



MAY
Vol. 1

SAMPLE

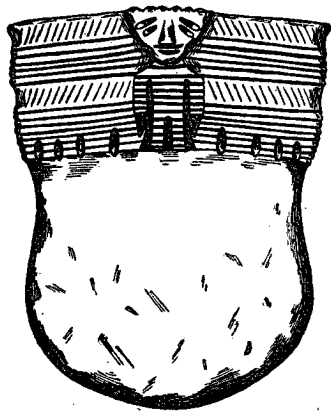
1937
Number 3

National Archaeological News

The
Highlights

- POTTERY
- ARIZONA
RELICS
- NUT
CRACKER
- AXES
- PIPES
- BEAR
HUNT
- MUSIC
- BONE
CHART
- BOOKS

In This Issue



Iroquois Pottery Page 3

Twenty-Five Cents

NATIONAL ARCHAEOLOGICAL NEWS

VOLUME

1

May, 1937

NUMBER

3

(ISSUED MONTHLY)

Published at 1014-20 N. Christian St.,
Lancaster, Penna.

ANNUAL SUBSCRIPTION, \$2.00
SINGLE COPY, 25 CENTS

GERALD B. FENSTERMAKER, Editor
RICHARD G. WOLF, Associate Editor

Business Office, The Conestoga Publishing Co., Inc.,
1014-20 N. Christian St., Lancaster, Penna.
Copyright, 1937, by Gerald B. Fenstermaker

Table of Contents

EDITORIAL FORUM	1
IROQUOIS POTTERY	3
INDIAN TRIBES	6
SALT RIVER VALLEY PEOPLE	8
"HAMMER STONES"	10
LIFE OF SUSQUEHANNOCK BOY	11
ANCIENT BURIED CITY	13
LOWER SUSQUEHANNA POTTERY	16 17
FORT SUSQUEHANNOCK AXES	18
MUSICAL INSTRUMENTS	19
GAMBLING GAMES	22
SENECA PIPES	24
BOOKS OF INTEREST	26
IROQUOIS BEAR HUNT	27
ARTIFACT REVIEW	28
ANTHROPOMETRY CHART	29
TIMELY TOPICS	30

Editorial Forum

A Pottery "Link"

THIS May issue of the National Archaeological News is devoted in major part to much discussion and data on Indian pottery found in America.

Information submitted by our readers is deeply appreciated. Other readers from time to time may supplement these facts with comparative statistics and artifacts and by publishing their findings we feel that the *News* may serve as the amateur archaeologist's mouthpiece in voicing his views and deductions of any material relative to those "Early Americans," the Indians. Without endless research and constant systematic study of the lives of those people, we may never hope to supply the first complete chapter in American History.

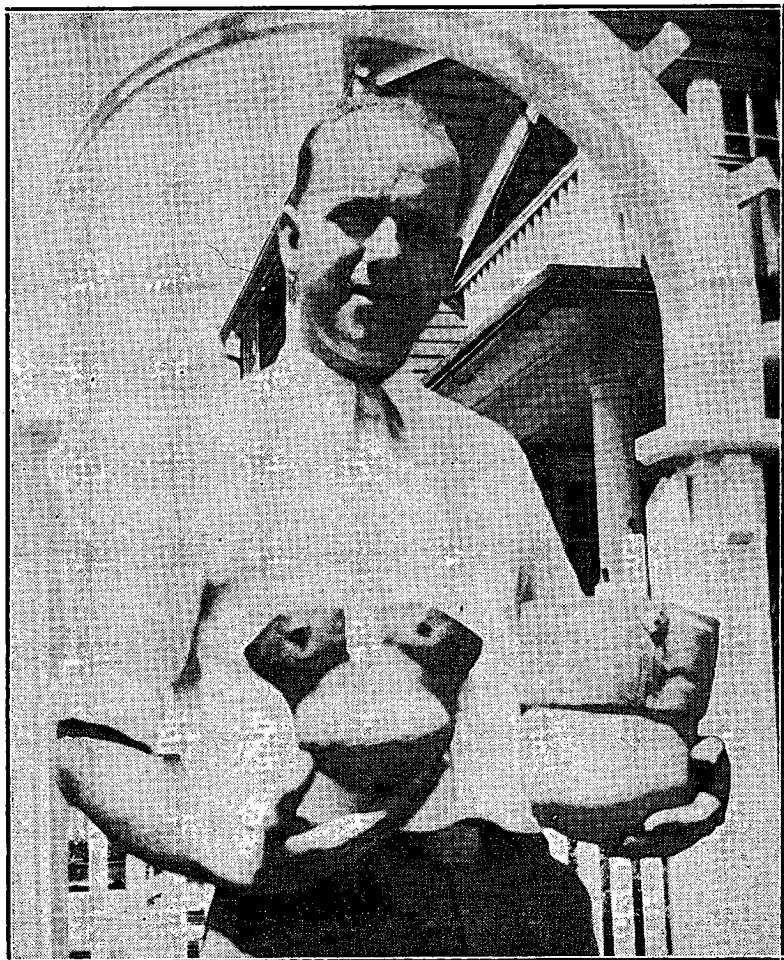
The stories that may be related to the manufacture of Indian pottery would fill volumes, but before this work can be accomplished many missing links from all corners of America must be forged together over periods of years.

