques have improved within the past 10 years. The work thus far completed has now put us in a position to glimpse in a very general way the outline of certain aboriginal tribal movements and cultures in the region. A large part of the earlier work left much to be desired. However, details, so essential at the present time, would easily be overlooked without conception of the variation and relationship of these prehistoric peoples.

Within the past 5 years a chronology for these aboriginal inhabitants has been tentatively outlined:

The "Folsomoid"[1] artifacts represent the earliest hunting group. The historic discovery of chipped flint implements definitely associated with extinct animals was made at Folsom, New Mexico, in 1925. (For a brief review of these important discoveries see Roberts, 1935, pp. 3–6.) Numerous examples of similar projectile points characteristically fluted came to light in various collections, and others have subsequently been discovered on the surface and in creek beds within the Southeast. No definite association of extinct animals with these Folsomlike points has been established, nor have any such artifacts been discovered in any of the archeological horizons east of the Mississippi. It is generally accepted, however, that these so-called Folsomoid artifacts constitute the earliest evidence of an aboriginal hunting culture in the area and that the necessary corroborative evidence will eventually be found.

The more sedentary, at least seminomadic people, partly represented by the mound-building group, and other prehistoric and protohistoric Indians, constitute the problem before us. When we attempt to solve the origins of these rather diversified groups, we naturally look farther south to Mexico, Central America, and South America, the centers of highest aboriginal civilizations in the New World. The three general elements in common are the building of truncated mounds, agriculture, and the presence of pottery; agriculture unquestionably originated farther south. In the Southeast the truncated

[1] The term "Folsomoid" is used to indicate projectile points having a concave base and flakes removed on both faces, forming shallow channels of varying length from the base to the tip, similar to those found at Folsom, New Mexico. Our reason for not using the term "Folsom" is that the eastern specimens are usually somewhat longer and so far have never been found associated with extinct fauna. (See Shetrone, 1936, for the type and distribution in Ohio; Howard, 1935, pp. 119–121; Roberts, 1935, p. 8.) Since the above statement was written, the International Symposium on Early Man held in Philadelphia, 1937, agreed that all fluted points could be designated as Folsom.

mound, used as a foundation for temples and chiefs' houses, is well known. Among the Maya and Aztec, however, such mounds are much more elaborate, usually faced with cut stone or even plaster. The underlying principle, except for strictly burial mounds, was the same. Carvings, especially on copper and shell, and sometimes on pipes, of human or animal effigies, found among certain of the agricultural groups in the Mississippi Valley, would seem to point to a more southern origin, especially those from the states of Mixtec and Puebla, Mexico. However, none of the early prehistoric complexes in the Mississippi Valley have produced artifacts as comparable to those from Mexico as those specimens which have been described from archeological horizons which appear to be, in point of time, just prior to historic contact.

Recent archeological explorations in central Louisiana have developed a tentative chronological series of cultures. The earliest, designated at present as the Marksville or Southern Hopewell (Setzler, 1933 and manuscript), seem to be related, especially insofar as pottery design is concerned, to the Hopewellian Phase in the northern Mississippi Valley. This basic complex, whether it developed in the lower or upper Mississippi Valley, seems entirely too specialized in its artistic designs to have originated independently. If indigenous, certain developmental stages must have preceded the design element now recognized, yet nothing has been discovered which would indicate a link with any of the culture centers farther south in Mexico, or in the Pueblo region.

Other sites in Louisiana, Mississippi, and Florida very definitely contain pottery with these Marksville design elements, and wherever the sites have been inhabited long enough, new decorative techniques on pottery appear which are somewhat related to the Marksville and yet show contact from other culture centers. These new features might make up an aspect known as the Coles Creek (Ford, 1935, 1936). In northern Florida the Coles Creek seems to form the basis for a horizon known as the Weeden Island Component (Fewkes, 1924; Stirling, 1935). In Louisiana, Mississippi, Arkansas, and Texas, they seem closely linked to such protohistoric groups recognized as Natchez, Caddo, and Tunica, the latter in turn serving as the direct ancestors of historic tribes by the same names.

Another important prehistoric complex contemporaneous with the Coles Creek but thus far centering in the Yazoo River district of west central Mississippi is the Deasonville (Collins, 1932). According to Ford (1935, 1936), this phase contains certain elements of decorations out of which some of the Caddo and Tunica pottery design elements developed. Three of the sherds from the Deasonville site were decorated in a manner comparable to the general Marksville type (Collins, 1932, p. 19).

In Georgia and Alabama this Coles Creek influence is less evident, but may have affected some of the proto- or even prehistoric Creeks. The most important site in Georgia, from the point of view of chronology, is the Hollywood Mound in Richmond County, 3 miles east of the town of Hollywood (Thomas, 1894, pp. 317–326). This mound has produced what appears to be a definite stratification of two seemingly unrelated cultures. The basilar levels of the mound contained pottery very closely related to the Moundville type in Alabama (Moore, 1905). The upper stratum was composed mostly of a sandy micaceous loam 3 feet thick, while the lower level was a compact "crawfish land" vegetable earth which had been piled on very black, rich vegetable mold, evidently the village site. In this upper sandy micaceous loam were fragments of pottery decorated with a carved-paddle stamp. With this pottery, historic iron and porcelain fragments were associated. The stamped pottery designs are more usual in the eastern part of the Southeast, extending from Pennsylvania south to about the middle of the Florida peninsula and west to the Mississippi River.

The extensive archeological projects in Georgia, and much of the significant work in Tennessee, Alabama, Kentucky, Arkansas, Louisiana, and Texas will go far toward making these general statements more specific. Within the next few years we can hope to outline and perhaps establish the centers and distribution of what now seems merely a heterogeneous aboriginal mixture.

TAXONOMY OF ABORIGINAL CULTURES

Archeologists in the northern Mississippi Valley have inaugurated a taxonomy (McKern, 1934), for the analysis of prehistoric cultures, based entirely on the material objects and constructional features of the mounds and village sites. Old excavation reports together with the specimens recovered are being re-analyzed (Griffin, 1935; Deuel, 1935, 1937) and all comparable traits grouped together by sites (components) to form foci, phase, aspect, and pattern of a basic culture. This is indeed an advance, and as other scientific excavations are completed in the South the same general classifications can, we hope, be applied there. This report, on one site in North Carolina, has been written with this eventuality in mind. Even though we are unable to place this component definitely in a specific aspect or phase, the data and subsequent analysis can be used for this classification in the Southeast.

HISTORICAL BACKGROUND

The culmination of all archeological explorations is primarily historical. Historians have long had an interest in connecting historically known groups with archeological sites, and the archeologists

must depend on the historical evidence in order to identify the prehistoric or protohistoric material culture with the correct historical descendants. It is one of the aims of the student of prehistory to verify or disprove these historically derived connections.

Recent attempts to classify the cultural manifestations of the Mississippi Valley are steps which should be taken. Results must be constantly modified by all workers in the field if the prehistory of the region is to become legible. Classification of prehistoric cultures on the basis of the imperishable artifacts is necessary, but this is only a means toward solving the problems rather than an end in itself. These classifications are made in order to establish relative temporal relationship and spatial distribution. After objective treatment has accomplished these things, reference to the historically known sites will possibly affix the divisions of the classification to historic groups whose early history is established by documentation.

It will not always be possible to attach historically known groups to archeological divisions. This, however, does not mean that history has been neglected. The establishment of relative time sequences and spatial distributions, indicating the movements and influences of people, is in itself history. The question seems to be one of aims and actual arrangement of data, rather than one of terminology. If the prehistorian can establish temporal sequences and from this is able to prove definite cultural movements, he is contributing to history just as much as the documentary historian when he records specific unique facts in their proper sequence. The prehistorian must present his story in broad general terms, without reference to specific ethnic groups, while the historian cites documented facts. This difference results from the type of data rather than ultimate aims.

The historical approach involving progress from the known to the unknown is not, unfortunately, always possible. There are innumerable archeological sites, both dug and undug, whose location is such as to preclude accurate identification with a historic group; or which may have been used by various groups from time to time. In such instances the only method of handling the data is objective, with an ensuing attempt to correlate the data with sites historically known as well as with sites which so far have no proved contact with history. That these two approaches should be used to their full limits, together where possible, is obvious.

The Peachtree site can be used for testing the validity of the historical approach. That it is a homogeneous site, which extends from 1831 back to pre-European time, is indicated artifactually. Its occupation by the same ethnic, linguistic, and cultural group seems to make it the ideal site for the historically minded and at the same

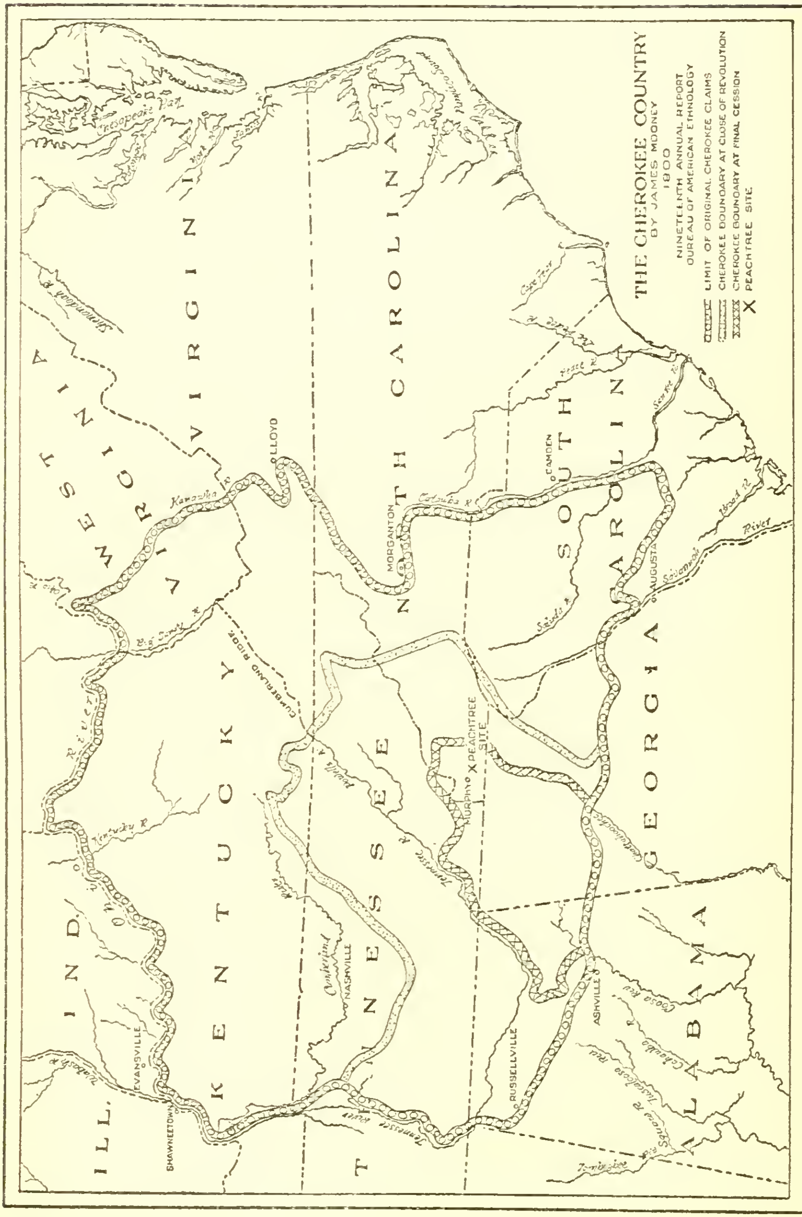

Figure 2.—Location of the Peachtree site within the Cherokee Country.

time gives an unexcelled opportunity for those primarily interested in pure classification.

The site is also important because it so well fits the description of the town of *Guasili* visited by Hernando De Soto in 1540 (Swanton, 1932, 1935). As Dr. Swanton has indicated, the Peachtree site is geographically and topographically more accurately situated for the location of *Guasili* than either the Nacoochee or Etowah mounds, both of which had previously been considered as the site of *Guasili*. (Heye, Hodge, Pepper, 1918; Thomas, 1894; Willoughby, 1932.) This site in the midst of the Blue Ridge Mountains, where the feasibility of trails is limited, coincides more nearly with the expected situation as described by the chronicles than any other location. However, the significant point in this report is not whether this is the site of the ancient town of *Guasili*, but whether the artifacts of the site can be culturally allocated. Whether the Peachtree site is actually *Guasili* or not, it is near a well-known Indian trail, and the deviation of such trails in this rugged mountainous region is extremely limited. Myer (1928) shows at least one trail of importance which passes the site, while several others are connected to it.

It is essential that we here present the historic evidence with regard to the Cherokee occupation of the site. A résumé of this section, viewed in the light of archeological comparisons, will appear on pages 55–57.

Figure 2, reproduced from the Nineteenth Annual Report of the Bureau of American Ethnology, plate 3, shows a map of the Cherokee territory, giving the fullest, original limits of the Cherokee domination in 1780 and the boundaries at final cession. This clearly indicates that the Peachtree site was approximately in the center of the area during the entire Cherokee domination. Its spatial centrality, combined with its topographic isolation deep in the mountains, makes it highly improbable that it was alternately occupied by Cherokee and other Indian groups. Thus we can partially rely on the location to insure that the occupation was by the Cherokee.

The historic towns mentioned and located by Mooney and Royce cannot be accurately ascribed to the Peachtree site. However, four historically known towns are shown on the Hiwassee River: Chestua, Great Hiwassee, Hiwassee, and Tlanusiyi. Both Hiwassee and Tlanusiyi are near Murphy, N. C., and are now represented by mounds. A short distance to the south of these last named two is Nottely, where a large low mound now stands. Though no mention is made specifically of a town at the Peachtree site, the last three mentioned towns, Hiwassee, Tlanusiyi, and Nottely, are no more than 5 miles distant from Peachtree. An important trail, however, ran from the Tennessee River up the Hiwassee River, through all the

above-mentioned towns except Nottely, which is south of Murphy on the Nottely River. The trail forked above Peachtree, one branch going northeast up Shooting Creek toward Franklin, N. C., and the other branch following the Hiwassee to its headwaters, crossing the ridge to the Cherokee towns of Echota, Stecoee, and Tallula in the northeast corner of Georgia. It seems likely, therefore, that more villages or settlements would be found along the river than are listed. Extensive village sites occur at such places where the valley is wide enough to accommodate a semisedentary group, along the entire length of the Hiwassee River, yet no historic towns were located there by Mooney. He (Mooney, 1900) does not often mention the Hiwassee sites by name, but refers to them collectively as the "Hiwassee Valley Towns" or the "Valley Towns." On page 33 he states ". . . in the winter of 1715–16 . . . a detachment . . . penetrated to 'Quoneashee' (Tlanusi'yĭ on Hiwassee, about the present Murphy) . . ." On page 63, "The valley towns on Hiwassee . . . continued hostile." However, on his map, Mooney shows, to the northeast of Peachtree Mound, a site called Valleytown. It is possible that Valleytown is the town which was historically located at Peachtree Mound and was improperly located on the map. This idea is strengthened by the statement on page 107 where Mooney says a mission was established at "'Valley-towns' . . . on the north side of Hiwassee River, just above Peachtree creek." This is the exact location of our excavated site. Possible identification of the Valleytown on the map, which is occasionally mentioned in the text, is made less positive by Mooney's further statement that the mission was established in 1820 "on the site of the old Natchez town on the north side of the Hiwassee River." His statement that this is an old Natchez town is referred to in an article, The End of the Natchez, published in the American Anthropologist (1899, vol. 1, n. s., pp. 517–518). His location of the town is on a tributary of the Hiwassee River south of the Peachtree site.

Additional evidence against the assumption that this was one of the historic Cherokee towns is tacitly secured from two references in Mooney (1900) on page 23:

> Harry Smith, a halfbreed born about 1815, father of the late chief of the East Cherokee, [N. J. Smith, one of Mooney's chief informants] informed the author that when a boy he had been told by an old woman a tradition of a race of very small people, perfectly white, who once came and lived for some time on the site of the ancient mound on the northern side of Hiwassee, at the mouth of Peachtree creek, a few miles above the present Murphy, N. C.

This would imply that no Cherokee Indians were living there or near there. Another similar myth regarding the site at Murphy itself indicates the visit of the "little people" to have been prior to

the advent of the whites. According to Mooney, therefore, there is little historical evidence for the continuous occupation by the Cherokee, or any other group, during the historic period.

Opposed to these data is the testimony of local residents who affirm that the Peachtree Mound and village site is the exact location of a Cherokee village described by their fathers and grandfathers when settling the region. This evidence may not be reliable. Also it is asserted by Sibbald Smith, the son of Mooney's informant, N. J. Smith, that "his" people had lived at Peachtree since the Revolution. One of the workmen employed during excavation of the site was one-fourth Cherokee and he stated that, according to his father, his grandmother was buried somewhere in the field near the mound. Added to this is the very important evidence at the mound itself (which, after all, is incontestable) of occupation since the advent of Europeans by the presence of glass beads, copper and brass, iron, and other artifacts as grave furniture. Such materials were also prolific in the surface soil of the village site. Further evidences of quite recent occupation are the two spring pocket knives found as grave offerings with intrusive burials Pm–19 and Pv–3, and the metal cup with burials Pv–3 and Pv–4.

Regardless of certain legendary statements and the lack of indisputable documentary evidence, the facts observed during excavation make it seem certain that the site was historically occupied by the Cherokee. The evidence indicates that it was inhabited from the prehistoric to a very recent historic period, and is located in the center of the Cherokee country. Since the Cherokee were notoriously zealous in keeping strangers well outside the Cherokee boundaries, the tumulus and its associated village site may be called, with some degree of certainty, Cherokee in origin. This assumption, though by no means ironclad or uncontested, seems now to have the most convincing evidence in its favor.

Space will not permit a discussion as to whether the Cherokee built mounds.[2] Sibbald Smith states that his father, N. J. Smith, claimed the Cherokee built mounds along the Tennessee River, but did not erect the Franklin or Peachtree Mounds. He did not know about the large one at Nottely nor did he mention the one near Murphy, the site of old Tlanusiyi.

To bring this discussion to a close it seems best to summarize the evidence for our hypothesis: 1, It has been indicated that the Cherokee probably lived here historically, although this precise location is nowhere indicated specifically; 2, in identifying this site with a historic group caution must be taken. It is not asserted that Chero-

[2] William S. Webb (1938), under "Speculations" (pp. 370–382), has some worth-while suggestions on this point.

kee-speaking people *always* had this type of culture. Neither is it stated that *only* Cherokee had developed the culture represented at this site. On the contrary, many of the traits listed for the Peachtree component are reported for the entire Southeast. However, it is asserted that the traits reported here do represent the material culture of a group of Cherokee inhabiting this site.

Necessary to our hypothesis is the fact of continuous occupation by the Cherokee of the Peachtree Mound area. That this occupation extends over a long period and has not been interrupted for any appreciable length of time is also essential.

The historic Cherokee tribes have been studied extensively by ethnologists and linguists. There has also been a tendency to label many differing archeological manifestations Cherokee.[3] Origins or migrations of the Cherokee do not interest us here. Mooney (1900), Thomas (1894), Powell (1891), Royce (1887), and others have, on the basis of ethnology and linguistics, shown the Cherokee closely related, originally, to a northern Iroquois group. They reached the Blue Ridge section prior to European contact (1300?) and had apparently taken over a Southeastern culture pattern by the time they were first visited (Swanton, 1928, pp. 673–726).

The significant factor in identifying this site with the Cherokee seems to be not that the Cherokee once inhabited the village, but that all the material evidence is the same regardless of level. That the site has only one culture, which is probably Cherokee, makes this important. Where stratigraphic cultural differences occur, identification is perhaps more tenuous, but here, it seems, identification of an archeological manifestation with a linguistic group is of a far more definite nature. The assertion is not that any artifacts resembling these *must* have been made and used by Cherokees. It is only asserted that these were made and used by the group known historically as Cherokee.

The above remarks should not be interpreted as implying belief that the Cherokee had a culture all their own, or that they were culturally isolated. Actually the Cherokee, as mentioned by Stirling (1932, p. 23), reflected the influence of contiguous cultures to a large degree. It is possible to state that this particular association of objects and complexes seen at Peachtree is typical of the Cherokee for a restricted area. The percentages of influences, such as material comparable to that from Moundville, would naturally be less here than at Etowah or some other southern site, while the Tennessee sites would have different proportions of these southern traits.

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[3] For a more detailed treatment of the "Cherokee" archeology, see Archeological Implications (p. 50). This section also deals with the archeological manifestations not labeled Cherokee.

It seems very improbable that a "pure" site of any sort will ever be found. No culture develops or exists without influence from neighboring peoples. It is equally true that the technology and material culture (archeology's only data) are subject to the easiest change. Thus it is inevitable that in many cases spatially intermediate cultures will reflect influences which originate in distant centers, these influences or patterns existing as integral parts of the intermediate culture. Placing this reference at this point is in explanation of a certain mixture of traits found side by side at the Peachtree site. This mixture of basic elements is charted in Appendix B. They are definitely coexistent, with no level or time differences. If the artifacts were found singly and compared, the reaction would be that they belonged to unrelated groups, but in this case their contemporaneity is clearly demonstrable. So it cannot be said that there are levels of occupation; only can it be said that diverse and unrelated elements were found to exist together and are equally typical of the Peachtree archeological manifestation.

EXCAVATIONS

The Peachtree Mound and village site was selected for excavation for various reasons: First, from the historical point of view Dr. Swanton felt that this site, situated as it was on an important aboriginal Indian trail, might be the location of a Cherokee town called *Guasili* visited by Hernando De Soto in 1540. Second, from the archeological point of view it was hoped the site would give us an exceptionally good cross section in the heart of the Cherokee country and perhaps some stratification. Third, from the point of view of the original purpose of the Civil Works Administration, it could provide legitimate employment for the unemployed in the area, and weather conditions during the winter months were favorable.

Aside from the historic occupation of the site by the Cherokee, it was hoped that some evidence of Yuchi occupation might be encountered. Whether the village of *Guasili* was located here does not seem to be a question of primary importance in this report of excavation, but is of great historical interest.[4] Excavation of the site would not conceivably reveal an artifact indubitably belonging to De Soto, but could perhaps have shown, through the size of the mound and its structure as well as the cultural objects, that the site fitted the description of the town visited by De Soto.

The site, consisting of a large mound and village, is located 5½ miles east of Murphy, on United States Highway No. 64 in Cherokee County, N. C. It is on the north bank of the Hiwassee River, 300

[4] Dr. Swanton has published a full account of his reasons for reconstructing De Soto's route as he has in the Final Report of the United States De Soto Expedition Commission, 1939, of which he was Chairman.

yards east of the confluence of Peachtree Creek and Hiwassee River. At this point the river is a swift flowing stream 100 or more feet in width. (See fig. 1.)

Cherokee County, most southwesterly county of North Carolina, is bounded on the west and north by Tennessee, while Georgia is its limit on the south. Murphy, the county seat, lies approximately in the center of the county. Of its three rivers, Nottely, Valley, and Hiwassee, the latter is of main importance. It flows northwest to the Tennessee River, of which it is the fifth largest tributary, draining some 2,660 square miles of territory,[5] with an average discharge of 4,741 cubic feet per second at Charleston, Tenn.[6]

The entire country is rough and picturesque (pl. 1, *A*), its steep hills and ridges being typical Southern Appalachian terrain. The broken country is covered with forests of pine, oak, hickory, poplar, and chestnut. While now only small game is found, one can imagine a country rich in game during aboriginal times. Arable land is extremely scarce. Only the flood plains of the river valley (pl. 1, *B*) have sufficiently fertile soil to make farming practicable or profitable.

As shown in figure 1, the mound itself lay directly on the bank of the river. The location was strategic because the river valley here reached a considerable width, thus making a large area available for cultivation. During seasonal floods all the bottom land is inundated, providing the rich silt which annually renews the fertility of the soil.

PEACHTREE MOUND

The technical procedure involved in the excavation may be briefly mentioned (pl. 1, *C*). The crew furnished for the excavation by the County Civil Works Administration included 104 men. So large a number, all of whom must be employed, made necessary a revision of methods involved in excavation. Approach is usually made along a single axis. In this case, however, approach trenches were put down on three sides. This three-way excavation proved extremely appropriate later, permitting as it did a simultaneous approach from three sides to feature 29, the central structure. Since a balance between speed and careful work had to be attained, the trenches were first put down rapidly to undisturbed soil. Then the technique was changed to vertical cutting. The face of the cut was kept vertical and was "sliced" down, allowing the excavation to progress toward the center of the mound from all three sides. When the excavation had so advanced into the mound that a face was too high for effective work, it was terraced and removed in two or more arbitrary levels.

For convenience in reference, the arbitrary spatial divisions of the

[5] Bulletin 34, of the Tennessee Division of Geology. See King, 1925.
[6] U. S. Geological Survey water supply papers (unpublished).

mound, as it was staked, should be briefly described. The method employed was the usual grid system. The long axis of the mound ran northwest to southeast. Stakes were placed along this axis 10 feet apart and numbered. Stake 11 was the central and highest point of the mound. On each side of the central axis, at 10-foot intervals, rows of stakes were set, designated R1, R2; L1, L2, etc., depending on their distance from, and whether they were to the right or left of the central axis when observed from stake 0. Each stake in the long axis gave its

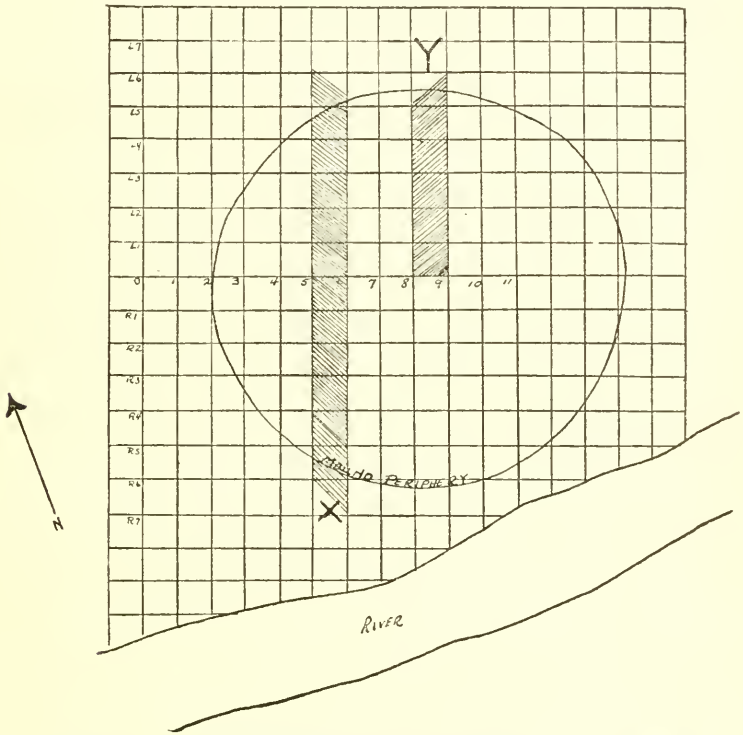

FIGURE 3.—Section 5 (X) above is all the area between the 5 and 6 lines of the grid; (Y) is the left half of section 8.

number to the 10-foot section following it. That is, "section 7" was the 10-foot strip between stake No. 7 and stake No. 8. Its length was indefinite, being as long as the mound was wide. (See fig. 3.)

In order to make reference to ground plans easier for the reader, descriptive references which follow will be to section only, squares being disregarded.[7] Reference to any arbitrary division will be made as infrequently as possible.

[7] The number of the square is taken from the number of the stake in the lower right-hand corner of the square, as viewed from stake 0 of the central axis. Thus, a stake in line R2, opposite stake 7 of the central line of stakes (axis) would be numbered: 7R2. Square 7R2 is the 10-foot square of which stake 7R2 marks the lower right-hand corner.

Work had not progressed far when it became evident that there were two natural strata in the site. The mound itself constituted one level; the old village level upon which it was constructed was the second.

On the assumption that there might be cultural differences between the material in and on the surface of the mound, and that which came from the village site, the material from each layer was kept separate. The village site material was labeled "BML" (Below Mound Level), while other material was "ML" (Mound Level).

Laboratory analysis of the material, particularly pottery, indicated that slight cultural differences between levels existed. The analysis given on pp. 48–49 was secured by random sampling and showed that there was no difference in the artifacts, except pottery, between the two levels.

The mound itself, due to cultivation and erosion, was gently sloping on all but the south side (pl. 1, *C*). This, the river side, was very steep and abrupt for two reasons: First, during annual floods the river had cut away a part of this side; and second, its nearness to the river plus its steepness prevented cultivation and consequent flattening. At the time of excavation the mound was a round-topped tumulus slightly less than 11 feet in height, 180 by 220 feet in size.

A general outline of the more important structural features will indicate the type and purpose of the mound. Three hard, level, superimposed burned floors were uncovered near the top. At the center, serving as a core or the nucleus of the mound, was a structure of stone and wood (feature 29), over which a small primary mound, perhaps 7 feet by 60 feet, had been erected. Over this primary mound was a larger secondary mound. The entire primary mound was built at one time, as indicated by the fact that soil used in the construction was practically homogeneous in color and texture, with no separable strata, although lensing could be observed (pl. 2). Before the erection of the secondary mound a layer of white sand, varying in thickness from 1 to 6 inches, was put over the primary mound and the adjacent village site until all the area which was to serve as the base of the secondary mound had this sand mantle. This layer was thickest near the periphery of the primary mound, and was full of water laminae, indicating that there was a certain amount of erosion of the sand before the later mound was begun. Construction of the secondary mound was intermittent, indicated by various thin water deposits up through its structure and 6 refuse strata.[8]

The secondary mound was used primarily as a foundation for ceremonial or domiciliary purposes rather than to cover deceased individuals. Even though six burials were placed in the mound

[8] See p. 48 for discussions of levels AA, A, B, C, D, E, and pottery analysis.

during its construction, this was incidental to the original purpose. After the mound had been completed, 11 more bodies were intrusively buried in the substructure.[9]

The following structural phenomena were encountered: A rich village site deposit upon which was constructed a small primary mound. Over this mound a larger secondary structure completed the tumulus.

The primary mound was built of brown and black soil, probably from the surrounding habitation site, because it contained a certain amount of artifactual material. Only these two types of soil were used in the primary mound. It was steep-sided, possibly hemispherical, with a gently sloping ramp to the east, parallel to the river. The primary mound did not serve as an exact center for the secondary mound, but was rather to one side (fig. 4).

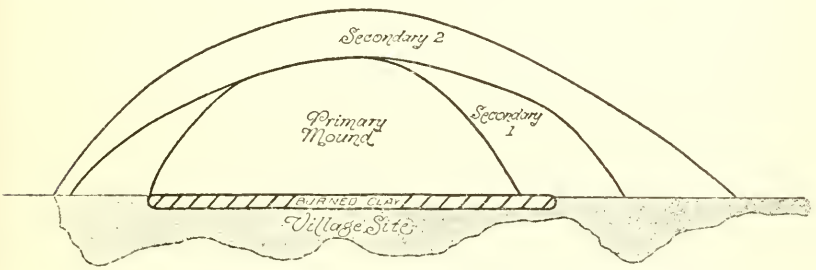

FIGURE 4.—Schematic drawing showing periods of mound construction.

The secondary mound, probably built after some lapse of time, contained many different colored soils, including white river sand, black humus, brown subsoil, various clays, and sandy mixtures. One blue-gray clay layer, extremely compact, served as a "cap" over a portion of the top.[10] The lensed areas show very plainly (pls. 2 and 3). Since the earth used in the secondary mound was usually natural soil, few cultural objects were found therein. Sherds were rare. A preponderance of the material labeled "mound level" was found in the surface humus or in the eroded fill at the periphery of the mound.[11]

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[9] Ten burials were reported to have been removed by the Valentine brothers of Richmond in 1885 from the top of the secondary mound. Since no fragmentary human bones were found in the fill of their excavation, this statement may be erroneous. (Fig. 6 shows the extent of their pit.)

[10] This blue-gray "cap" shows very plainly in pls. 2 and 3. Profiles L1 and L5 show the gray layer which later comes to the surface at the top of the mound.

[11] See pp. 16, 22, and 48 for exception to this statement, i. e., levels AA, A, B, C, D, E. Also the periphery of the primary mound contained some sherds. The northeast portion of the mound (see profile 15, pl. 2, *B*) shows that the mound was erected in layers, not by blanketing the whole tumulus with new soil, but by adding layer after layer on the one side. Apparently the intention was to enlarge the top area rather than to increase the height of the mound.

What actually seems to have happened is that the central feature, the structure of stone, etc. (feature 29, pls. 4, 5, 6, 7, and 8), was built and covered with brown and black soil. This first mound—actually a small one only 7 feet high—was no more than 60 feet in diameter. This can be seen in plate 2, *A*, L1 profile. The dome outlined by the sand line, which had been spread over the mound as a thin and continuous layer, is a cross section of this first central mound. During a second period of construction, the diameter of the mound base was increased to perhaps 100 feet by the addition of another layer of black and brown soil. The plane of deposition of the lenses in this addition did not conform to that of the primary mound. This first expansion of the mound did not increase its height. The later strata, however, added intermittently on the east and north sides, raised the summit some 3 feet (fig. 4). The usage of primary and secondary will remain as follows: The primary mound applies to the earth over the central feature. The rest of the tumulus will be referred to as the secondary structure.[12]

European contact material, such as glass beads, iron, etc., was plentiful on the surface and in the deep peripheral fill. None, however, was recorded in or below the mound except in association with intrusive burials. ("Mound" here includes primary and secondary portion.)

Culturally the site seems to have been homogeneous. The sole difference is in percentages of certain pottery types (see pp. 48, 49) and in the presence or absence of European objects in the two levels.

Within the mound were a number of unusual features which may prove significant to those interested in comparative treatments of mound construction. Three natural divisions of the site are suggested by figure 4: First, the rich village debris in which most of the burials were found; second, the primary mound, erected over a large central structure; third, the secondary mound, with two main periods of construction. These divisions, with their contents, will be described in reverse order: The secondary mound, the primary mound, and the village site.

THE SECONDARY MOUND

Floors and Wooden Steps or Ramps

The two major features of the secondary mound are the hard, burned-clay floors near the top and along the southeastern side, and two series of log stairways on ramps. As was indicated before, the

[12] A careful analysis of the profile photographs and sketches indicates that there is a need for the foregoing paragraphs concerning the structure of the mound. Several short sand lines occur at random through the secondary structure. These may be either wash—many obviously are—or thin layers deliberately spread out. The sand layer which covers the primary mound is continuous and is usually referred to by "the sand line" unless preceding context clearly indicates a different phenomenon.

secondary mound seems to have been built intermittently over a relatively long period.

The hard packed, and in some places burned, superimposed floors were very clearly observable. Reference to plate 2, *A*, profile L1, makes their position in the mound and their relation to each other plain.[13] In plate 2, *A*, the sand line over the primary mound is clearly visible. The lowest of these floors originates below, and to the right of stake 11 (numeral 11 in photograph). This floor was about 1 inch thick except in the fired areas (the darker, thicker portions of the floor), where it is some 4 to 6 inches thick. It was cementlike in hardness and the soil above it cleaved off readily. Its extent, as well as that of the others, was indeterminable, due to the large area previously dug.[14] The Valentine pit had obliterated a great deal of evidence. Remnants of the floor left in the first digging, however, indicated that the original length was no less than 40 feet.

Another floor lay 6 to 8 inches above this first one, separated from it by an unlensed mixture of burned clay, charcoal, and various earths. It did not differ in appearance or probable extent.

The last floor was very near the surface. Most of it was destroyed through cultivation. It rested upon the thick layer of blue-gray clay (cap) referred to elsewhere. These floors were probably those of buildings, although no regularly spaced post holes were located to corroborate definitely this reasonable assumption.[15]

It should be pointed out in connection with profile L1 that directly beneath the lower two floors the first section of the secondary mound is visible. This wedge-shaped zone, beginning just under the lowest floor, and lying between it and the sand mantle over the primary mound, was a darker stratum, the lenses of which lay at a slightly different angle than the horizontal ones of the primary mound. This indicates that in the earlier stages of secondary construction, floors were made and used. A further deduction is that following an indefinite period of use the gray clay cap was added, raising the level of

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[13] Cf. fig. 5 with pl. 2, *A*.

[14] See footnote 9, p. 17.

