

Vol. I

No. 1



BULLETIN

OF

The Archaeological Society

OF

Delaware

May 1933

Ralph E. Beers, Editor



REPORT OF MEETINGS

In accordance with the letters of invitation issued by Mr. H. Geiger Omwake, of Dover, a group of twenty-nine persons, from all parts of this State, interested in Indian lore, met at the Dover High School Museum, on Friday, February 24, 1933. At that time it was explained that the purpose of the meeting was to organize an Archaeological Society in the State of Delaware. Dr. J. Alden Mason, Curator of the American Section of the University of Pennsylvania Museum, then explained the need of such a society in Delaware, how it should be formed, and what its purpose should be. Mr. Omwake then asked for expressions from the group and after many favorable suggestions were offered, a temporary organization was effected and committees on Nominations, Constitution, Publicity and Membership were appointed.

The organization meeting of the Archaeological Society of Delaware was held at the home of Mr. Ralph E. Beers of Bethel, Delaware, on March 17, 1933. The meeting was called to order, after an inspection of the collections of Indian relics owned by Mr. Beers and Mr. Howard Stein, of Seaford, by the Chairman Pro Tempore, H. Geiger Omwake, and the minutes of the preceding meeting were read, approved, and ordered to be recorded. Mr. W. W. Mack, Chairman of the Committee on Constitution, read the proposed Constitution, which was adopted with revisions. Mr. Omwake then reported the result of his conference with Governor Buck, regarding the probability of securing a room in the State House, for the use of a Museum. Governor Buck expressed his approval of the idea and his willingness to cooperate. Dr. H. V. Holloway, of the Nominating Committee, submitted the following nominations for officers:

Mr. H. Geiger Omwake, President
Miss Anna T. Lincoln, Vice-President from New Castle County
Mr. Albert Early, Vice-President from Sussex County
Mr. Leon deValinger, Jr., Secretary and Treasurer
Mr. Ralph E. Beers, Editor

Following the unanimous election of these nominees to office, Dr. J. Alden Mason pointed out the importance of making an archaeological survey of the State before attempting excavations or collection of specimens. Dr. Donald A. Cadzow, Archaeologist of Pennsylvania, expressed his approval of Dr. Mason's suggestion and told of the valuable work that had been done in Pennsylvania on an archaeological survey of that State. After the adjournment of the business meeting, the members of the newly instituted society met in the Community Hall of Bethel, where Dr. Cadzow showed pictures of and explained the removal of Indian pictographs

from the rocks, in the Susquehanna River, at Safe Harbor, Pennsylvania. These Indian inscriptions had to be removed before the area was flooded with the backwater of a Power Company's dam, otherwise these valuable Indian records would have been lost to posterity.

Submitted by
Leon deValinger, Jr.
Sec'y. and Treas.

EXCAVATIONS AT REHOBOTH
by
Joseph Wigglesworth

Along the Atlantic Coast, south of Rehoboth Beach, extends a succession of conglomerate hills and sand dunes, washed by the waves of the ocean and often presenting to the beach almost perpendicular faces for a height of six to ten feet.

These hills and ridges are, doubtless, the remnants of what was once a continuous bluff, now sculptured by the ceaseless and tireless action of the sea. Standing on one of these elevations and facing eastward, the broad expanse of the Atlantic Ocean holds the enchanted gaze, while to the west and southwest the more placid waters of Rehoboth Bay meets the eye. This narrow peninsula, between ocean and bay, was a favorite residence of the Indians, both in pre-historic and early historic times. The great abundance of oysters, clams and fish, and other shell and sea food was undoubtedly the magnet that attracted the aboriginal natives to this particular spot.

Not so many years ago, and in the memory of those still living, there was an almost unbroken succession of shell heaps along this coast. The waste resulting from the consumption of oysters, clams, mussels, and conchs was very great and the accumulations in many places were so extensive as to excite the wonder of the early settlers of that section. A number of years ago, I spent considerable time delving into these shell mounds, being rewarded by finding arrowheads of very fine workmanship, numerous pottery fragments and a few celts. In one of these refuse heaps it was my good fortune to find the largest stone celt that I have ever seen in any collection, public or private.

The name of the Indians occupying this region at the time of the discovery of America, was the Nanticoke Tribe. The word Nanticoke is of Lenapean origin and is derived from Nentogo, a var-

iation of Unalachtigo, the name of the most southern or Turkey Tribe of the Lenni Lenapes. The meaning of Nanticoke is "tide-water people" or "those living near the ocean."