The *News* this month endeavors to contribute a "pottery link" that may aid the amateur archaeologist in acquiring and fitting another link to his chain that eventually will form the complete chain of knowledge concerning Indian Pottery.

Advertising

OUR readers' attention is called to the group of advertisements appearing in the *News* for the first time. Since this handy pocket-edition of archaeological findings has a coast to coast subscription list consisting of colleges, libraries, teachers, archaeologists, and collectors, who at some time during the course of study may desire illustrative artifacts, the *News* feels that it is adding a service department that is always useful.

Strict censorship and the right to refuse doubtful advertising copy will be observed by the *News*. Knowledge of any dissatisfaction that is met by readers in dealing with our advertisers will also be appreciated.



● *Meet the Editor*:—MR. GERALD B. FENSTERMAKER, himself an ardent amateur archaeologist, is shown above with several of his finest pieces of pottery excavated from Pennsylvania sites.

Iroquois Pottery

By G. B. FENSTERMAKER

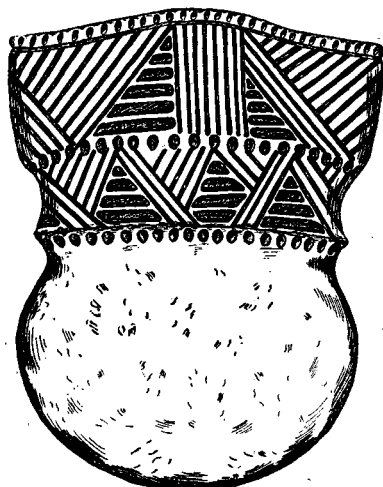
Some of the finest and most artistic sculptured pottery ever found in the Eastern United States has been found here in Lancaster County. It seems that further North into New York State the pottery loses its artistic design, and appears to be copies of what were seen here. The heads and designs are crude imitations of our pottery in Lancaster County, Penna., the small stone maskettes are also much cruder. I believe that the Lancaster Garden Spot was the first and original home of the Iroquois in the Eastern States, establishing here their first settlement. Even the rare and odd double neck bowls used for special occasions or ceremonial purposes were better shaped.

The oldest designs of this particular pot are the types with a double effect collar with design on each collar. The writer excavated a large Iroquois pot with a large plain collar and no design on the side of the vessel; another vessel of the coil construction type, was uncovered with all coils showing and filled in on the inside only to make it hold liquids. In one of the pots the backbone of a fish was found. A number of the older designs show the pots with extended lugs of clay and holes through the lugs so as to be carried with a sinew cord; these vessels with the heads are rather rare but the pots

with the whole outline of a full image are also scarce.

Each piece of pottery expresses some phase of Iroquois art as interpreted by the potter's individual taste. Thousands of pieces of Iroquois pottery found in Lancaster County are now in my collection.

The potters were women who were skilled in preparing the raw materials. They selected the best potter's clay to which was added a powdered mixture of quartz, flint, stone, or mussel shells. These substances together with mica were



MODERNISTIC IN SUGGESTION

used to temper the clay, reinforce the vessels and give them a heat retaining surface.



IROQUOIS MAKING POTTERY VESSELS

SHAPING AND FORMING

After beating the clay with stone roller pestles the Iroquois maidens rolled the clay into long, round strands about a quarter of an inch in diameter, and then coiled them, coil upon coil, each coil being a complete circle, until the correct shape of the pot or vessel desired was finished in the rough. After this process was accomplished the potter would embed and pat soft clay between the coils making the pot solid inside and out, then smooth it with a bark paddle. Corded paddles woven together out of vegetable fibers served the same purpose. To shape some of the heavier sections and scrape away the surplus clay a sharp edged mussel shell proved a handy tool.