[15] The mound structure plan (fig. 6) shows a few scattered post holes, whose origins average 2 feet from the present surface. These were probably the foundation posts for a building, but the early digging has made any certainty on this point impossible to determine.

During excavation every effort was made to locate the post holes which would make it possible to reconstruct the size and outline of some superimposed structure on the top of the mound, but the few irregular holes mentioned above were the only ones observed. There is a difference of 2 feet in the levels of the lower floor and the top of these post holes. This can be accounted for by the fact that the last structure stood on earth more recently added over the floor, or by the fact that the short posts were left standing and the next stratum of soil applied over them.

John Macomb, an old settler, says that when he first saw the mound there were four large posts at corners of a 20-foot square, on the top of the mound. These were cut, along with the trees, at the time the mound was put into cultivation. There was no trace of these posts or of the post holes.

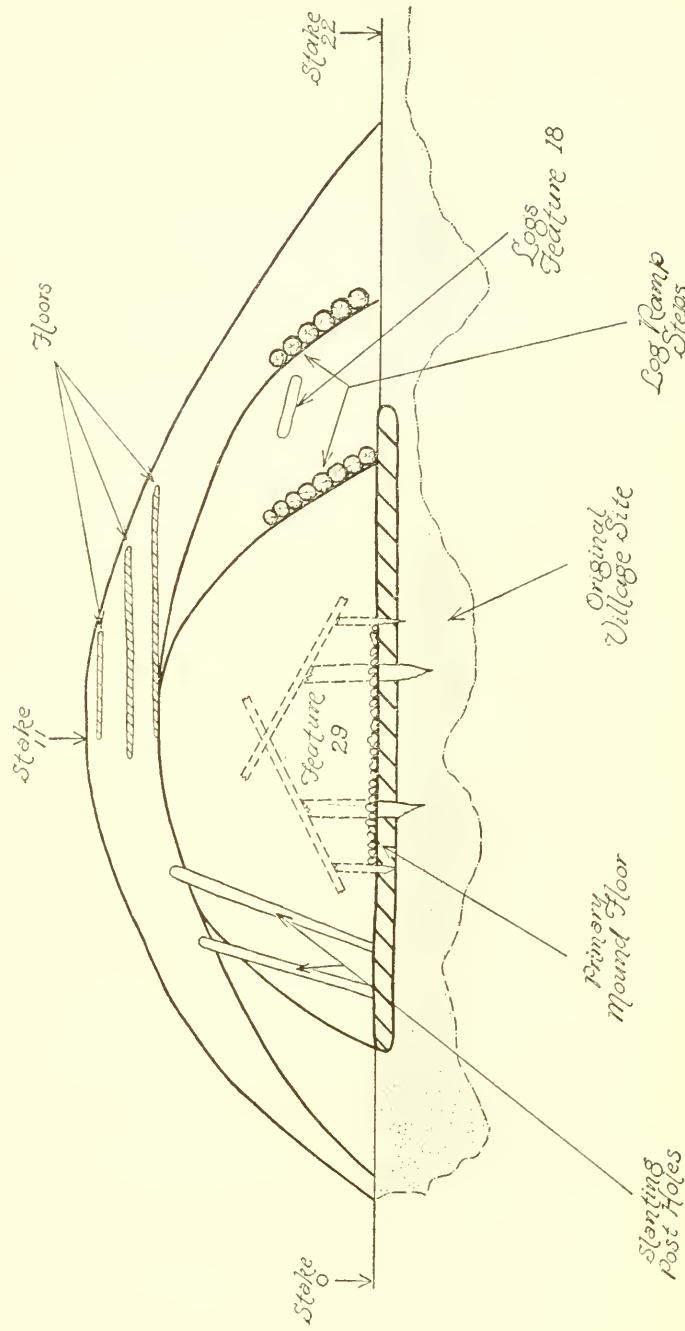
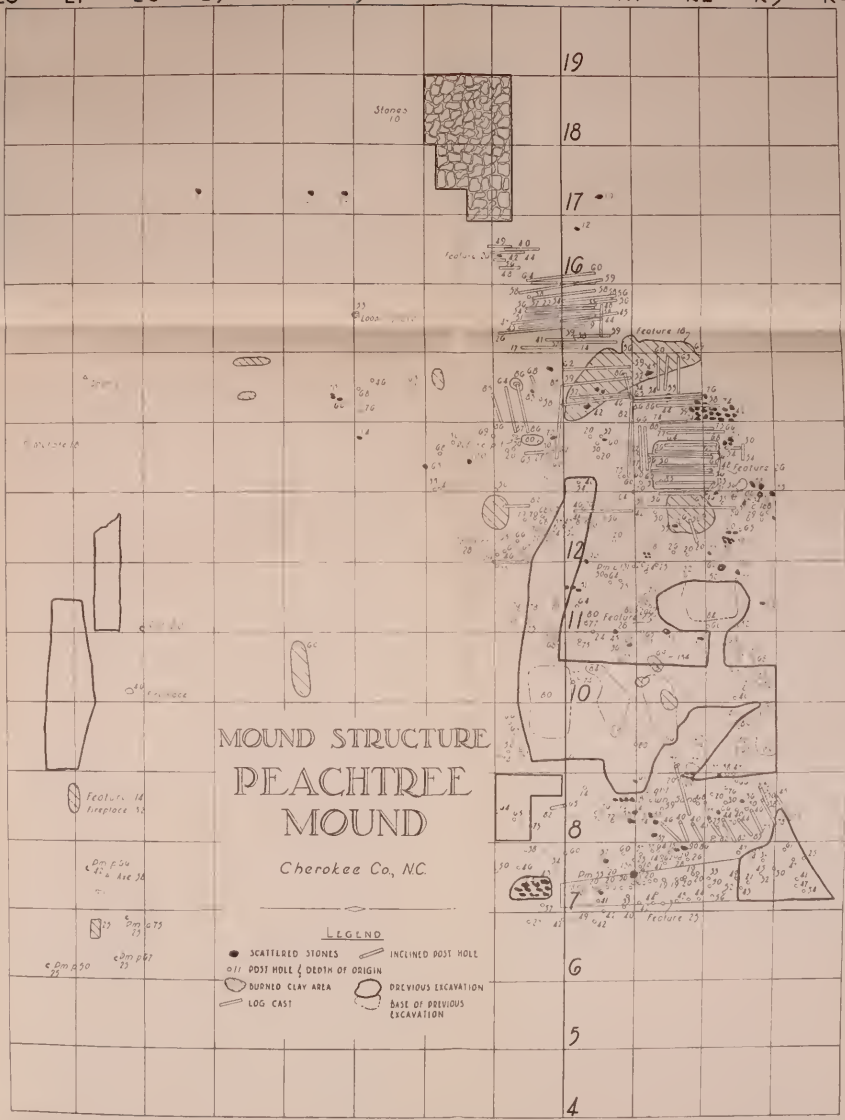


FIGURE 5.—Schematic cross section of mound through the long axis (not drawn to scale).



(Scale: 1 square=10 feet.)

FIGURE 6.

247000—41 (Face p. 20)

the entire mound, and a new, possibly larger, floor was made. Profile 15 (pl. 2, *B*) showed the same gray layer distinctly lower in the mound. Over it were numerous lensed and mottled zones, which increased the surface area. The post hole in profile L1, just below stake 11, was probably a support of the building originally accompanying the first floor.

The other significant structural features of the secondary mound were the two ramps or series of "steps" (see mound structure plan, fig. 6) on the southeast side of the mound. The first of these, feature 16, is a series of 12 logs or poles, averaging 4 inches in diameter, and from 8 to 12 feet in length. These lay horizontally on the brown and black lensed stratum just referred to above, as the first stratum of the secondary mound (see description of floors) and just under the next or gray "cap" stratum. The poles vary in depth or level, the one farthest away from the center of the mound being the lowest, a surface depth of 6.4 feet, which, at this point, was the base of the mound. Each succeeding pole was higher and closer to the center of the mound, until the last one of the series was only 3.2 feet below the surface. The surface rise of these steps is then 3.2 feet in a horizontal distance of 11.3 feet, but an actual rise of over 4 feet from datum. Over them lay the gray clay stratum which covered the first two floors. The ramp is associated with the first of the floors, which rested upon the brown-black lensed stratum of which the stairway or ramp was a part. The steepness of the stairs indicates that the level top area could not have extended past line 15, at which the stair ended.

In connection with the pole ramp it should be mentioned that at each end of the logs small, deep post holes were found. These were only on the lower side, evidently the remains of small posts which held the logs in place on the steep slope of the mound. In plate 3, *A*, the step arrangement of the feature and its steep pitch is clearly shown. To show this structure more clearly in the photograph, canes were placed in the log or pole molds, while shorter canes can be seen in the vertical post holes. It is interesting to note that one pole was quite close to the surface, near the top of the gray clay stratum. This pole did not, apparently, have any connection with the series beneath it.

The series of logs could not have been a structure which had collapsed, since the logs were all in order. They show no displacement or criss-crossing as was noted later in a collapsed edifice (feature 29); nor is it likely that there would be any building on such a steep slope. No evidence of supporting timbers was found, though the post holes at the exact ends of the logs indicate their original occurrence there. It seems justifiable, therefore, to consider this feature as a log

stairway on a ramp leading up to the floor of a temple or house structure.

Twenty feet nearer the center of the mound, beginning at the base and running from a surface depth of 8.6 feet to 5.6 feet (3.6 feet rise above datum), we find a similar series of 13 poles (feature 26) lying on the side of the primary mound.[16] This series, as reference to the figure of the mound structure plan shows, did not ascend the slope as uniformly as did feature 16. Post holes also occurred here at the ends of the horizontal logs. Under the logs was a thin hard layer of sand, which is possibly the same as the sand layer over the primary mound. No floor was associated with the upper level of this ramp.

To the north of feature 26 was a thin layer of bark which rested conformably on the stratum for the length of the steps, from the mound base to the uppermost log.

Just to the east of feature 26, on a slightly higher level, was a series of four poles, whose arrangement was similar, and whose function may have been like that of features 16 and 26. Other post molds and fragments of wood were encountered at various places through the mound. These were considered accidental inclusions. Small areas of charred grass and cane were found at various levels. No explanation for these pockets of material appeared.

Adjacent to feature 26, but higher and in another stratum, was a series of three large log molds which ran parallel to, rather than across, the slope of the stratum on which they lay. No explanation could be found for this structure. These molds were above the base of the mound. Complete exploration did not reveal any associated structural phenomena, so a definite explanation of these logs is lacking.

Another feature of the secondary structure is visible in profile 15 (pl. 2, *B*). Here five dark refuse strata are visible. The first of these, A, lying just beneath the gray-clay layer, was followed on through section 14 and was observed to fuse with the lowest of these three floors near stake 11, at the same datum depth as that at which the floor originated. (See p. 19 ff. *re* depth of first floor.) It is thus demonstrated that sufficient time elapsed after the construction of this floor for the accumulation of a certain amount of debris. The other levels, B, C, D, E, were higher and later (pl. 2, *B*). Their origins did not tie in definitely with any other feature in the mound. (See p. 49 for pottery types in level A.)

Throughout the mound, aside from burned portions of the floors, small areas of burned clay, from 1½ to 6 feet in diameter, and from 1 to 8 inches thick, occurred. These were random occurrences and seemed to have no significance or relationship either to the mound as

[16] On p. 18 a statement is made that structural features from three natural divisions would be discussed by divisions. Description of primary mound ramp at this point is a logical exception.

a whole or to each other. Artifactual material was seldom encountered on these burned-clay areas. In the mound fill single boulders were often found. These occurred at no particular level nor in any degree of order. They are assumed to be accidental inclusions.

Another feature as interesting as the floors and starways just discussed was the collection of water-borne boulders in sections 17, 18, and 19 along the L1 line (pl. 4, *B*). This layer of boulders—21 feet in length and 13 feet in width—formed a close, evenly laid "floor" of boulders, one foot in thickness, resting on the eastern slope of the mound. It was put in place after the last addition to the mound was deposited. It also appears that the stones begin at the edge of the mound, at its base. The plane on which they lie rises with the mound strata. The depth of the rock stratum at line 19 is about 2.5 feet, while at line 17 the depth is only 1.0 foot. This indicates the depth to which erosion had covered the lower end. Further up toward the center of the mound, profile 17 showed that some of the mound strata had come to the edge of the stones, but no evidence appears which indicates that any later artificial layer had covered the stones. It has been suggested that this regular arrangement of stones was the floor of a sweat house. A few small irregularly spaced post holes near the outer periphery would further verify this sweat-house theory. Possibly these post holes were all that remained of a house. In profile 17 (pl. 3, *C*) a thin sand stratum in which were water laminae, is seen, originating at the edge of the rock area. The profile indicates its possible use as a stone ramp. Its nearness to the surface, however, makes it barely possible that this entire feature was not aboriginal but modern in origin.

In section 7, largely obliterated by earlier work, was a series of 20 post holes, only a foot in depth, lying under a sand stratum. These were identified with the first stage of the secondary mound construction. They lay on the same stratum as the steps (feature 16) on the other side of the mound. Inadequate exploration of this series of post holes makes any definite explanation impossible.

On the "mound structure" plan (fig. 6) will be seen the surface and basal outlines of the pits put down by the Valentine brothers in 1885. This area extends over portions of sections 8, 9, 10, 11, 12, and 13. Fortunately, this digging, which obscured much of the evidence regarding floors, post holes, etc., on the surface, did little actual damage to the central feature at the base of the primary mound. Probably a more adequate explanation of the post holes, etc., could have been made if this part of the mound had not been disturbed. However, the floors seem fairly good evidence for assuming that structures once existed on the mound, although the exact size and shape can never be determined.

247600—41——3

PRIMARY MOUND

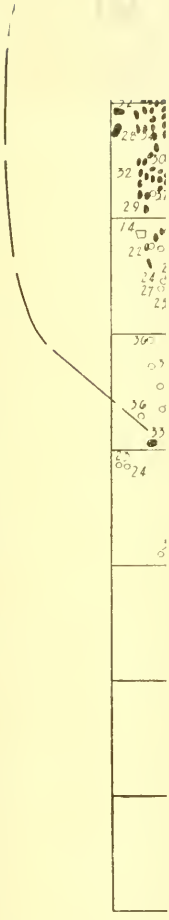
The most spectacular and complete structure, feature 29, lay on the prepared floor under the primary mound. This feature, occupying the right half of sections 8, 9, 10, and 11, was a large structure, built of stone and wood, oriented roughly with the cardinal points. This central structure, approximately 22 feet square in the interior dimensions and 31 feet in exterior dimensions, possessed a wide stone bench around the four sides and a timber superstructure containing separate compartments along its walls.

Reference to plate 5, *B*, shows the appearance and distribution of the stones as they were found. The canes were placed in the picture to indicate the length and direction of the log molds, all that remained of the collapsed roof and wall sections which overlay the stones. This picture also shows the depth and arrangement of the external or peripheral stones which made up the wall some 2 feet in height. Inside, and only inside, this wall there were scattered single stones. No stones were found outside the line of the peripheral wall. The loose central stones were placed on the thick and unshifted peripheral stones to reproduce the original outline of the structure. The stones of the wall proper lay flat on the prepared floor, while all the central stones had fallen into their place with such force that their impact with the floor had made shallow indentations.[17] The fact of a forceful collapse was emphasized when the two halves of a broken boulder were found 10 feet apart inside the enclosure. This fracture had occurred during the collapse of the wooden structure. The larger piece was found partially embedded in the floor, lying against the stone upon which the break had occurred. It is quite possible that the larger central stones had been placed on the roof of the wooden structure in order to secure or hold down mats or reeds.

The finding of four large corner post holes indicated the main roof supports. These post holes were first encountered 6 feet above the clay floor of the house and extended through the undisturbed soil beneath the village site. They averaged 12 inches in diameter. Their size and vertical position were doubtless the reasons they stood through the collapse. The smaller cross beams formed the molds scattered among the stones within the edifice. A glance at the "mound floor" plan (fig. 7) shows that the direction of the collapse was toward the southwest. No charred specimens were found, so that joints or methods of fastening timbers could not be determined.

The exterior walls were built of small vertical poles outside the area covered by the stones (pl. 8, *A*) and served as the outer roof

[17] See pl. 8, *B*, for the smooth floor beneath the walls and compare with pl. 7, *B*, which shows a portion of the central section with the boulders "gouging" into the floor.



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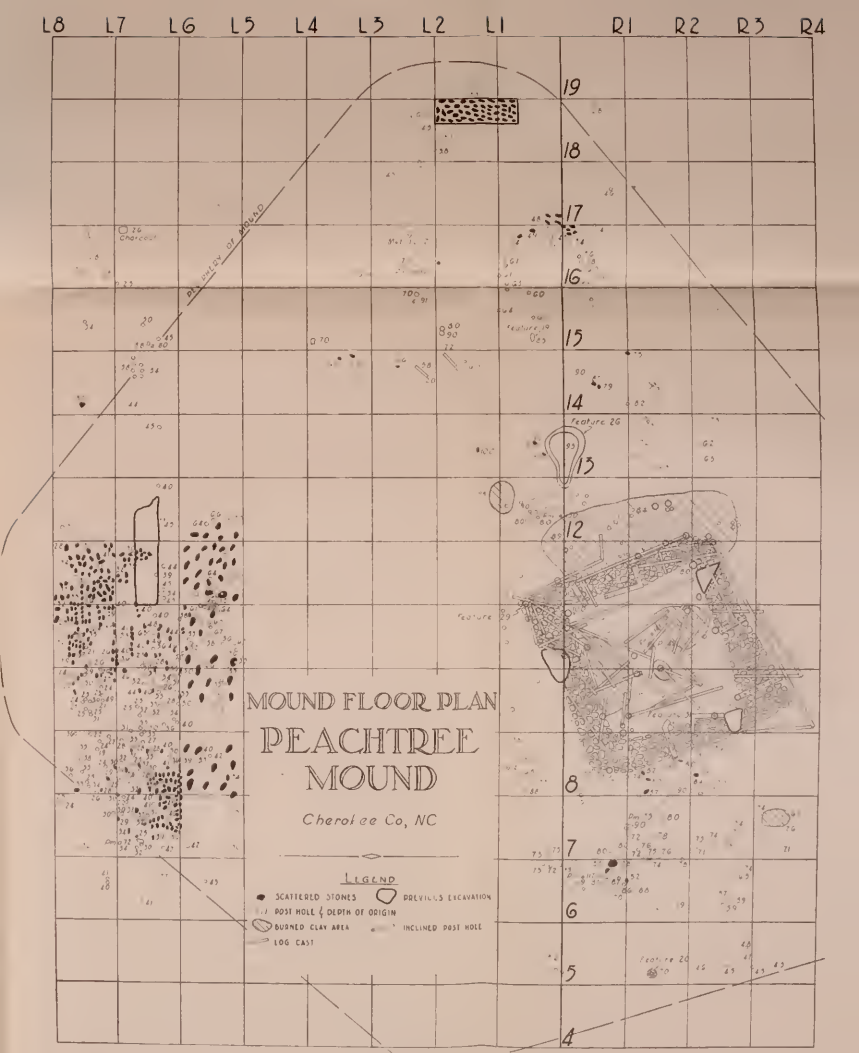

(Scale: 1 square=10 feet.)

FIGURE 7.

supports. The roof was probably of thatch or cane matting. Some decayed, formless organic material among the roof or wall cross members is the basis for this assumption.

The six vertical yellow clay and sand walls, as seen on plate 8, *B*, were reinforced with 1½-inch posts which were sunk deep in the mound floor. The yellow bands extended 2 feet above the stone layer. These transverse walls are not easily explained, but by virtue of their size, shape, and arrangement, they are considered to be partitions. The relations of these cross walls of clay to the rock base of the structure is shown in the floor plan of the central feature 29; one of the bands is labeled 31. They showed definite color contrast to the matrix of the primary mound and to the post reinforcements.

A burned area in the center of the square may have served as the fireplace for the building, although burned zones occur at various places all over the floor of the mound. Two of these shown on the ground plan run under the boulders of the structure. These burned areas seem to have no direct relation to the house itself.[18]

This structure collapsed after the primary mound had been built and probably during the building of the secondary mound. The internal evidence of the arrangement of the ruin itself indicates a forcible inward collapse. The sand layer which covered the entire primary mound seemed to dip considerably directly above the structure. Instead of this sand layer forming a dome, the center and highest point slumped, giving the appearance of a geological fold. The lowest point in this sand line was near the center, while the highest peaks were directly above the walls. Since the traces of timber found were log molds and small rotten wood fragments,

[18] The theoretical reconstruction of feature 29 as a thatch-covered, wooden structure, with a continuous stone bench against its walls, and partitions rising above the bench was verified by an identical structure excavated by the junior author in December 1936 and January 1937 for the Tennessee Valley Authority, Chickamauga Basin Survey. The feature referred to was on site 8 Ha 1, in Hamilton County, Tenn., some 15 miles upriver (NE.) from Chattanooga, Tenn. In location (i. e., the core of a small mound), size, general orientation, presence of a bench of similar width with partitions (of almost identical arrangement), post holes at the rear of the bench, a central firepit (only a burned area in Peachtree), beams for roof supports, with thatch and matting roof, all constructed over a prepared level, makes the Tennessee find a remarkably similar phenomenon. It is true that the Tennessee edifice was destroyed by fire, which baked to bricklike hardness the puddled clay of its benches and floor and partitions, thus preserving more details of construction. Charred beams, pieces of matting, and thatch roof material were readily identifiable. The Tennessee manifestation differed further in being semisubterranean, having been built in a shallow depression, which was obviously made to accommodate the structure. It also differed in having an entrance and a short curved entry way or "storm-door" outside the building, probably to reduce drafts inside. The benches were not made of stone but of puddled clay. These showed evidence of occasional aboriginal repair. It is possible that the Peachtree bench was covered with clay, but the clay covering was not observed at excavation because it had not been fired and no distinction was observed.

The two sites, Peachtree and 8 Ha 1 in the Chickamauga series, are no more than 150 miles apart by river and were doubtless subject to similar or identical cultural influences.

rather than charcoal and charred wood, it seems logical to conclude that the collapse of feature 29 was due to pressure rather than fire.

An additional feature, more difficult of explanation, largely because amateur digging had obliterated part of the evidence, was the series of long, slanting post molds in section 8. Ten of these originating at a surface depth of 4.0 feet, and extending down through the base of the mound, offer a puzzling feature. They were arranged in a gentle arc, their tops slanting toward the center of the mound. The mound structure was unbroken around them—i. e., it was lensed and contained no changes in material—showing that they were in place during the erection of the primary mound, or that they were forced into the mound when the work was partially done. In section 7 a similar group of posts, feature 25, originated just above the top of the primary mound and extended through the mound base into the undisturbed soil. It is probable that these post holes represent some part of a temporary structure erected on the northwest edge or slope of the primary mound. No floor or transverse timbers or other evidence of an edifice were encountered.

THE VILLAGE SITE

Several features of construction in the village site have been hinted at earlier. Refuse pits, burial pits, hundreds of post holes, some with stones arranged around them, fire pits both lined and unlined with stones, caches of animal bones, pits containing charcoal, etc., appeared at many points. Refuse pits were uniformly dug from the original surface into the basic or undisturbed brown soil and were clearly distinguishable, in both vertical and horizontal profile. They were filled with rich black soil, in which broken bones, charcoal, and cultural objects were found. Their occurrence and size were irregular. The majority of the burials discovered were in the village site, inhumed in pits dug from the original surface. These burial pits varied from a size just large enough to contain a flexed or infant burial, to long oval pits in which an extended body could be placed. They varied from 1½ to 4 feet in depth. For further discussion of burials, see pages 33–34. In one instance (skeleton Pm–16) a grave was dug into an older refuse pit. In profile these two types were easily distinguishable. Burial pits were filled with light-colored mottled earth from the surface and subsoils, while the refuse pits were always filled with black, rich soil.

In sections 1, 2, 3, and 4 a refuse pit was connected to a burial pit by a trench 20 feet long, with a depth equal to that of the two pits. The trench was filled with the usual black soil. No explanation can be offered.

(Scale, 1 square = 10 feet.)

FIGURE 8.

247600—41 (Face p 26)

Beneath and around the mound a profusion of irregularly spaced post holes occurred, which justifies the assumption that houses were destroyed and rebuilt many times, and possibly indicates a rather long occupation before the building of the mound. The homogeneous nature of the humus on the camp site surface made it impossible to locate the origin of post holes in the first and significant foot of soil. Traces were only visible after the digging had gone below the original humus, at which point they were readily detected through their contrast with the brown subsoil. Empty molds or casts were rarely encountered. Sometimes the burial pits were dug through several post holes. In another case (Pm–52) a post had been driven through the head of a skeleton some time after inhumation.

On the northeast side of the mound, running across sections 7 to 13, were two long and regular rows of posts, averaging 15 feet apart. These (fig. 8) do not seem to form either an enclosure or a structure. It has been suggested that they were portions of a stockade.

Seven instances of clearly defined post holes, surrounded by a cluster of flint pebbles, varying in size from 2¼ inches by 6 inches down to 1½ inches by 3 inches appear. These probably served to wedge the posts when inserted in the ground. The fact that floors were never found in connection with the numerous series of post holes in the village makes possible the conjecture that the houses were slightly raised, the posts serving for piles. This assumption of pile dwellings, based on purely negative evidence, is not so unreasonable as it may seem, since the entire village site is and doubtless was flooded several times a year, and a raised house would be a distinct advantage.[19]

Another phenomenon worthy of mention was the seven instances of small clusters of stones, occurring sporadically, unassociated with post holes and sherds. Reference to the ground plan shows a "pile of rocks" here and there. Their surface depth varies, although usually they were in small holes well down in the old humus zone. It is possible that these flint stones were heated and put in a hole, which was later sealed for some type of cookery. The stones were not, however, subjected to regular intense firing, inasmuch as they were neither discolored nor cracked, as heated stones usually are.

Various fireplaces, sometimes deep, round holes, with fire-reddened bottom or merely a small flat burned area, occurred frequently. Usually they had some broken sherds associated with them. One round pit lined with smoothed but unburnt clay and filled with sherds and charcoal was found. This pit was sunk from the original sod level (pl. 9, *A*). Another (pl. 9, *B*) shows a fire pit lined with

[19] No historic descriptions of raised houses were encountered in the Southeast ethnological literature.

pebbles. Under the pebbles ran a thin layer of talclike material, no more than ½ inch thick, running under the entire burned area. Its significance is unknown. One other example of a pit lined with talc, in this case not a fire pit, occurred in section 11, shown on ground plan as "pipe clay pit." It was about 5 feet in diameter, and was sunk from the old sod level to a depth of perhaps 3 feet. Possibly it was a storage or cache pit, hence the lining. Numerous areas or zones of charcoal occurred. One cache or deposit of corn cobs was found. It should be mentioned here that the village site, or mound base was not always determinable in the same way. As hinted previously, the two levels, mound and village site, were usually separable on the basis of a definite sand line. This was true only of the secondary structure. When the limits of the basilar portion of the secondary mound were passed and excavation encroached upon the primary mound, it was discovered that the primary mound rested upon a hard prepared floor, averaging about 6 inches in thickness. This floor was made of a mixture of sandy clay, burned clay, strata of ash and of charcoal, and was quite hard throughout.[20] Near the center there seemed to have been a smaller floor, at a slightly greater depth, over which the more extensive floor which served as a base for the primary mound was placed. Large parts of this floor were burned (fig. 8, secs. 11 and 12). The fact that this prepared floor had a wide extent, from sections 8 to 13 (50 to 60 feet) should be kept in mind.

On the northeastern periphery of the village site under the mound were a great number of stones. All these stones lay on the original surface, which in some cases was packed and hardened in a manner comparable to that of prepared floors. The great number of post holes nearby indicated that several structures existed here successively. Just what the structures were is problematical.

In sections 13 and 16 a roughly circular group of post holes, which originated at the old surface are shown. In the village site proper, excavations were begun at a burned area which proved to result from a fire at the top of a pit in which a double burial had been placed.

An attempt to delineate a house structure in the present village site was unsuccessful. A long double series of post holes was followed for 70 feet, but no explanation of the arrangement was found. Probably the structure was a stockade, since the posts were not in evidence either in color or texture until a depth of 2 feet was reached. Due to the homogeneity of the soil, the level of origin cannot be stated; therefore the relative age of the structure cannot be postulated.

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[20] Earlier descriptions indicate that this large floor served, without modification, as the floor of feature 29.

SUMMARY

In summarizing these data it may be said that the Peachtree site consisted of an artifactually rich and extensive habitation site which was pock-marked with refuse pits, burial pits, and evidence of wooden dwellings. Upon this village site was built a hard-packed area which later became the floor of a large ceremonial structure of stone and wood. This was covered by a small round-topped mound, about 60 feet in diameter. Over this mound, and separated from it by a sand stratum, was a larger secondary mound which underwent at least two major periods of construction and several minor additions. The secondary mound had upon it three successive ceremonial buildings, as evidenced by the three superimposed floors.

MATERIAL CULTURE [21]

This brief description must be correlated with the illustrations for a complete grasp of the material evidence constituting this component. (See pp. 72–79.)

ARCHITECTURE AND HOUSE-LIFE

The evidence on this phase is unfortunately incomplete. As mentioned in the chapter on excavations, the chief features consist of the numerous post holes, clay floors, fireplaces, and an occasional fragment of burned clay which carries the imprint of cane wattle work. The probability is that these houses were made of poles, with thatched roofs (a few "patches" of charred grass were found in the mound and village site) and walls of wattle and daub (Adair, 1775). The arrangements of the post holes were such that no accurate record of the number of houses occupied over a given period of time could be ascertained. Historically the Indians of the Southeast are known to have had variations of the above type of house. The evidence of Peachtree Mound was only corroborative. No definite house shapes or sizes were determined, nor was the type of construction discernible.

The household furnishings included items of wood, shell, and vessels of stone and pottery. Grain food was largely corn, of which many specimens were found. It was ground on milling stones (pls. 27, *A*, and 27, *B*). Flesh food was provided by deer, bear, opossum, turtle, and turkey. Mats and skins were in use. Tobacco was known and was probably cultivated by the group. There seems little doubt con-

[21] This division could have been arranged in several ways, but this style, similar to Aztalan by Barrett (1933), the Pictorial Survey of the Mississippi Valley (University of Chicago), and Cole and Deuel (1937), seems more useful, tending to erect a direct interpretation from the material evidence left by the aborigines. The added ease of reading will, it is hoped, overbalance the admitted interpretive nature of this type of organization. A list of all traits appears in Appendix B; detailed descriptions of the illustrated artifacts will be found in Appendix C, pp. 72–79.

cerning the fact that these aborigines were agriculturalists. However, they also depended upon the gathering of wild nuts and the seasonal hunting of wild animals. The dog was probably the only animal domesticated.

COSTUME AND DRESS

Upon this subject considerable evidence was unearthed. Among the articles used for dress were beads, ear ornaments, ear rings and ear plugs, pendants, hairpins, wristlets or bracelets, and rolled metal beads or jinglers (pls. 10, 11, 12, and 14; figs. 9 and 10).

Beads were largely of shell, although stone and pottery were employed; glass beads were common after European contact. The shell beads include massive ones, made from the columella of conch shell, *Olivella* and *Oliva* shells perforated longitudinally, long slender flattened tubular beads of cut shell (pl. 10), small round beads with flattened sides, small cut shell disk and cylindrical beads.

The glass beads are of all sizes. Plate 12 shows the range and type.

On plate 14, figures 12, 13, 14, and 15 are pottery beads. Note the biconical shape of 13 and 15 and the centrally constricted cylinder of 14. Figures 39 and 40 on plate 14 show two stone beads. Figure 39 is small and hemispherical, while figure 40 is long, with tapered ends and is made of highly polished chlorite. A few European brass beads and buttons are shown in plate 11, figures 12, 13, 16, and 17. (Note string still present in fig. 13.) Beads served as necklaces, bracelets, and anklets (pl. 17, *B*, burial Pm–41).

Ear ornaments were made of copper, shell, clay, and stone. The copper ornaments are disk shaped, made of wood and covered with copper. The three examples of this type of ear ornament (pl. 11) differ slightly from one another. The ornament on plate 11, figure 1, is oval rather than round, has a central perforated boss with a series of 13 peripheral nodes. The edge of the copper is turned under the overhanging rim of the wooden plug and is thus secured in place. It has a chamfered groove running down the center of the reverse side. The other two copper-jacketed ornaments came from Pm–41. Figure 2, plate 11, is round with a central perforated boss, lacking the peripheral nodes, but is held in place by the overlapping metal edge (fig. 9, *A*). The third ornament is the smallest of the three. It is round and lacks the central boss, although it is perforated. The edge of the copper is not turned under the beveled edge of the wooden disk, but is held in place by a short wooden peg which was driven through the copper (fig. 9, *B*).

Plugs of clay and stone, which were considered ear plugs, although they could well have been nose or lip ornaments, were fairly common.

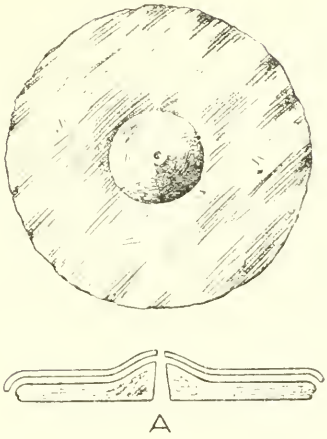

FIGURE 9.—Wooden disks covered with copper. *A* and *B* from burial Pm–41; *C* from burial Pm–20. Copper plating on A and C should be shown as turning under the beaded wooden edge (see description, p. 30).

Plate 14, figures 22–26, 30–34, are examples of clay plugs; figures 27–29 and 36–38 are broken plugs made of talc and coal shale (or cannel coal). These last may be hairpins. Plate 14, figures 1 and 2, shows two clay pulley-shaped objects, one whole and one fragmentary. These are probably ornaments which were inserted or suspended from the lobe of the ear. Hairpins of shell, made from the columella of conch (pl. 10), and double pointed objects of polished bone were represented.

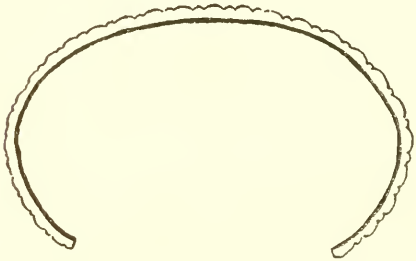

FIGURE 10.—Decorated copper bracelet with shallow indentations.

Pendants, fairly common, were of several kinds. The stone specimens, all of which are shown in plate 31, are very crudely executed, with the exception of the first two figures on the left. The first figure is a long flat celt-shaped object of yellow slate with crude engraved designs. It is perforated, with a constricted neck. The second figure is a tapering, well polished, double-perforate, boatstone-shaped object which has been grooved around the central part, possibly for suspension. The remainder of the perforated stones which are considered pendants are rough, crude pieces showing but little attempt at ornamentation or careful shaping. Other publications have referred to these objects as "net sinkers."

A modern spring-back knife wrapped in fabric (pl. 12, upper row, 8th fig.) was found lying on the sternum of skeleton Pm–19. A fragmentary, almost disintegrated shell, found on the thorax of burial Pm–16, may have been a gorget or pendant, but could not be positively identified.

Aside from the shell bead bracelets, 16 copper wire bracelets were found with burial Pv–4. These (pl. 11, figs. 8–10), eight on each wrist, were plain, except for figure 10, which is decorated, as shown in text figure 10. These bracelets are doubtless of European origin, since a metal tankard (pl. 12, top row, 1st fig.) was also with this burial. Plate 11, figure 15, shows two of the tapering conoidal brass "jingles" which were rolled or coiled, found in the surface soil. A canine tooth, grooved for suspension, was found in level AA (pl. 13, fig. 24).

The hairdress of these people, as deduced from the effigy pottery heads discovered, consisted of a high knot or "pile" along the sagittal portion, with two lesser knots on both sides of the central one. Whether this hairdress was the mode for male or female or both is uncertain.

Dress was of both skins and fabric, as shown by the presence of both with one of the burials. (See burial traits, below.) The use of bone awls (pl. 13), implies partially tailored garments, although no needle forms were found.

Use of ochre for body painting is probable since several fragments of hematite with various ground faces were found.

CUSTOMS AND CEREMONIES

Under this heading we shall consider burial customs, pipes and tobacco,[22] warfare, and games.