The hills and dunes along this beach were not once as near the shore line as today and may have been, a few centuries ago, a mile or more inward from the coast. The relentless ocean has been slowly, but steadily and surely encroaching upon this peninsula. A dozen years ago, severe storms entirely obliterated what was once an Avenue in Rehoboth Beach. A summer resident who has occupied a cottage on this beach for the past fifty years, informed me that the ocean has encroached upon the shore at least one thousand feet during that time, and he has been compelled to move his cottage inland three times. Old residents tell me that the Hen and Chicken Shoals, now far out at sea, were once a part of the mainland and that they have heard their fathers tell about when cattle grazed beneath the trees that adorned this once ridge of land.

In my opinion, this back bone of the peninsula, of which the elevations and hummocks remain, was once midway between the Atlantic Ocean and Rehoboth Bay and formed, as it were, a miniature water shed between sea and bay.

Several years ago, owing to heavy rains and a number of severe south-easterly storms, the face of one cliff was considerably eroded, exposing to view the skeletal remains of an adult human. The discovery of these bones was made by the Rev. C. C. Morhart, a Lutheran clergyman, of Cleveland, Ohio, a man greatly interested in archaeological and historic matters.

The land upon which the skeleton was found is one and a half miles south of Rehoboth Beach and was purchased by the late Chief Justice Comegys and Manlove Hayes, about the year 1865. After the death of Chief Justice Comegys, his interest was purchased by Mr. Hayes, who afterwards conveyed the property to a Mr. Patterson, of Philadelphia. This latter owner sold the land to the Catholic Order of Paulists, who, after using the premises for a number of years as a religious retreat, disposed of the same to the Y. M. C. A., of Baltimore, the present owner.

For the purpose of making an archaeological investigation of the interment, I journeyed to the scene of discovery and on the morning following my arrival, I began the labor of the survey. The brow of the cliff at this point is eight feet, three inches above the beach and for a considerable distance its direction was exactly north and south. The surface is covered with a thin, meagre, soil, barely sustaining a scanty vegetation. Beneath this thin top coating was seven to eight inches of sand, resting upon a subsoil of dark yellow clay.

The surface soil and the sand were thickly impregnated with coal ashes, cinders and pieces of anthracite coal, the stove or range debris of a cottage that formerly occupied this spot.

Commencing at a point ten feet back from the edge of the cliff I excavated a trench running parallel with the face of the bank. This trench was excavated for a distance of twelve feet, made wide enough for working purposes and three feet, four inches in depth and on a level with the bottom of the grave exposed in the side of the bank.

For a short distance I opened narrow trenches to the northwest and southwest, but without results. I then began the demolition of the wall between the wide trench and face of the bluff; after removing the top soil and sand with shovel and spade, the entire remainder of the work was completed with a small hand trowel.

At a depth of three feet, four inches, and at a point six feet, four inches, due west from the face of the cliff the first skull was brought to light. It lay on its left side and was buried with the head pointed to the south. I then worked carefully toward the north until the entire length of the skeleton was exposed to view. The bones were in a far advanced stage of decay and only the larger bones could be removed. Eight inches above and one foot to the south of the skull of this skeleton, the cranium of a child, 12 or 14 years old, was found; traces of the bones could be plainly discerned in the clay but the most of them immediately turned to dust on exposure to the air. Portions of the skull, leg bones and two ribs were taken out.

At the same level and one foot, three inches to the east, the remains of the second adult were found; it also lay with head to the south. In the work of excavating this skeleton, the lower leg bones of six adults were found lying across the rib bones with the extremities pointed to the south west.

Near the pelvis of the second skeleton two skulls were found, and just south of the feet four other crania were discovered; all six of these skulls stood upright upon their bases and a thorough examination of their immediate vicinity failed to disclose a bone closer than eight inches, excepting the skeleton of the second adult above mentioned. It was discovered later, upon following up the skeletal remains of the six persons who were buried close together, with feet to the southwest, that the crania of all were missing, at least from their proper places. In my opinion these six persons were undoubtedly beheaded before burial.

Continuing, the excavation, two other skeletons were dis-

covered, side by side, at full length, heads to the south, the last of these being the one discovered in the side of the bank by Mr. Morhart. Immediately above these, four others were found, one with head resting near the shoulder of the eastern, or outside, skeleton; one with skull upon pelvic bone of same skeleton and two others with heads between the knee joints of this skeleton and the one in the grave immediately to the west. These latter two were buried with heads to the southeast and extremities to the northwest, with feet about thirty inches north of the four skulls found together. In all, fifteen skeletal remains were uncovered, fourteen of them being adults and one a child.

These were all buried in one grave or pit, nine feet, two inches long, and six feet, eight inches wide, the longer measurement being north and south, or parallel with the coast.