DESIGNING

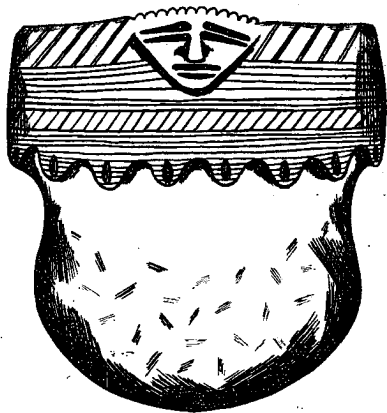
The designs on the top of the bowls, or side of the collars, as we call them, were worked on with animal bones and pointed wooden sticks. Some of the extended heads were added with extra clay and modeled forming the face of a spirit. Many pottery vessels with two to four heads around the edge of the bowls had the full effigy of the Indian with broad shoulders against a crossed or striped background design showing the remainder of the Indian's body.

BAKING

The pots were next placed around the edge of the fires for several days of drying. Drying them too rapidly caused them to crack into small pieces. After "fir-

ing and baking" the new vessels were ready to use for the family meal. The very small ones were used for drinking cups and paint cups, the latter are found holding quite a lot of red war paint at times when excavated. These miniature pots averaged from one to two inches in height. The larger Iroquois pots averaging up to 30 inches in height were used for ceremonial or funeral gatherings; some filled with water were placed inside the stockade walls on the fighting or observation platforms to check any attack by fire from outside the stockade.

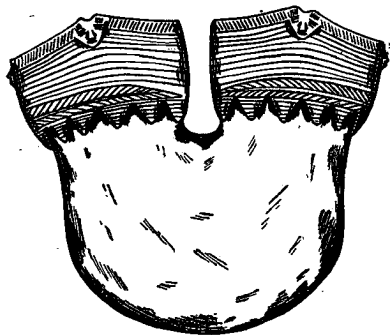
Clay gambling balls still showing the potter's finger prints and clay coil beads, clay pipes, hollow clay ball rattles with bone handle designs are some of my rare "finds."

**THE INDIAN SPHINX**

The heads on the pottery pieces resembled very closely the features of the sphinx heads in Egypt. Some of the older pottery had protruding legs with claws

similar to the sphinx. In addition, there was a hole through these legs to attach a cord so that the pots could be carried around the camp or on a journey.

The rarest type of pottery vessel made by the Iroquois was the



DOUBLE NECK BOWL

double neck bowl. The writer excavated three such specimens during his field research work several years ago. The perfect double neck bowl is a valuable piece made rare by the original V shape plus the distorted shape caused by the shifting of the soil in which it was buried.

Many vessels were found in the kitchen middens—otherwise called the Indian's dump. Other pieces are often turned up in the ancient fire places. More difficult than completing a hundred jig-saw puzzles, is the job of finding the missing pieces of an Iroquois masterpiece. Those pieces totally missing are replaced with plaster of paris and sometimes colored to match the original vessel.

In some instances many pots were found in A-1 condition on the Indian burial lots. Some were filled with bear and fish bones, evidence enough that food for the long journey of the dead to their happy hunting grounds was a requisite for the hungry soul. The hunter's dog and his arrows were buried with his master. Sacrifices at the graves were made by the relatives who would cut themselves till the blood flowed. Funeral fires burned also at the grave.

The writer came upon a very old Algonquin burial site, about 1500 years old, and on the top surface was found the remains of an Iroquois site about 500 years old.

Indian Tribes

THE SUSQUEHANNOCKS

The Susquehannock tribe lived on the river of that name and its tributaries when Pennsylvania history began. Racially they were Iroquois, but never admitted to the Confederacy.

At his invitations, 60 of them

visited Captain John Smith in 1608, coming from their homes near Lancaster. He said of them: "Such great and well proportioned men seldom are seen, for they seem like giants to the English. . . . The calf of the leg (of the greatest of

them) was $\frac{3}{4}$ yard about, and all of the rest of his limbs so answerable to that proportion that he seemed the goodliest man we ever beheld."