Burial customs have been hinted at in earlier sections.[23] Bodies were uniformly buried in the flesh, usually in pits barely large enough to contain the body readily. There were 68 burials encountered, of which 8 were extended, 19 fully flexed, 17 semiflexed, and 24 undetermined. Thus more than 50, and probably as many as 75 percent of the burials were flexed. The burials were not usually accompanied by grave goods. If any were included they were near the throat and head (in one case anklets were found, Pm–41) and consisted of beads, hair and ear ornaments, or pendants. With Pv–5 were two small bowls (pl. 32, figs. 2 and 3). Even though numerous burials occurred in the mound, these were primarily of an intrusive nature, indicating that the mound was used only secondarily as a burial mound.

Four intrusive stone cyst burials were added after the mound had been completed (pls. 15, 16, 17, *A*). Three of the cysts were floored as well as having sides, end walls, and covers of stone slabs; while the one containing Pm–58 (pl. 16, *B*) lacked a floor. The covers of burials Pm–20 and Pm–42 had not been sufficiently well fitted to

[22] Pipe smoking was historically practiced in ceremonial contexts.
[23] See p. 26 and Appendix D.

prevent infiltration of earth, but those over Pm–57 and Pm–58 (pl. 16) had fitted covers which kept the loose earth out of the cysts. The narrow side slabs around burial Pm–58 were battered and splintered on their upper ends, indicating that they had been driven into place with hammers or mauls of some sort (pl. 16, *B*), while the walls of the other three cysts were no deeper than the floor slabs, apparently having been placed alongside.

In burial Pm–58 (feature 35) matting, fur, and skins, a conch-shell cup or dish, and various beads had been placed with the body (pl. 16, *B*), while with Pm–57 (feature 30) matting, skins, and some maize leaf were recovered. From burial Pm–20 (feature 10) came a copper-jacketed ornament (fig. 9, *C*). No other artifacts were discovered in these cysts.

Aside from two examples, Pm–28 and Pv–3 and Pv–4 (a double burial), no evidence of a ceremony at the time of death was observable. In the two cases mentioned above, however, an intense fire had been built over the filled-in pit at the current surface. This fire seemed to follow immediately after burial. Perhaps the finely made celt with burial Pm–56 (pl. 24, fig. 1) was a ceremonial implement or was a symbol of the ceremonial importance of the dead individual. There is a possibility, of course, that the burials inhumed in the top of the mound after its completion were persons of high standing in the community. No evidence of a deliberate cremation and subsequent burial of the burned bone fragments was present.

The skeletal material was generally poor, caused by the acidity of the soil and the intermittent extreme dampness, due to high flood water extending above the level in which the burials were laid. The burials in the mound were almost entirely disintegrated, because the pits dug for their reception were usually in clay fill which prevented immediate drainage of the water. Burials Pm–30 and Pm–39 (pl. 18) are examples of this condition. These alternate moist and dry periods would easily account for their disintegration.

For a treatise on the physical type, see Appendix D, by Dr. T. D. Stewart (pp. 80–99).

Pipes and Tobacco

The tobacco complex seemed to play a large role in the life of these people. No massive stone effigy forms were found.[24] Dozens of small whole pipes and many fragmentary ones were encountered. These smaller pipes, made from stone and clay, were uniformly well carved and modeled, some combining technical skill with artistic execution to make objects of extreme beauty (pls. 19–21).

[24] Two massive effigy pipes from Cherokee County are figured by West (1934, pl. 86, p. 653).

The predominant type was the elbow pipe and its variants. There were also some stemless forms, all from the mound level. One Siouan calumet, two examples of Micmac type—one stone and one pottery—and various bizarre effigy forms, all stemless, were found.[25]

Considerable variation is observed in the equal armed styles. In some the stem is longer than the bowl, with various developments of the stem collar treatment. A few of the long-stemmed pipes have the bowl forming an obtuse angle with the stem, while the stems of the same length as the bowl usually form a right angle with the bowl. In section the long stems are round, octagonal, or square, and square with rounded corners. Usually the stemmed pipe has a small bowl proportionate to the dimensions of modern briers. In some instances, however, ornate bowls with small short stems were discovered. Several examples of pipes with highly decorated flaring bowl and short stem (pls. 19 and 20) are comparable to those from the Etowah (Moorehead, 1932, p. 92) and Nacoochee Mounds (Heye, Hodge, Pepper, 1918, pp. 73–86). Two examples of the "bird pipes" with conventional bird beak running up the front of the bowl were encountered.

The pipes were not found with burials, but occurred at random throughout the site. Usually they still contained the carbon or "cake" due to long usage. Some gave evidence of having been broken and reworked for further use. One bowl had been chipped but the pipe kept in use, as the carbon extended over the edge of the fracture to some depth. The stemless pipes are not well made, but are crude and heavy (pl. 21).

Warfare and Hunting

The triangular, concave base projectile point is the predominant type. The size, proportions, and type of material and chipping vary over an enormous range. Generally it can be said that points are made either of a core or a large flake inasmuch as all show chipping over their entire surface. One or two exceptions to this occur. The minority of the points are of the stemmed type. These are uniformly well chipped, though not finished with the same care as the triangular examples, although many of the latter are quite rough. The two types, stemmed and triangular, occur throughout the site from surface to basic clay. As indicated above, it is felt that both styles are typical of the Peachtree component. Points with careless chipping, triangular, stemmed, stemmed and notched of every kind occurred at all levels (pl. 22). Two antler projectile points were also found (pl. 13, figs. 13 and 14).

Reference should be made here to the notched and grooved stones of plate 23, *A*, and the ax forms of plate 23, *B*. Celts on plate 24 (except

[25] See p. 74 for description and provenience.

figure 1) all show use and were probably employed in hunting, industry, or war. The axes and celts were used for weapons and hunting tools. Some of the celts are unusual in that they have been sharpened at each end, and may be called double bitted. Although the ax is rare, it shows great variety in form, as in plate 23, *B*. Of these, only figures 1, 2, 3, 4, 6, and 7 could have been used as axes. The notched stones on plate 23, *A*, may be considered axes, although their lack of wear at the bit seems to make this conclusion doubtful.[26]

GAMES

Evidence regarding games is restricted to the hundreds of small discoidals found. That the smaller ones figured as counters in hand games, gambling, or similar amusements is probable. The larger pieces may have been used in the chunkey game (Timberlake, 1765, p. 100) mentioned by writers on Southeastern archeology for the last generation (Colburn, 1936, pp. 1–6).

The discoidals and "counters" are made of stone and potsherds, varying in size from 5 inches to ¾ of an inch. Some of the stone specimens were given a high polish and are extremely well made. Others are crudely roughed out and are possibly unfinished, although it is likely that they were used in their crude state. Occasionally the edges are beveled, i. e., their shape, if projected, would be conical; others are biconcave. Most are biconvex or parallel sided with rounded edges. Some have incised lines on the flat surfaces, but the greater number are undecorated (pl. 25).

The sherd discoidals or pottery disks (pl. 26) are made of any suitable sherd, varying in the care with which they are turned out. Some have central perforations.[27]

DESCRIPTION OF MANUFACTURED OBJECTS

STONE

The only objects of chipped stone were projectile points and scrapers. The predominant technique was pressure flaking. Projectiles were made from both flakes and cores. The majority of stone specimens, such as pipes, beads, discoidals, celts, hairpins, and earplugs, can be grouped as polished stone techniques.

Ground or polished stone pieces were usually made of steatite, slate, or chlorite. In many cases the polishing of the pipes did not obliterate the marks of the earlier process of manufacture. Knife or scraper marks are clearly shown on numerous stone specimens.

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[26] Heye, Hodge, and Pepper (1918, p. 87) refer to similar objects as net sinkers. This use may be correct. Some of the forms discussed above may also have been net sinkers or forms other than axes.

[27] These forms have been considered spindle whorls.

The sole examples of polished stone beads are the two shown in plate 14, figures 39 and 40. The long, tapering-end specimen (fig. 40) is highly polished. Discoidals were sometimes of polished stone. The disks were apparently ground to shape on the sandstone abraders and then polished. The polish may have resulted from long use, although this seems improbable. Celts were made of slate and in nearly every case were highly polished. It should be mentioned that these celts were sharpened or "bitted" on each end. This is not a common celt form. One of the celts (pl. 24, fig. 1) is perforated with a tapering hole.

Ax forms were rare, but included a variety of shapes. Reference to plate 23, *B*, figure 1, shows an unusual asymmetrial notched type; a round, full-grooved club head (fig. 5); a thick, full-grooved celt-shaped specimen (fig. 6); a rough full-grooved object of steatite (fig. 7); one thin, symmetrically ground and notched piece; and two slate objects of questionable type (figs. 3 and 4). None of the axes was carefully made, except figure 2. This piece is so small, and of such soft stone (slate), that its use as an ax seems impracticable. Perhaps it is a child's piece or a ceremonial object. The other ax forms all have ends pecked from use.

On the same plate (23, *B*, figs. 10 and 11) are two highly polished "pick" forms, and two squares of hematite which have ground edges (figs. 12 and 13). Figures 8 and 9 are probably celt fragments or blanks.

Plate 23, *A*, shows several large pieces of shale and flint with fairly deep notches on each side which have been roughly shaped by pecking and breaking. It is not probable that these stones were axes or mauls because there is no evidence of wear on either bit or poll of the stones. Apparently they were used as they now appear. The term "net sinker" has been applied to them, but no real evidence as to their use can be found. They do seem, however, to be a trait of this component, since they are very common.

Rough stone work included mortars or milling stones, notched stones, mortars of the "nutstone" type, steatite vessels, pendants (perforate pieces), abrading stones, and a few problematical pieces. The mortars or milling stones were merely large flat boulders of flint with a depression worn on one side by constant grinding (pl. 27, *A* and *B*). Shaping of the stones was apparently not practiced. A suitable flat one was merely selected and used without modification.

Plate 28, *A* and *B*, illustrates numerous examples of cupstone fragments, which are called by many people "nutstones." The pits are smooth, having been abraded rather than pecked. Even the small garnets which occur throughout all the slate have been worn smooth

in the depressions. The use to which these stones were put cannot be stated with certainty. It has been suggested that they were paint mortars. No stains of ochre or other materials were found in these cups, leaving this theory without a strong basis. They may have served as drill rests. Whatever the use, the frequency of these objects makes them artifacts typical of the component.

Steatite vessel fragments, occurring at all levels, are exemplified in plate 29. Here the exterior treatment shows very well. The tool-roughened decoration and flange handles are illustrated. The interior of these vessels is smoothly finished. Plate 30, *B*, shows numerous abrading stones which have been shaped by grinding or cutting, after which their flat surfaces were used for grinding, sharpening, or smoothing. Plate 31 shows roughly shaped fragments of steatite vessels, and slate, all of which are perforated. These take on a variety of shapes, but are considered together as pendant forms because of the perforation. Pitted hammerstones were fairly common and were of the usual type as shown in plate 30, *A*.

Bone and Antler

Working of bone was not common. The entire collection of bone and antler artifacts from the component is shown on plate 13. The following objects were made of bone and antler: Awls, hairpins, fishhooks, projectile points, and flaking tools. Five awls were made of the ulnae of various animals; one flattened form, a few splinter awls of both animal and bird bones, one sharpened fibula, and five hairpins or bodkins complete the list of piercing tools. One small grooved fishhook and one canine tooth grooved for suspension conclude the list of bone objects found. No bone beads, ear or nose ornaments, or implement handles were found. The failure of the aborigines to use more bone artifacts seems unusual; however, this scarcity of bone objects may be a diagnostic trait of the focus.

Shell

Shell was used for manufacturing a considerable variety of objects, most of which were used as ornaments, such as beads (see section on costume, on p. 30), gorgets, hairpins, and ear plugs. The large conch shells were used for drinking cups or vessels. Pulverized shell was also used to some extent as an aplastic in making pottery (pl. 10).

Copper

Objects made from copper were rare. It was used in sheet form for making ornaments. Plate 11, figures 1–3, shows three ear ornaments of copper-jacketed wooden disks. The copper was beaten thin, pressed against a wooden ornament, and took its design from the

bosses or nodes carved on the wooden base. The small coil (pl. 11, fig. 11) was an aboriginal piece of copper wire. The four fishhooks of copper (pl. 11, figs. 4–7) are of European wire, all having been found in the surface levels. The copper bracelets (pl. 11, figs. 8–10) came from burial Pv–4 and were in association with other European objects. The bracelets were all quite plain, except one, which had the simple embossed design shown in text figure 10 and plate 11, figure 10. The other illustrated metal objects are of European origin.

Metal objects on plate 12 were found in graves and in the surface soil. The metal (iron) tankard (top row, 1st fig.) was at the head of burial Pv–3 and Pv–4. The knife (top row, 8th fig.), on which can be seen copper pins, was with burial Pm–19, an intrusive burial on the east side of the mound (see Appendix D). Pv–3 had with it a knife illustrated in plate 12 as the 7th figure (top row). The scissors, buckle, iron axes, copper bells, and other objects were found throughout the surface soil.

TEXTILES

The only evidence of textiles was that found with burials Pm–41 and Pm–57, preserved by copper salts. These textiles are plain twilled plaiting, *over three and under three.* Materials used in weaving have not been identified, but they were probably cane.

POTTERY

Since pottery is one of the most essential characteristics for comparing related archeological components, as well as reflecting cultural change or the influence of foreign groups, more space has been devoted to this section than to any other. Lack of time prevented an analysis of every sherd (estimated 250,000) from the site. This vast amount made it necessary to select certain squares, more or less at random, but especially those which would give an adequate cross section from both the mound and village site. All the sherds from these selected 10-foot squares, both above and below mound level, were used in preparing the following summary. This method of selection, however, should be taken into consideration in any comparative studies.

The ceramic material from Peachtree Mound was analyzed in the light of definitions set forth by Guthe, although the "wares" here discussed are more nearly comparable to the "types" of his definition (March, 1934, pp. 1–6).

Guthe's definitions follow:

A *ware* is a ceramic group in which all attributes of the paste and the surface finish remain constant. A *style of decoration* is a ceramic group in which decorated design and technic both remain constant. A *style of form* is a ceramic group in which the form as a whole remains essentially constant, and

is distinguished by some outstanding feature. A *type* is a ceramic group wherein the similarity is a generic one of all four characters caused by the entire pottery complex of the designated culture group.

His discussion mentions the four major aspects which are significant in pottery treatment. These four are paste, surface finish, decoration, and form. The divisions made by Guthe should be derived from the aspects of ceramics most easily treated objectively. This attempt to apply Guthe's ideal to an actual mass of data was done in the interests of objectivity, inasmuch as culturally significant "wares" cannot yet be safely described for the Southeast. The objective facts are here recorded and are naturally open to any interpretations. We have attempted to define certain diagnostic types in such a way that they can be readily recognized by other workers in the field and be used in comparative analysis.

Theoretically the application of objectivity to pottery seems absurdly simple. In practice it is fraught with difficulty. Difficulties occur in the range of relative hardness, presence of various size aplastic, and color, to mention but a few. To what extent is color significant, if it is at all? (Kidder and Shepard, 1936.) If two sherds have the same decoration, color, and shape, but have different aplastic, are they the same "ware" or are they different "wares"? Objectively the two pieces are separate, but culturally they may be identical.

All the difficulties encountered in pottery treatment may be summarized by this question: Which is more important, the materials from which pottery is made, or the way the material is treated as seen in the final product? To be objective means that material and treatment are both considered important, with materials having slightly greater weight.

Ideally, pottery complexes should be considered as a part of a total of other archeologically associated complexes, and objective differences minimized as in the Southwest, where workers have employed a more useful method of establishing wares.[28] It is to be hoped that additional information will permit a similar treatment by Southeastern workers, but until that time the objective treatment seems advisable.[29]

Wares have been set up on the basis of paste (or aplastic, texture, hardness, and color) and surface finish. Classification is possible on the basis of decorative motif, color, or texture. Interpretive bases, such as the ceremonial or utilitarian functions of the material, have

[28] Kidder's opinion is that body form (specifically rim sections) and decorative technique and motif are of major importance in the order named.

[29] Since this section was written, a series of informal conferences on pottery analysis have been held in the Southeast.

points in their favor, and may even be more valuable for purposes of determining cultural affiliations.

The pottery from the Peachtree component was not significantly different by levels. Certain wares differed slightly in percentage, as is shown in table 2. Classification into four major divisions or "wares" was made. The "wares" A, B, C, and subwares B–1 and C–1, constitute 99 percent of the pottery. Ware D, extremely rare, but strikingly different from A, B, B–1, C, and C–1, will be discussed later.

WARE A

Ware A (pls. 32–37 and figs. 11 and 12), constituting more than 90 percent of all pottery from all levels, is a strong, though rough, ware. The *paste* has grit aplastic of sand or crushed stone, sometimes including both in the same sherd. It has a medium to hard surface, but is not uniform from sherd to sherd; fracture is slightly rough, not flaky or crumbly, though it may be friable if badly overfired or weathered. Mica flecks are present in paste, but it is not certain that this is intentional. Color is variable from a dull black or gray, through red, to a light brown or tan.

The *surface finish* is plain, smoothed, or polished. If plain, marks of paddle construction are sometimes still visible. Slips of different or self color (mechanical) are sometimes, though rarely, applied. The interior is scraped, smoothed, or, very rarely, polished.

Concerning *decoration*, the techniques include carved-paddle stamping, fine and broad incising, and punctate markings, while 13.9 percent of all sherds are plain. The motifs of the carved paddle designs include the check or grid, many types of curvilinear patterns, numerous combinations of the straight-line stamps and "concentric" straight-line designs. The incised and trailed patterns include the scroll, guilloche (intersecting lines, usually curvilinear), the herringbone, and hachured triangle designs. Punctate impressions usually occur on the rim and handle, but take on no particular pattern. Most common among body shapes are the large, wide-mouthed jars with everted rims. Straight-mouthed jars and bowls, especially the *cazuela* types (Harrington, 1922, p. 184) occur next in frequency. Shallow bowls, both plain and effigy types, water bottles, and plate forms rarely occur.

Among the secondary features of the ware are single lug or flange handles, which originate on the rim well below the lip of the vessel. These may be small nodes rather than the "tongue-shaped" lug commonly used. The flanges are often portions of effigies. The most common handle is the strap, and the allied loop form. These are normally inserted just below the rim and may be plain or have either punctate or incised decoration on them.

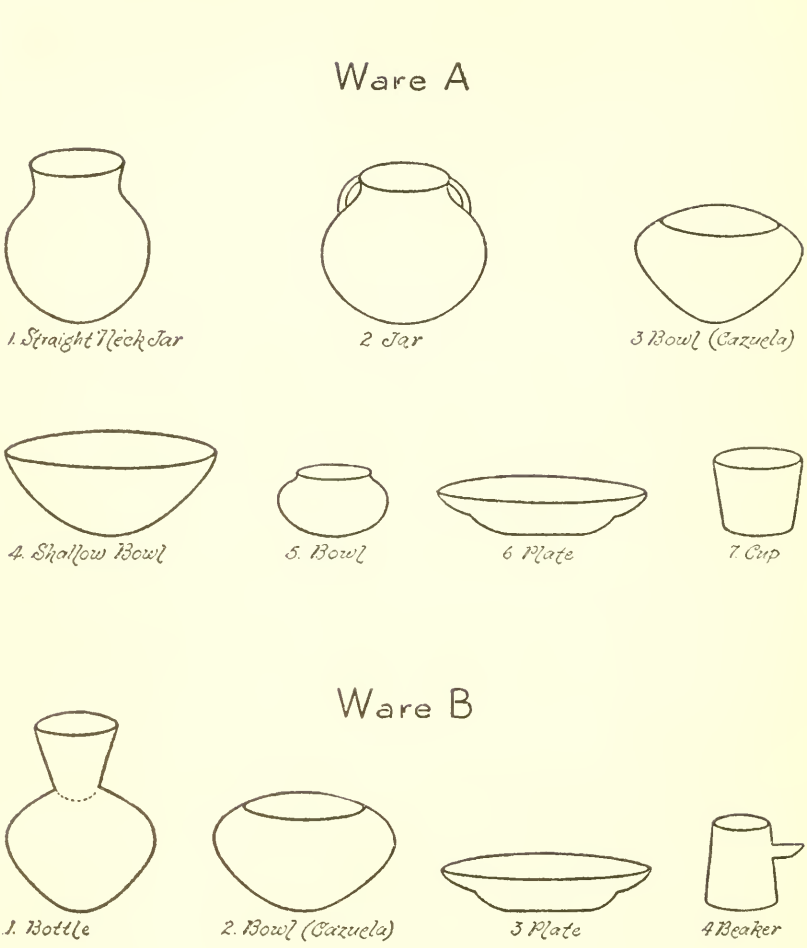

FIGURE 11.—Pottery forms of wares A, B, and C.

Bottoms are usually rounded, although conoidal and flat bottoms occur. Legs are commonly found among the sherds. These are solid and are attached firmly to the base of the vessel. As a rule they are decorated with the same stamp as the vessel. Scalloped rims are occasionally found with a lug or node projection just below the peak of the scallop. Usually there are four scallops.

Jar rims, as shown by figures 11 and 12, have an everted lip, with possibly an applied strip of clay just below the lip. This strip is decorated by pinching, leaving alternate peaks and depressions; it may be incised or scratched transversely, or unmodified. The lip itself is everted and is seldom decorated. Where no clay has been added below the lip, a single or double series of punctate designs with varying degrees of regularity may occur. The lip is usually finished after the body has been decorated because partially effaced paddle marks can be seen on some of the more poorly finished lips.

Bowl rims may be unmodified or thickened. When thickened, the lip is widened proportionally, and perpendicular incisions may occur on the rim, just below the outer edge of the lip. On shallow bowls effigy heads of both animal and human types occur in rare cases. The area decorated, if stamped, covers the entire vessel from lip to base. The modified appliqué rim is added after the stamping is done. Incising is always on the upper portion of the vessel. The handles may be incised, as well as the area just below the lip down to the shoulder. Cazuela bowls are usually incised only from lip to shoulder. Shallow bowls may have incising below the lip on the exterior. The remainder is usually plain.

WARE B

Ware B (pls. 33, *B*, 40; and fig. 11) differs from ware A in size and uniformity of temper and in possessing a uniform polish. This ware, including about 2.7 percent of the pottery, characteristically contains no aplastic or may contain very fine sand evenly distributed throughout the paste. The paste is very hard and strong, with a straight smooth fracture. Minute flecks of mica appear in the paste and on the surfaces. Color of paste is usually black.

The *surface finish* is plain, smoothed, and polished, exterior and interior, in some cases developing a glossy black surface.

The major *decoration* is an incised scroll with hachured triangle designs common. Paddle stamping occasionally occurs on the lower portion of the *cazuela* bowl type of vessels.

Attention should be called to the fact that the line of division between wares A and B is difficult to determine. Probably 3 percent of the sherds could be placed in either category, but the ideal sherds of each classification are easily separable. The major differences of wares A and B are found, first, in the aplastic, which is very fine and

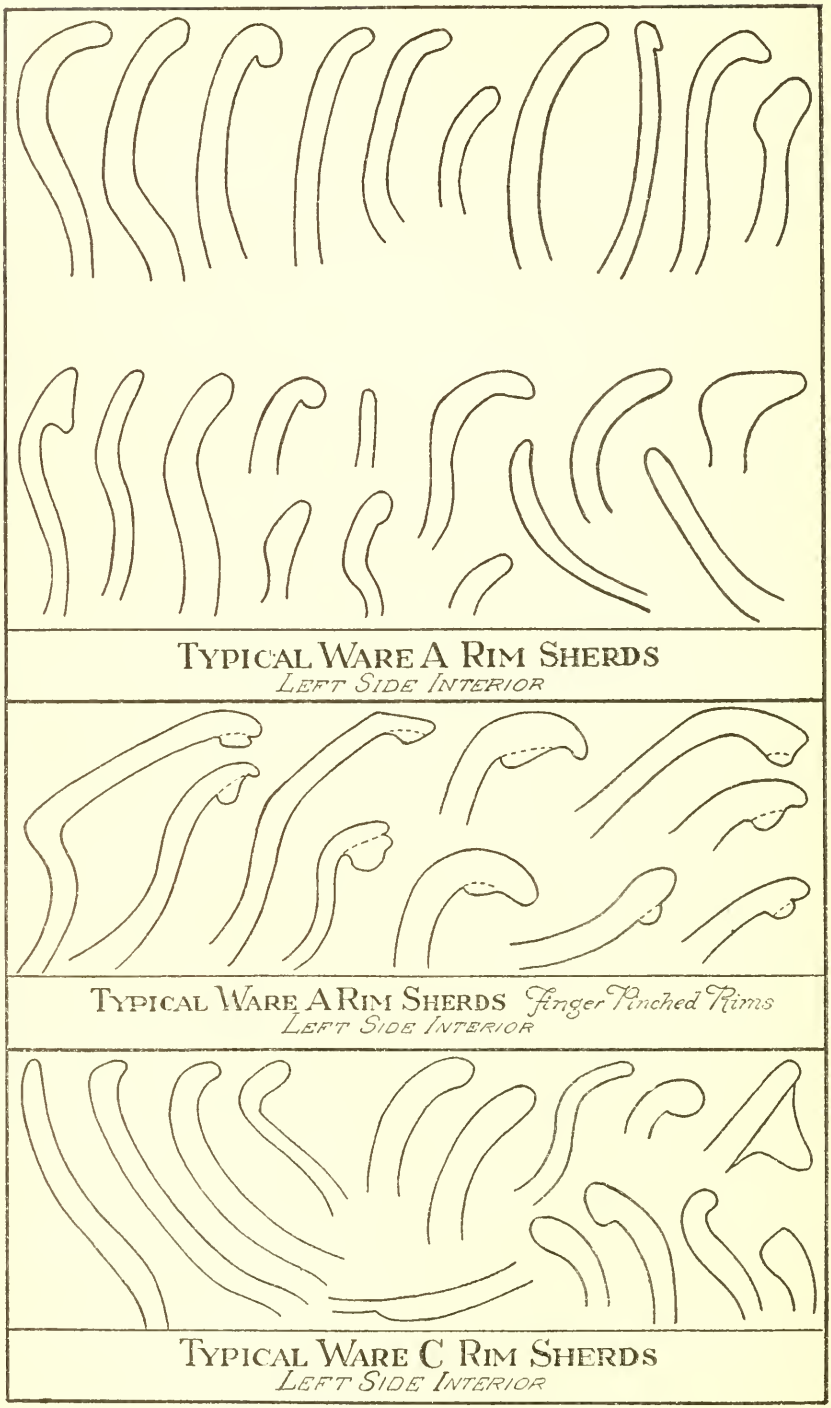

FIGURE 12.—Typical rim sections of wares A and C.

uniform, or even lacking in ware B, as opposed to the coarser, less uniformly distributed aplastic of ware A, and, second, in the finish, which is typically a highly polished black, with a preponderance of incised decoration. Ware A varies in excellence of finish and workmanship, while B is uniformly well made.

WARE B–1

Ware B–1 (pls. 38 and 39), of which very few examples were found, includes pieces which judged by paste and finish would fit into ware B, but which have been painted. The color is either black-on-orange or red-on-gray. Ware B–1 is then identical with ware B except for painting.[30]

Water bottles occur. These are usually of ware B–1 with painted design (pl. 38, and fig. 11). The examples of this form are all technically excellent. Beakers were represented only by sherds, so the occurrence of this form is based on fragments entirely. These may actually be neck fragments of large water bottles.

Plates are fairly common forms. They may have either plain or scalloped rims. Bottoms are usually rounded. Handles are rare. Lips of the *cazuela* bowl type are usually not thickened or modified in any way except for rounding and smoothing.

WARE C

Ware C (pls. 41 and 42, and figs. 11 and 12), about 6.8 percent of all the sherds, is entirely different from the aforementioned wares. It is usually a soft ware, either shell or cell tempered.[31] The shell differs in size from fine to coarse. The cell-tempered ware is particularly light in weight, the shell temper being naturally heavier. Texture is not uniform, some sherds tending to crumble, others tending to flake or laminate upon fracture. Mica flecks are not present, as they were in the paste of A, B, and B–1. The color of the paste is usually gray, though dull red occurs. It is suggested that the lack of mica in the paste of ware C indicates a different source of clay for the shell-tempered ware. The mica particles in the paste of wares A and B are probably unintentionally included since all the basic clay in the region has this mica in it, and any pottery clay obtained nearby would, of course, contain a certain percentage of it.

The surface of the ware is always plain, smoothed, and often carries a good polish. Roughness, or inequalities of the surface, found on smoothed pieces of ware A, do not occur. A slip may be added which is either self-slip (mechanical) or a red. This slip is not to be confused with the red or orange paint of ware C–1.

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[30] This is probably the polychrome ware of Harrington's pre-Cherokee culture. (Harrington, 1922, p. 191, fig. 31.)

[31] Classed together as the same original aplastic.

Decoration on ware C is uniformly lacking, the vessels being plain and smooth. Rare pieces have paddle-stamped decoration on their lower halves. No examples of incising or scratching were found. Two textile marked sherds were noted.

The body forms of ware C include the jar with small orifice, possibly water bottles, plates, shallow bowls, and flattened globular jars with wide mouth and strap handles. An irregular jar type, with a large flaring rim, the diameter of which is larger than any other part of the vessel, was found. The basilar portion of this pot is globular. Its appearance is that of an old-fashioned cuspidor; two such sherds were found. (See Harrington, 1922, pl. 56, opposite p. 185.) In this ware flat bottoms are the rule.

The strap handles of the jars originated at the lip, being actually attached to it, and terminated about 1½ inches down on the shoulder area. The lip of this type vessel is rarely everted, differing in this respect from the jars of ware A. In one instance effigy features appeared as flanges on the side of a shallow bowl sherd.

WARE C–1

Ware C–1 (pl. 42, figs. 8–15; pl. 44, figs. 19–21) is subject to the same description as C except for the addition of paint. This painting is usually a wash of red, which covers the entire exterior of the vessel, including the base. If it is a plate form, the interior is also painted, although such forms are rare. A few pieces had designs of red on buff.

WARE D

Ware D (pl. 44, figs. 1–4, 10–13, 17–18) is an unrelated ware, which does not seem to fit into the general complex. It has grit tempering, but instead of this being sand of various coarseness, it is rotten rock or pieces of burned clay. The size of the temper is extremely variable. Such pottery is not strong, and crumbles badly when fractured. In color it is usually red or brown. The most noticeable or useful trait distinguishing this ware is its gritty or friable "feel." While ware A is often rough to the touch, it is hard and rarely crumbles. Ware D, on the other hand, is so friable that fragments of clay and grit are removed by rubbing the fingers over the sherd.

The fabric or textile markings of these sherds are most distinctive. Some are marked by cord paddling; others bear basketry impressions; still others have impressions of a rough irregular textile which may be identified as a hair textile.

Leaving for a moment the professed "objective" view, it should be stated that this ware D seems to be of a general Woodland type.[32]

[32] Identical with Harrington's Round Grave material, and with sherds called "Baumer" found at lowest levels of the Kincaid site in southern Illinois.

Another type of ware, of which not more than 10 sherds were found, is a tan-gray ware, which is very hard and dense, usually thick, with fairly large grit aplastic. These were included as ware A, although separate note is made of them. It is possible that they constitute a separate ware.

In retrospect, it seems that the purposes of this type of classification would be equally well served had the division into wares been made on the primary basis of aplastic material, further divisions being set up on the basis of type of decoration. Actually this is approximately all that has been done, except that the grit aplastic group has been broken up into divisions which tend to overlap. In any event, the table which follows gives the wares, with percentages of occurrence, with ware A broken up into decoration groups, so that the prevalence of various designs may be observed.

The carved paddle stamps are divided into four types. These are curvilinear, which includes any design employing curved lines; grid or check; "concentric" straight lines; and straight-line designs, not concentric, aside from the grid. Classes for plain and undetermined are listed in the tables.

The degree of care with which stamped designs were matched varies enormously. Some examples are well matched and clearly stamped; others are not. In some instances wear, erosion, or weathering, or even intentional scraping has almost obliterated the stamped design. Some of the larger sherds of the plates show the variation in sharpness of stamp. In other sites of the Southeast these variations in stamped decorations may occur in determinably stratified sites, while here at Peachtree we have a variety of types in a more or less homogeneous situation, as indicated by table 2.

It is important to mention that a certain percentage, probably not more than six or eight percent, of ware A was marked by brushing. These sherds, at the time of analysis, were not recognized as having a different decoration and were included in either a miscellaneous or straight-line group. The straight lines of brushing were considered weathered stamping and were consequently not put into a separate class.

An analysis of the percentages listed in table 1 produces several suggestive facts.

First, the curvilinear stamped paddle design comprises but 8.9 percent of the sherds analyzed. The relative scarcity of this decorative motif may be considered diagnostic of a focus inasmuch as it is reputed to occur in greater percentages in other sites, notably to the west. One fruitful line of study, i. e., the relative frequency of this specific decoration, might give a valuable clue to sources of origin. Grid stamping is also fairly rare.

TABLE 1.—*Average percentages of wares from all samples*

Level of origin	Ware A						Ware B	Ware C	Ware D
	1 Curvilinear stamp	2 Check stamp	3 Concentric straight-line stamp	4 Straight-line stamp	5 Plain	6 Miscellaneous			
Mound level	9.5	6.1	2.2	26.1	15.9	31.1	2.4	6.2	0.1
Below mound level	8.9	9.9	4.5	20.3	13.3	35.4	1.8	4.7	.7
Feature 29	6.5	16.9	4.0	12.3	5.6	35.2	5.0	13.6	.4
Average percentage of wares at site	8.9	8.5	3.3	22.7	13.9	32.8	2.7	6.8	.3

It is perhaps necessary to point out that the occupation levels in the mound, AA, A, B, C, D, and E, occurring in that order from bottom to top (see pl. 2, *B*, profile 15), vary markedly from the "mound level" squares proper in sherd percentages. These levels, as before mentioned (p. 22) were strata of charcoal, burned clay, and refuse, which had apparently been swept or dumped off the current top of the mound at various times during mound construction. They indicate possible minor fluctuations of prevailing wares over the later periods of occupation. Most significant of these percentages is the relatively high frequency of wares C and C–1, the shell-tempered wares. While the average for the three entire squares of "mound level," including surface, is slightly over 2.5 percent, the average of the six levels is about three times as high. This would indicate that in recent times ware C was becoming less common. The effect of these levels on the entire "mound level" group is to raise the percentage of occurence of ware C two and a half times.

Ware B, the polished black ware, on the contrary, shows from the six levels about the same percentages as would have been found had only the full depth been sampled, as seen in squares 5R1, 6L1, and 15L1.

Highly significant is the fact that the last two lines of table 2—feature 29 and "above feature 29"—are the high percentages of ware C. We see from the average percentages above, from below mound level, that ware C was more generally found below the mound than above. The percentage of the last two emphasizes this difference. A possible explanation of the great frequency of ware C above feature 29 is that the primary mound covering feature 29 was built in some measure from humus, which contained sherds and other village debris. Obviously then, there were more ware C vessels in use prior to the building of the primary mound than there were subsequently, or the relative high frequency of the ware C sherds would not occur.