The line of the burial pit was easily traced and distinctly marked by the difference in color of the soil. Contiguous to the skeletons was a rich dark-colored earth and so decidedly different was this from the surrounding clay, both in quality and color, that the outline of the space where the bodies had been buried could be easily traced. This dark decomposed earth had once been human flesh. Had this pit been the burial place of skeletal remains alone, as the position of some of the bones and especially the six severed crania would possibly indicate, the rich, discolored earth would have been missing.

Here and there, at the bottom of the grave and upon the undisturbed surface of the clay, scant traces of wood ashes and charcoal were seen. I spent twenty hours in the pit, working with a small hand trowel and thoroughly pulverized and sifted every particle of earth and clay from the bottom of the sand deposit to two inches below the bottom of the grave, and with the exception of four war points and about a dozen small pieces of Indian pottery, nothing of human make was found.

The discovery of pottery fragments in the grave proves nothing, as they may have been thrown in from camp refuse from the surface at the time the grave was filled. In an hour's time searching the adjacent sand dunes, I succeeded in finding about twenty pottery fragments of similar make.

The clay used in the manufacture of this pottery was tempered with sand and finely crushed shells and from markings on the exterior surface it undoubtedly had been moulded in fine reed or twisted grass baskets. The finding of so many fragments of pottery in such a small area is another proof that this section was a permanent camping place of the Indians. With nomadic tribes extensive pottery making was not available on account of the extreme fragility of pottery utensils, but a

sedentary life of pre-historic natives encouraged the development of pottery making.

A number of years ago, six skeletons were found about forty feet northeast of where I made my excavations. A cranium from this find was examined by the late Dr. Frame, of Dover, who pronounced the skull as of distinctive Indian type. This information was given to me by Mr. D. M. Wilson, who was present at the time the discovery was made, and he pointed out to me the very spot. This evidence was corroborated a short time afterwards in a letter from Ex-United States Senator Richard R. Kenney, who was an eyewitness to the excavation.

Taking into consideration the fact that my search was rewarded with no finds, it is significant that no implements of any kind were found with these six skeletons.

In times of peace, the aborigines always buried their dead with great ceremony and they invariably deposited with the deceased objects of bone or pottery and implements of stone. Skeletal remains found without any of these implements and buried near the surface as were those I unearched and also those found forty feet away are of unusual occurrence. There must have been some urgent necessity for this mode of burial and the most plausible reason for such a hasty interment is that a battle was fought near here and that those slain were, after being stripped of their weapons, hastily buried in shallow pits. We must remember that already the remains of twenty-one persons have been found within a distance of fifty feet and a total area of less than two hundred square feet has been excavated.

As I have stated before, in making my excavations of the grave, I made a very diligent search of its contents, completely powdering every particle of earth and clay and there was nothing that escaped my sight. The smaller bones were almost entirely decomposed and instantly crumbled to dust when first exposed to the air; six of the skulls were removed from their proper positions and there were scant traces of fire upon the bottom of the grave.

I was greatly indebted to Mr. Marvin H. Markle, of the Baltimore Y. M. C. A., for his permission to excavate and his many courtesies while engaged in the work. Also to the Rev. C. C. Morehart, of Cleveland, Ohio, and Drs. Gatch and Palmer, of Baltimore, Maryland, for their valuable assistance.

A LETTER FROM DR. GUTHE

Curator

Museum of Anthropology, University of Michigan

and

Chairman of the National Research Council

Dear Archaeologists of Delaware:

I felt very much honored when I learned that you wanted a message from me to be used in the first bulletin of the Delaware Archaeological Society. The suggestion that I discuss the basic elements of archaeology with special reference to terminology was rather a large order, and I have spent some time in attempting to work out a concise statement for you.

Archaeology is a method of historical research. The students of the subject are not interested in merely gathering a lot of objects which were used by people long since dead. Our interest lies in the lives and habits of former civilizations, and we use such fragments as we may find for the purpose of interpreting, often very inadequately, the human experiences of the past. We speak of Indian cultures, and by this term we refer to the civilization, or total method of life, of the particular group of Indians with which we are working. This use of the word "culture" should not be confused with the more popular concept of good breeding which the term implies. The methods of the archaeologist are analogous to those of the historian. There are three principal steps in archaeological research. The first of these is securing the evidence. The second, and most important, is the study of this evidence from a descriptive and comparative standpoint. The last step is the preparation and publication of the report which contains the conclusions reached by the student. No archaeological work is complete until this report is finished.