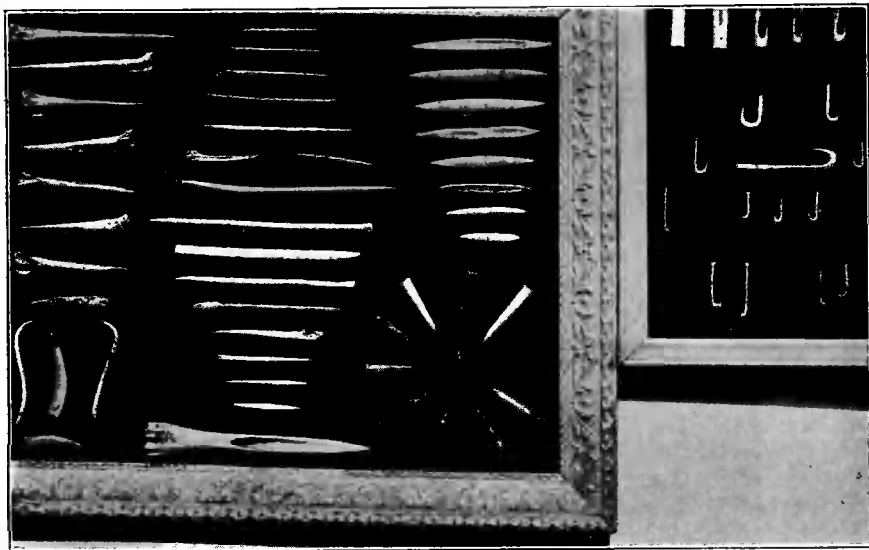
Recent excavations confirm Smith's description of them as giants. Estienne Brule, Champlain's interpreter, was the first white man to set foot on Pennsylvania soil when he visited their great town at Carantoun, Athens Twp., Bradford County, in 1615. In 1763 the "Paxton Boys" murdered the pitiful remnant of this great tribe, then called Conestogas, living peacefully near Lancaster.

From their capital at Onondaga, now Pompey, N. Y., the Iroquois

held the Pennsylvania tribes in subjection, when the whites came. The Senecas settled about the headwaters of the Allegheny and had a few villages in Pennsylvania; the Iroquois, however, were N. Y. Indians. They looked on Pennsylvania as their hunting grounds and forwarded their viceroys—such as Shikellamy and Tanacharison, the Half King to look out for their interests.

EDITOR'S NOTE:

The above description of various Indian tribes will be of specific interest to the amateur archaeologist who wishes to establish a foundation of knowledge valuable in studying artifacts and their relations to certain tribes that migrated from the East.



Among the thousands of interesting articles in the Ft. Ancient Museum established by C. C. Anderson near the Ft. Ancient Mounds are a large number of fishhooks and awls of which these are representative.

—Courtesy—HOBBIES.

Salt River Valley Prehistoric People

By E. H. MURDOCK

Through the study of United States History in school I believe I first became an ardent student of the American Prehistoric Indian. For many years, I looked for arrows, and other artifacts along the Delaware River and its tributary streams in New Jersey. As I grew older I continued this fascinating hobby.

About three years ago, I left the haunts of the Line-Lenape and immediately started looking for trails of another tribe of Indians known as the Prehistoric Hohokums, and the Prehistoric Pueblos who followed them and roamed the plains near and around my present home in the South Central part of Arizona.

Naturally, it took me some time to get adjusted to the difference. Here were great stretches of plains, and if it had not been for friends, I am afraid I never would have found where to look or what to look for. One finds little surface hunting here. All collectors dig. My eye was so well trained from Eastern surface hunting experiences, that I did pick up several valuable relics in this way, while my companions were industriously digging in the hot sun. However, will admit that in order to really find relics, in any quantity or qual-

ity, one must dig here. Surface hunting in this part of the State is difficult, as it seldom rains here, and therefore takes a period of years to wash out relics.

One outstanding characteristic of the Indian of this culture is his artistic ability. Surely they took great pride in their common utensils as is shown by their highly decorated pottery. They were not satisfied to make simply a pitcher for water, but in many instances decorated it beautifully. Their paint cups, in which they mixed their war paint also show much decoration, many being the effigy type.

NATURE LOVERS

The outstanding quality of the effigy found in this locality, is the spirit of life the Indian was able to mold, or carve in the effigy. Surely he must have loved nature in order to transplant this quality into his work. I have observed effigy cups, and ceremonial slates, that were so real that while I looked at it, I had the feeling that it was about to move. Artists in our day, are still striving for this same quality in art.