Another significant point is the much greater percentage of ware D, the "alien" ware, which occurs below the mound. Actually the per-

TABLE 2.—*Detailed analysis of all sherds examined from site*

Level of origin	Ware A												Ware B B-1		Ware C C-1		Ware D		Total
	1 Curvilinear stamp		2 Check or grid stamp		3 Concentric straight-line stamp		4 Straight-line stamp		5 Plain		6 Indeterminate								
Mound level:	*No.*	*Percent*	*No.*	*Percent*	*No.*	*Percent*	*No.*	*Percent*	*No.*	*Percent*	*No.*	*Percent*	*No.*	*Percent*	*No.*	*Percent*	*No.*	*Percent*	*No.*
5R2 square	60	4.8	159	12.8	190	15.3	220	17.7	54	4.4	500	40.2	18	1.5	40	3.2	0	0	1,241
6L1 square	56	11.1	33	6.5	13	2.6	158	31.3	75	14.9	154	30.5	1	.2	12	2.4	3	.6	505
15L1 square	32	10.8	33	11.1	0	0	44	14.8	42	14.1	130	43.8	10	3.4	6	2.0	0	0	297
Level AA	11	13.1	4	4.8	1	1.2	31	36.9	10	11.9	21	25.0	3	3.6	3	3.6	0	0	84
Level A	0	0	2	2.5	0	0	23	28.8	24	30.0	25	31.3	2	2.5	4	5.0	0	0	80
Level B	2	9.5	2	9.5	0	0	2	9.5	7	33.3	6	28.5	1	4.8	1	4.8	0	0	21
Level C	17	13.0	2	1.5	4	3.1	37	28.1	15	11.5	41	31.3	4	3.1	11	8.3	0	0	131
Level D	3	9.1	2	6.1	0	0	12	36.4	5	15.1	5	15.1	1	3.1	5	15.1	0	0	33
Level E	5	14.3	0	0	0	0	11	31.5	3	8.6	12	34.2	0	0	4	11.4	0	0	35
Total	186	9.5	237	6.1	208	2.2	538	26.1	235	15.9	894	31.1	40	2.4	86	6.2	3	.1	2,427
Below mound level:																			
11R2 square	28	13.0	17	7.9	20	9.3	46	21.4	44	20.5	49	22.8	3	1.4	6	2.8	2	.9	215
15L2 square	56	5.8	92	9.6	50	5.0	145	15.1	108	11.2	435	45.2	23	2.4	50	5.0	2	.2	962
6L1 square	27	10.0	35	12.9	8	2.9	70	25.9	30	11.1	79	29.3	4	1.5	14	5.2	3	1.1	270
15L1 square	58	6.7	79	9.1	20	2.3	163	18.8	88	10.2	383	44.3	18	2.1	52	6.0	4	.4	865
Total	169	8.9	223	9.9	98	4.5	424	20.3	270	13.3	946	35.4	48	1.8	122	4.7	11	.7	2,312
Feature 29 (primary mound fill)	12	3.1	63	16.5	23	6.1	44	11.5	23	6.1	97	25.5	29	7.6	86	22.8	3	.8	380
Above feature 29	31	9.9	55	17.4	6	1.9	41	13.2	16	5.1	140	45.0	8	2.5	14	4.5	0	0	311
Total	43	6.5	118	16.9	29	4.0	85	12.3	39	5.6	237	35.2	37	5.0	100	13.6	3	.4	691
Average percentage of wares for site	------	8.9	------	8.5	------	3.3	------	22.7	------	13.9	------	32.8	------	2.7	------	6.8	------	.3	------
Total sherd samples from site	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	5,930

centage at any level is negligible, being much less than 1 percent, but the relatively greater percentage found below the mound shows the priority of this ware and its later decline. Unless the analysis of the sherds is in error, there are only three such sherds above the base of the mound, while a dozen were encountered below the floor and the primary mound. Reference to the provenience of sherds on plate 44 shows that there were more than three sherds reported from above the mound floor, but the percentage would probably be no more than is shown for 6L1. These sherds probably were included in the upper levels through scooping up of soil for the mound. Other percentages as to frequency of various motifs are manifest in the condensed table. Ware A shows the same distribution of frequencies at all levels.

It is of significance, then, that the Peachtree site shows a certain gradation of ceramic wares from bottom to top. Shell-tempered ware C seems to have been more common in the earlier history of the site. This is also true of the polished black fine ware B and B–1. Certain "alien" sherds, ware D, occur more frequently in the lower levels.

It is very interesting to observe that these percentages check Harrington's (1922) sequence of cultures most admirably, particularly when the wares B and B–1 are identified with Harrington's polychrome ware of the "pre-Cherokee," and ware D with that of the "Round Grave Peoples."

Interpretation of the above comments will, of course, vary. We feel that it indicates a developing acculturation of a group, rather than evidence of a series of occupations. This ceramic data must be regarded as but one bit of evidence indicative of shift of culture as opposed to the homogeneous nature and uniform occurrence of other artifacts (except, of course, European artifacts).

ARCHEOLOGICAL IMPLICATIONS

It should be stated in beginning the archeological comparisons that the authors are well aware of the difficulty of treating archeological data in a purely objective way. In line with the dissatisfaction resultant from the early analysis of archeological data, recent workers have selected "significant" traits and considered these traits as single, independent, and of equal importance (Deuel, 1935; Cole and Deuel, 1937; Griffin, 1935). They have handled these traits statistically. This attempt toward scientific detachment is subject to criticism on two points. First, traits selected as significant are determined subjectively through long experience with various archeological materials, and are the traits which seem to the investigator to be significant. It is also noteworthy that workers, with equal opportunities for study, do not concur with regard to the significant traits. Given a similar

series of artifacts and the necessary data, the investigators will obtain a different list of significant traits. The statistical results obtained through handling the two sets of data might conceivably produce diversified cultural answers. The second point is that traits, set up as indicated above, are not always of equal weight in cultural determination, and cannot, therefore, be handled as independent units of equal value. This type of evaluation will be the most essential factor and yet the most difficult to obtain. To evaluate properly the traits which shall be considered significant will require considerable data, study, and experience, both in the field and laboratory. This minor criticism is not intended to minimize the importance of such analysis, but to point out some of the problems inherent in such an approach.

The traits used in the table included in Appendix B were selected on much the same basis as those by Deuel and Griffin, although the table is not carried as far as that of other workers reanalyzing archeological material. This procedure has been followed so that the data may be used for reference in establishing the correct cultural affiliations for this site. Many of the traits listed as diagnostic will be regarded as trivial by some; others will feel that more important traits have been omitted. An effort has been made, however, to record everything in the report, so that those interested in the analysis of material traits for comparison or classification will be adequately served. (See Appendix B.) At the same time we feel that the more general conclusions should not be so involved with minutiae that the nonspecialist will lose interest in the more general problems.

Reference should be made to M. R. Harrington's work on the Tennessee River between the mouths of the Little Tennessee and Hiwassee Rivers (1922). He described three levels of cultural occupation: 1, The lowest level, which he termed "Round Grave Culture," characterized by stemmed arrowpoints, crude basket-marked pottery of ovoid, pointed-bottom shape, steatite vessels, polished gorgets, bone work, canine tooth pendants, and certain burial customs; 2, "Pre-Cherokee," which he classifies by triangular projectile points, celts, much shell, partial cremation, polychrome pottery; and 3, "Modern Cherokee," whose artifacts include those of "pre-Cherokee" type, especially pottery. Harrington's identification of historic Cherokee seems valid, since it is based on historic data. The "Round Grave People" he places in the "Algonkin" category; the "pre-Cherokee" he deals with as a probable "Siouan" tribe; the "Cherokee" proper as a branch of the northern Iroquoian stock.

It is rather significant that the material reported by Harrington as belonging to three distinct horizons occurred in all levels at the Peachtree site. For example: Steatite vessel fragments occurred under, in,

and on the surface of the mound. Stemmed projectile points and triangular points occurred in every level. Pottery typical of Round Grave culture occurred (less than 0.5 of 1 percent) both above and below the mound level, as was true of all the pottery types encountered. Also a few polychrome pieces (pl. 44) were found below the mound in a refuse pit at Peachtree. A few fragments also occurred in the mound fill. These facts are susceptible to two explanations: First, that the Cherokee at Peachtree had a cultural combination of all these elements, with a predominating percentage of the material used by the historic Cherokee. Second, that the earliest inhabitants of the site were comparable to Harrington's "Round Grave People," and that the Cherokee, displacing them, employed such artifacts as they left and lost them in the mound during its construction; or in gathering up surface material to build the mound, artifacts of this earlier culture (Woodland in type) were left in the mound associated with more recent artifacts typical of the Cherokee.

Thus we have two possible situations at Peachtree. First, a culture exhibiting, archeologically, a contemporaneous blend or mixture of Mississippi and Woodland traits, which must be accepted as a cultural manifestation or, second, we have two cultural levels represented by artifacts, which were so mixed during aboriginal occupation as to leave an apparently homogeneous site. The latter explanation seems feasible if we consider that the various elements of Woodland and Mississippi type recorded by Harrington were distinct as to level but lacking in definite aboriginal strata. On the other hand, it seems possible in view of known facts of cultural dynamics that at the Peachtree site there existed a culture in which certain elements appeared which are not culturally the same in origin. Whatever the explanation, Appendix B (see p. 66) shows the close similarity between seven sites, three of which are known to have been Cherokee at one time—Hiwassee Island, Etowah, and Nacoochee. It is also possible that the three levels described by Harrington should be considered as a Cherokee complex. If so, the "Round Grave People" typify the culture used by the Cherokee upon their arrival in the Tennessee Valley; the pre-Cherokee might be a transitional stage; while the Cherokee represents the final adoption of the general Southeastern pattern. This is particularly interesting when we realize that Harrington's stratigraphic differences are percentages and frequencies rather than discernible, vertical stratification separated by sterile layers.

Vertical stratification, where an unbroken horizon of sterile earth—due to erosion, flood deposits, etc.—separates one archeological level from another, quite obviously is not being considered here. Such stratification, provided it represents two distinct habitation surfaces,

not a refuse dump, would be undeniable evidence that the objects in the lowest stratum represent the material culture of the first inhabitants and the artifacts in the upper stratum—provided they are not comparable—represent a culture more recent and unrelated to the lower horizon.

On the other hand, it must be stated that we are by no means convinced that Woodland and Mississippi cultural traits are always readily distinguishable or that the presence of stemmed arrowheads and cord-marked pottery in combination with a variety of vessel shapes and a rich industry in shell and bone always indicates a series of culturally unrelated occupations.

Work done by Greenman (1932, pp. 493–502) in his analysis of the Adena phase points toward a genetic relationship of Cherokee with the Adena and Hopewell archeological horizons. In this section of his report Greenman refers to Harrington's work at Lenoir, Bussell's, and Hiwassee Island. He points out that each of Harrington's three cultures have certain Adena-like characteristics. These include: Sandstone rasp or smoothing stone, pointed bottom vessels, bone awls, stemmed projectile points, gorgets, suspended animal teeth, celts, *Olivella* shell beads, and stone disks. On these and other traits Greenman is inclined to label Adena type mounds as Cherokee in origin. Greenman's claims must be accepted with caution in view of the controversy concerning diagnostic traits of the "Adena" phase. In any event, the traits employed to illustrate the possible genetic relation between manifestations of the Cherokee archeological cultures and the Adena complex are actually very general traits which have widespread distribution and may do little more than indicate conformity to a general pattern.

Reference to Appendix A will show that at the Peachtree site a few basic Woodland determinants and traits are present. These include predominantly flexed burials with grave goods rare (especially pottery), flint core or coarse flake used in projectile points, stemmed and notched points common, grooved axes, and occasional conoidal vessels present.

Mississippi traits are much more in evidence. These include extended burials accompanied (when grave goods are found) by ornaments, mounds built for substructures, discoidals abundant, grooved axes (rare), equal arm pipes, awls from ulnae, fishhooks, numerous shell beads, copper jacketing of wood, whetstones, and milling stones. Flattened globular vessel forms of considerable variety and numerous other characteristic traits exist (Cole and Deuel, 1937).

These traits, the majority of which are Mississippi, indicate that a mixture of basic determinant elements appears at the Peachtree site. This is important when we realize that these differences occur only when statistical comparisons of the specimens are made.

It should be mentioned that pottery, especially polychrome and carved-paddle stamped ware, has been thought by students to be of such general Southeastern distribution and so uniform as to preclude its specific use as a cultural determinant (Stirling, 1932, p. 23). Recent emphasis upon the differentiation of carved-paddle stamped design elements has indicated that clearly demonstrable divisions, referable to chronologically separate horizons, can be successfully made. Heretofore only the more specialized forms, such as the distinctive engraved black ware from Moundville, Ala., have been recognized as diagnostic traits within the Southeast.

It is felt by some that the stone graves of Nacoochee and Etowah indicate different cultural periods, even though pottery and other artifacts in association are not observably different. Single extraneous culture elements or traits recognizable as intrusive do not indicate displacement of one group by another with intervals of various occupations. It is much more likely that these anachronistic forms imply a certain degree of cultural contact and an exchange of ideas or specimens rather than tribal oscillations. For example, the stone graves of Nacoochee are recorded for the lower levels or primary mound structure. At Peachtree they were intrusive into the current surface of the mound, although none contained any articles of European manufacture. Harrington reports no stone cyst graves from Hiwassee Island. Aside from this difference of level, no apparent differences between Nachoochee and Peachtree cysts are observable. It would seem more logical to conclude that the idea of lining a grave with stone reached these groups at various times or was adopted as part of the burial complex at different times, rather than that the two sites were at one time under actual domination of another group. There is a time difference indicated by the relative positions of these stone-lined graves when we compare the two sites. Assuming that the knowledge of stone-grave burials, quite common in the Tennessee-Cumberland area, came from the north, it would have touched Peachtree first, reaching Nacoochee later. Since the Peachtree Mound was completed before the four stone graves were intrusively placed in it, while the graves at Nacoochee were much lower and were sunk into the primary mound, it is safe to assume that the Peachtree Mound was completed before the secondary mound at Nacoochee was constructed. Although the cysts are more numerous along the Tennessee and Cumberland Valleys, they are by no means lacking as far west as the Mississippi River, as far north as Quincy, Ill., and as far south as Cartersville, Ga. It is true that the cysts occur at different levels (see Nacoochee, Etowah, and Peachtree), but their value as time indicators is debatable.

Pipes from the Peachtree Mound belong to two general types: The elbow type and the stemless bowl type. Numerous significant variations exist among the elbow type, i. e., stems of different length, bowl at right and obtuse angles, and general lack of decorative treatment on the bowl. The bowls of stemless pipes are generally crude and heavy, the exception being a few well-made effigy forms.

Similar pipes are recorded for the other components. The elbow pipe and the massive stone effigy pipe are typical of the entire eastern half of America, and as such would not serve as focal determinants (West, 1934). The variations on the stem treatments, such as shape, presence of band or collar, are felt to be diagnostic (see Appendix B). The pottery forms are different from the stone specimens only in their more ornately decorated bowls. These decorative bowl treatments are also deemed an important diagnostic trait.

The closest correspondences between the traits of Peachtree, Hiwassee Island, Nacoochee, and Norris Basin sites 10 and 19 are shown in Appendix B. The specific correspondence between these sites is sufficient to warrant the conclusion that the five sites represent a cultural unit or focus. The correspondence with certain levels of Etowah is obvious after a comparison with pottery from the village site.

The original statement of the hypothesis upon which this report is based was that the Peachtree site is Cherokee in origin, and that the culture artifactually represented there is typically Cherokeean. As the idea has been scrutinized from various angles, the conclusion is forced that though this site is Cherokee, no generalizations as to the whole of Cherokee culture can be made. The difficulty of the historical approach is once more demonstrated. A comparison of all archeological manifestations definitely known as Cherokee, when checked against Timberlake's and Adair's accounts of the ethnology of the Cherokee, indicates the extreme variation in the cultural objects employed. It is clear that the Cherokee, as a linguistic or tribal unit, employed a wide variety of nonperishable objects. That their nonmaterial culture was perhaps more uniform is possible, but not proved. Material objects from this site (except pipes) indicate a Cherokee "pattern" not noticeably different from adjacent Southeastern sites which were historically occupied by Indians whose social organizations and language set them apart from the historic Cherokee. Our conclusion, then, is that at this community, Peachtree Mound and village, a Cherokee group had a material culture which at the present time would be interpreted as a combination of Woodland and Mississippi elements, the same admixture which seems to constitute the nucleus of a general Southeastern pattern.

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The cultural relation of this site to others must be determined on the basis of objects and inferred nonmaterial practices. It is undenied that such relationships as are postulated on the basis of "objective" traits will show relationship and contact, but it will not and cannot enable the research workers to determine tribal classifications. This, from the historical point of view, is the major weakness of the classificatory scheme now under development. The system must be used with a full realization of its limitation as a historical tool.

It appears that Hiwassee Island, Nacoochee, and Peachtree can be considered historical Cherokee sites. But both Cherokee and Creek occupation are recorded for Hiwassee Island, while Etowah has also been shown to have had Creek occupation. The chart of trait correspondence shows considerable similarity between the latter two sites, yet we know that each had more than one linguistic and tribal occupation. A situation of this kind, where representatives of two or more tribal groups used similar material objects, forces the conclusion that they belong to the same prehistoric culture (pattern). In other words, irrespective of tribal distribution, we can say with certainty that a more or less uniform material culture existed. The basic unity of this area is shown by the persistence of the following traits: The use of a carved paddle to decorate pottery vessels; shell utensils and ornaments; celts and the lack of grooved axes; elevated town houses or ceremonial buildings; erection of mounds at river banks; association of stemmed and triangular projectile points; and use of either shell or grit aplastic in the same type of earthenware vessels.

To break this broad region into smaller divisions is beyond the scope of the summary. That this can be done eventually is shown by the analysis of the Norris Basin by Webb (1938, pp. 363–382). His analysis deals with cultural remains which are nearly identical; diagnostic traits, such as pottery rim treatment and handles, or the size of log employed in town house structures serve as differential determinants. Such minor points of difference are not necessarily valuable as diagnostic traits. Only when, as shown by Webb, definite correlations exist, can they be assumed significant. His report points the way in which further understanding of the Southeast is to be attained. Further excavation and further analysis, if done as accurately as Webb has begun, will permit subdivision of Southeastern cultures into categories of various magnitude. Webb's report (1938) also corroborates the conclusions of this report, in that it suggests historical connections, although he labels them as "Speculations." He states on page 371 that ". . . it becomes at once apparent that it is not easy to determine what traits are definitely diagnostic of Cherokee material culture," and again on page 375. "Because of this widespread distribution of

many so-called Cherokee traits, it may well be doubted whether it will ever be possible to definitely fix on a list of traits defining Cherokee material culture." This agrees precisely with conclusions arrived at independently in this report.

CONCLUSIONS

By way of brief conclusion it can be said that the Peachtree site is a component in which both Woodland and Mississippi traits occur simultaneously, blended or fused to make a culturally homogeneous site. It has a temporal range from 1830, or thereabouts, back to prewhite contact, and was probably occupied by Cherokee during this entire period.

Since the absolute identification of the builders of the site may always remain questionable, we would hesitate to label the component as pure Cherokee, or even to assign it unequivocably to any linguistic or ethnic group.

The objective classification of culture as developed by Midwest archeologists is, through its present incompleteness, not clearly applicable to this region, but, following the methodology of this group, we assign the Peachtree Mound to a focus including Nacoochee, Stalling's Island (upper level), and Peachtree. This focus might also include the Etowah manifestation, Hiwassee Island, and Norris Basin sites 10 and 19. Present knowledge does not warrant allocation of these sites to the larger units in the classificatory system.

The complete lack of such data as the number of inhabitants, the number of individual dwellings, methods and extent of horticultural occupations and dependence is discouraging when viewed from the larger and more general anthropological point of view. This site has given us only a glimpse of the life of the people who inhabited it for a few hundred years. Satisfactory reconstructions and conclusions cannot be made, yet the descriptive report and objective treatment of the material may, we hope, form another link for eventually rounding out the aboriginal picture in the general Southeast.

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APPENDIX A

Diagnostic Traits from Peachtree

The following basic determinants, usually considered as forming a part of the diagnostic traits of the Woodland pattern, were recovered at the Peachtree site:

Burials predominantly flexed; grave goods lacking or only a few in number; pottery vessels rarely buried with the body; some of the pottery tempered with crushed rock or sand; projectile points chipped from a core or a coarse flake, size ranging from medium to large, mostly made by primary flaking; a few indicated secondary chipping; both notched (diagonally) and stemmed points.

The following traits from the Peachtree site are considered diagnostic of the Mississippi pattern:

The mound used primarily as a substructure; ornaments and insignia associated with burials; discoidal stones; elbow type of pipes, both plain and effigy; fishhooks fashioned out of bone, copper, and shell; numerous beads made from cut and whole shells; carved wooden objects overlaid with copper; grooved ax (rare); whetstones and flat mealing stones present. Pottery was quite abundant, consisting of a variety in form and decoration; tempering of crushed shell; fine and medium textures in paste; well controlled firing technique; fairly high degree of technical perfection; basal portions of vessels globular or modified to be almost flat; effigy heads used as decoration; walls thin to medium in thickness; a few strap handles, more lugs and collars; area of decoration varied considerably. (See Pottery, analysis of different wares, pp. 39–50.)

If these and other traits were to be further analyzed we might find that a large amount would fall into a Lower Mississippi phase, with about two traits fitting into an Upper Mississippi phase, and one in the Middle Mississippi phase. However, we feel it is too early to establish such general classification. More sites must be carefully excavated and analyzed in order to establish the necessary traits to form a series of components, foci, aspects, and phases, before such a site as Peachtree can be correctly placed into the classificatory system. The complete summary of all traits from this site, which can be used eventually for establishing the correct cultural aspect and focus, is listed under Appendix B.

APPENDIX B

Comparison of Traits from Peachtree and Seven Other Sites

In table 3 all material culture traits are grouped in various categories and the actual number of specimens found at the Peachtree site is given. It also includes a comparison of these traits with similar specimens as reported by other investigators from seven other comparable sites in this general area (pottery vessels did not receive as detailed an analysis as might be desired): *Nacoochee*, The Nacooche Mound in Georgia, by G. G. Heye, F. W. Hodge, and G. H. Pepper (Contr. Mus. Amer. Ind., Heye Foundation, vol. 4, No. 3, 1918); *Etowah*, Exploration of the Etowah Site in Georgia, by W. K. Moorehead, et al. (Dept. Archaeol., Phillips Acad., Andover, Mass., 1932); *Stalling's Island*, The Stalling's Island Mound, Columbia County, Georgia, by W. H. Claflin, Jr. (Pap. Peabody Mus. Amer. Archaeol. and Ethnol., Harvard Univ., vol. 14, No. 1, Cambridge, Mass., 1931); *Hollywood*, Report on the Mound Explorations of the Bureau of Ethnology, by Cyrus Thomas (Twelfth Ann. Rep. Bur. Ethnol., 1890–91, pp. 317–326, 1894); *Hiwassee*, Cherokee and Earlier Remains on Upper Tennessee River, by M. R. Harrington (Ind. Notes and Monogr., No. 24, Mus. Amer. Ind., Heye Foundation, pp. 93–146, 1922); *Norris Basin, sites Nos. 19 and 10*, An Archaeological Survey of the Norris Basin in Eastern Tennessee, by William S. Webb (Bur. Amer. Ethnol. Bull. 118, 1938).

Specimens not made by the American Indians but which definitely indicate contact with European traders, such as glass beads; iron knives, tools, or vessels; brass or copper utensils, are not included in these tables. These objects serve primarily as time indicators rather than traits which can be used for aboriginal culture comparisons. Most of the protohistoric and historic sites in the Southeast would probably contain much the same type of European trade objects.

TABLE 3.—*Material culture traits from Peachtree site compared with 7 other sites belonging to the same general culture* [1]

Culture traits	Peachtree	Na	Et	St	Ho	Hi	No. Ba. Site 19	No. Ba. Site 10
MOUND STRUCTURE								
1. Pyramidal mound	×		×		(?)		×	×
2. At bank of stream	×	×	×	×	×		×	×
3. Buildings on top	×	×	×		(?)		×	×
4. Erected on prepared clay floor	×		×		×			
5. Secondary mound erected on sand layer over primary mound	×	×	×		×	×		
6. Wooden steps or ramp	×		×				×	
7. Intermittent construction and enlargement	×	×			×	×	×	×
8. Intrusive burials	×			×			×	×
9. Wattle and daub house construction	×		×			×	×	
10. Many burned-clay zones	×	×	×	×	×		×	
11. Prepared dwelling floors	×						×	×
12. Stone-filled post holes	×						×	
13. Clusters of stone	×							×
14. Stone-filled firepits	×							
15. Central firepit	×	×					×	
16. Stones on mound floor	×						×	
17. Charred reeds and grass in mound	×	×	×					
18. Cache of deer scapuli	×							
19. Food bones and sherds in many refuse pits	×						×	×
BURIAL CUSTOMS								
Total burials	68							
20. Double	1							
21. Flexed	19	×	×	×		×	×	×
22. Semiflexed	17	×		×		×	×	
23. Extended	8	×	×		×			×
24. On left side	14	×					×	×
25. On right side	4						×	
26. Hands to face	19							
27. Cysts floored	3		×					
28. Cysts roofed	4	×	×					
29. Simple interment in pit	63			×			×	×
30. Fire over burial pit	2							
31. Wrapped in mats	×	×				×	×	
32. Miscellaneous stones near burial	6	×					×	
33. Children treated as debris	5							
34. Burials in pits in village site	×					×	×	
BONE ARTIFACTS								
35. Awls—ulna, deer and other	5	×		×	(?)		×	×
36. Awls—turkey metatarsi	3	×		×	(?)		×	×
37. Awls—splinter	3					×	×	×
38. Awls—fibulae	2						×	×
39. Awls—spatulate form	1			×		×	×	(?)
40. Antler—projectile points perforate	2			×		×	×	×
41. Antler—chipping tool	1	×		×			×	×
42. Fishhook—grooved	1			×				×
43. Canine tooth—grooved	1						(?)	×
44. Hairpins—double pointed	5	×				×	×	×
45. Tortoise shell debris	(Frequent)					×		
STONE ARTIFACTS								
46. Axes—grooved, round in cross section, celt-shaped	2	×		×				
47. Axes—spherical club head, grooved	1			×				
48. Axes—thin, slate forms	3						×	×
49. Axes—notched, ungrooved	1							×
50. Beads—spherical	1							
51. Beads—elongate, tapered ends, polished	]	×						×
52. Celts—polished	25	×	×		×	×	×	×
53. Celts—perforate	1	×	×				×	
54. Celts—imperforate	12	×				×	×	×
55. Celts—spatulate	1	×	×				×	×
56. Celts—double-bitted	6						(?)	×
57. Celts—hafted	2	×				×	(?)	(?)
58. Celts—blunt polls	50%	×				×		×

[1] Na=Nacoochee; Et=Etowah; St=Stalling's Island, upper level; Ho=Hollywood; Hi=Hiwassee; No. Ba.=Norris Basin.

TABLE 3.—*Material culture traits from Peachtree site compared with 7 other sites belonging to the same general culture*—Continued

Culture traits	Peachtree	Na	Et	St	Ho	Hi	No. Ba.	
							Site 19	Site 10
STONE ARTIFACTS—continued								
59. Chisels, adzes, or picks, polished	2	×				×		×
60. Discoidals	100's	×	×	×	×	×	×	×
61. Discoidals—polished	50%	×	×		×	×	×	×
62. Discoidals—biconcave	1		×		×	×		
63. Discoidals—beveled edge	5	×				×	(?)	(?)
64. Discoidals—parallel sides with rounded edges	50%	×		×		×	×	×
65. Discoidals—central depression	10	×				×	×	×
66. Discoidals—perforate	1	×						×
67. Discoidals—incised cross lines	3	×				×		×
68. Discoidals—variety of material	×	×				×	×	×
69. Discoidals—pitted	1	×						×
70. Hematite—ground fragments	2					×		×
71. Hairspreader—cannel coal	1							(?)
72. Hairpins—talc or steatite	2	×						
73. Hairpins—shale, cannel coal	2							
74. Mica—fragments	{Numerous.}		×				×	
75. "Nut stones"—slate	10–20					×		
76. "Nut stones"—pecked to roughly square shape	10–20					×		
77. Notched stones—roughly shaped, poorly pecked notches	50%	×				×		×
78. Notched stones—carefully shaped, deep and smoothly pecked notches	50%	×				×		(?)
79. Hammerstones—pitted		×				×	(?)	
80. Hammerstones—pecked ends only		×				×		
81. Mortars—rough stone, shallow ground depression	2			×		×		
82. Pestles—bell-shaped, slate	1					×		
83. Pipes—equal arm elbow	20–30	×	×		×			×
84. Pipes—long stem, band or collar on stem, stem round or square	10	×	×					
85. Pipes—long stem, square, no collar	6	×	×		×			
86. Pipes—long, square stem, effigy stem	2	×						
87. Pipes—right angle	8	×						(?)
88. Pipes—obtuse angle, between bowl and stem, stem type being disregarded	{15 or more}	×			×			×
89. Pipes—stem same length as bowl, or shorter, square stem	6							
90. Pipes—stem same length as bowl, or shorter, round stem	8							×
91. Pipes—flange rim, expanded	3	×						×
92. Pipes—disk bowl or rim (modified flange)	1							
93. Pipes—modified rims and lips other than flanged	3							
94. Pipes—forward projecting or decorated "chins"	4							×
95. Pipes—calumet type	1							
96. Pipes—stemless	10–15							
97. Pipes—massive, biconoidal, flaring, crude	4							
98. Pipes—specialized effigy or other highly decorated forms, polished, stemless	5							
99. Pipes—Micmac, pipestone, decoration on bowl	1							
100. Projectile points—stemmed and triangular	100's	×	×	×	×	×	(?)	×
101. Pendants—polished, biperforate, "boatstone"	1							×
102. Pendants—grooved, engraved, perforate, celt-shaped, unpolished	1							
103. Pendants—fragments of steatite vessels	3	×		×		×		
104. Pendants—roughly chipped or ground, slate	3							
105. Scrapers—long slender, curved, chipped knife	1						×	×
106. Scrapers—small, snubnosed, secondarily chipped, made of a core, "thumbnail" type	5							
107. Smoothing or abrading stones—rectangular, ground edges	3					×		×
108. Smoothing or abrading stones—unshaped pebbles, flat surfaces	2					×		
109. Steatite pottery—smooth interior, roughened exterior	10	×				×		

TABLE 3.—*Material culture traits from Peachtree site compared with 7 other sites belonging to the same general culture*—Continued

Culture traits	Peachtree	Na	Et	St	Ho	Hl	No. Ba.	
							Site 19	Site 10
STONE ARTIFACTS—continued								
110. Steatite pottery—lugs	4							
111. Miscellaneous forms—pottery polishing stones	Many	×				×		×
112. Pipe blanks	2							×
113. Miscellaneous forms—"Paint cups" (concretions)	2					×		
SHELL ARTIFACTS								
114. Beads—massive, columella of conch	Approx. 20	×	×	×		×		×
115. Beads—oliva, perforate longitude	1						(?)	×
116. Beads—*Olivella*, perforate longitude	10		×			×	×	
117. Beads—cut shell disk	Approx. 100	×	×	×	×	×		×
118. Beads—cut shell small cylindrical	50	×	×	×			×	×
119. Beads—cut shell small spherical	50	×	×	×			×	×
120. Beads—cut shell long flattened tubular	4		×					×
121. Hairpins—columella of conch	5	×	×	×		×		×
122. Gorget	1	×	×	×		×	×	×
123. Drinking cups of conch	2	×		×		×		×
124. Pottery aplastic	×	×	×	×		×	×	×
METAL ARTIFACTS								
125. Copper jacketing of wooden earspools	3		×		×			×
126. Copper fishhooks, barbless	3							
127. Copper coil	1							
128. Copper bracelet	16		×					
129. Copper jinglers			×			×		
TEXTILES								
130. Check, 3 over 3 under	2	×				×		×
131. Cane strips	1	×				×	(?)	×
132. Bast	1					×		
133. From pottery						×	×	×
POTTERY ARTIFACTS								
134. Pipes—equal arm	All	×	×		×	×		
135. Pipes—flaring funnel-shaped bowl and short stem with or without facets, nodes, or other decoration	9–15	×	×					
136. Pipes—stems round with expanding collar or band	18–20	×	×		×	×		
137. Pipes—bulbous bowl	3		×		×			
138. Pipes—punctate decoration	1		×					
139. Pipes—bird-beak decoration	1		×					
140. Pipes—celt hafting stem	1	×						
141. Pipes—effigy figure bowl, hands or feet on stem	1							
142. Pipes—rim or lip flange regardless of bowl style	9		×					
143. Pipes—"chinned" Arkansas type	1							
144. Pipes—traces of red paint on pipe	1	×	×					
145. Pipes—Micmac	1							
146. Beads—cylindrical, constricted center	1		×					
147. Beads—cylindrical, expanded center	3	×						
148. Beads—cylindrical, cut from pipe stem	1	×						
149. Earplugs—tapering, pin-shaped, with hemispherical head	10	×						
150. Earplugs—polished above	1							
151. Earspools—pulley-shaped	2	×						(?)
152. Toy vessels—carefully made	1					×		
153. Pellets of clay with punched cavities	3	×	×			×		
154. Sherd discoidals	100's	×	×			×		×
155. Sherd discoidals—well shaped	50%		×					×
156. Sherd discoidals—crudely made	50%							(?)
157. Sherd discoidals—perforated			×					×
158. Sherd discoidals—size variable			×					×

TABLE 3.—*Material culture traits from Peachtree site compared with 7 other sites belonging to the same general culture*—Continued

Culture traits	Peachtree	Na	Et	St	Ho	Hi	No. Ba.	
							Site 19	Site 10
POTTERY ARTIFACTS—continued								
Pottery utensils, shapes								
159. Waterbottle—plain	×				×	×		
160. Olla, globular or flattened globe	×				×	×		
161. Widemouthed	×				×		×	×
162. Straight neck	×							×
163. Cazuela	×				×	×		
164. Seed bowl	×						×	
165. Shallow bowl, plain	×					×		×
166. Shallow bowl, effigy	×						×	×
167. Plate	×					×		
Secondary features								
168. Double flange or lug handle						×	×	×
169. Appliqué effigy features on shallow bowls	×						×	
170. Scalloped rim	×						(?)	×
171. Ornamental nodes near rim or on scallop	×				×		×	
172. Effigy lugs	×	×					×	×
173. Loop handles—riveted	×	×						×
174. Strap handles—appliqué, often incised	×	×					×	(?)
175. Painted basilar legs or rests conical	×						(?)	(?)
176. Rounded bottoms	×						×	×
177. Semiconoidal bottoms	×						(?)	×
178. Flat bases	×							
Decorative techniques								
179. Incising	×						×	×
180. Scratching or engraving	×						(?)	(?)
181. Paddle stamping—carved	×				×		×	
182. Paddle stamping—cord	×						×	×
183. Textile marking	×						×	×
184. Basket marking	×							
185. Punctate	×						×	×
186. Fingernail marks	×						(?)	(?)
187. Painting	×							×
188. Brushing	×							
Rim and lip treatment								
189. Lip unmodified	×							
190. Lip everted	×				×			
191. Lip incised	×						(?)	
192. Rim dentate		×						×
193. Rim shouldered on shallow bowl		×						×
MORE GENERAL TRAITS								
194. Bone articles—not common	×				×			
195. Stone articles—very common	×	×	×	×		×		×
196. Celts occur in caches	×							×
197. Celts range in size	×		×				×	×
198. Disks—many unfinished forms	50%		×	×		×	(?)	(?)
199. Disks range in size	×		×				×	×
200. Mica—cut fragments	×	×	×	×	×			
201. Mica—with burials	×		×					×
202. Pipes—numerous	×	×			×			×
203. Hammerstones—rare	×						(?)	×
204. Grave goods—rare	30%	×		×				
205. Grave goods—near head only	15						×	
206. Grave goods—anklets or bracelets	2							×
207. Grave goods—pottery	1							
208. Grave goods—shell	13			×			×	×
209. Grave goods—dog or other animal with human burial	1			×				×
210. Grave goods—conch shell cup at head	1							×
211. Grave goods—beads, either shell, glass, or copper	13			×		×	×	×
212. Grave goods—celts	1	×				×	×	×

The following traits were present in the Nacoochee mound but were not found at the Peachtree site:

Copper celts; painted split cane textile; four copper rods; pearls; sheet copper ornaments—claws of bird, hand and body of man, arm bands; grave goods; grave goods at pelvis and at arms; over-four-under-four technique in weaving; shell gorgets—perforate, central hole, paddle shape; bark-covered cyst—burial mound; stone fireplace; platform pipe; disk pipe; *Marginella* beads; dippers of pottery; flat-headed shell ear plugs—eccentric; stemless clay pipes; plummets; shell refuse heaps.

The following traits were present at the Stalling's Island site but not recovered from the Peachtree site:

Shell in mound; made over a natural rise; mound by accumulation; burned bottom storage pits; banner stones; tools of antler; perforate awls or needles; bone handles or hafts; engraved bone (deer mandibles) or whistles; "drawer pull" ear plugs of shell; well-made full-groove and three-fourth-groove axes; steatite pendants, shaped and finished; bundle burials; no pipes; blades in caches; trephining; shell gorgets, round, gingerbread.

The following traits were present at the Hollywood site but not at Peachtree:

Copper celts; human effigy pipes; animal effigy pipes; painted pottery; effigy tripods; shell thick in debris under mound; Moundville pottery; repoussé copper; galena; burial mound.