The general public is best acquainted with the first of these steps--that of securing the evidence. Yet frequently half of this process is entirely overlooked because of the romantic appeal of the discovery of unusual materials by means of excavation. Adequate excavation cannot be done until the student has become acquainted with the archaeological assets of the region in which he is interested. It is first necessary to conduct a survey of the area. The most obvious method is that of visiting localities in which archaeological materials are found, and in noting them upon maps. But library work is of

equal importance in such a survey. A great deal of valuable information can be secured by examining the writings of early explorers and travelers and studying the reports of engineers and scientific men who have worked in the area prior to the organization of the survey. It is also worthwhile to become acquainted with and analyse the many private collections of Indian materials which have been gathered by farmers and local enthusiasts. A compilation of information obtained from all these sources serves to give the archaeologist a general picture of the facilities at his command in the area in which he is interested. It is only after such information has been secured that excavation should be undertaken in localities which give indication of supplying the necessary additional information by means of which a more complete picture of the life of the Indians can be constructed. Excavation does not mean merely the accumulation of objects. The record in the earth is like a document, in that the relationships between the objects themselves are analogous to the relationships between words in a document. In order to be sure that these relationships are obtained, a very definite method of excavation has been developed by professional archaeologists during the past fifty years. It is not advisable for interested amateurs to undertake excavations without securing some training and experience under the guidance of a professional. This is said because there is grave danger of losing historical information if the excavation is improperly done.

There are two kinds of evidence which the archaeologist seeks to obtain. The first of these relates to location and associations, and the second to objects alone. Such evidence is found in sites, which are places in which human beings have left remains. There are a large number of different kinds of sites, the names for which in some cases are self-explanatory. Village sites are, of course, localities in which Indians once had one or more habitations. Sometimes people use the terms "work shops" or "battle grounds" for these places. But the Indians did not have special localities for making things, nor did the nature of their warfare require pitched battles in restricted areas. Another type of site is referred to as cemeteries or burial grounds. Either term is satisfactory. Mounds are artificial piles of earth which vary greatly in size. They should not be confused with natural hillocks. These three types of sites may occur separately or together. Frequently Indian materials are found in rock shelters. This type of site is not a cave, for a cave has an interior which is larger than the opening, or doorway, and rock shelters are formed by overhanging cliffs whose greatest diameter is at the opening. Quarries are localities from which the Indians obtained stone of various kinds by breaking it away from natural outcrops. Quarries and village sites cannot be confused. Along some of the rivers and the sea coast are shell heaps, which consist of

debris left behind by people whose principal food was shell fish. These are easily recognized because of the great amount of shell present and because of the occurrence among the shells of charcoal, ashes, and occasional implements and burials.

In the sites various conditions exist concerning the associations of objects in the earth. We speak of surface collections as groups of materials which are gathered from the site without excavation. In many cases such surface collections are all that is necessary in order to characterize a given site. When excavation work is undertaken, one usually encounters layers in the earth. These are recognized by differences in color and texture of the earth. We refer to one of these layers as a stratum, and to several of them as strata. The position of objects with relation to these strata is very important. The condition of the strata make possible the identification of certain specific deposits. Frequently the inhabitants of a village throw the refuse from their meals and from their house cleaning into a given locality, such as a ravine or the side of a hill. These places where the strata are clearly defined and very rich in remains are called refuse or rubbish heaps. Again, some strata contain archaeological materials and other strata above and below them may be barren - that is, contain nothing of archaeological information. The strata having material are referred to as containing living debris. Sometimes a hard-packed surface or a thin stratum of a distinct color is called a floor or a level because it indicates that it was once a surface upon which people lives. These floors may be associated with houses or house sites. When the archaeologist refers to a house, he usually means the remains of a house, which may consist of a floor and meager indications of walls. In this house or sometimes entirely unassociated with it, one will find fire places. There is a tendency to associate rocks with fire places, but the principal criterion for a fire place is a heavy and relatively localized deposit of wood ashes or charcoal. If ashes are not found, one cannot refer to a fire place. Under certain conditions, one will find post-molds associated with a floor. These are casts in the ground of the bases of posts. They always have sharply defined edges. Sometimes they are filled with earth of a different color from that immediately around them, and sometimes they contain what is obviously decomposed wood. In most village sites, pits are found which have been dug through the strata into the ground by the original inhabitants. Here again differences of earth color make it possible to recognize these deposits. We refer to them as refuse or storage pits, depending upon the material found in them and their probable use. If such pits contain a number of objects, they are sometimes called caches.