The eastern banner stone, unknown here, is replaced by the ceremonial slate. No one knows

for sure its purpose or use, however, it is generally accepted that these slates were used for religious ceremony purposes. Some have carved borders, with designs, or tally marks around them. These objects are also made in effigy form.

Due to the dry climate here, painted pottery has been preserved beautifully. Some of these pots have been in the ground about 2,000 years, yet, when excavated, the designs are plain and distinct. Some of the designs are very complicated, and one marvels, when he learns, that these were done free-hand by the women of this culture with yucca fibre brushes.

MOUNDS DISAPPEAR

Like many other parts of the country, it won't be very many more years, before all these mounds will be leveled and the ground used for agricultural purposes. Only this spring, I have seen mound after mound being leveled. This means, that the objects are scattered and mostly broken by the heavy farm implements.

Arizona is a large State, and covers a great deal of territory, therefore, when I speak of the relic conditions in this part of the state, it does not mean this describes the relic situation for Arizona in general.

In Northern Arizona one finds the Cliff Dwelling. That of course is an all together different life from the Indians who roamed the plains in this section.

The Indians of that period were

God fearing also. I visited a religious ceremonial cave, where they made pilgrimages to pray for rain or immediate needs. In these caves, can be found ceremonial prayer sticks, pieces of prehistoric rope, turquoise pendants and beads, also pieces of arrow shafts. In order to find these objects one must sift the dirt with a fine screen. This is no pleasant task, but to a collector nothing is too hard, and no object too small to satisfy his thirst for new findings.

While it is true that some of the land out here is restricted by the Government, the amateur collector, can find places to hunt for relics on private owned ground. Most of the owners are very generous along this line, and like in so many other parts of the country, think it is quite odd, why any one wants to pick up "them stones." Even digging permission is obtainable if the digger respects common decency and fills up the holes he has made. If the owner is a noncollector, and one obeys the common rules of courtesy, you have no trouble in getting consent to explore.

AGATE ARROWS

The arrows found in this section are of exceptional beauty and design and very scarce. As cremation was a popular form of burial in this section, almost all of the arrows are of this type. Due to the heat of the cremation, many of them are burnt ash white, and are fragile, although whole and perfect. Many of these points

before burning were agate. Occasionally one finds, an agate point that was not cremated with the body, and these are very fine.

The Indians of this section had obsidian to work with, and therefore the obsidian arrow head is typical of this section. However, I have found a good number of arrows, picked up a great many flakes of materials, and as yet have never seen a chip of the bright red obsidian sometimes sold to collectors in other parts of the country, as true prehistoric relics. When I lived in New Jersey, I had two very bright beautiful arrows, red in color, that I was especially

proud of possessing, but since coming here, I have learned that although they were pretty, they were modern made, and the material was simply red glass!

By using the Pacific Coast shells, the Indians made many of their ornaments of this material. The frog was a popular object for them to carve out of the shells. Pendants, rings, and bracelets were made from the larger shells, and therefore supplied the showy ornaments of which they were so fond. The Thunderbird was held sacred to this tribe, therefore it was the popular form to represent in carved shell or stone.

"Hammer Stones"

By E. L. FENSTERMAKER

A multiple nut cracker serves as proof that the American Indian believed in saving time when preparing his edible products.

The nut cracking outfit shown below consists of a large flat lap or anvil stone worn by much use.

In the center is a hard sand stone about 5" square. The top is picked flat with 9 pits or depressions. The bottom side is also pitted but about half are destroyed by a piece breaking off. These pits are the size of a dime, in di-

ameter, and $\frac{1}{8}$ " deep. Nine filberts or hazel nuts can be placed in the pits as shown; the hammer stone at right is of pebble formation, $4\frac{3}{4}$ " diameter picked flat on



the bottom. If used as illustrated at right the filberts are all evenly

cracked with one blow without crushing the kernels, thus you have a multiple nut cracker for mass production. It is interesting to note that these two stones were found, while surface hunting at the same time in 1936, only about 35 yards apart, on a tract where the first white settlement in Lancaster Co., Pa. was located in 1710 A.D. It is remarkable since they

were not separated in that period of time, considering that this land was cultivated from the start. All indications point that they are a unit and have been used together before. The Indians made good use of the kernels of the forest, by mixing them with the fats of animals to be used as a corn bread spread for sandwiches on long, hard trails.