Traits reported by Harrington but not present at the Peachtree site:

Incised bone tubes; cylindrical pestles; worked antler objects; bone reamers (drawshaves); long drills, flint; shell earplugs, eccentric type; *Marginella* beads; unworked columella of conch; pearls; bone beads; copper beads.

APPENDIX C

Provenience of Specimens Illustrated in Plates

Table 4 constitutes an explanation of plates with additional data on the finding places of the artifacts. The plates that carry fully explanatory legends have not been included in the table. The following abbreviations are used in the table: Specimens recovered within the mound itself are indicated by ML, "Mound Level"; specimens recovered from the village site beneath the mound are marked BML, "Below Mound Level"; Pm indicates burials from the Peachtree mound; and Pv indicates burials from the Peachtree village site.

TABLE 4.—*Provenience of specimens illustrated in plates*

Plate	Figure	Name	Square [1]	Level [1]
10		Shell ornaments		
11	1	Copper jacketed wooden ear ornaments.	Burial Pm-20	Feature 10.
	2, 3	do	Burial Pm-41	BML.
	4	Copper-wire fishhooks	14-L-7	ML.
	5	do	11-L-6	BML.
	6	do	17-L-5	ML.
	7	do	7-L-5	ML.
	8, 9, 10	Samples of 16 copper bracelets, 8 on each wrist.	Burial Pv-4	
	11	Copper wire	11-L-6	BML.
	12	Brass earrings	Burial Pm-8	
	13	Brass beads (note cordage)	do	
	14	Brass coiled springs	Burial Pm-6	
	15	Brass (?) cones from necklace	2-L-2	ML.
	16	Brass buttons	2-L-5	ML.
	17	do	18-L-7	Surface.
	18	Copper wire	15-L-6	ML.
	19	Twisted copper wire	16-L-5	ML.
12	Top row, from left to right.	Iron tankard	Burial Pv-3	
		Shears or scissors (2 pairs)		Surface.
		Spring knife, horn handle		Do.
		Buckle		Do.
		Spring knife, horn handle	15-L-6	ML.
		do	Burial Pv-3	
		Spring knife, horn handle, used as a pendant.	Burial Pm-19	
		Iron blade		Surface.
	Second row, from left to right.	Sleigh bell	5-L-8	ML.
		Brass ferrule from pistol butt		Surface.
		Brass spur	14-L-7	27 in.
	Third row, from left to right.	Brass bell	9-L-7	13 in.
		Brass ferrule from pistol butt		Surface.
		Lead bullets, various sizes		Do.
		Iron nail or awl		Do.
		Iron fishhook	4-L-1	30 in.
		Iron nail		Surface.
		Iron ax blade		Do.
		do	7-L-6	30 in.
	Bottom row	European glass beads	Various	Various.

[1] Unless otherwise indicated.

TABLE 4.—*Provenience of specimens illustrated in plates*—Continued

Plate	Figure	Name	Square [1]	Level [1]
13	1, 9, 21	Bone awl, antler tool, bird-bone awl	5–L–1	ML.
	2	Bone awl (secondary mound)	14–L–4	ML.
	3	Bone awl	14–L–2	BML.
	4	do	Feature 2	BML.
	5	do		Surface.
	6	Bone awl, well polished	10–L–8	ML.
	7	Bone awl	6	BML.
	8	Bone awl, fragment	5–R–3	BML.
	10, 11, 12	Spatulate (?) and bone awls	15–L–2	ML and BML.
	13	Antler point, length 4.5 cm	5–L–8	(?).
	14	Antler projectile point, length 5.4 cm	13–L–8	BML.
	15, 17	Bone hairpins with burial Pm–41		
	16	Bone hairpin, polished, length 6.7 cm	17–R–2	ML.
	18	Bone awl, length 11.2 cm	10–L–5	ML.
	19	Bone awl, polished at both ends	19–R–1	BML.
	20	Shaft of bone awl	14–L–3	BML.
	22, 23	Bone awl and barbless fishhook	5–R–4	BML.
	24	Grooved canine tooth	14–L–2	ML.
14	1	Pulley-shaped ear ornament, pottery	19–L–4	Surface.
	2	Fragment of pulley-shaped ear ornament, pottery.	3–L–2	BML.
	3	Toy pottery vessel, brown, grit-tempered.	16–L–5	BML.
	4	do	5–R–1	BML.
	5	do		AA.
	6	Flint flake knife	19–L–3	40 in.
	7	Gunflints	2–R–1	(?)
	8	do	17–L–6	BML.
	9	do	21–L–4	Surface.
	10	do	20–L–6	(?)
	11	do	4–L–7	ML.
	12	Red-clay pottery bead	15–L–6	BML.
	13	do	18–R–1	ML.
	14	do	2–L–5	ML.
	15	do	15–L–7	BML.
	16	Red-clay pottery bead, made from pipestem.	19–L–4	ML.
	17	Notched slate fragment	5–R–4	BML.
	18	Fragment of pottery. Holes punched before firing.	7–L–5	ML.
	19	Fragment of polished chlorite, pipe fragment.	9–L–7	BML.
	20	Soapstone fragment, drill rest (?)	16–L–5	ML.
	21	Fragment of mica		BML.
	22	Pottery earplug, grit-tempered	5–L–2	ML.
	23	do	12–R–2	ML.
	24	do		AA.
	25	do	11–L–7	BML.
	26	do	7–L–8	(?).
	27	Soapstone ornament fragment	11–L–7	ML.
	28	Cannel coal, problematical		Surface.
	29	Soapstone, problematical	5–R–4	72 in.
	30	Fragment of pottery earplug, grit-tempered.	8–L–6	BML.
	31	do	2–R–3	BML.
	32	do		Surface.
	33	do		Surface.
	34	do	17–R–2	ML.
	35	Ground object of slate	15–L–2	ML.
	36	Fragment of stone earplug	5–R–4	BML.
	37	Fragment of soapstone earplug	9	ML.
	38	do	11–L–8	ML.
	39	Partially drilled stone bead	13–L–3	BML.
	40	Drilled stone bead, highly polished	5–L–8	32 in.
19	Top row, from left to right.	Clay pipe, notched flange, 8 nodes below rim.	17–R–3	BML.
		Clay pipe with drilled holes in nodes	(?)	(?).
		Clay pipe, slight flange, smooth surface.	16–L–3	BML.
		Clay pipe, grit temper, bulbous bowl, dull finish.	17–L–3	BML.
	Second row, from left to right.	Clay pipe, red paste, similar to No. 4	14–L–2	AA.
		Clay pipe, grit-tempered	14–L–4	ML.
		Clay pipe, fine grit temper	16	ML.
		Clay pipe, roughly made	8–L–6	BML.
		Clay pipe, roughly finished elliptical bowl.	16–R–2	ML.
		Clay pipe, punctate decoration forms a "U" on each side.	15–L–1	ML.

[1] Unless otherwise indicated.

TABLE 4.—*Provenience of specimens illustrated in plates*—Continued

Plate	Figure	Name	Square [1]	Level [1]
19 (cont.)	Third row, from left to right	Clay pipe, grit temper, red slip, conventional bird-beak design.		ML.
		Clay pipe	1-L-7	ML.
		Clay pipe, trailed line below bowl rim	15-L-1	ML.
	Fourth row, from left to right.	Clay pipe, uneven grit temper and mica.	17-R-2	ML.
		Clay pipe, blue-gray paste	15-L-2	ML.
		Clay pipe, fine grit temper, bowl decorated with nodes near base, now missing.	15-L-4	ML.
		Clay pipe, fine grit temper, probably one of the "funnel" bowl types.	6-L-2	ML.
	Fifth row, from left to right.	Stone pipe, beaded rim, polished	Village site	18 in.
		Stone pipe, octagonal stem	do	20 in.
		Stone pipe, beaded rim	13-L-8	ML.
	Sixth row, from left to right.	Stone pipe, incised lines on stem	7-R-2	BML.
		Stone pipe	16-L-8	ML.
		Stone pipe, short square stem, highly polished.	9-L-6	ML.
		Stone pipe, octagonal stem	3	ML.
		Stone pipe, square stem, "chin"	3-L-1	ML.
		Stone pipe, "chin"	5-R-4	ML.
	Seventh row, from left to right.	Stone pipe	16-L-2	ML.
		do	14-L-5	ML.
		do	16-L-2	ML.
		do	14-L-5	ML.
		Stone pipe, possible effigy feature at base of bowl.	18-L-4	ML.
	Eighth row, from left to right.	Stone pipe	14-L-4	ML.
		do	16-L-1	ML.
		do	3-L-7	ML.
		do	9-L-4	ML.
		do	4-R-1	BML.
		do	9-L-8	ML.
	Ninth row, from left to right.	Stone pipe stem, square, highly polished.	8	BML.
		do		Surface.
		do	Village site.	
	Tenth row, from left to right.	Stone pipe stem, square, highly polished.	3-L-3	ML.
		do	4-R-3	ML.
	Bottom row, from left to right.	do	Miscellaneous	
		do	17-L-5	ML.
		do	Miscellaneous	
21	Top row, from left to right.	Stone effigy pipe bowl, no stem	4-L-3	ML.
		Stone pipe, effigy (?)	3-L-7	ML.
		Stone pipe, Micmac style. Incised and drilled decoration. Hole for stem in side of bowl.	Village site	16 in.
		Pottery pipe, Micmac type	14-L-4	
		Stone pipe, engraved decoration	8	BML.
	Second row, from left to right.	Stone pipe bowl	Village site	20 in.
		Stone pipe bowl, stem broken	4-L-3	ML.
		do	Village site	18 in.
		do	7-L-8	ML.
	Third row, from left to right.	Stone pipe, calumet, square stem	6-L-6	ML.
		Stone pipe stem, decorated	12-L-7	BML.
	Bottom row, from left to right.	Stone pipe bowl	15-L-5	ML.
		do	5-L-6	ML.
		do	17-L-4	ML.
23	*A*, 1	Crudely notched stone, or net sinker	13	BML.
	2	do	6-L-2	ML.
	3	do	Miscellaneous	
	4	Crudely notched stone, or net sinker, formerly a "nutstone."	15-L-3	M8.
	5	Crudely notched stone, or net sinker	5-R-2	Surface.
	B, 1	Stone ax, ground	Miscellaneous	
	2	Stone ax, slate	15-L-2	ML.
	3	Stone ax, fragment, chipped and ground.	Miscellaneous	
	4	do	5-L-2	ML.
	5	Stone club head, round, pecked, and grooved.	18-L-3	ML.
	6	Stone ax, roughly grooved	16-L-3	ML.
	7	Steatite hammer or maul, partially grooved.	Miscellaneous	
	8	Stone celt (?), ground edges	4-L-6	BML.
	9	Fragment of highly polished celt		Surface.
	10	Fragment of highly polished pick or adz	15-L-2	BML.

[1] Unless otherwise indicated.

TABLE 4.—*Provenience of specimens illustrated in plates*—Continued

Plate	Figure	Name	Square [1]	Level [1]
23(cont.)	B, 11	Fragment of highly polished pick or adz	12-L-6	BML.
	12	Hematite with rubbed surfaces	17	BML.
	13	do	18	BML.
24	1	Drilled celt. Corners at top and edges are square. No evidence of use along blade.		ML.
	2	Celt, rounded poll, one side concave	17-L-8	BML.
	3	do		ML.
	4	Celt, sharpened at both bit and poll	18-L-4	BML.
	5	do	18-L-4	BML.
	6	Celt, rounded poll	19-L-4	BML.
	7	Celt, poorly shaped, poll missing	18-L-4	BML.
	8	Celt, sharpened bit, poll polished	2-L-3	BML.
25	*A*, Top row, from left to right.	Stone disk, polished, truncated cone, beveled edge.	13-L-1	ML.
		Stone disk, unpolished, rounded edges.	6-L-1	BML.
		Stone disk, unpolished, smooth, rounded edges.	15-L-2	ML.
		Stone disk, biconvex, straight edges	Miscellaneous	
		Stone disk, unpolished, straight faces and edges.	16-L-2	ML.
	Second row, from left to right.	Stone disk, roughly made, straight faces and edges.	13-L-6	ML.
		Stone disk, roughly made, pecked finish.	16-L-6	ML.
		Stone disk, irregular faces, biconvex	17	ML.
		Stone disk, rough, faintly biconcave, edge partially straight, part round.	15-L-5	ML.
		Stone disk, ground and pecked, convex on one side, pecked hole on other side.	14-L-3	BML.
	Third row, from left to right.	Stone disk, roughly finished, straight edges.	Miscellaneous	
		Stone disk, slate, roughly finished, engraved lines on each face.	15-L-6	ML.
		Stone disk, smoothed on one side	14-R-1	
		Stone disk, slate, roughly made	16-L-2	ML.
		Stone disk, slate, roughly made, ground edges.	16-L-3	ML.
	Fourth row, from left to right.	Stone disk fragment, biconvex, deeply pecked holes in each face, straight edges.	Feature 29	
		Stone disk, very crude	Miscellaneous	
		Highly polished discoidal stone fragment.	17-R-2	ML.
	B. Top row, from left to right.	Stone disk	4-L-4	ML.
		Stone disk, highly polished		C.
		Stone disk	5-R-4	ML.
		do	16-R-2	BML.
		Stone disk, concave	18-L-4	BML.
		do	Feature 29	
		do	10-L-4	ML.
	Second row, from left to right.	Stone disk	7-L-7	ML.
		do	9-L-6	ML.
		do	Miscellaneous	
		do	12	ML.
		do	16-L-4	ML.
		do	10-L-1	ML.
		do	7-L-5	ML.
	Third row, from left to right.	do	16-L-5	ML.
		Stone disk, pitted	8-L-7	ML.
		do		Surface.
		do	14-L-2	BML.
		Stone disk, pitted, engraved	14-L-4	ML.
		Stone disk, concavo-convex, perforated.		Surface.
	Bottom row	River pebbles possibly used as discoidals.		
26	Top row, from left to right.	Pottery disk	16-L-5	ML.
		do	4-R-2	BML.
		do	5-R-3	BML.
		do	17-L-2	BML.
		do	Miscellaneous	
		do	8-L-2	ML.

[1] Unless otherwise indicated.

TABLE 4.—*Provenience of specimens illustrated in plates*—Continued

Plate	Figure	Name	Square [1]	Level [1]
26 (cont.)	Second row, from left to right.	Pottery disk	6-L-2	ML.
		do	6	BML.
		do	Miscellaneous	
		do	4-L-7	ML.
		do	6-L-1	BML.
		do	Miscellaneous	
		do	4-L-5	ML.
	Third row, from left to right.	do	Miscellaneous	
		do	16-R-2	ML.
		do	14-R-3	ML.
		do	Feature 29	
		do	Miscellaneous	
		do	15-L-1	BML.
		do	4-R-1	BML.
	Fourth row, from left to right.	do	16-L-5	ML.
		Pottery disk, drilled	Miscellaneous	
		Pottery disk	15-L-1	BML.
		do	6-L-1	ML.
		do	15-L-1	BML.
		do	5-R-1	ML.
		do	4	BML.
28	*A*, left	Cupstone, nutstone, or drill rest	7-L-6	ML.
	A, right	do		Surface.
	A, bottom	do	Miscellaneous	
	B, top, left	do	15-L-5	ML.
	B, top, right	do	15-L-1	BML.
	B, bottom, left	do	9-L-6	ML.
	B, bottom, right	do	5-L-1	BML.
29	Top row, from left to right.	Steatite vessel fragment	Miscellaneous	
		do		BML.
		do	Miscellaneous	
		do	Miscellaneous	
	Center	Steatite vessel fragment	7-R-4	BML.
	Bottom row, from left to right	Steatite vessel fragment	Miscellaneous	
		do	4-L-3	ML.
		Steatite fragment (not part of a vessel)	Miscellaneous	
30	*A*, Top row, from left to right.	Fragment of cylindrical pebble, pecked at end.	13-L-7	ML.
		do	Miscellaneous	
		Hammerstone, pecked on all surfaces	11-R-2	BML.
	Second row, from left to right.	Roughly ground hammerstone, central peckings on both sides.	16-L-3	ML.
		do	Feature 29	
	Bottom row, from left to right.	Cylindrical pebble with end pecking	do	
		do	do	
		Round pebble, central pecking on both sides and ends.	do	
		Discoidal, central pecking on both sides.	10-R-3	
	B, Top row, from left to right.	Fragment of flat mortar	12-L-6	BML.
		Possibly an abrader	4-L-6	BML.
		Hammerstone, pecked and abraded on the two larger surfaces.	15-L-1	ML.
	Bottom row, from left to right.	Abrading stone, rectangular. Both surfaces show use.	Miscellaneous	
		Abrading stone, both sides used, edges square.	Miscellaneous	
		Part of a broken steatite celt. Used for abrading and hammering.	15-L-8	ML.
		Rectangular abrader. Rounded edges and corners.	Miscellaneous	
31	Top row, from left to right.	Stone pendant, ground, crudely incised. Biconoidal boring.	15-L-4	ML.
		Stone pendant, biperforate, polished, biconoidal boring.	6-L-2	ML.
		Slate pendant, chipped and ground, biconoidal boring. Biperforate.	16-L-6	BML.
		Similar to above	21-L-4	Surface.
		do	6-L-2	ML.
	Bottom row, from left to right.	Perforated fragment of steatite vessel.	3-L-7	BML.
		do	5-R-1	ML.
		do	5	ML.
32	1	Modified olla type, rounded bottom, grid-carved-stamp decoration. Appliqué incised rim, everted lip, and occasional mica flecks (represented by light spots on surface). Ware A.	1-L-7	ML.

[1] Unless otherwise indicated.

TABLE 4.—*Provenience of specimens illustrated in plates*—Continued

Plate	Figure	Name	Square [1]	Level [1]
32 (cont.)	2	Similar in form and decoration to fig. 1. Found near the shoulder of Burial Pv-5, together with a European spring-back knife. Ware A.	Village site	
	3	This vessel was inserted in fig. 2 at the time of burial. Smoothed surface. Ware A.	Burial Pv-5	
33	*A*, Top	Grid paddle stamp. Ware A	15-L-6	
	Center	Curvilinear stamp. Ware A. Diameter, 10 in.	1-R-1	
	Bottom	Curvilinear stamp. Ware A. Height, 4½ in.	Feature 12	
	B, Upper left	Polished surface, black interior. Ware B. Diameter, 4⅞ in.	Feature 13	
	Upper right	Polished surface, inverted rim. Ware B. Diameter, 5½ in.	do	
	Center	Fragment of strap handled bowl. Ware B. Rim diameter, 7½ in.	do	
	Bottom left	Inverted rim, polished surface. Ware B. Diameter, 6⅛ in.	do	
	Bottom right	Inverted rim, polished surface. Ware B. Diameter, 8 in.	1-R-1	1-2 ft.
34	Top row, from left to right.	Rectangular stamp decoration. Ware A sherd.	8-L-7	
		Grid stamp decoration. Ware A sherd.	Village site	
		Curvilinear stamp decoration. Ware A sherd.	Feature 13	
		Rectangular stamp decoration. Ware A sherd.	Miscellaneous	
		Lobed pot, smooth surface	4-L-3	BML.
	Second row, from left to right.	Grid-stamp decoration. Ware A sherd.	Miscellaneous	
		Carved-stamp decoration. Ware A sherd.	do	
		Corrugated-stamp paddle. Ware A sherd.	9-L-7	ML.
		Corrugated-stamp paddle, scalloped rim, decorated lug. Ware A sherd.		BML.
	Third row, from left to right.	Rectangular stamp decoration, straight high neck, well-defined shoulder. Ware A sherd.		ML.
		Corrugated-stamp decoration, appliqué rim. Ware A sherd.	Miscellaneous	
	Bottom row, from left to right.	Rectangular stamp decoration, straight high neck. Ware A sherd.	Miscellaneous	
		Rectangular stamp decoration, notched appliqué rim. Ware A sherd.	6-L-6	ML.
		do	3-L-7	ML.
		Well-defined grid-stamp decoration, appliqué notched band around neck. Ware A sherd.	Village site	18 in.
35	Top row, from left to right.	Curvilinear stamped sherd from vessel base.	Miscellaneous	
		do	4-L-6	BML.
		do	3-L-4	BML.
	Second row, from left to right.	May be lug from rim of vessel	8-R-2	BML.
		Foot from a stamp decorated vesse	Feature 19	
	Third row from left to right.	Fragment of a foot from a stamp decorated vessel.	4-R-4	BML.
		May be a lug or broken handle from a vessel.	2-L 6	ML.
		Foot from a grid stamped decorated vessel.	6	ML.
		Foot from a stamp decorated vessel	5-R-2	ML.
	Fourth row, from left to right.	Worn base of a stamp decorated vessel.	15-L-5	ML.
		Foot from a stamp decorated vessel	4-R-1	BML.
	Bottom row	Rounded bottom of large vessel with stamp decoration.	Miscellaneous	
36	*A*, Top row, from left to right.	Combination of stamp and incised decoration. Ware A.	13-L-2	ML.
		Incised decoration around rim. Ware A.	Miscellaneous	ML.
		Incised rim and stamped body. Ware A.	16-L-4	ML.

[1] Unless otherwise indicated.

TABLE 4.—*Provenience of specimens illustrated in plates*—Continued

Plate	Figure	Name	Square [1]	Level [1]
36 (cont.)	Second row, from left to right.	Incised rim and stamped body. Ware A.	7-L-3	ML.
		do	15-L-5	ML.
		do	15-L-6	ML.
	Bottom row, from left to right.	Grid stamped, notched rim. Ware A sherd.	Miscellaneous	ML.
		Incised rim. Ware C sherd	13-L-6	ML.
		Incised rim. Ware A sherd	9-R-1	ML.
		do	15-L-4	ML.
	B	Rim sherds illustrating a variety of methods of decoration. All Ware A.	Miscellaneous	ML.
37	*A*	Rim sherds, showing specialized rims and secondary features. Ware A.	do	
	B	Sherds demonstrating decoration and rim treatment. Ware A.	do	
38		Painted water bottle, Ware B-1, from central portion of feature 29. When found, a conch-shell cup was in place as a cover. Concentric circle design in dark brown appears all over vessel. Note flat base and rim treatment.	Feature 29	
39		Painted plate. Ware B-1. Carved-paddle stamped exterior. Negative design black, on dull orange around outflaring rim.	Feature 13	BML.
40		Ware B sherds showing rim decoration and varieties of rim treatment.	Miscellaneous	
	Top row, from left to right.	Sherd	16-L-3	ML.
		do		BML
		do	14-L-4	ML.
		do	Miscellaneous	
		do	15-L-3	ML.
	Second row, from left to right.	do	Miscellaneous	
		do	18-R-1	BML
		do	2-L-3	
		do	Miscellaneous	
	Bottom row, from left to right.	do	15-L-1	ML.
		do	15-L-1	ML.
		do	20-L-4	
		do	15-R-1	ML.
		do	20-L-7	
		do	Miscellaneous	
41		Found with pl. 39. Both are from feature 13, a large refuse pit below mound level. Ware C-1, deep red wash or paint. Flat bottoms. Note careful work and excellent rim treatment of the upper specimen. The lower one was originally similar to the upper, or was a water bottle and was ground down after being broken.	Feature 13	
42		Selected rim sherds of ware C and C-1, showing rim treatment.		
	1	Plain sherd of ware C	18-R-2	BML.
	2	do	2-L-6	ML.
	3	do	9-L-6	ML.
	4	do	22-L-6	Surface.
	5	do	19-R-1	BML.
	6	Sherd showing paddle stamping. Ware C.	19-R-1	
	7	Sherd showing paddle stamping. Ware C.	Miscellaneous	
	8	Plain sherd of Ware C-1	do	
	9	do	18-R-1	BML.
	10	do	Miscellaneous	
	11	do	2-L-2	
	12	Plain flat-bottom sherd, some of the paint worn off through use. Ware C-1.	18-R-1	BML.
	13	Plain sherd of ware C-1	3-R-2	ML.
	14	do	19-R-1	ML.
	15	do	19-R-1	

[1] Unless otherwise indicated.

TABLE 4.—*Provenience of specimens illustrated in plates*—Continued

Plate	Figure	Name	Square [1]	Level [1]
43		Miscellaneous sherds of wares A, B, and C, showing secondary features of rim and lip.		
	Top row, from left to right.	Ware C	5–L–2	BML.
		Ware A	5–L–1	BML.
		Ware C	18–R–2	ML.
		Ware A	5–L–1	ML.
		do	3–R–1	BML.
	Second row, from left to right.	Ware C	15–L–2	BML.
		do	6–L–2	
		Ware A	5–R–1	ML.
		Ware B	19–L–3	Surface.
		Ware (?)		BML.
	Bottom row, from left to right.	Ware C	4–L–6	
		Ware A		BML.
		do		BML.
		do	11–L–5	ML.
		Ware C	Village site	
44		Vessel fragments illustrating various types of decoration, such as basketry and textile (ware D), and painted (ware C–1).		
	1	Rough textile-marked sherd, ware D	13–L–7	BML.
	2	do	5–R–2	ML.
	3	do	15–L–7	ML.
	4	do	15–L–1	BML.
	5	do	16–L–4	ML.
	6	Cord-paddle-stamped sherd, ware D	15–L–5	ML.
	7	do	5–L–3	ML.
	8	do	8–L–7	BML.
	9	do	13–L–7	BML.
	10	Basketry-marked sherd, ware D	3–R–2	ML.
	11	do	4–R–1	ML.
	12	do	8–R–2	ML.
	13	do	19–L–2	
	14	do	8–R–2	ML.
	15	Similar to "salt pan" ware textiles of Tennessee and Cumberland.	16–R–1	BML.
	16	do	15–L–1	ML.
	17	Rough textile-marked sherd, ware D	7–R–2	ML.
	18	do	5–L–3	ML.
	19	Painted sherd, red on brown or orange ware C–1.	7–L–8	BML.
	20	Same as fig. 19		ML.
	21	do	15–L–1	BML.

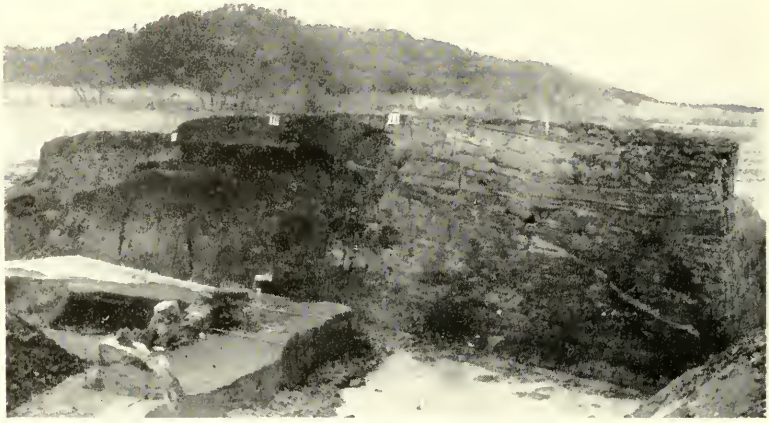
[1] Unless otherwise indicated.

A

B

C

A, The section of Nantahala Mountains between Franklin and Shooting Creek, N. C., on U. S. Route No. 64. *B*, The fertile valley at the junction of Peachtree Creek and the Hiwassee River. *C*, Clearing and surveying the Peachtree Mound.



A, Profile L–1, showing the various stages of construction.

B, Profile 15, showing lensed appearance and the charcoal strata.

C, Profile 15.

A

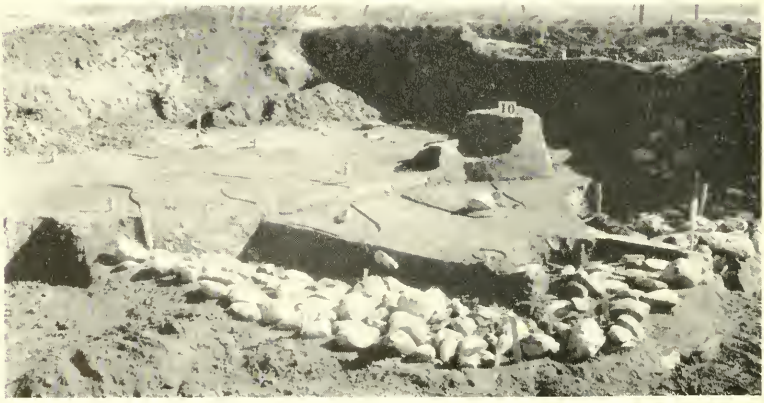
B

C

A, Feature 16, showing 14 horizontal poles lying upon a stratum of brown sandy loam, the remains of a series of steps upon a ramp leading to the top of the primary mound. *B*, Profile 16, showing the beginning of feature 16 in the left center. *C*, Profile 17. The thin sand line from R–2 to L–5 extends a distance of 70 feet.

A, The first indication of feature 29.

B, Layer of flint boulders in sections 17, 18, and 19. This may indicate the remains of a sweat house. Post holes occurred around it.



C, The clearing of feature 29.

A. Another view of feature 29. The troweled lines indicate the outline of pits dug by amateurs.

B. Showing feature 29 after it had been completely excavated. Log molds have been indicated and show how the timbers of the roof had fallen in all directions. The benches above the stones comprise feature 31. Small post holes are indicated by vertical reeds.

A, Showing the reconstructed outline of feature 29. The interior has been removed and the inner stones piled upon the higher periphery. The block standing in center was left to show structure.

B, Showing feature 29 completely uncovered, the log molds fully traced. This also shows the interesting clay compartments in one corner of the structure.

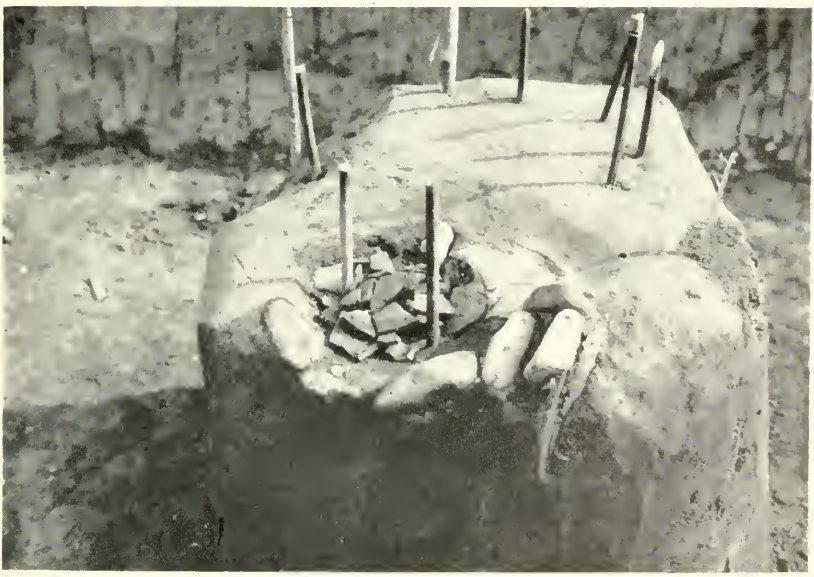
A, The cleared interior of feature 29, showing post holes in the corners and a close view of the lensed mound structure left standing as a control.

B, Close view of the center block after the earth and stones had been removed. The unevennesses above the floor line are the impressions made by the stones presumably falling from the roof. This is in contrast to the even floor found around the foundation of the sweat house. The trowel line marks the bottom of the mottled clay floor.

A, Feature 29 completely cleared and reconstructed. The interior has been dug to the undisturbed brown soil. Block in the center shows the stones left in the control block.

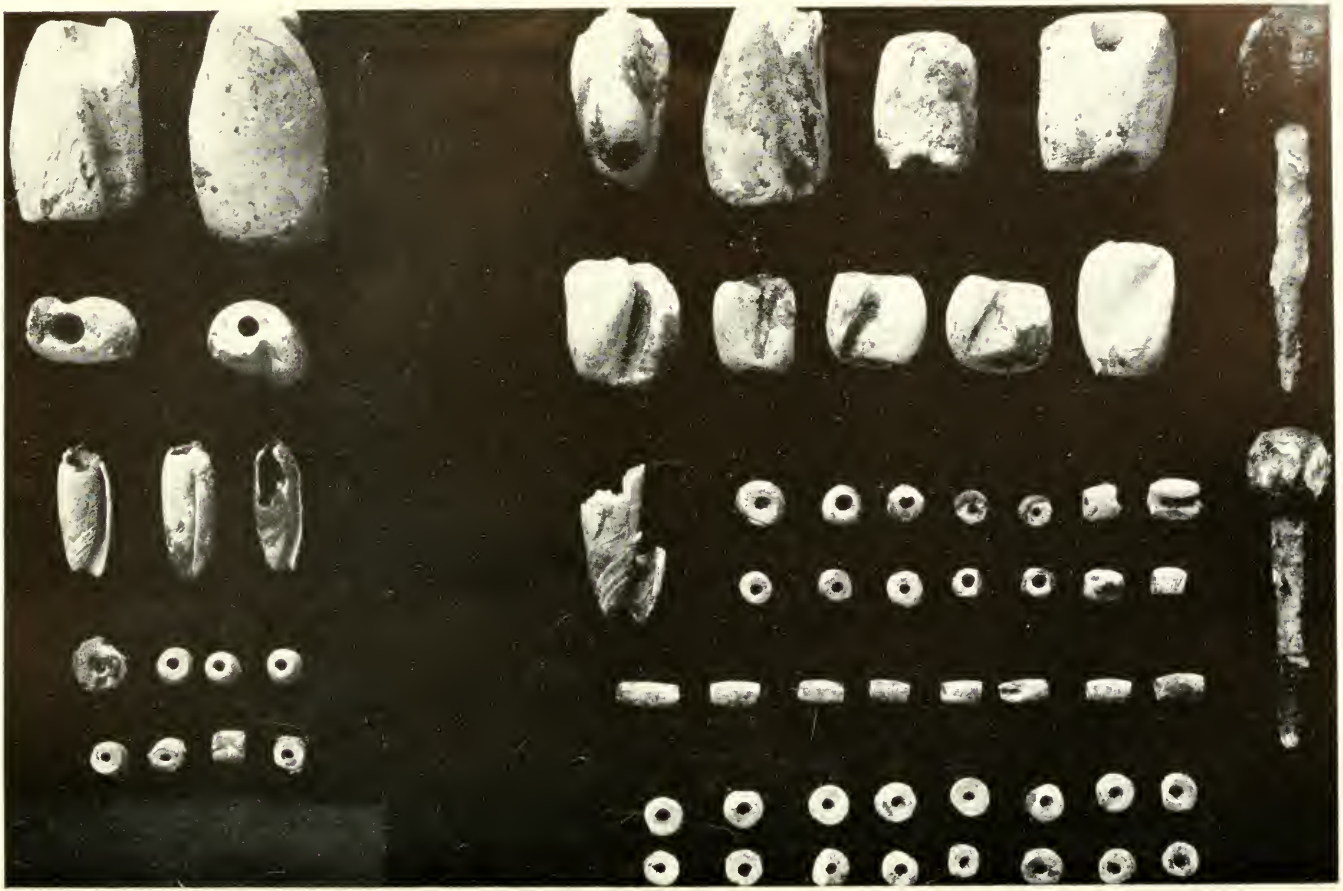
B, Feature 29 after the stones had been removed. This also shows feature 31, clay compartments erected above the floor.