There is another great class of associations which we call burials. It is not customary to refer to these as graves. Naturally they contain the skeletal remains of human beings, and sometimes objects which were placed with the dead at the time of

burial. These objects are referred to as "burial furniture". There are many different kinds of burials, and I shall mention only a few which may occur in the region in which you are interested. The terms used refer to the position of the skeleton. The bones may be in anatomical order, or they may obviously have been put into the grave after the flesh disappeared. If they are in anatomical order, the burial is referred to as lying at length, prone, or extended - three terms which are synonymous. Reference is always made to the position of the body as to whether it is on its back, on one side or the other, or on its face. A flexed burial is one in which the extremities (legs and arms) of the body are bent. A fully or tightly flexed burial is one in which the arms have been so bent that the hands are near the head, and the legs placed so that the knees are on the chest and the feet near the hips. A partly or semi-flexed burial is one in which the extremities are bent to a lesser degree. Here again, it is necessary to give the position in which the body is lying, on the back, on the face, on left side, on right side. When the bones are not in anatomical order, there are two general classes of positions. A bundle burial is one in which the bones of an individual body have been piled in a hole in the smallest possible space. One will usually find the long bones parallel to one another, the skull on top of the bones, and the smaller bones entirely missing or mixed up with the long bones. A group burial is a deposit of human bones which more commonly are not in anatomical order. These are simply a form of bundle burials. Frequently a number of flexed or extended burials may be found very close together, but technically this would not constitute a group burial.

The other class of evidence is that of objects alone. These objects in themselves are of no value historically, and must be accompanied by notes giving their relationship to the several associations to which I have just referred. The word specimen is a very general term referring to all manner of objects of value to archaeologists. One group of specimens consists of materials used but not shaped by man. This includes food remains (such as animal bones, charred fruits, vegetables, and seeds), and materials used in their natural state such as grass or stones for pits, pavements, etc.. There is a tendency to overlook this class of specimens; but it is obvious that if we know the kind of food eaten by the people and the kind of natural materials which they used, we may be able to understand their method of life more clearly than if we knew nothing about this phase of their existence.

Another class of specimens is the artifacts. This term refers to objects which have been shaped by man, and which often have a specialized use. It is a general term synonymous with the word relic, of which professional archaeologists disapprove, since that word implies an interest in the object

itself without an understanding of its historical importance. Artifacts fall generally into two large groups - implements and ornaments. Most of the artifacts which will be encountered in Delaware are non-perishable objects. That is, they are made of materials which cannot be destroyed by weather, acids in the earth, or decomposition. The variety of shape and size of artifacts is myriad, and it would be impossible for me to give you definitions of the many descriptive terms used in studying them. This phase of terminology can best be obtained by studying reports and general books on archaeology. Non-perishable artifacts may be classified according to the material of which they are made. Stone artifacts may be chipped, pecked, or polished. Another common type of artifact is the pottery, which is usually found in fragments. These fragments are called sherds, or potsherds. Pottery can always be distinguished from stone because it is made of burned clay in which one finds particles of foreign materials which were placed there intentionally by the Indians, and which American archaeologists call the temper of the pottery. This temper may consist of sand, broken stone, shell, etc.

Two other classes of artifacts usually found in village sites are those made from shell and from bone. You will almost certainly encounter still another type which we speak of as European artifacts, which may be recognized because they are made of glass, iron, silver, or brass. There is another group of artifacts which is perishable. I think this term explains itself. They may be of either animal or vegetal origin. Skins or things come under the first group, and wood, reeds, bark and objects made of grass and fibers fall into the second group. These perishable materials may be found in dry caves or rock shelters, but are only rarely discovered in other sites. This gives an outline of the principal varieties of objects which constitute archaeological evidence. Let me emphasize again that the objects themselves, without a record of their location and associations in the ground, are historically worthless. Unfortunately many of the private collections of Indian artifacts are for this reason of little use to the archaeologist.

I believe that the material I have covered so far is of most interest to your group. Yet the second step in archaeological research is of the greatest importance. The accumulation of evidence is not an end in itself. If material is worth saving, it is worth studying. In order to obtain a worthwhile return upon the investment of time and money which has been made in securing the evidence, it is necessary to study this evidence in detail in the office or laboratory. The first step in this study is a careful description of the materials from the culture being studied, in order that the student may obtain as complete a knowledge as possible of the people in which he is interested. Then, after the culture is understood as fully as possible, it is necessary to compare this culture by

years of the record obtained, with similar cultures which have been studied in other regions. The study of the evidence usually occupies a longer period of time than the accumulation of evidence. Many archaeologists feel that out of every twelve months, three should be devoted to field work and nine to laboratory work. When the material is understood and has been described and compared with other cultures, it is then possible to write a report giving not only the details of the evidence, but also some indication of the historical significance of this evidence. Even if funds are not available for publication and distribution of this report to other students, it is advisable to prepare the report as if it were going to be published at once, before undertaking another season of field work; that is, securing additional evidence.

Sincerely yours,

Carl E. Guthe

THE LAST INDIAN OF HIS TRIBE, LEFT IN DELAWARE

Reprint from DELAWARE REGISTER, 1838.