Life Of A Susquehannock Indian Boy

A Biographical Excerpt

By G. B. FENSTERMAKER

Early one Spring morning, I, Lone Wolf, arose and wandered from Fort Susquehannock to the bank of the Great Susquehannock river.

The Spring atmosphere was emphasized by the winging of large flocks of water geese, herons, cranes, swans and other birds that made the river banks their homes. Pigeons soared out of the woods and roosted so thickly on the branches that we often caught them at night with our bare hands.

My father's favorite animal hunt was for the "great beast," the moose. Aided by the dog pack he would track the great animal down until it had become weak and

yielded to the mighty spear hurled by my father. Many times my brothers would take the place of the dogs and help our father get the beast in a position for the final kill. I, too, soon was taught how to hunt and often helped to kill the beaver, elk and buffalo, of which there were many, but in the Spring we always turned to the soil for our living.

We all helped father in the field and pulled the plow fashioned out of a long, angular grooved axe, five times as long as the common grooved axe, which was fastened on a large sappling with sinews. All day we broke the soil and near dusk an Indian runner

boy brought a message to my parent that our grandfather had become seriously ill. We hastened back to the Fort and there watched him pass on to the great horizon. His journey was to be aided by the Shaman's beating of wood and bark paddles upon the outside of the long house. The beating was continued by my father and brothers whose duty it was to help the soul depart out of the smoke holes and prevent it from lingering in the house or else his departing breath might touch them and send them to their doom.

Relatives, neighbors, and friends were informed and gathered at the lodge where the body rested. They all came with charcoal stained, mourning faces and the third day when the funeral and village feast were held they all came with their share of food. My grandfather's body was then prepared for burial. He was wrapped in beaver skins and placed upon two sapplings covered with bark and rushes. His limbs were bent and pressed tightly against his body so that he may be committed to the earth in the same position in which he came when he saw first light.

After removing the bark from the house, that side to which the body had been turned, my relatives lifted the corpse to their shoulders and carried it to the hill top that overlooked the Susquehannock river. The donors of gifts and the procession followed to the bier. To make my grandfather

more comfortable on his long journey to the kingdom of the dead such things as garments, pottery, and other luxuries, were buried with the body.

Many times have we made sacrifices to appease the heaven. For our weaker neighbors who died by drowning we have held special ceremonies at which time a portion of the flesh together with the viscera is thrown into the fire. By that method did we hope to appease heaven for we were sure that heaven was always enraged with our race whenever anyone of the tribe lost his life by drowning.

The tombs of our chiefs were raised a little from the ground. Long poles were erected to form a pyramid over the grave. This marker on which was placed a bow, arrows, shield, and war-paint signified the passing of a true warrior. On the women's graves were placed necklaces.

The Indian infants of our tribe were always buried near the paths trodden by the women into whose bosoms the souls of the infants were supposed to depart.

Time arrived for the Spring ceremonial dance. The fire lighter started the ceremony in the long bark house where more than 40 members of the tribe were in attendance. Three drummers beat out heavy staccato notes on the clay and brass kettles to which the ceremonial participants joined in with a loud YO HO BUHQ and HALLO. This procedure continued throughout the night as some rested

members relieved others who became tired.

When the harvest season came we discovered that it became more difficult every year to bring the crop into the Fort. . . . Our Indian runners have just returned with word that the Senecas are coming down the river. We prepare for the attack but already many of our people have died from a queer disease, called by the whites, "Small-pox." We have no time to lose in preparing our war dress, painting our faces blue, noses, cheeks

and eyebrows black over which we paint many lines in many colors to make us appear dreadful to our Seneca enemies and also protect our skin from the coming cold. Some of our warriors wear small images of the snake, eagle, or toad and also pierce their necks, chests, and cheeks with flint points and bone awls. To the punctures is added powdered charcoal which leaves designs under the skin that time can not efface.

Now we are ready for the Senecas! Our enemy has arrived on our soil and they attack

Ancient Buried City

By **BLANCHE BUSEY KING**

None of us ever quite outgrow the lure of digging for buried treasure. Imagine the thrill of finding buried deep in the earth on this continent, almost in the center of population, the thatched roof of a building which housed people hundreds of years ago. One never knows what the newly excavated earth will reveal. It is the fascination of the unknown which lures us.

Prehistoric people of various countries have left behind them monuments by which we identify them. We identify the ancient people of North America by their household articles and implements

of trade of various shapes and sizes buried under mounds of earth.