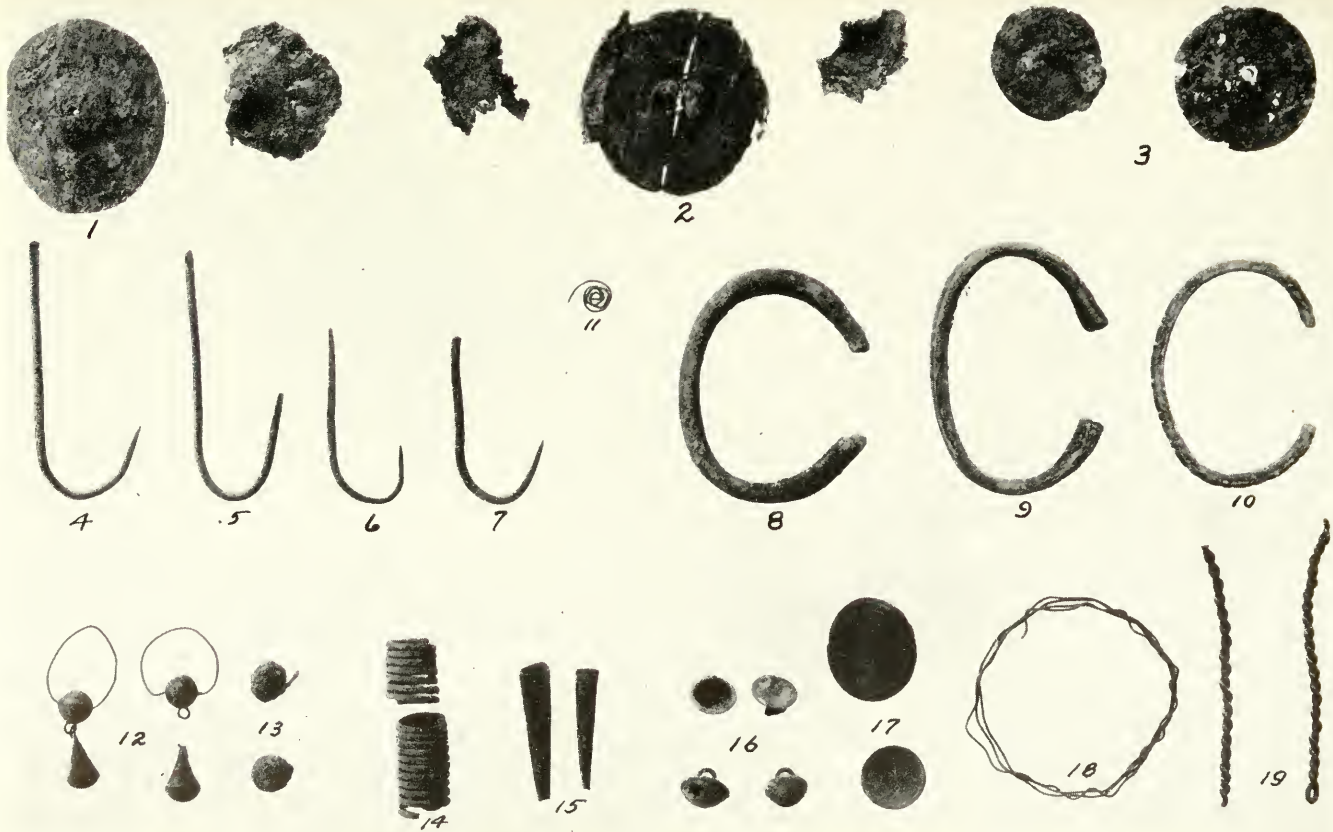
A



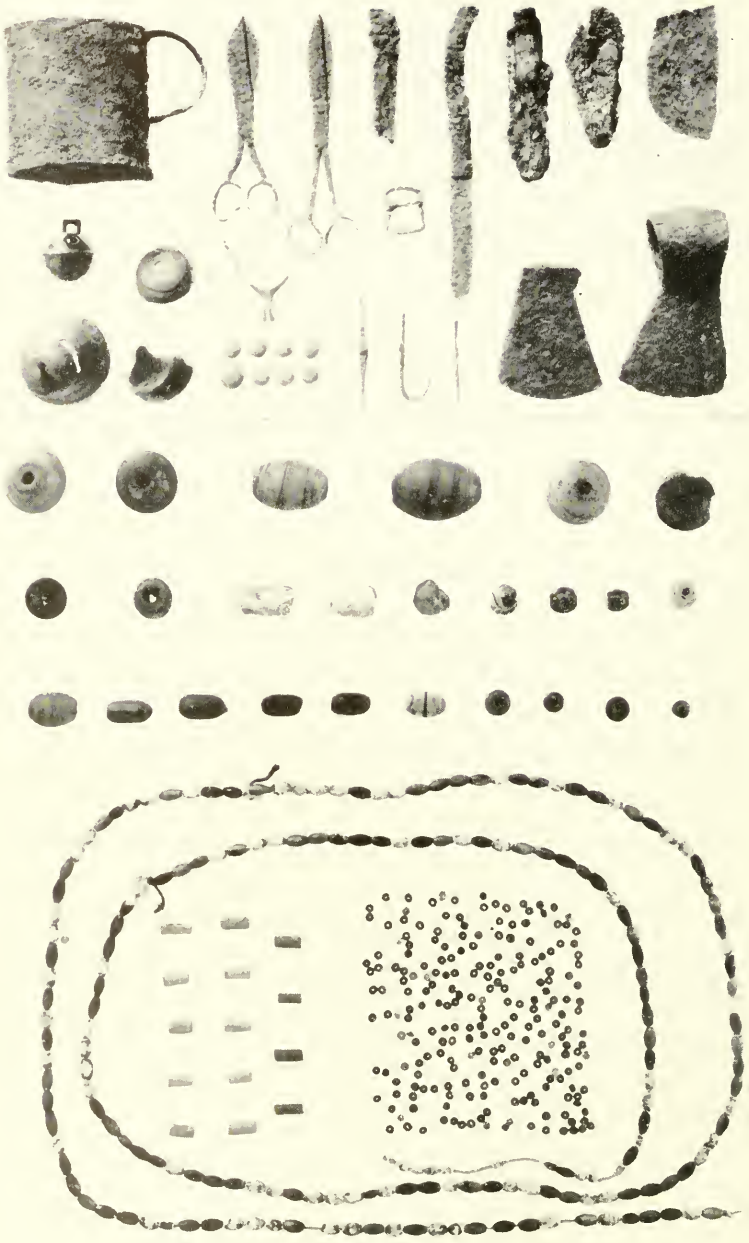
B

A, Feature 18, a small circular fire pit full of charcoal. The pit was 2 feet deep and extended from the mound floor into the brown subsoil. *B*, Small circular flint-lined fireplace containing potsherds. The canes have been placed in post holes dug from the old surface of the mound into the subsoil to penetrate the fireplace itself.

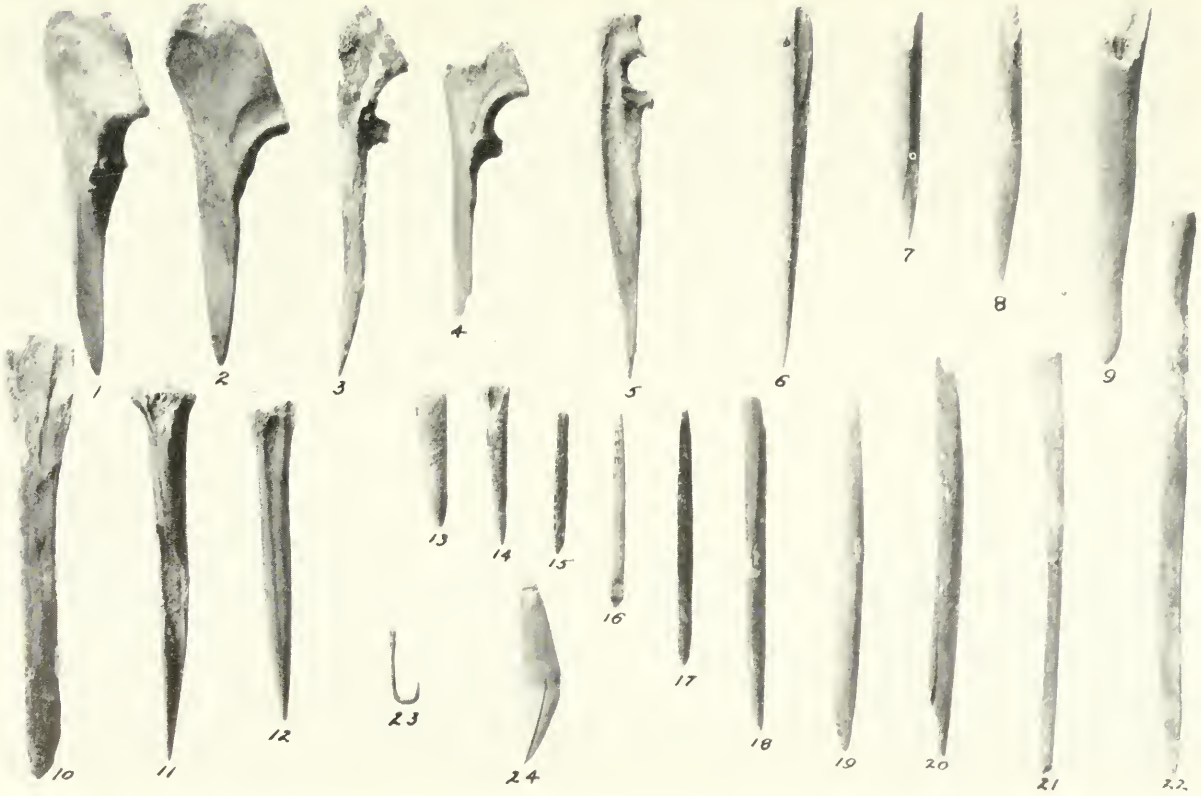




Copper and brass objects. Copper-jacketed ear ornaments, fishhooks, bracelets, brass bangles, wire, cones, and buttons. (Provenience, see p. 72.)



European trade articles. Iron, brass, and lead. Tankard, scissors, spring knives, bells, lead bullets, ax blades, and glass beads. (Provenience, see p. 72.)



Bone awls and pins, antler projectiles, bone fishhook, and grooved canine tooth. (Provenience, see p. 73).

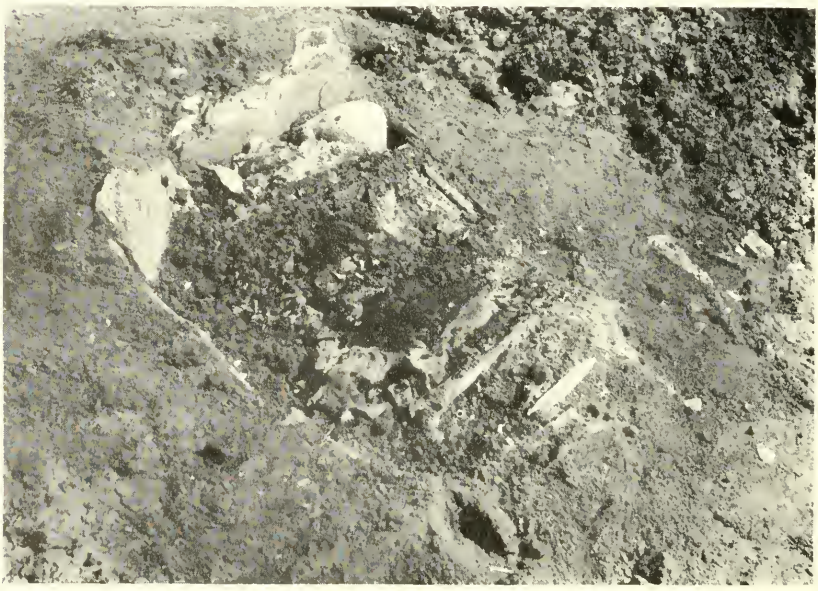
Miscellaneous objects of stone and clay. (Provenience, see p. 73.)

A

B

A, B, Top and side view of intrusive flexed burial Pm–42, feature 21, square 13–L–6. The stones used to cover vault had fallen and crushed some of the bones.

A, Stone-lined grave, Pm–57, feature 30. Skeletal remains very crumbly. Lower right half of mandible indicated old age. Note bark matting in lower left corner of cyst. This was floored with slate.



B, Flexed burial Pm–58, feature 35. Large conch shell in upper right corner, powdered matting over femora; numerous types of shell beads were around upper portions of body.

A, Flexed adult burial in stone vault, Pm–20, feature 10. On forehead was a copper-covered wooden disk. Square 12–L–8.

B, The most important burial. Pm–41, square 15–L–1. This flexed body had been placed in a pit extending below the original surface, made prior to the erection of mound. With it were two copper-covered wooden ear ornaments, three types of shell beads around wrists and neck, and two circular fragments of cane matting.

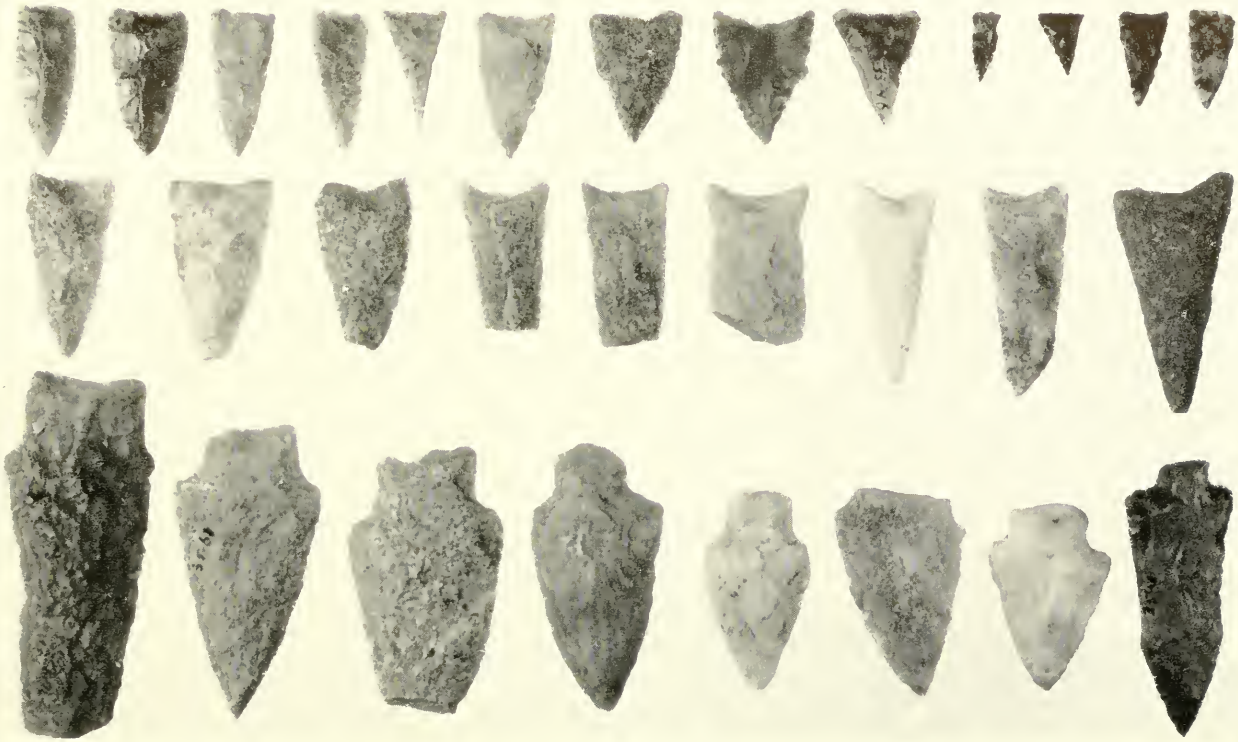
A, Poorly preserved adult flexed burial, Pm–39, square 12–L–6.

B, Intrusive flexed burial, Pm–30, square 16–R–1. Disintegrated charcoal but no weaving molds in bottom of pit.

Clay and stone pipes. Top four rows are baked clay, all others are stone. (Provenience, see pp. 73–74.)

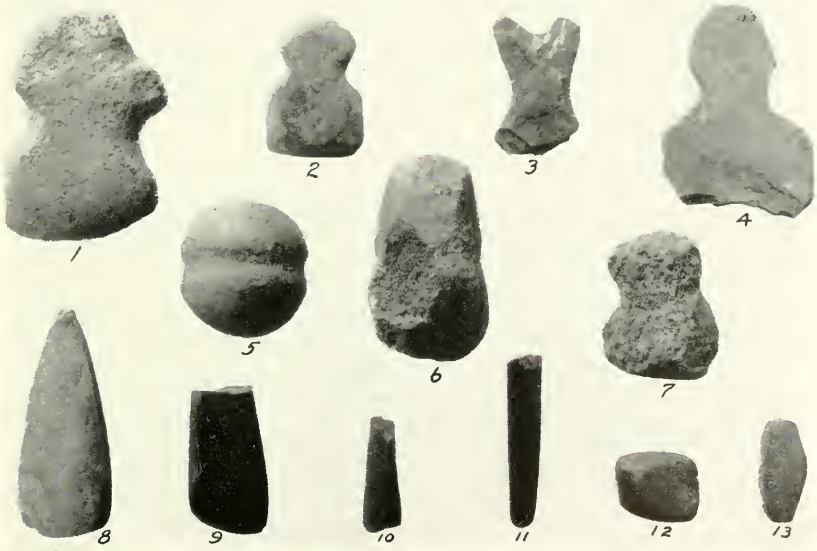
Fragments of pottery pipes showing variations in form and decorations.

Unusual types of stone pipes. (Provenience, see p. 74.)

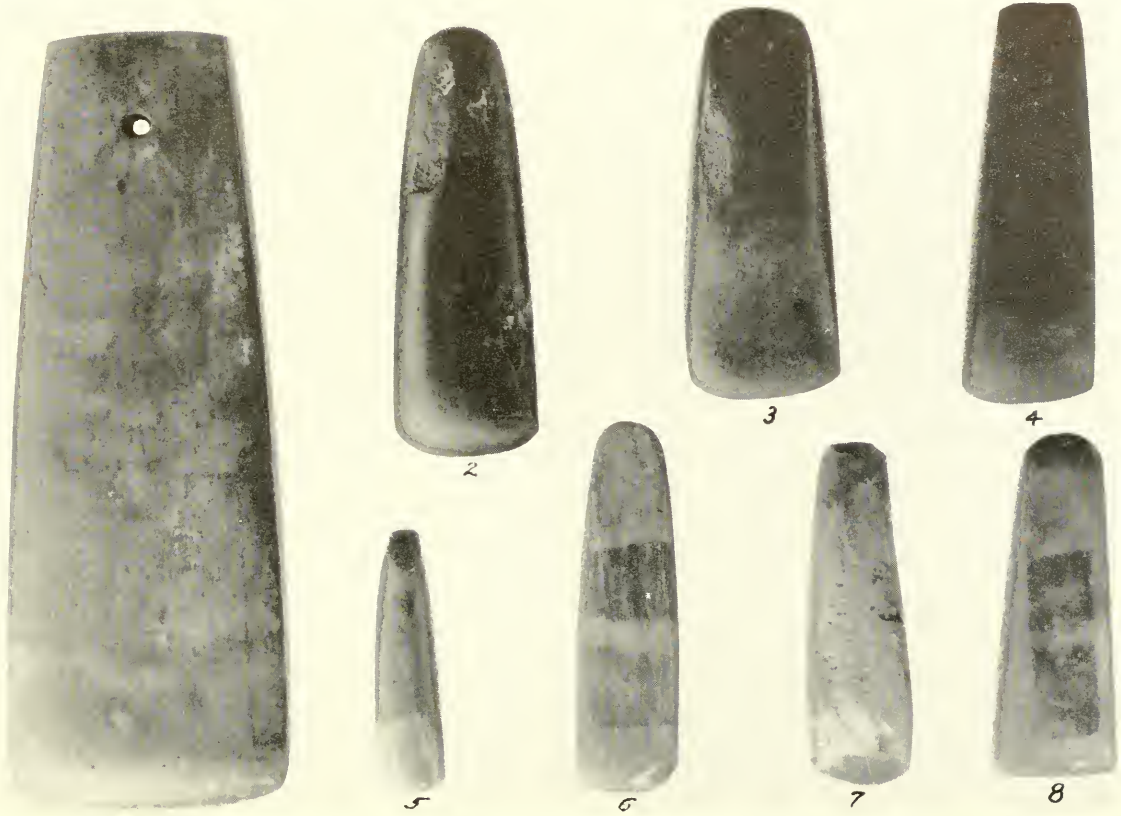


Representative selection of chipped projectile points. The distribution of types uniform on all levels.

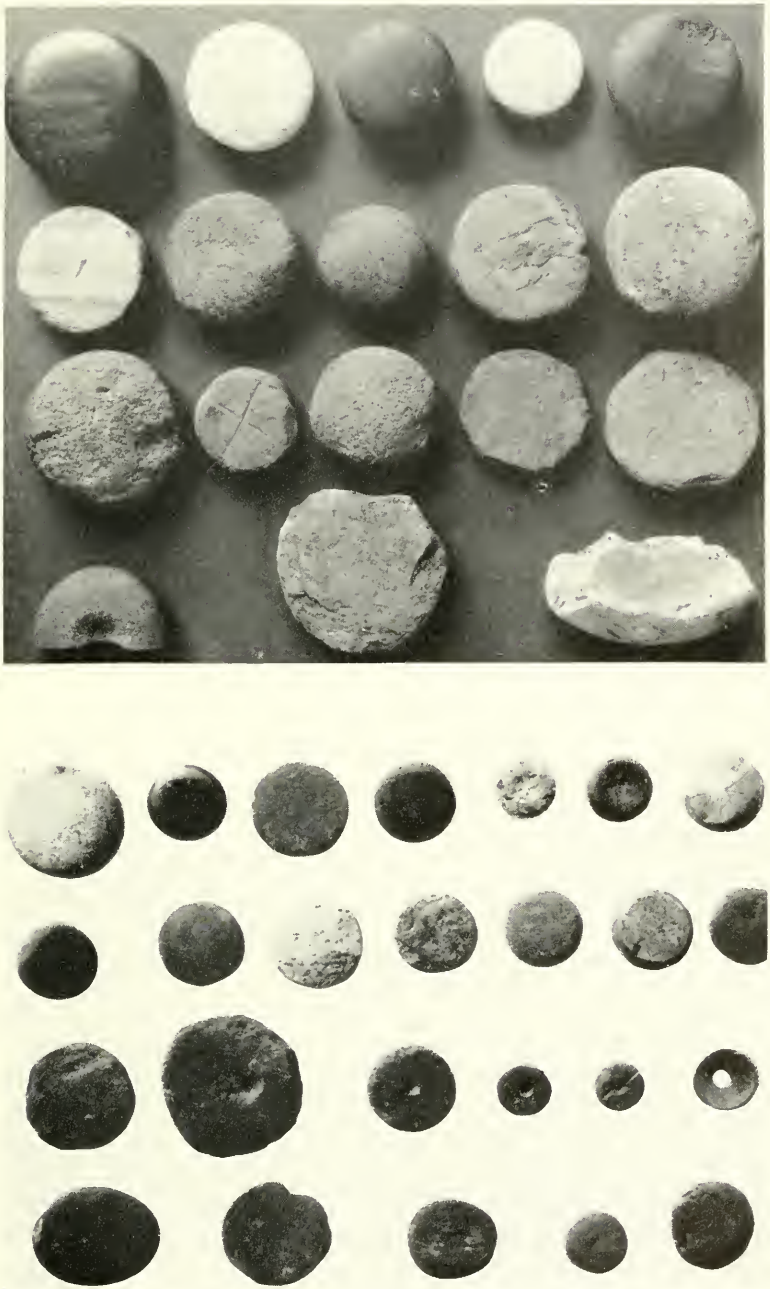
A, Crudely made notched stones, or net sinkers.



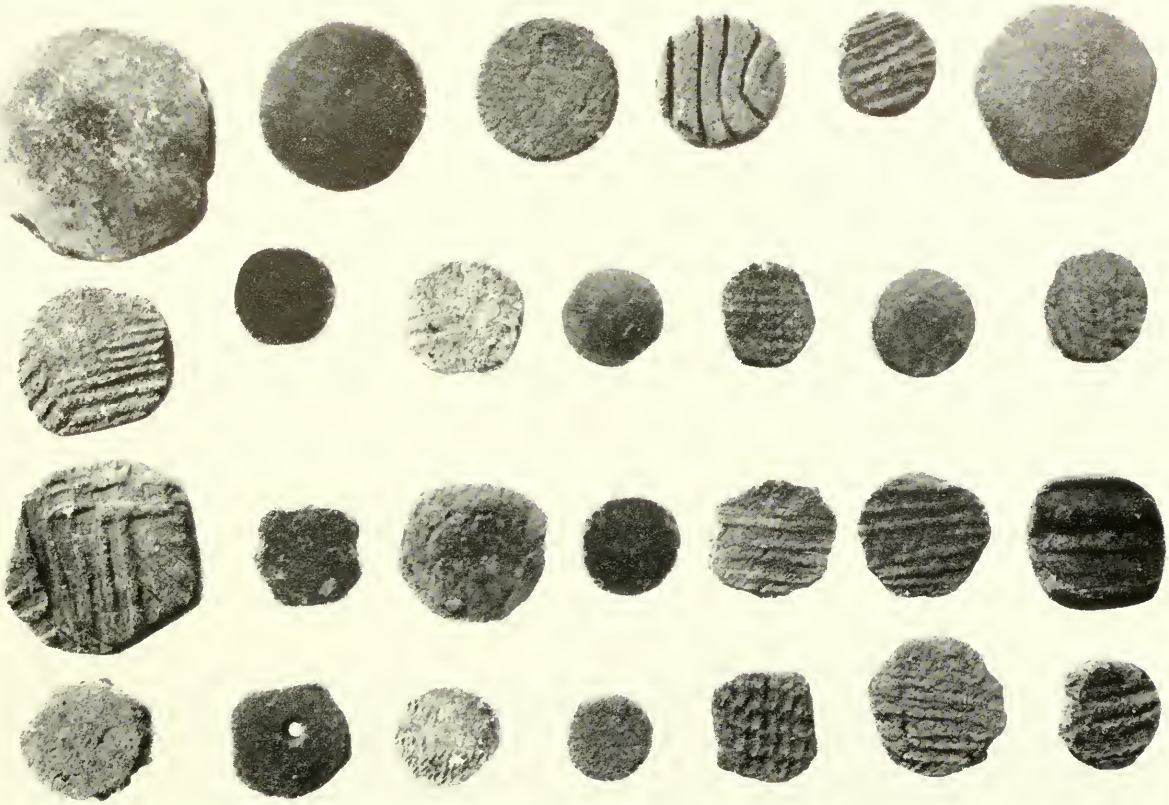
B, Miscellaneous stone objects: Axes, grooved club head, mauls, celts, adzes, ground hematite. (Provenience, see pp. 74–75.)



Celts and adzes. All, except drilled specimen, have one flat side, the other side being convex. (Provenience, see p. 75.)



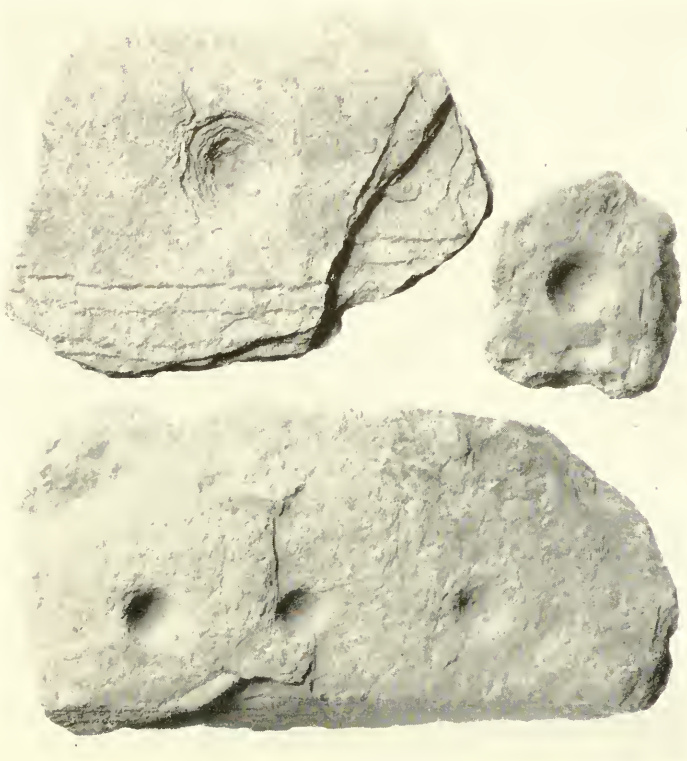
A, *B*, Stone disks, ranging from highly polished edges and convex sides to rough unworked sides, and fragments of concave discoidals. (Provenience, see p. 75.)



Pottery disks, edges smooth, made from a variety of potsherds. (Provenience, see pp. 75–76.)

A, Grinding stone or shallow mortar. Square 6–R–1, below mound level. Biconcave.

B. Grinding stone or shallow mortar. Found in boulder stratum on east side of mound. Biconcave.



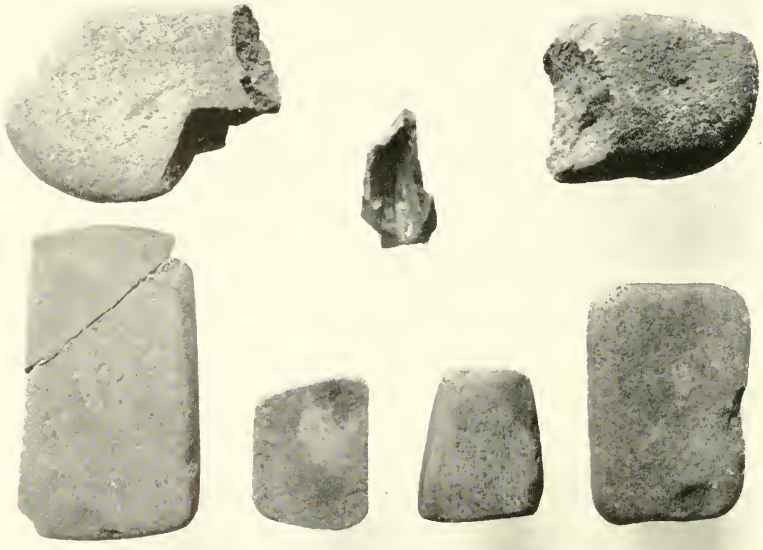
A

B

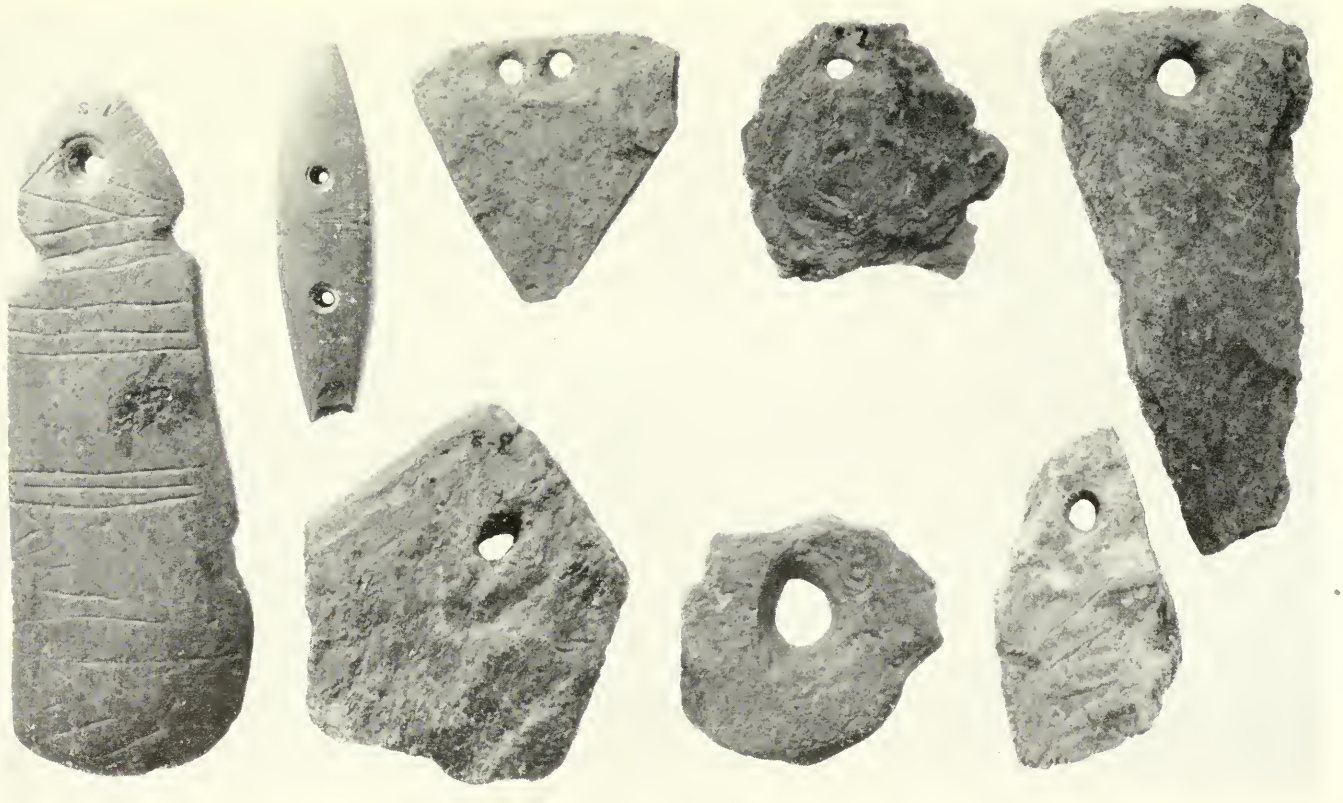
Cupstones. Sometimes called nutstones or drill rests. Exact use awaits determination. (Provenience, see p. 76.)

Steatite vessel fragments. Note flanges for handles in upper row. Interiors are smooth. (Provenience, see p. 76.)

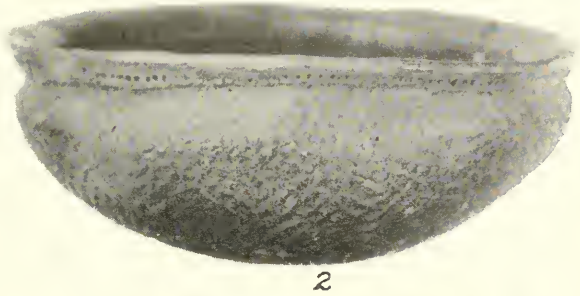
A, Hammerstones. Fragments of pestles reused for pounding or crushing. (Provenience, see p. 76.)



B, Abrading, or grinding stones. (Provenience, see p. 76.)



Drilled ornaments, pendants, and sinkers. (Provenience, see p. 76.)



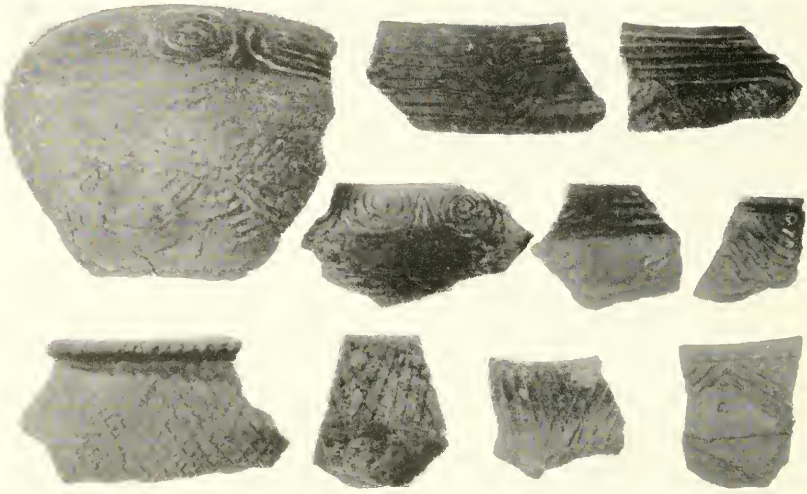
Pottery vessels of ware A. (Provenience, see pp. 76–77.)

A, Pottery vessels of ware A. (Provenience, see p. 77.)

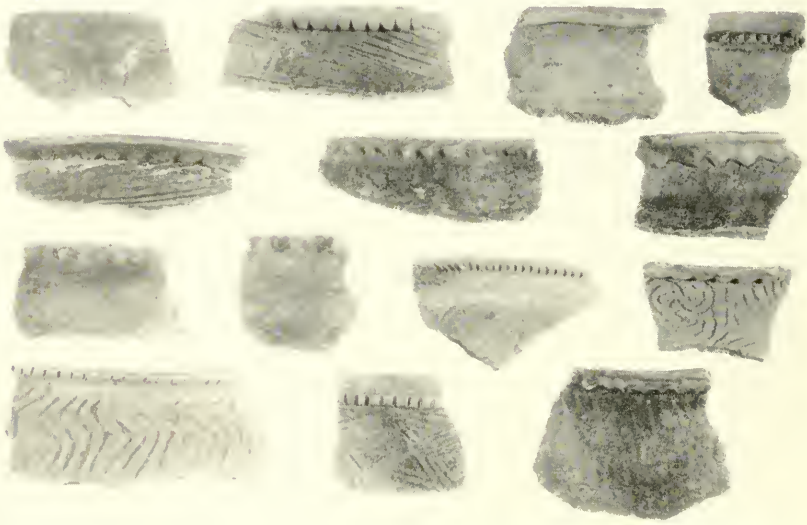
B, Pottery vessels of ware B. (Provenience, see p. 77.)