Alone in my wigwam, mid the shades of the night,
I sat, and called back the scenes of the past,
'Ere the white man appeared our joy to blight
Or the blow of the axe, made a track for the blast.

On the last skin of the bear, now left for a bed,
My limbs I composed, but found not repose;
My thoughts wandered back, and the ghosts of the dead
On the tablet of memory before me arose.

The shades of the mighty, stood in order around me,
Of the days, when the Indian was lord of the wood;
When his skiff cut the wave, and his arrow flew free;
And brought to his wife, and her children their food.

My heart, it was sad! all my race had departed,
Beyond the blue mountains, in search of a home!
I wept like a coward! and was nigh broken hearted,
That I too, was destined, in a far land to roam.

Sleep weighed down my eyelids, I sank to repose,
But soon the dark mantle was drawn from the night;
A light like the day star around me arose,
And the good TAMENEND, appeared to my sight.

And thus spake the chief, in accents as soft
As whispering winds when the leaves scarcely move;
His right arm extended was pointed aloft;
His face it was calm, and his eyes beamed with love.

"Son of a great, but fallen race,
Last of thy tribe, the wild, the free;
No more let tears bedew thy face,
Nor tune thy voice to misery.

There lies beyond the setting sun,
A lovelier land, by far, than this;
And when thy course on earth is done,
Ascend and drink of endless bliss.

No white man's foot can reach the place,
Fixed for his sons by the Indian's God;
Nor axe, nor plow, can there deface
The sylvan shade, or break the sod.

No biting frost, nor blinding snow,
Within those blissful bowers can come,
There limpid waters ever flow,
And fairest flowers forever bloom.

There youth eternal lights each eye,
Nor age nor sorrow enters there:
Then weep no more! prepare to die!
And soar beyond these realms of care.

POTTERY ANALYSIS

Mr. James Griffin of the Ceramic Repository, Ann Arbor, Michigan, is willing to give members of the Society an analysis of the mixture, design, and meaning of the design, if they will send their fragments to him. He will return the potsherds.

A STATE ARCHAEOLOGICAL SURVEY.

by

Dr. J. Alden Mason, Curator

UNIVERSITY OF PENNSYLVANIA MUSEUM

That a general survey of the field is the prime requisite in any extensive investigation, in order to ascertain the amount and nature of the material to be dealt with, is so self-evident that I need not spend time or space on that point. Since the boundaries of archaeological areas are ill-defined and overlap, present political bodies form the most convenient units, and since local archaeological agencies are generally state-wide, the state archaeological survey has naturally become the most usual. The National Research Council has recognized this by terming its archaeological committee the "Committee on State Archaeological Surveys". The purpose of this Committee is "to encourage and assist the several States in the organization of State archaeological surveys" and its plan contemplates, among other aims, "the coordination of all the agencies within those States, enlisting the cooperation of local students and interested citizens so that an effective appeal may be made to the various State legislatures for special appropriations for these surveys".

Ordinarily the most logical body to carry out the State Archaeological Survey is the State Archaeological Society, but local conditions may indicate other agencies. If the necessary funds can be secured from interested persons and it is not necessary to appeal to the state legislature, the Society may prosecute the work independently, but if state appropriation is required an official state agency is frequently entrusted with the investigation. In the case of Pennsylvania, the state archaeological society was an outgrowth of the state archaeological survey inaugurated by a more local body, the "Wyoming Historical Society of Wilkes-Barre. County historical societies may sometimes be entrusted with the survey in their own counties.

As is unfortunately the case in all mundane affairs, the primary sine-qua-non is the securing of sufficient funds for the

engagement of a Chief of the Survey and for printing and postage. If done under official state auspices generally an office can be secured gratis, possibly secretarial help, printing and mimeographing, and possibly even postage and the use of a state official automobile. The latter is a necessity in order to permit the Chief to visit and investigate the many points in the open country that will be reported to him. A clerk and one or more assistants as investigators naturally relieve the Chief of much routine and carry on the work much more rapidly at slight additional expense.

Let us suppose, then, that funds have been appropriated or otherwise secured to inaugurate and carry out an archaeological survey of Delaware. A trained and experienced archaeologist has been engaged as Chief for the duration of the Survey. He devotes his full time to the work. He has an office with clerk and typewriting machine, a young assistant or two, a cheap "repossessed" car, and funds or means for printing or mimeographing forms and blanks and for mailing them.

The Survey is, of course, merely a preliminary, but a most important one, to the other two phases of archaeological investigation, excavation and publication. These present their own problems and may be left out of the picture for the present. The work of excavation is urgent, in view of the increasingly rapid destruction of archaeological sites, both by intentional unscientific excavation, and on account of the progress of industry, and the survey, as a pre-requisite for this, is therefore also urgent.