Some of the most interesting of these mounds are the King Mounds, beautifully situated high above the meeting of the Ohio and Mississippi Rivers near Wickliffe, Kentucky. There are nine mounds in all, four of which have been excavated under the supervision of Colonel Fain W. King, of Paducah, Ky.

The Burial Mound contains one hundred and fifty-three burials of three distinct types: bundle or reburial, extended dorsal, and cremated. The bodies were buried with their favorite pottery, tools,

fine flints, bone implements and jewelry. They were placed on the ground rather than in it, the surface soil being scraped away slightly, and the body covered to a depth of one or more feet.

Compared to our present racial standards these people were rather short in stature. A pottery maker was barely four feet in height. She lies buried with her six various size mushroom shaped trowels, made of pottery clay, a piece of round edged gravel for making incised lines, and a piece of cannel coal at her head.

In another section of the Burial Mound is the remains of a man who was an artisan of another type. Perhaps he was the leather worker, for close to his side are his tools—bone implements, consisting of needles, skivers, awls, spatulas and scrapers, some made from fish spines, others from bones of deer and wild turkey. Near him is a family group—father, mother and baby clasped closely in the mother's arm.

Council House Mound

The Council House Mound is rectangular in shape, measuring twenty-one by twenty-five feet. It contains three fire pits with the white ashes of the ceremonial fires still remaining; which must have blazed in ritualistic fires centuries ago. There is a gap in the wall,

indicative of a doorway. Within the dwelling are post molds placed about ten inches apart, suggestive of platforms for a Shaman or



BURIAL TOMB—FIVE LAYER DUNHALL,
ANCIENT BRADDO CITY, WICKLIFFE, VA.

Priest and his audience. Near the post molds is the outline of a building surrounded by a prehistoric drainage ditch. In this building were found seven pieces of pottery graduated in size.

Ceremonial Mound

The Temple Mound is the largest and highest mound of the group, and commands a superb view of the Ohio and Mississippi Rivers for miles in the distance. It is devoted to religion. In this mound are three rectangular clay altars, carrying out the trinity idea that is found in both the Burial and Council House Mounds causing much speculation, as the trinity idea occurs in many religions. Indications point to the worship of three different deities or religious forms; each altar being dedicated perhaps to the worship of some one deity and burnt offer-

ings made according to their religious customs.

Dwellings, and Infant Remains

The fourth Mound has been recently excavated. This Mound is rectangular in shape—155 by 55 feet. It presents a very vivid picture of the actual living conditions of an ancient people.

The Mound itself is built over many building sites, all large and rectangular in shape except one circular structure. At the base of the mound are the outlines of four small buildings with post molds placed at regular intervals. Scientists have wondered at the absence of infant burials in the other mounds as only four were found, one in the arms of its mother. Obviously this was the children's mound for fifty-four have been found. Infinite care was taken in brushing away the earth in order that the delicate little skulls and fragile wee bones were not damaged. One infant had a string of shell beads around its neck and near the hand of another lay a beautifully carved white bone doll. Others were surrounded by petite three legged clay bowls, one with a snake head for a handle and the other in the shape of a small hand; all telling the simple poignant story of paternal love and devotion.

Five fire pits were found. One raised and concave, two feet in diameter, shows evidence of great heat as it has a layer of fire hardened clay baked almost to a brick. Near this fire pit is the remains of

a feast, a charred heap of chinkapin nuts, hickory nuts, pecans, maize kernels, beans similar to lima beans, bones of turkey, squirrel, bear, deer, racoon and other species of animals, fowl and fish, bearing concrete evidence of prehistoric dining.

The pot sherds tell an impressive story of their textiles, pieces of which must have been pressed into the clay while soft, leaving indentures of many different designs. Mussel shells were ground and mixed with the clay as a tempering agent and red and yellow ochre used to color it.

They were an ingenious people. They utilized the human figure in many attitudes and every kind of bird and beast in the prehistoric forest is represented in their zoomorphic effigy pottery pipes, bird stones and ceremonials. Some of the human effigy pottery types are caricatures and the one representing a crouching woman, arm on knees, is seen so often that one is led to believe that she represents some malevolent goddess whose anger had to be averted in every household.