Various rim fragments, ware A. (Provenience, see p. 77.)

Round bottoms and feet of pottery vessels. Ware A. (Provenience, see p. 77.)

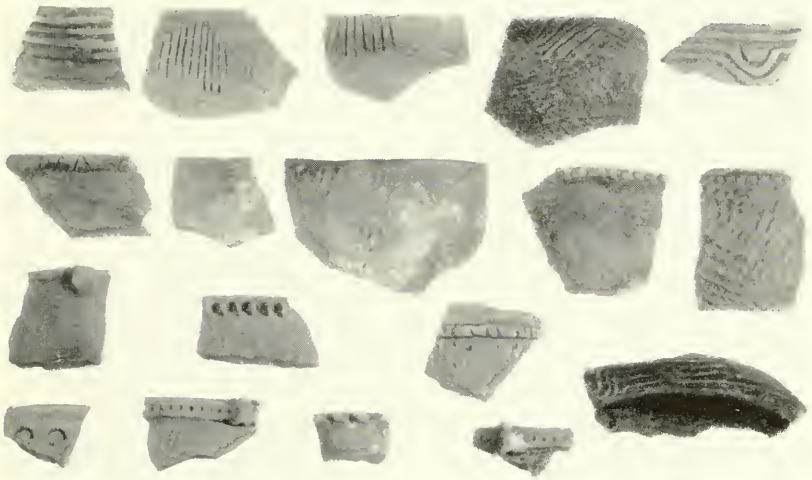


A

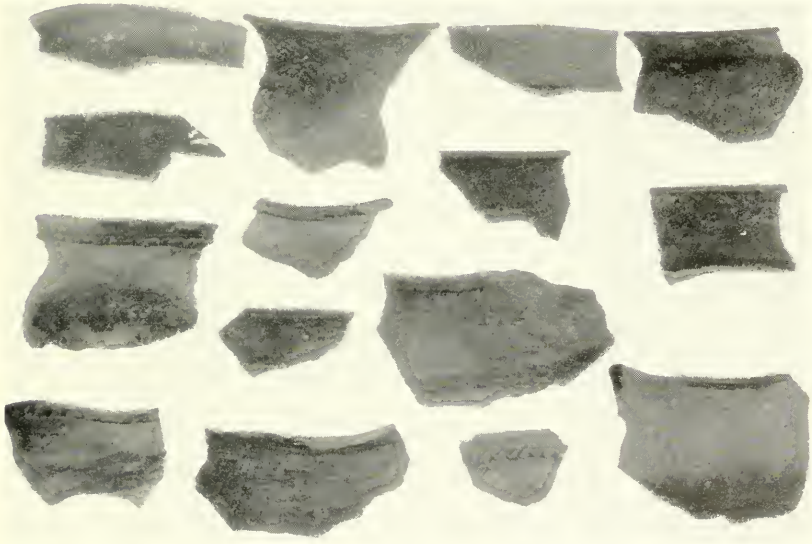


B

A, B, Rim sherds illustrating incised, trailing, and stamped-design elements. Note variety of rim treatment. Ware A. (Provenience, see pp. 77 78.)



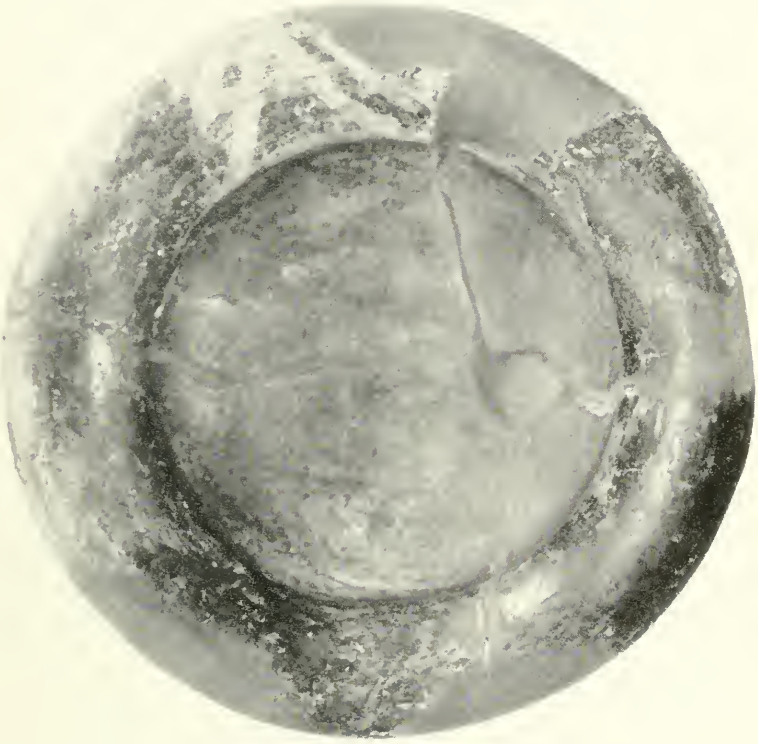
A



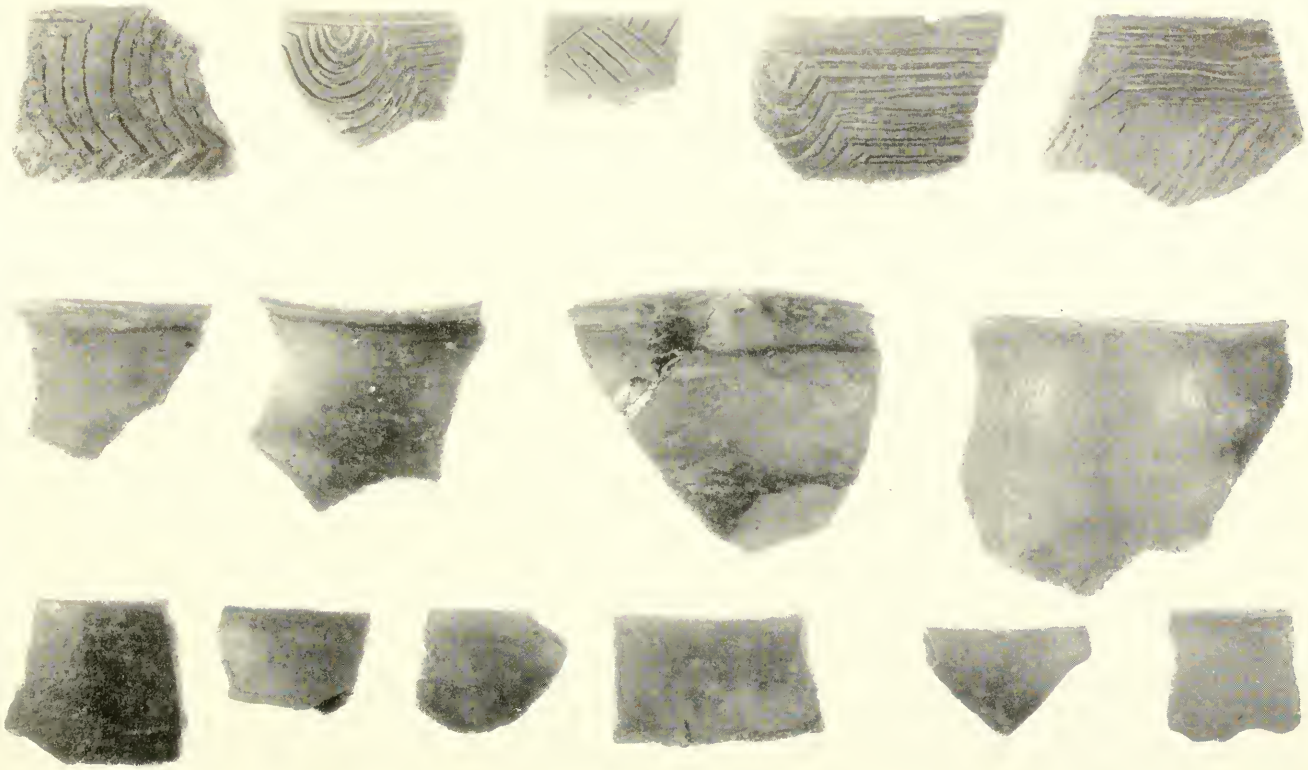
B

A, *B*, A more specialized treatment of incised and stamped designs on rim sherds. Ware A.
(Provenience, see p. 78.)

Painted jar. From central portion feature 29. A conch-shell cup served as a cover. Note flat base and rim treatment. Ware B 1.

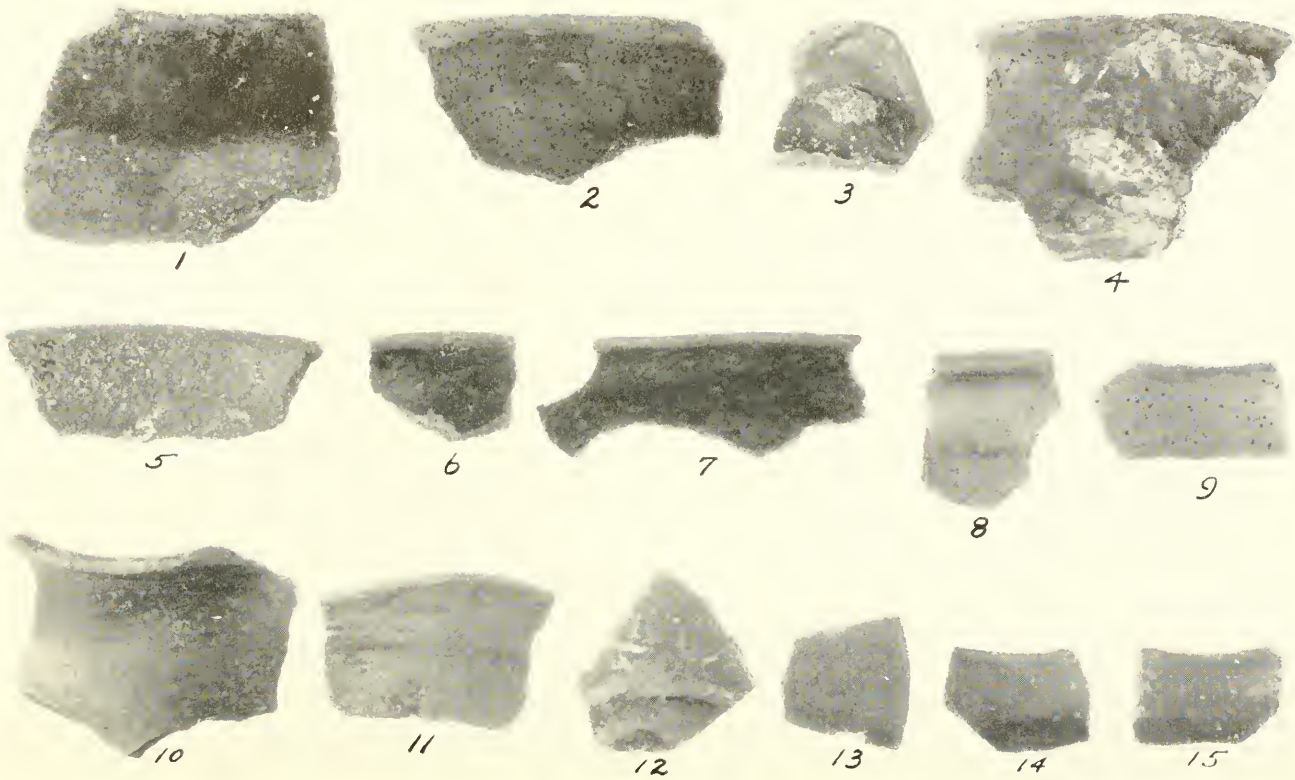


Negative painted plate with a wide out-curving rim. Paddle-stamped exterior. Ware B–1. Feature 15. (Provenience, see p. 78.)



Series of vessel fragments illustrating ware B. (Provenience, see p. 78.)

Two restored pottery vessels illustrating ware C. Part of feature 13, a large refuse pit below mound level. Exterior has a deep red wash. Note flat bottoms and rim treatment. Rim of lower vessel broken off and the edges subsequently smoothed. (Provenience, see p. 78.)



Selected rim sherds of ware C and C–1. (Provenience, see p. 78.)

Miscellaneous sherds of wares A, B, and C, showing secondary features of rim and lip. (Provenience, see p. 79.)

Vessel fragments illustrating various types of decorations, such as basketry, textile (ware D), and painted (ware C 1). (Provenience, see p. 79.)

APPENDIX D

SKELETAL REMAINS FROM THE PEACHTREE SITE, NORTH CAROLINA

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The skeletal material from the Peachtree site is very fragmentary, so in the description of each specimen the parts recovered are first briefly itemized. For the same reason only the more important measurements and observations are given. All specimens recovered are described.

DESCRIPTION OF SPECIMENS

Pm–3 (*U.S.N.M. No. 369558*).—Paired temporal bones, fragment of left molar, and a fragment of mandible including the right anterior tooth sockets.

Temporal bones show slight exostosis in each ear, with considerable antero-posterior flattening of the meatus; also a slight perforation of the tympanic plate on the right (left?). Mandibular fragment shows extreme alveoloclasia and antemortem loss of first molar.

Probably adult female.

Pm–4 (*U.S.N.M. No. 369559*).—Incomplete skull with lower jaw.

Skull exhibits a peculiar and extreme type of fronto-occipital flattening (pl. 45). Length, 14.6 cm.; breadth, 16.4 cm.; cranial index, *112.3*. Sutures very simple and ununited. Two parietal foramina symmetrically placed. No ear exostoses, but marked antero-posterior flattening of the meatus. Small perforation of the tympanic plate on each side. Permanent incisors and first molars erupted; canines, anterior premolars, and second molars erupting. Upper median incisors shovel-shaped.

Juvenile, approximately 10 years of age.

Pm–5 (*U.S.N.M. No. 369560*).—Fragmentary skull, lower jaw, and incomplete skeleton.

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Skull probably undeformed and moderately long headed. No ear exostoses; meatus rounded; no tympanic plate perforation on right (left?). All teeth erupted, in regular positions, and but slightly worn.

Proximal epiphyses of femur and distal epiphysis of tibia but recently united; proximal epiphysis of tibia uniting; distal epiphysis of femur probably beginning union. Bicondylar length of left femur near 41.5 cm. Maximum length of left tibia 36.0 cm. Sciatic notch of innominate bone presents an acute angle.

Adolescent (about 18 years) male.

Pm–6 (*U.S.N.M. No. 369561*).—Fragmentary skull and lower jaw.

Skull shows moderate fronto-occipital deformity of the type shown in plate 45. Sutures of medium complexity, largely obliterated endocranially. No ear exostoses or perforation of the typmpanic plates; meatus rounded. Marked dental destruction.

Adult male.

Pm 7 (*U.S.N.M. No. 369562*).—Paired temporal bones; upper and lower jaws.

No ear exostoses; slight perforation of tympanic plate on each side; meatus rounded. Teeth show moderate wear; antemortem loss of upper median incisors has occasioned peculiar wear of anterior lower incisors (pl. 46, *A*).

Probably adult female.

Pm–11 (*U.S.N.M. No. 369563*).—Paired fragments of innominates; paired femora; two tibiae probably not mates.

Bicondylar length of right femur near 46.5 cm. Right tibia deformed by old healed osteitis (syphilis ?); left shows no involvement. Sciatic notches in the form of moderately acute angles.

Probably adult male.

Pm–12 (*U.S.N.M. No. 369564*).—Incomplete skeleton with fragmentary skull (no lower jaw).

Skull asymmetrical and moderately flattened in the occipital region, especially on the right.[1] Sutures relatively simple and in an advanced stage of closure. Two parietal foramina, symmetrically placed. No ear exostoses or perforation of the tympanic plates; meatus rounded. Upper teeth moderately worn; median incisors probably just being lost (alveoloclasia ?).

The long bones give the following measurements: Femur (bicondylar length): right, 44.5 cm.; left, 44.8 cm. Humerus (maximum

[1] In this and all of the other cases of simple occipital deformation, the plane of the flattened occiput is essentially vertical to the Frankfort plane.

length): right, 31.8 cm. Radius (maximum length): left, 25.4 cm. Sciatic notch shows moderately acute angulation.

There was probably an old fracture of the lower end of the left fibula with subsequent exostosis both of the fibula and tibia and beginning bony union at a point 2 to 3 cm. above the usual place of articulation.

Adult male.

Pm–13 (*U.S.N.M. No. 369565*).—Incomplete skeleton with fragmentary skull and lower jaw.

Skull probably is undeformed, although there is more than usual flattening in the region of lambda. Mesocranic by inspection. Suture closure is advanced. Left temporal (right not present) shows no ear exostosis, but a large perforation of the tympanic plate. The jaws are practically edentulous.

Long bones very light in weight. Tibiae show traces of old healed osteitis (syphilis ?). Deformity of posterior arch of atlas suggests intraspinal tumor. Sciatic notches moderately angular.

Senile male (?).

Pm–14 (*U.S.N.M. No. 369566*).—Fragmentary skull with lower jaw, paired fragmentary innominates, and miscellaneous small bones.

Skull shows marked fronto-occipital flattening of the type shown in plate 47, which is like that shown in plate 45. Length, 14.4 cm.; breadth, 15.2 cm.; cranial index, *105.6*. Sutures obliterated. No ear exostoses or perforation of the tympanic plates; meatus rounded. Jaws nearly edentulous.

Skeletal parts show little of interest except fusion of second and third cervical vertebrae. The sciatic notches are moderately broad.

Senile female.

Pm–15 (*U.S.N.M. No. 369567*).—Incomplete skeleton with skull fragments and lower jaw.

Skull not complete enough to give shape. Pieces thick. Large ear exostoses present on both anterior and posterior walls of meatus—both sides; no tympanic perforations. Medium tooth wear with some antemortem loss of molars.

Bicondylar length of left femur is 44.7 cm. Maximum length of left tibia is 37.1 cm. There is a large septal aperture in the left humerus (right ?). The sciatic notches are narrow.

Adult male.

Pm–16 (*U.S.N.M. No. 369568*).—Relatively complete skeleton with damaged skull and lower jaw.

Skull undeformed. Maximum length, 17.3 cm.; maximum breadth, 13.6 cm.; cranial index, *78.6* (mesocranic); high vaulted. Advanced suture closure. Parietal foramen on right only. Trace of ear exos-

tosis on each side; no tympanic perforations; meatus rounded. Jaws nearly edentulous.

The long bones give the following measurements: Femur (bicondylar length): left, 41.7 cm.; tibia (maximum length): left, 35.5 cm.; humerus (maximum length): left, 30.2 cm.; ulna (maximum length): right, 25.2 cm., left, 24.6 cm. There is a "pin point" septal aperture in the right humerus, none in the left. The sciatic notch approaches a right angle in shape.

Adult female.

Pm–18 (*U.S.N.M. No. 369569*).—Incomplete skeleton with fragmentary skull and lower jaw.

Skull shows extreme degree of the same type of fronto-occipital flattening shown in plates 45 and 47. The sutures are in an advanced stage of closure. There are no ear exostoses present; a slight tympanic perforation is present on the right side, none on the left; the meatus are rounded. The dental arches are well formed and wear is only medium.

The only measurable long bone is the right tibia: maximum length, 35.8 cm. Right humerus is without a septal aperture (left?). Sciatic notch quite narrow.

Adult male.

Pm–9 (*U.S.N.M. No. 369570*).—Incomplete skeleton with skull fragments.

The shape of the skull fragments give good reason for believing that this individual was undeformed. No ear exostoses are present; a slight tympanic perforation occurs on the right, a small one on the left; the meatus are rounded. The teeth include permanent incisors and first molars with roots almost completely formed (small terminal aperture); canines, premolars, and second molars with roots about ⅔ complete. Upper median incisors are shovel-shaped.

All major epiphyses of long bones ununited. Bicondylar length of right femur (epiphyses replaced) is 31.8 cm.

Juvenile, approximately 10 years of age.

Pm–20 (*U.S.N.M. No. 369571*).—Incomplete skeleton with nearly complete skull.

Skull shows a moderate degree of fronto-occipital flattening (pl. 48) of the type probably in which the plane of the flattened occiput is vertical. There are copper stains on the forehead. Sutures are in an advanced stage of closure. Parietal foramen on the right side only. Each ear has a medium-sized exostosis; tympanic perforations are absent; the meatus are somewhat elongated. Orbits are square and moderately inclined. There is a sharp nasal border. Suborbital fossae are absent. The teeth are regular and only medium worn.

One tooth, the lower left first molar, has been lost antemortem. The principal measurments (cm.) follow:

Maximum length (deformed)	16.8	Basion-alveolar point	9.0
Maximum breadth (deformed)	14.8	Nasal height	6.0
Basion-bregma height	14.3	Nasal breadth	2.4
Cranial index (deformed)	*88.1*	Nasal index	*40.0*
Mean height index (deformed)	*90.5*	Orbital height	3.7
Minimum frontal diameter	9.6	Orbital breadth (lac.)	3.7
Total facial height	13.5	Orbital index	*100.0*
Upper facial height	8.5	Alveolar length	5.5
Bizygomatic diameter	(14.3)	Alveolar breadth	7.2
Height of symphysis	4.1	Alveolar index	*130.9*
Basion-nasion	10.1		

The only measurable long bone, the left femur, gives a bicondylar length of 43.3 cm. The sciatic notch is fairly narrow.

Adult male.

Pm–23 (*U.S.N.M. No. 369572*).—Incomplete skeleton with fragmentary skull and lower jaw.

Skull small, asymmetrical, and probably slightly flattened at the occiput. Cranial index, *79.9* (length, 16.4 cm.; breadth, 13.1 cm.). Sutures simple; stage of closure uncertain. Single parietal foramen to the right, but near the midline. Ear exostosis on the right large, on the left medium; no tympanic perforations. Teeth show slight wear, but considerable antemortem loss.

No long bones measurable. Medium-sized septal aperture of left humerus (right ?). Sciatic notch broad.

Adult female.

Pm–24 (*U.S.N.M. No. 369573*).—Incomplete skeleton with fragmentary skull and lower jaw.

Skull undeformed; mesocranic by inspection. Sutures simple; stage of closure uncertain. No parietal foramina visible. Moderately large ear exostosis on each side; no tympanic perforations. Teeth medium worn but with considerable antemortem loss.

Bones of upper extremities are well preserved and give the following measurements:

Maximum length of humerus, right, 27.0 cm.; left, 27.1 cm.
Maximum length of radius, right, 21.2 cm.; left, 20.7 cm.
Maximum length of ulna, right, 23.0 cm.; left, 22.7 cm.

Small septal aperture of the humerus on each side. Sciatic notch broad.

Adult female.

Pm–25 (*U.S.N.M. No. 369574*).—Incomplete skeleton with jaws.

Teeth are extremely worn and most of the posterior ones lost antemortem.

Bicondylar length of left femur 47.7 cm. Tibiae and fibulae show extreme osteitis (syphilis ?). Small septal aperture of left humerus, none on right. Sciatic notch narrow.

Adult male.

Pm–26 (*U.S.N.M. No. 369575*).—Incomplete skeleton with fragmentary skull.

Skull small and moderately flattened at the occiput, especially on the left. Sutures are of medium complexity with beginning endocranial closure. A single parietal foramen is located on the right. There are no ear exostoses; a small perforation of the tympanic plate on the left, none on the right; the meatus are rounded. The dental arch is regular, the teeth only slightly worn, but already some of the first molars are carious.

The following measurements were obtained on the long bones:

Bicondylar length of right femur, 38.9 cm.; left, 39.2 cm.
Maximum length of right tibia, 31.8 cm.; left, ?.
Maximum length of right humerus, 28.2 cm.; left, 28.0 cm.
Maximum length of right radius, 22.2 cm.; left, 22.4 cm.
Maximum length of right clavicle, ?; left, 13.1 cm.

A medium-sized septal aperture is present in the right humerus, and a very small one in the left. The sciatic notch is broad.

Adult female.

Pm–27 (*U.S.N.M. No. 369576*).—Incomplete skeleton with fragmentary skull.

Skull shows moderate occipital flattening. Sutures nearly obliterated. Left ear free from exostosis and tympanic perforation (right ?); meatus elongated. Jaws nearly edentulous.

Bicondylar length of right femur, 44.0 cm.; left, 44.1 cm. No septal aperture in either humerus.

Adult male.

Pm–29 (*U.S.N.M. No. 369578*).—Incomplete skeleton with fragmentary skull.

Skull fragments definitely indicate the absence of deformity. Sutures probably beginning closure endocranially. Two parietal foramina close together. No ear exostoses; medium-sized perforation of tympanic plate on each side; meatus somewhat elongated. Arthritis of left temporo-mandibular joint. Teeth medium worn with some antemortem loss of right lower molars.

Long bones small, but unmeasurable. Sciatic notch medium broad.

Adult female.

Pm–30 (*U.S.N.M. No. 369577*).—Few fragments of skull and long bones.

Portion of frontal bone shows massive supraorbital ridge. Left temporal bone shows small ear exostosis (right ?). Teeth of lower jaw medium worn; the resulting form of the anterior teeth is shown in plate 46, *B*.

Long-bone fragments show extensive osteitis (syphilis ?).

Adult male.

Pm–31 (*U.S.N.M. No. 369580*).—Skull fragments.

Temporal bones show medium-sized exostosis in left ear, none in right; no tympanic perforations; right meatus rounded. Portion of right mandible nearly edentulous.

Adult male ?.

Pm–32 (*U.S.N.M. No. 369581*).—Skull fragments.

Upper jaw indicates complete eruption of milk dentition; only crown of first permanent molar formed.

Child, probably 4 to 5 years old.

Pm–34 (*U.S.N.M. No. 369582*).—Incomplete skeleton with fragmentary skull.

Skull moderately flattened at the occiput and perhaps slightly in the frontal region. Single parietal foramen on the right. Temporary dentition completely erupted; the crowns of the first permanent molars are well above the alveolar borders and these teeth show beginning formation of the individual roots.

The bicondylar length of the left femur (epiphyses replaced) is about 22.3 cm.

Child, near 6 years of age.

Pm–36 (*U.S.N.M. No. 369583*).—Incomplete skeleton with fragmentary skull.

Extreme asymmetry of skull, suggesting postmortem pressure change. Probably very little, if any, deformity antemortem. Sutures of medium complexity; stage of closure uncertain. Two parietal foramina. Large depressed scar in upper midfrontal region. Slight exostosis in each ear; tympanic plates unperforated; meatus rounded. Fine dental arches with all permanent teeth erupted and only slight wear. The incisors are shovel-shaped.

Femora show recent closure of distal epiphyses; humeri have their proximal epiphyses in the stage of beginning closure. Bicondylar length of right femur, 44.8 cm. Maximum length of left tibia, 36.9 cm. Medium-sized septal aperture in each humerus. Sciatic notches narrow.

Male, near adult (about 20 years).

Pm–37 (*U.S.N.M. No. 369579*).—Skull fragments.

Temporal bones show no ear exostoses; medium-sized perforation of tympanic plate on each side; meatus rounded. Tooth wear medium; antemortem loss considerable. Chin square.

Probably adult male.

Pm–41 (*U.S.N.M. No. 369585*).—Incomplete skeleton with fragmentary skull.

Moderate occipital flattening. Sutures of medium complexity and ununited. Small exostosis in each ear; no tympanic perforations; meatus rounded. Supraorbital ridges absent. Teeth only slightly worn, but carious. Incisors shovel-shaped.

Sternal end of clavicle shows an epiphyseal surface considerably excavated and probably in the stage of beginning union. The epiphysis of the iliac crest also shows incomplete union. All other major epiphyses united. Bicondylar length of right femur, 43.6 cm. Septal aperture not present in the left humerus (right?). Sciatic notch fairly broad.

Young adult female.

Pm–42 (*U.S.N.M. No. 369586*).—Incomplete skeleton with fragmentary skull.

Skull undeformed; probably mesocranic. Sutures in advanced stage of closure. One parietal foramen on left. No temporal bones present. Teeth moderately worn but without loss.

No long bones measurable. Both tibiae show traces of old osteitis (syphilis?). Humeri probably not mates; no septal aperture on right, medium on left. Last (?) lumbar vertebra has separate neural arch. Sciatic notch narrow.

Adult male.

Pm–45 (*U.S.N.M. No. 369587*).—Fairly complete skeleton with fragmentary skull.

Moderate occipital flattening, especially on right. Sutures of medium complexity with beginning closure endocranially. Single small parietal foramen on right. Temporal bones damaged. Teeth show only slight wear, but resulting in an alignment of the inferior incisors, as shown in plate 46, *C*. There is a supernumerary tooth between the upper median incisors and the latter are directed forward, increasing the alveolar prognathism. The upper median incisors are shovel-shaped.

The long bones are fairly well preserved and yield the following measurements:

Bicondylar length of femur, right, 46.0 cm.; left, 45.8 cm.
Maximum length of tibia, right, 38.3 cm.; left, 38.6 cm.
Maximum length of fibula, right, ?; left, 37.3 cm.
Maximum length of humerus, right, 32.7 cm.; left, ?.
Maximum length of radius, right, 25.8 cm.; left, ?.
Maximum length of ulna, right, 27.9 cm.; left, ?.
Maximum length of clavicle, right, ?; left, 15.6 cm.

There is an area of active osteitis on the medial surface of the distal fifth of the right fibula, with a slight reaction on the corre-

sponding part of the tibia. No septal apertures of the humerus are present. The pelvis is masculine.

Adult male.

Pm–47 (*U.S.N.M. No. 369588*).—Incomplete skeleton with fragmentary skull.

Skull undeformed and relatively long headed. Sutures of medium complexity; stage of closure uncertain. Single parietal foramen on right. No ear exostoses or perforations of the tympanic plates; meatus rounded. Teeth show most wear antero-superiorly; that antero-inferiorly being of the type shown in plate 46. There is a supernumerary or malposed premolar on the right side of the lower jaw (the state of decay of the tooth occupying the position of the first premolar makes it impossible to say whether or not the temporary molar was retained).

The epiphyseal surface at the sternal end of the clavicle shows the fairly deep excavation characteristic of beginning union. The preserved long bones give the following measurements:

Bicondylar length of femur, right, 44.5 cm.; left, ?.
Maximum length of humerus, right, ?; left, 32.1 cm.
Maximum length of radius, right, ?; left, 25.6 cm.
Maximum length of ulna, right, ?; left, 27.3 cm.
Maximum length of clavicle, right, 14.7 cm.; left, ?.

Neither humerus shows a septal aperture. The left femur was fractured at a point between the upper and middle thirds; side-to-side union resulted, with the upper shorter fragment displaced anteriorly. Sciatic notch narrow.

Young adult male.

Pm–51 (*U.S.N.M. No. 369589*).—Incomplete skeleton with fragmentary skull.

Skull probably slightly flattened posteriorly. Sutures nearly obliterated. Two parietal foramina. Widespread old scarring, but especially on right parietal. Small exostosis in each ear; no perforation of the tympanic plates. Lower jaw fragment shows moderate tooth wear and some antemortem loss.

Bicondylar length of left femur approximately 45.0 cm. Both femora show considerable irregular swelling of the shaft owing to an old osteitis; other long bones do not show this. No septal aperture in the left humerus (right ?). The last (?) lumbar vertebra has a separate neural arch. Sciatic notch narrow.

Adult male.

Pm–52 (*U.S.N.M. No. 369590*).—Incomplete skeleton with fragmentary skull.

Skull brachycranic by inspection; deformity uncertain. Sutures of medium complexity; stage of closure uncertain. No parietal

foramina present. Ears free from exotoses and perforations; meatus rounded. Third molars unerupted; other teeth unworn. Incisors shovel-shaped.

Proximal epiphyses of humeri and distal epiphysis of left ulna just uniting (right ulna ?). Bicondylar length of left femur, approximately 39.5 cm. Maximum length of left humerus, approximately 27.5 cm. Sciatic notch broad.

Female, near adult (about 20 years).

Pm–53 (*U.S.N.M. No. 369591*).—Incomplete skeleton with fragmentary skull.

Moderate fronto-occipital flattening of the type shown in plate 49. This case seems somewhat intermediate in type between those shown in plates 47 and 48. Cranial index approximately *100* (length and breadth near 16.2 cm.). Sutures obliterated. Two parietal foramina. Slight exostosis in left ear; right ear occluded by a bony partition situated 3 to 4 mm. within the meatus (hole pushed through it in the course of investigation); no tympanic perforations; meatus rounded. The teeth show considerable wear with some antemortem loss, notably both upper and lower median incisors.

Bicondylar length of right femur, 47.0 cm.; maximum length of right tibia, near 40.0 cm. Sciatic notch fairly narrow.

Adult male.

Pm–54 (*U.S.N.M. No. 369592*).—Fragmentary skull with a few pieces of long bones.

Undeformed; probably dolichocranic originally. Sutures obliterated. Single parietal foramen on right. Small ear exostosis on right, none on left; no tympanic perforations; meatus somewhat elongated. Jaw fragments show considerable but irregular wear occasioned by tooth loss. The chin is square.

Probably adult male.

Pv–1 (*U.S.N.M. No. 369593*).—Incomplete skeleton with fragmentary skull.

Moderate fronto-occipital flattening approaching the type shown in plates 45 and 47. Sutures in an advanced stage of closure. Small parietal foramen seen on right (left ?). No ear exostoses or tympanic perforations; meatus rounded. Lower jaw shows medium wear of anterior teeth and antemortem loss of most of the posterior teeth.

The following measurements were obtained on the better preserved long bones:

Bicondylar length of femur, right, ?; left, 41.7 cm.
Maximum length of tibia, right, ?; left, 34.6 cm.
Maximum length of humerus, right, ?; left, 29.8 cm.
Maximum length of radius, right, 23.2 cm.; left, 23.1 cm.
Maximum length of ulna, right, ?; left, 25.2 cm.

Small septal aperture in left humerus; none in right. Sciatic notch broad.

Adult female.

Pv–2 (*U.S.N.M. No. 369594*).—Incomplete skeleton with skull and lower jaw.

Moderate fronto-occipital flattening of the type shown in plate 50. This case approaches the true flathead type in which the plane of the flattened occiput nearly parallels that of the frontal. Cranial index, *83.7* (length, 17.2 cm.; breadth, 14.4 cm.). Sutures in an advanced stage of closure. No parietal foramina visible. Slight exostosis in left ear, none in right; slight perforation of tympanic plate on each side; meatus flattened. Teeth considerably worn and decayed, with some antemortem loss.

The better preserved long bones give the following measurements:

Bicondylar length of femur, right, ?; left, 47.1 cm.
Maximum length of tibia, right, ?; left, 40.0 cm.
Maximum length of fibula, right, ?; left, 39.7 cm.
Maximum length of humerus, right, 33.3 cm.; left, 33.2 cm.

Neither humerus has a septal aperture. The pelvis is masculine.

Adult male.

Pv–3 (*U.S.N.M. No. 369595*).—Incomplete skeleton with fragmentary skull.

Undeformed; probably mesocranic. Bulging forehead. Sutures of medium complexity and open (except basilar). No ear exostoses or tympanic perforations; meatus rounded. Teeth but slightly worn: no antemortem loss; incisors shovel-shaped.

Proximal epiphysis of humerus in stage of beginning closure. Bicondylar length of right femur, 41.7 cm.; maximum length of right tibia, 34.3 cm. Neither humerus shows a septal aperture.

Male, near adult (about 20 years).

Pv–4 (*U.S.N.M. No. 369586*).—Incomplete skeleton with fragmentary skull.

Undeformed; mesocranic by inspection; infantile in appearance. Sutures relatively simple; open (except basilar). No parietal foramina visible. No ear exostoses or perforations of the tympanic plates; meatus rounded. Third molars and lower right second premolar unerupted, incisors shovel-shaped. Considerable alveolar prognathism.

Epiphyseal union appears to be at a stage comparable to No. 39 of the series published by the author in 1934 (table 2, pp. 440–441). Bicondylar length of left femur (epiphysis replaced), 38.7 cm.; maximum length of left tibia (epiphysis replaced), 30.6 cm. Slight septal aperture in left humerus, none in right. Sciatic notch wide.

Probably female, adolescent (17–18 years).

Pv–6 (*U.S.N.M. No. 369597*).—Incomplete skeleton with fragmentary skull (no lower jaw).