The first move of the Survey's Chief is naturally to become familiar with local conditions and to establish contacts with all persons and agencies which can be of assistance, with legislators, editors, reporters, and heads of organizations. Questionnaires, blanks and posters are then printed or mimeographed and sent to teachers, ministers, leaders of Boy Scout troops, postmasters, librarians, historical societies and other such groups and associations, requesting their heads to call the matter to the attention of their members. Posters are printed and placed in postoffices, railroad stations, libraries and similar places. Publicity articles are published in the papers. All these request the reader to send full information regarding Indian sites or collections of Indian objects to the Chief of the Survey. The Pennsylvania Survey sent out 13,000 letters to the territory east of the Alleghenies, and received about 2,000 replies indicating about 1,900 sites and 1,500 large or small private collections. The later extension of the survey west of the mountains resulted in the reporting of about 600 more sites.

The replies are then filed and tabulated in the office, and

the locations marked on large maps with symbols designating the type of site, as village, camp-site, shellheap, mound, earthwork or fort, burial-ground, quarry, cave or rock-shelter and trail. Different symbols indicate whether the site still exists or has been destroyed. Names of collectors are also tabulated with the size and range of the collection. As many of these reports as possible are verified by the Chief or one of his assistants. These may occasionally have to resort to superficial digging in order to determine, for instance, whether a mound is natural or artificial, but on the whole, no excavation is done until the survey is completed, except cases to investigate a site whose destruction is impending.

The people of the state, and especially the educated class, such as teachers and members of historical societies, must be given to understand at the outset that the Survey, and even the archaeological investigations that follow it, are not ends in themselves, but means to the greater end, that of reconstructing the pre-history of the state. Large sums are spent annually for researches and publications on the history of the state for the last three centuries; the millenniums that preceded are dismissed in a chapter or a paragraph. This is generally no more than a brief description of the Indian population of the state at the time of discovery, and the migrations and changes in population and in customs during the millenniums that preceded white colonization are quite unknown. It is to throw light upon this long period that archaeological work is done, not to accumulate and save relics, however interesting these may be. They are merely the raw material, the data from which deductions are drawn. And these objects are valueless scientifically unless excavated with care so that their proveniences and their relationships to their surroundings are known. While the excavation of objects, their preservation in museums, and the tabulation, study and preservation of objects already existing in public and private collections are phases of the work not to be neglected, yet they bear the same relation to real scientific research as libraries or other files or repositories do to other fields of investigation, a means, not an end in themselves. One of the important duties of the Chief of the Survey is to educate amateur excavators and collectors in this scientific point of view.

Hand-in-hand with the archaeological survey should go an ethnological survey, investigations among the living remnants of the Indians who inhabited Delaware at the time of colonization. The state should be the more interested in this as a great part of the state was inhabited by a tribe which bears the same name, the Delawares. Of course this name was given them in late years, their own name being Lenni-Lenape. The other tribes inhabiting the state at the time of settlement were closely related to these. Since the Delawares also inhabited eastern Pennsylvania, the ethnological investigations already done by the Pennsylvania Survey

need not be duplicated.

Other phases of the work which an extensive survey should comprehend include studies of the earliest literature and original sources, and studies of place-names, in fact every source which may throw any light on the pre-history and early aboriginal history of the state. Since tribal and archaeological boundaries transcend state limits, contacts must be made with extra-state organizations, objects of Delaware origin studied in museums and collections outside of the state, and the archaeology of adjacent states compared.

Delaware being relatively small in area, relatively homogeneous in terrain, and inhabited at the time of discovery by tribes of closely related culture, the task should be a relatively short and simple one. When survey, excavation and publication are completed, instead of being an archaeological terra incognita, the broad elements of the pre-history of the state will be known.

CONSIDER THE ARROWHEAD

Down the furrowed rows he walks, head bent downwards as if looking intently for something lost. Suddenly he stops, bends, stoops, and picks up an object grey and glittering. It is an arrowhead!

Onward he tramps, pushing aside the stalks of corn. Again he bends to lift a barbed spearpoint from its covering of loam. There is a triumphant gleam in his eye, a smile on his lips, and his breath comes a trifle faster through dilated nostrils. Out comes his notebook and pencil. The finds are registered for future consultation. Then onward he goes.

There are literally thousands who collect arrowheads, and they vary in occupation from the farmerboy who follows the plow to the president of a great corporation. Often they meet on favored collecting grounds and meet upon a common level to discuss a common interest. They exhibit their finds to each other and talk them over. The spell of the flint indeed creates a true fraternity of subtle charm.

What is it that induces men to glean these things of stone? these things that have no present-day use? What is it that causes men and boys to hoard them in felt-lined trays?