Undeformed; cranial index, near *75.0*. Sutures simple; open (except basilar). Single parietal foramen on right. No ear exostoses. Medium sized tympanic perforation on each side; meatus rounded. Third molars unerupted.

Distal epiphyses of femur, radius, and ulna; proximal epiphysis of humerus show recent closure. Epiphyses of iliac crest and clavicle ununited.

Bicondylar length of femur, right, 41.8 cm.; left, 41.8 cm.
Maximum length of tibia, right, 33.8 cm.; left, ?.
Maximum length of humerus, right, 30. 2 cm.; left, ?.
Maximum length of radius, right, 23.6 cm.; left, ?.

Small septal aperture in right humerus, large in left. Pelvis feminine.

Female, near adult (about 20 years).

SUMMARY

Sex.—Of the 39 individuals recovered, 17 are certainly males and 5 probably males; 10 are certainly females and 3 probably females. The remaining 4 are children. Thus males predominate about 22 to 13.

Age.—The number of individuals in the age groups represented, beginning with the youngest, are as follows:

Child, 4–5 years	1
Child, near 6 years	1
Juvenile, 10 years	2
Adolescent, 17–18 years	2
Adolescent, 20 years	4
Young adult, about 25 years	2
Mature adult	25
Senile adult	2
Total	39

Deformation.—Two general types of deformity occur in this group: 1, Simple occipital flattening (probably unintentional), and 2, fronto-occipital flattening (certainly intentional). Each of these types is represented by eight individuals. Fourteen others appear to be undeformed, whereas nine are too incomplete to give this information.

The general type of deformity known as fronto-occipital has been divided by Imbelloni (1930) into two subtypes: 1, That in which the plane of the flattened occiput is nearly vertical to the Frankfort plane, and 2, that in which it is inclined (about 120°) to this plane, so as nearly to parallel the frontal. The specimens shown in plates 48 and 49 probably fall into subtype 1, whereas the specimen shown in plate 50 falls more nearly into subtype 2. Naturally, extreme representatives of these two subtypes are more distinct in appearance than those here shown.

In addition to these two subtypes the present material includes five examples of a variant type of fronto-occipital deformity that does not appear to be widely recognized. If we may generalize from the few specimens available (see pls. 45 and 47), it would seem that pressure has been applied at three points on the head by means of boards. Thus the plane of the flattened occiput is nearly vertical and forms a broad angle near obelion with the flattened parietals, which in turn form a nearly right angle near bregma with the flattened frontal. In other words, this new subtype differs from the first of Imbelloni's two subtypes, described above, in having the anterior parts of the parietals flattened.[2] It will be recognized that, because the parts along the midline of the cranial vault were confined, growth could take place only laterally. There results, thus, the two following characteristics of this third subtype of deformity: 1, A high cranial index (often over *100*), and 2, a maximum height from basion located near bregma, instead of more posteriorly (even at obelion) as in the other types.

Of the few records of cranial deformity available for the Southeast only one seems to indicate the presence of this variant type. This lone record is Funkhouser's (1938) report on the skeletal material from Webb's site 19 in the Norris Basin, eastern Tennessee. Although the specimens illustrated are not entirely typical, the cranial indices of others range up to *116.3*. Funkhouser says, moreover:

> The extreme flattening occurs in both the frontal and parietal regions . . . and this, of course, has produced a compensatory bulging in the parietal regions on both sides. [P. 232.]

The presence or absence of cranial deformation at the Peachtree site may be analyzed further according to sex, age, and position relative to mound (table 1). It is perhaps significant that of the burials identified as being the oldest, that is, having been interred before construction of the mound, none shows fronto-occipital deformation, although simple occipital flattening is represented. However, one example of fronto-occipital deformity appears among the small group inclusive in the mound, and three examples occur among the intrusive group. Of the large group of burials encountered beyond the periphery of the mound, which undoubtedly includes late burials (one with European articles) and perhaps earlier ones, there are four examples of this intentional deformity. It is noteworthy, also, that of the three individuals accompanied by European articles, two are intentionally deformed (variant type). There appears to be no relationship between deformity and sex or age.

[2] After this report was written, I described this type of defomity at a meeting of the American Association of Physical Anthropologists, using the term "fronto-parieto-occipital." (See Stewart, 1939.)

TABLE 1.—*Relationship of skull deformity to period of mound construction*

Below mound floor (probably preceding mound construction)				Inclusive in mound (during mound construction)				Intrusive in mound (following mound construction)				Outside periphery of mound (relationship unknown)			
No.	Deformity	Sex	Age	No.	Deformity	Sex	Age	No.	Deformity	Sex	Age	No.	Deformity	Sex	Age
Pm–16	Undef.	F	Adult.	Pm–31	(?)	M?	Adult.	Pm–14	Fr.-occ.	F	Adult.	Pm–3	(?)	F?	Adult.
36	Undef.?	M	Adolescent.	37	(?)	M?	Adult.	18 [2]	Fr.-occ.	M	Adult.	4	Fr.-occ.	(?)	Child.
41	Occ.	F	Adult.	51	Occ.?	M	Adult.	19 [2]	Undef.	(?)	Child.	5	Undef.	M	Adolescent.
45	Occ.	M	Adult.	53 [1]	Fr.-occ.	M	Adult.	20	Fr.-occ.	M	Adult.	6 [2]	Fr.-occ.	M	Adult.
47	Undef.	M	Adult.					30	(?)	M	Adult.	7	(?)	F?	Adult.
52	Undef.?	F	Adolescent.					42	Undef.	M	Adult.	11	(?)	M?	Adult.
54	Undef.	M?	Adult.									12	Occ.	M	Adult.
												13	Undef.?	M?	Adult.
												15	(?)	M	Adult.
												23	Occ.?	F	Adult.
												24	Undef.	F	Adult.
												25	(?)	M	Adult.
												26	Occ.	F	Adult.
												27	Occ.	M	Adult.
												29	Undef.	F	Adult.
												32	(?)	?	Child.
												34	Occ. (Fr.?)	?	Child.
												Pv–1	Fr.-occ.	F	Adult.
												2	Fr.-occ.	M	Adult.
												3	Undef.	M	Adolescent.
												4	Undef.	F?	Adolescent.
												6	Undef.	F	Adolescent.

[1] Below mound floor but referable to level within mound.
[2] Accompanied by European objects.

TABLE 2.—*Comparative data on the lengths (cm.) of the major long bones*

MALE

Site	Femur (bicond. length)		Tibia (max. length)		Humerus (max. length)		Radius (max. length)		Ulna (max. length)	
	R	L	R	L	R	L	R	L	R	L
Peachtree, N. C.	(8) 44.9	(9) 44.9	(4) 37.1	(5) 37.7	(3) 32.6	(2) 32.6	(1) 25.8	(2) 25.5	(1) 27.9	(1) 27.3
Boytt's Field, Ark.[1]	(14) 45.6	(14) 45.6	(7) 38.5	(7) 38.3	(9) 32.7	(9) 32.6	(3) 25.0	(3) 24.7	(5) 27.3	-------
Various, La.[1]	(19) 44.1	(19) 44.2	(13) 37.1	(13) 37.1	(19) 32.7	(19) 32.7	(10) 25.3	(10) 25.1	(7) 26.9	(7) 26.6
Madisonville, Ohio [2]	(29) 44.8	(24) 44.7	(19) 37.5	(24) 37.8	(23) 31.8	(25) 31.6	(8) 24.4	(11) 24.2	(6) 26.7	(8) 25.8
Turner, Ohio [2]	(8) 43.7	(8) 43.9	(4) 37.3	(4) 36.9	-------	-------	-------	-------	-------	-------
Minisink, N. J.[4]	(14) 45.3	(15) 45.8	(12) 38.5	(12) 38.8	(14) 32.5	(13) 32.6	(11) 25.6	(9) 25.7	(8) 27.5	(9) 27.7
Roebuck, Ontario [5]	(3) 46.1	(3) 45.9	(3) 39.2	(2) 39.6	(2) 33.8	(2) 33.2	-------	-------	-------	-------

FEMALE

Site										
Peachtree, N. C.	(3) 41.4	(6) 40.4	(2) 32.8	(3) 33.6	(3) 28.5	(5) 28.5	(4) 22.6	(3) 22.1	(2) 24.1	(3) **24.2**
Boytt's Field, Ark.	(4) 41.0	(4) 41.2	(2) 33.2	(2) 33.2	(2) 28.9	(2) 28.9	-------	-------	(2) 24.1	-------
Various, La.	(12) 41.2	(12) 41.3	(10) 34.8	(10) 34.7	(13) 30.2	(13) 29.8	(14) 22.7	(14) 22.6	(9) 24.4	(9) 24.3
Madisonville, Ohio	(18) 41.0	(19) 41.9	(14) 34.8	(16) 34.7	(15) 30.4	(11) 29.6	(6) 23.6	(6) 23.5	(5) 24.8	(3) 25.5
Turner, Ohio	(6) 43.1	(6) 43.0	-------	(3) 35.6	-------	-------	-------	-------	-------	-------
Minisink, N. J.	(13) 42.1	(13) 41.9	(14) 35.3	(14) 35.2	(15) 30.7	(12) 30.2	(11) 23.7	(12) 23.5	(11) 25.4	(11) 25.3
Roebuck, Ontario	(17) 42.3	(18) 42.3	(9) 35.5	(13) 35.8	(24) 30.6	(21) 30.2	-------	-------	-------	-------

[1] Hrdlička, 1909.
[2] Hooton, 1920.
[3] Hooton, 1922.
[4] Hrdlička, 1916.
[5] Knowles, 1937.

Measurements.—Because of the presence of cranial deformity in so many specimens, and the general fragmentary condition of the collection, the available cranial measurements have little significance. A summary of the lengths of the major long bones, however, shows that these are very similar to the reported measurements of other Indian groups (table 2).

Ear exostoses.—This is one of the few nonmetrical observations for which some comparative data are available. In the present material there are 58 (27 right, 31 left) temporal bones represented, of which 23 (10 right, 13 left) have ear exostoses. This is about 40 percent. The highest percentage found by Hrdlička (1935) among American Indian groups was 30 (Indian Knoll, Ky). He found this feature to be less common in the Northeastern States generally. In a group from western Virginia, possibly Cherokee, the frequency was 19.2 percent.

Septal apertures.—Although but 33 (15 right, 18 left) humeri are sufficiently preserved to show the presence or absence of septal apertures, these defects were observed in 15 (5 right, 10 left), or in about 45 percent. Hrdlička (1932) has reported the general average for the American Indians to be about 40 percent. There are few figures available for individual groups.

Pathology.—It is still debatable whether or not the signs of osteitis and periostitis seen not uncommonly in Indian long bones, especially the tibia, are due to syphilis. It is, if anything, more debatable whether or not syphilis is a pre- or post-Columbian disease in North America. Under these circumstances it is noteworthy that five cases of osteitis, typical of syphilis as we know it, occur in the most recent group, and in that found beyond the mound. Of the remaining older specimens only two (Pm–45, –51) show this condition, and here it is atypical of syphilis.

The other pathological conditions observed in this material seem to be without tribal and chronological significance.

CONCLUSION

It is important to state first of all that the above morphological and anthropometrical observations alone on the Peachtree skeletons do not prove them to be the remains of Cherokees. This situation is not due entirely to the fragmentary condition of the collection. Rather, it is due to the lack of thoroughly identified Cherokee skeletal material for comparison. Moreover, the presence of cranial deformity at the Peachtree site prevents adequate anthropometric comparison with the linguistic relative of the Cherokee to the north, the Iroquois.

If, on the other hand, we assume that because European objects were found at this site, because the culture is uniform throughout the mound, and because the location of the site is within the historic Cherokee territory, the skeletal remains are therefore Cherokee, then the observations take on a particular significance. With this not unreasonable assumption we can conclude that:

1. The Cherokee practiced intentional cranial deformation at the time of European contact. As far as can be discovered this fact does not seem to have been recorded by any of the early travelers in the Cherokee territory. Mooney says:

> [The Catawba] were . . . called Flatheads . . . by the Iroquois, a name which leads to some confusion, as it was also frequently applied by the same people to the Choctaw, Chickasaw, and Cherokee. The name was properly applicable to the Choctaw, who practiced the custom of head flattening, as did also the Waxhaw of South Carolina adjoining the Catawba; but there seems to be no allusion to the existence of this strange custom among the Catawba themselves. [1894, p. 68.]

2. Not only did the Cherokee practice intentional cranial deformation, but they often obtained a type of deformity that is not found generally outside their territory. The fact has been mentioned that a similar type of deformity occurs at Webb's site 19. Other examples exist in the national collection from Nacoochee (Georgia) and various sites in southeastern Tennessee. I will present further details supporting this conclusion in a forthcoming publication.

3. Although the evidence is limited to a single nonmetrical character, there is reason to believe that the Cherokee and Iroquois differ somewhat physically. Iroquois skeletal remains have not been distinguished clearly yet from Algonkian, but together these two groups have ear exostoses rather uncommonly, whereas the Cherokee (assuming the Peachtree skeletons to be this) have them commonly. If we accept Hrdlička's conclusion that ear exostoses have an hereditary element as their predisposing cause, then this difference between Cherokee and Iroquois must be more profound than would result from recent separation. That linguistic relationship does not necessarily connote physical relationship has been pointed out by Hrdlička in connection with several Indian tribes (for example, 1927, p. 78).

Aside from the question of whether or not the Peachtree skeletons are those of Cherokees, the findings at this site lead to the following more general conclusions:

1. The stratigraphic positions of the intentionally deformed skulls not only suggest, but in view of findings elsewhere, make it seem probable that the custom of deforming the head reached the Southeast rather late. Thus Kelly (1938) says, in speaking of the excavations pertaining to the trading post on the middle section of the Macon plateau:

> Both in and around the enclosure were found burials of Indians of all ages and sexes associated with European trade artifacts and objects of Indian manufacture, including pottery. A number of burial traits not previously observed were encountered . . . the presence of artificial frontal deformation in a number of burials implied that this custom was much more prevalent in historic than in prehistoric times. [P. 52.]

Furthermore, Collins (1927) obtained in Louisiana undeformed skulls associated with elements of the Tchefuncte culture and intentionally deformed skulls associated with a later type of pottery. The late appearance of cranial deformity in the upper Mississippi Valley (see Neumann, 1937, observations not summarized) is probably significant also in this connection.[3]

2. As in the case of cranial deformity, the stratigraphic positions of the skeletons at Peachtree, together with evidence from elsewhere,

[3] Since this report was prepared, I have amplified this argument in my contribution to the Swanton Anniversary Volume. (See Stewart, 1940.)

make it seem probable that syphilis was not common among North American Indians until recent (even post-Columbian) times.[4] If this were not so, why has this disease not been reported for the old remains of Algonkians and Eskimos? And why is it not found among the skeletons of the "prepottery" people of Indian Knoll, Ky.? Attention may be called again also to Collins' finds in Louisiana (1927): The undeformed Tchefuncte people showed no signs of major bone pathology, whereas the more recent deformed people gave much evidence of osteitis.

These two general and rather bold conclusions, admittedly based on weak evidence, are advanced here in the hope that others with more extensive material from the Southeast will present data bearing thereon.

[4] I hesitate to say that this disease was absent in pre-Columbian times because occasionally bones with similar pathological lesions are found among the old Pueblos and Hopewellians.

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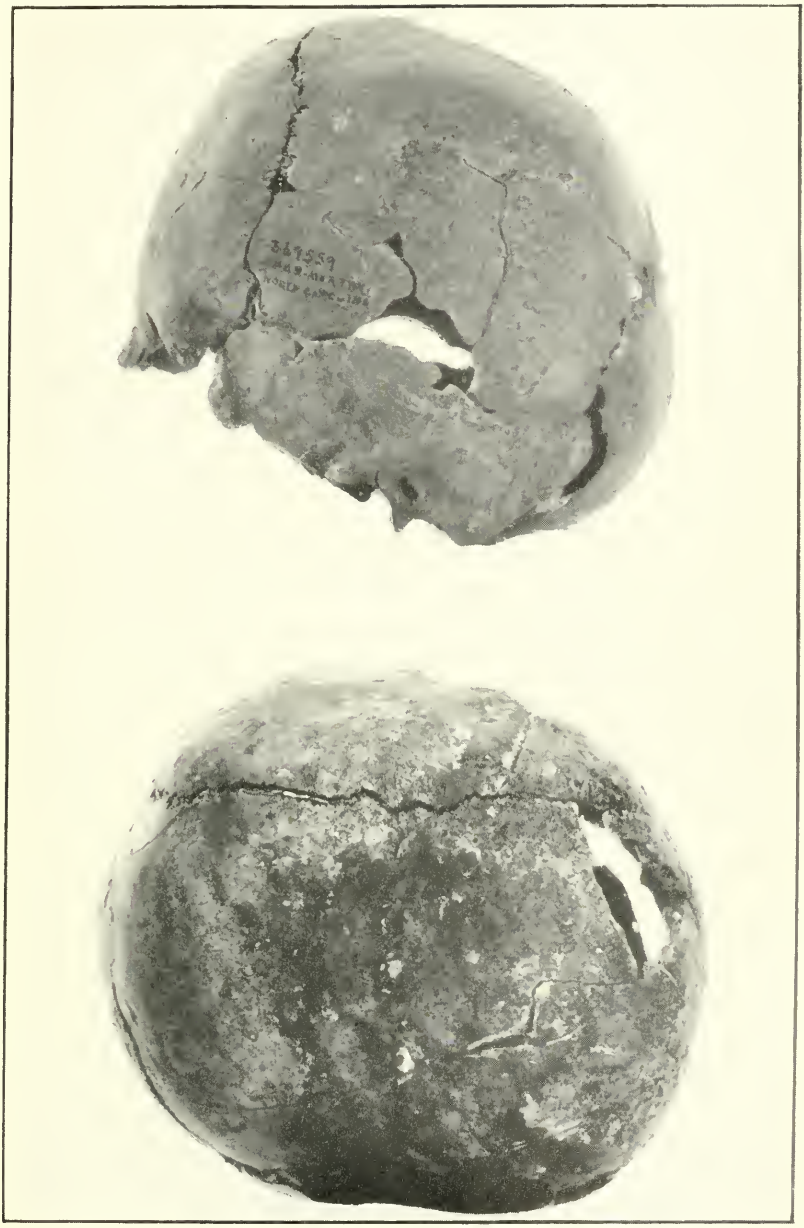
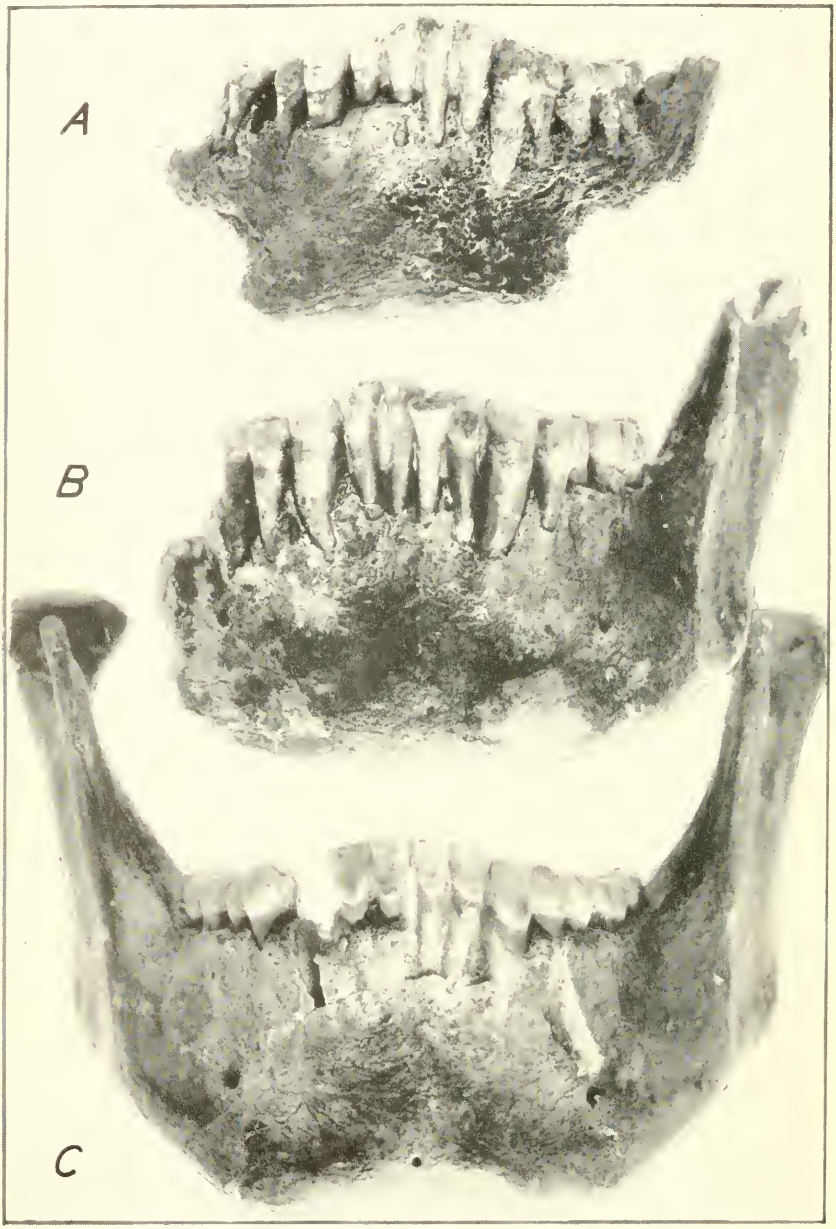
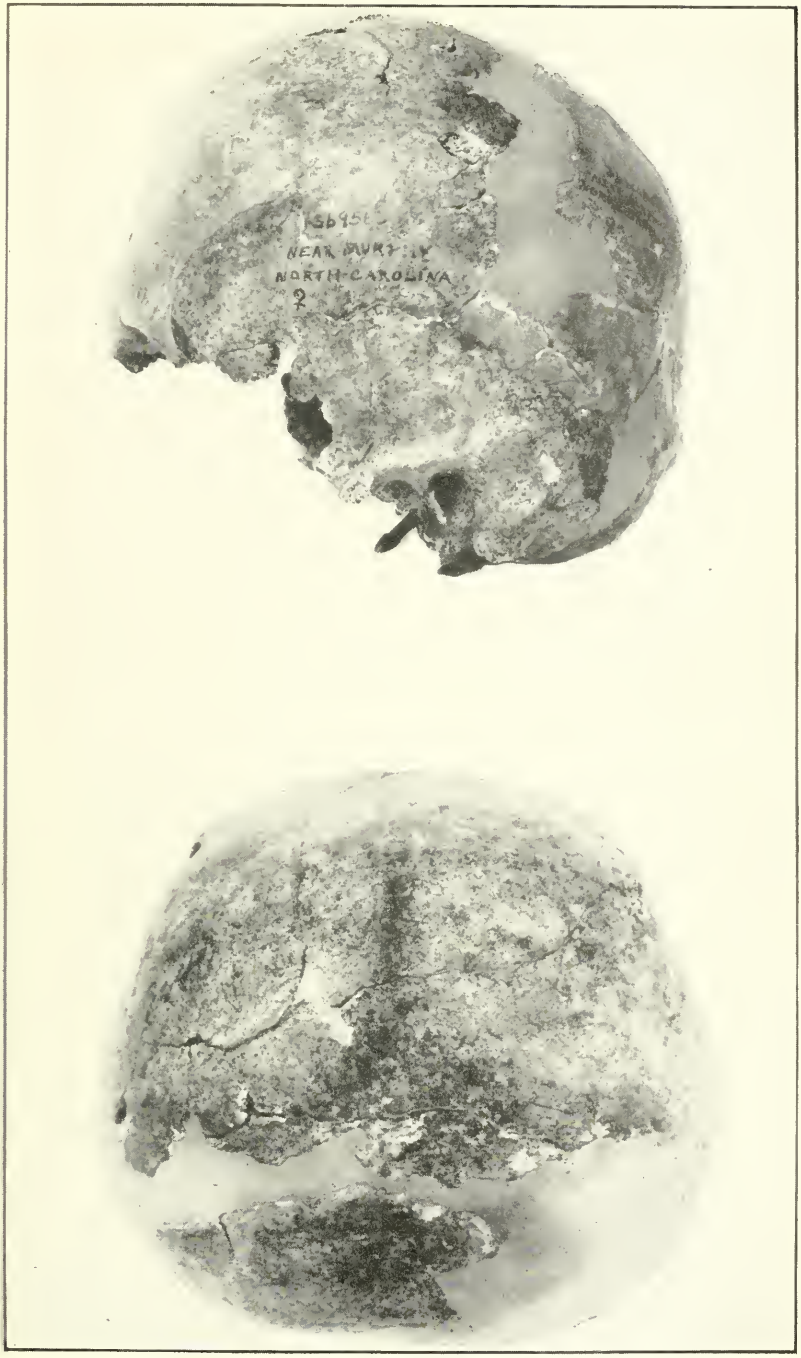


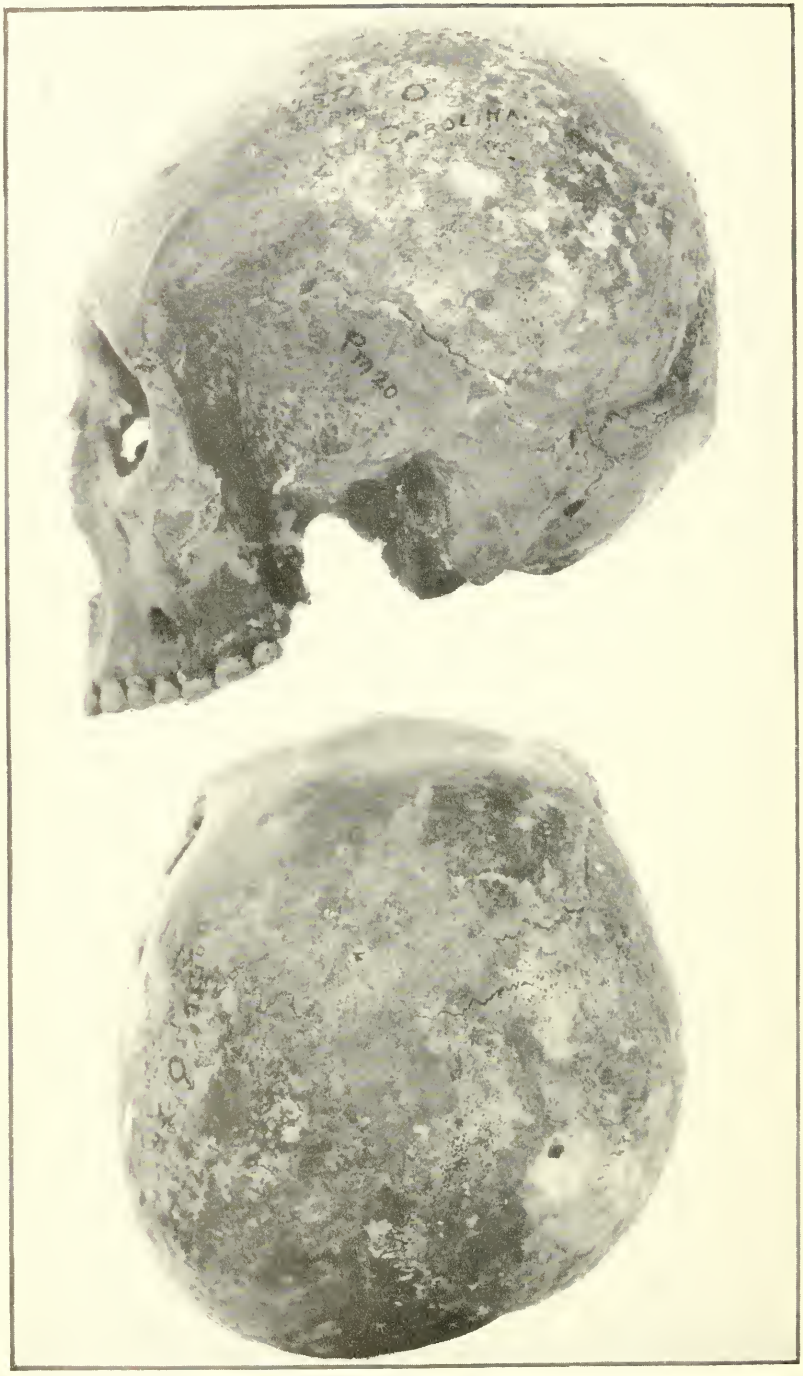
Side and top views of skull Pm–4 (U.S.N.M. No. 369559) in Frankfort position showing type of deformity. Juvenile (½ natural size).



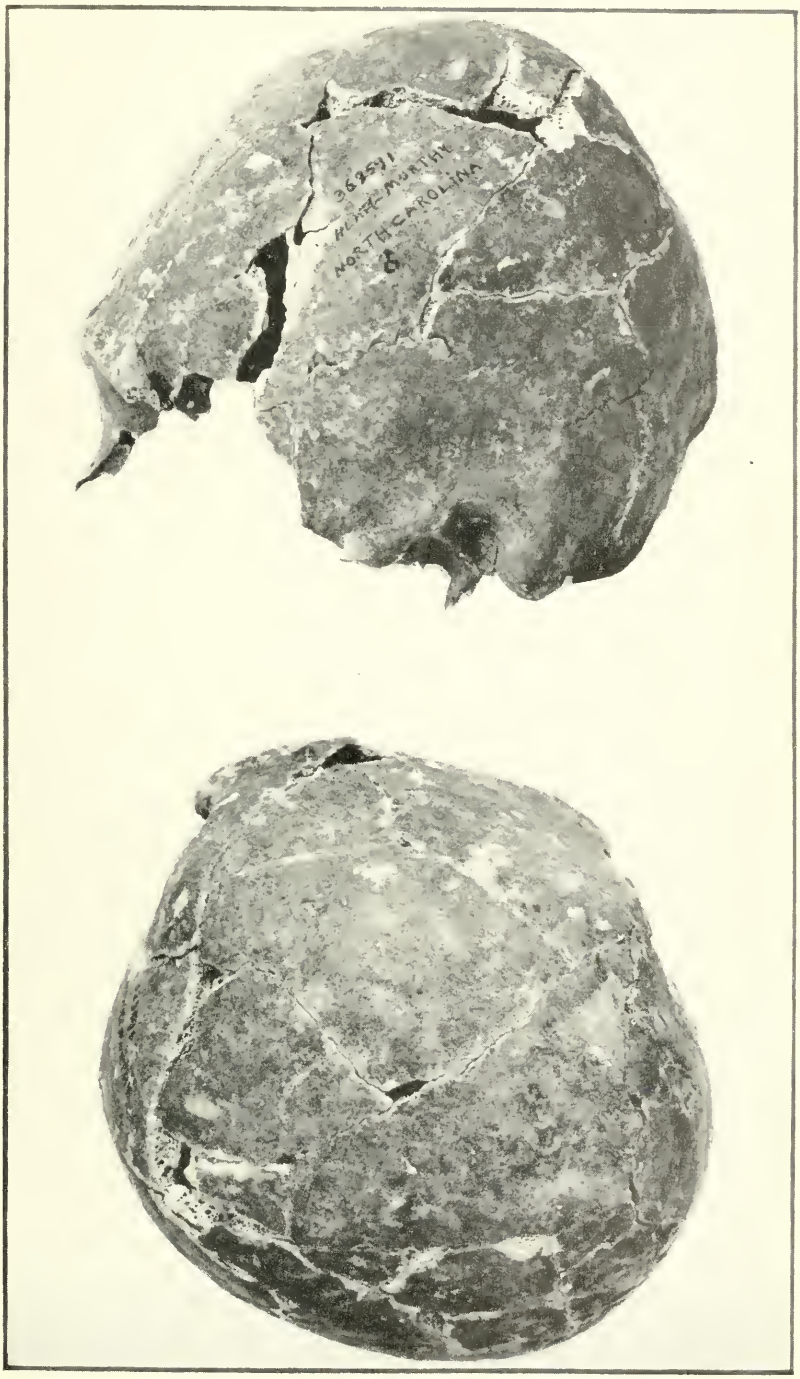
Three lower jaws showing a pointed contour formed by the biting edges of the incisors, caused apparently by early loss of the upper median incisors. *A* is Pm–7 (U.S.N.M. No. 369562); *B* is Pm–30 (U.S.N.M. No. 369577); *C* is Pm–45 (U.S.N.M. No. 369587). (Natural size.)



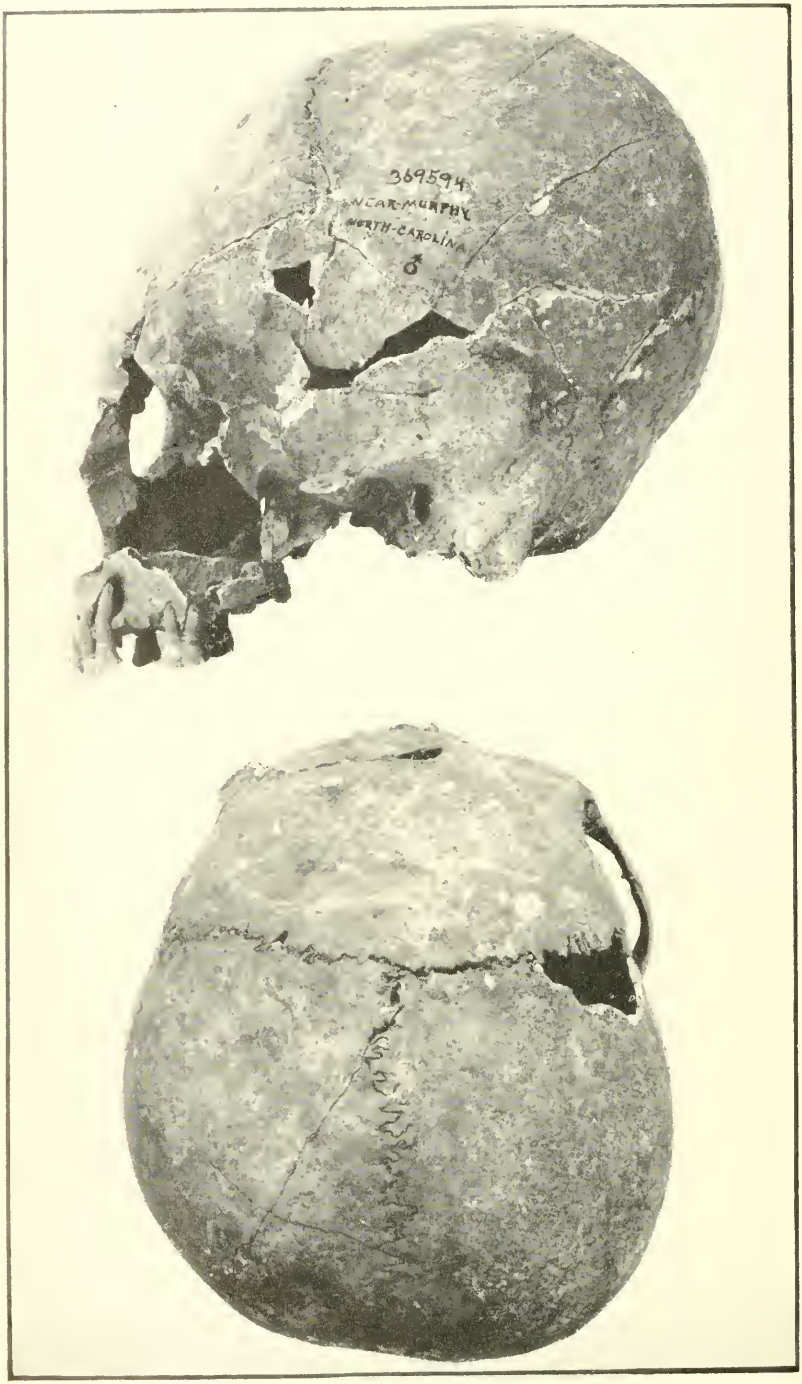
Side and top views of skull Pm–14 (U.S.N.M. No. 369566) in Frankfort position showing type of deformity like that shown in plate 45. Old female (½ natural size).



Side and top views of skull Pm–20 (U.S.N.M. No. 369571) in Frankfort position showing type of deformity. Adult male (½ natural size).



Side and top views of skull Pm-53 (U.S.N.M. No. 369591) in Frankfort position showing type of deformity. Adult male (½ natural size).



Side and top views of skull Pv–2³ (U.S.N.M.[a] No. 369594) in Frankfort position showing type of deformity. Adult male ($\frac{1}{2}$ natural size).

INDEX