Is it the mystery of their origin and manufacture? Is it the romance of by-gone days when blades of flint were the world's most effective weapons? Is it because there is some strange compulsion inherent in the Red Man's darts?

Perhaps all these things play a part in the explanation, but

again, it may be that there is also a half dreamed recognition that in touching this weapon of another age one bridges the whole history of art and invention. If this is true it will account for the strange thrill that affects the true arrowhead hunter when he lifts a specimen from the soil.

Perhaps, also, there is a dim recognition that all men once passed through a long period when the chipped blade of chert or chalcedony was mankind's greatest achievement, his most notable invention. Perhaps it is because the fashioned flint is the text of the most stimulating story that man may know,--that of his own rise to enlightenment through the conquest of obdurate elements.

Thus it is that the arrowpoint becomes the stylus with which the history of human effort may be written in living letters.

Arthur C. Parker, Director,
Rochester Museum of Arts and Sciences

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THE ARCHAEOLOGICAL SOCIETY

OF

DELAWARE

EDITORIAL

With the establishment of The Archaeological Society of Delaware comes an opportunity to render this State and the people who will live in it years from now a valuable cultural and educational service. The Society is dedicated to the study of man, especially to the study of the "Grand-father Men" of Delaware. It was conceived and founded by a small group of persons interested in finding and preserving the artifacts and relics of the Indians. Our program is ambitious yet reasonably conservative. It is capable of enlargement as the membership grows. Membership includes regular issues of this Bulletin, opportunity to keep in touch with archaeological progress not only in Delaware but in nearby States, association with persons interested in these subjects, worth-while meetings and interesting addresses by trained archaeologists. Through the medium of the Bulletin members are given an opportunity to communicate their experiences and observations to other members. A Question-Answer page will be conducted, the answers being provided by an

expert. You send the questions; we'll supply the answers.

The response with which the officers have met in all phases of our program has been gratifying. Individuals entrusted with specific cares have given excellent accounts. The spirit among members has been fine. Cooperation is a necessary factor in the success of any undertaking such as ours. We are on the threshold of a new store of knowledge. We are about to record for posterity the story of the first inhabitants of our State. Each of us has a part to play so that success may be assured. Among other things we must each serve as committees of one to secure additional members; we must advertise the work of our Society; we must keep our representatives in the State Legislature informed of our progress; we must "sell" our program to the people of the State; we must "talk up" our Museum project. The Governor has already indicated his approval and support. It is up to us.

From time to time the various committees will have occasion to mail to the members questionnaires asking for certain kinds of information. Please make a special point of answering and returning them as quickly as possible. The Committee for a State Survey has distributed blanks of several types. These may be forwarded to any member of the committee or to Mr. deValinger at the State House. He will have charge of the files of the Society and will cooperate with members desiring information.

Summer months are here again! Indian relics lie untouched, waiting for your eager hands to gather them. Team up with a fellow member or an interested prospect for a hike into the corn fields. The fresh air, the exercise, the companionship, the Indian relics--all are good for you. It's great sport. Keep careful records of your finds; fill in a Field Record or a Site Survey blank and mail it to the Survey Committee. The fall issue of the Bulletin will contain an account of the summer's progress. Write up an account of any interesting finds and send it to the editor. Here's luck to you!

It is hoped that endowment funds will be forthcoming to permit enlargement of the Bulletin. In this issue we might have used half a dozen photographs to illustrate Mr. Wigglesworth's interesting account. The price of cuts is beyond the limit of our treasury. If endowment funds can be provided this will become a printed magazine as it should be, greatly enlarged, more valuable, illustrated. Small contributions may be forwarded to Mr. deValinger. We can bring about this transformation if we all contribute a small amount. Let's do it.

The Archaeological Society of New Jersey has extended to us an invitation to take part in a joint conference of the New Jersey, New York, and Pennsylvania Societies to be held in

Trenton at a date not yet announced. Here is a fine opportunity for us to cooperate in the study of the Lenni-Lenape. We have many problems in common and will be mutually benefitted through such a meeting. Details of time and exact place will be mailed to the membership. It is hoped that our representation will be noteworthy.

Thanks are herewith extended to Drs. Mason, Gutho, and Cadzow for their help and guidance during the period of our extreme infancy. The service they rendered is invaluable. Without their sound advice and counsel we would be far removed from our present degree of progress. They stand ready at all times to help us carry on. We appreciate their sincere interest and encouragement. We extend gratitude also to Mr. Wigglesworth for his fine account of his work at Rehoboth. Our only regret is that we are unable to reproduce the photographs he took.

The editor again requests that any interesting accounts, legends, information be sent to him for inclusion in the Bulletin. The next issue will be bigger and better.

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