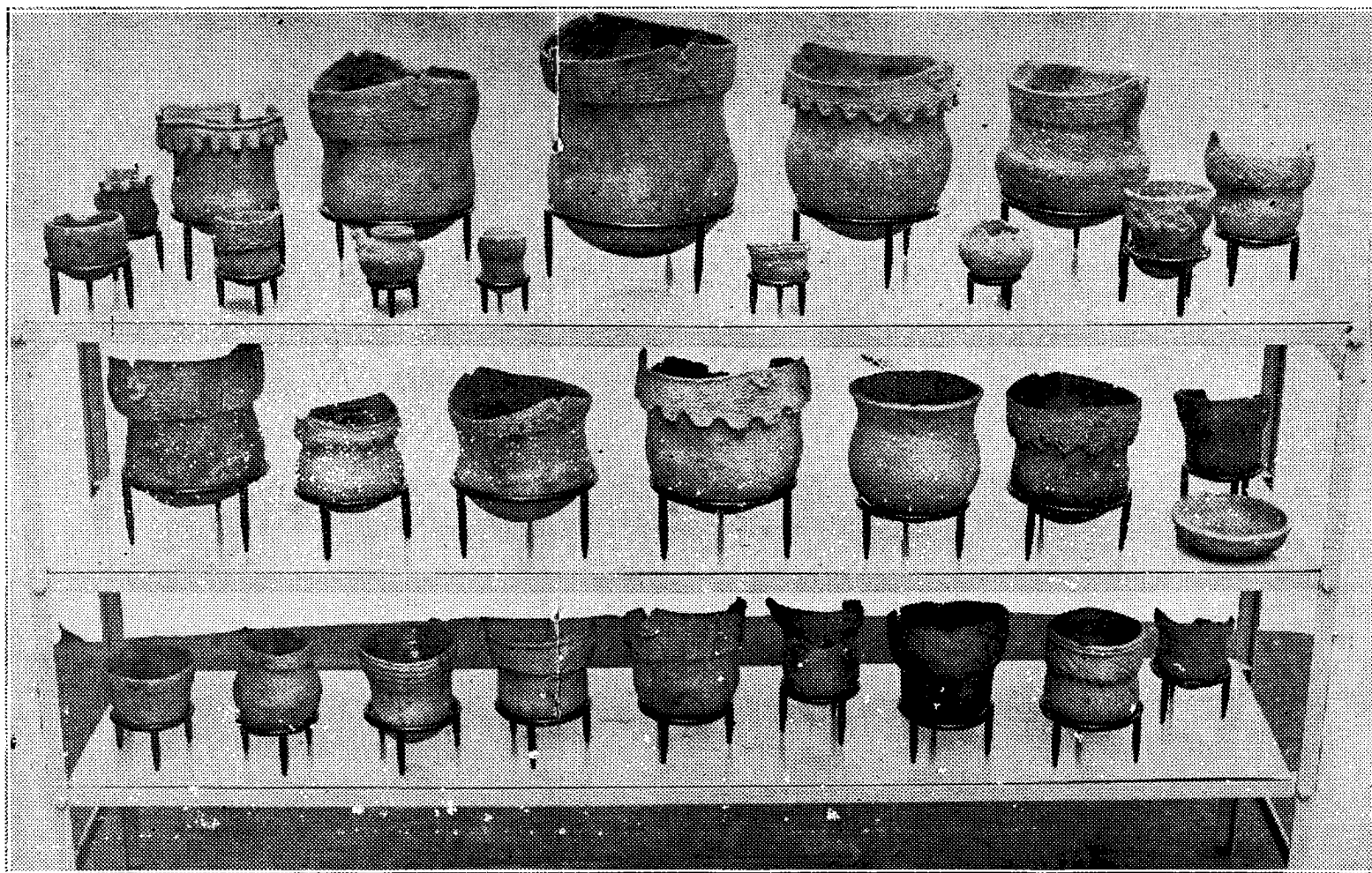
IN NEXT ISSUE

Beginning in the News next month will be a Zuni Indian vocabulary specially compiled by Roy A. Keech, of Santa Fe, New Mexico.

Mr. Keech spent several months in the Pueblo Indian village of Zuni learning the speech and folk-tales of that famous tribe.

Lower Susquehanna Iroquois Pottery

A fine group of Iroquois pottery illustrated here excavated from the lower Susquehanna River territory was secured by the State Museum, Harrisburg, Pa., from the Editor. This collection is considered one of the finest and most representative group of Iroquois pots in existence today. These specimens in various sizes and shapes, show the true artistic abilities that the American Indian was able to transcribe on such vessels.

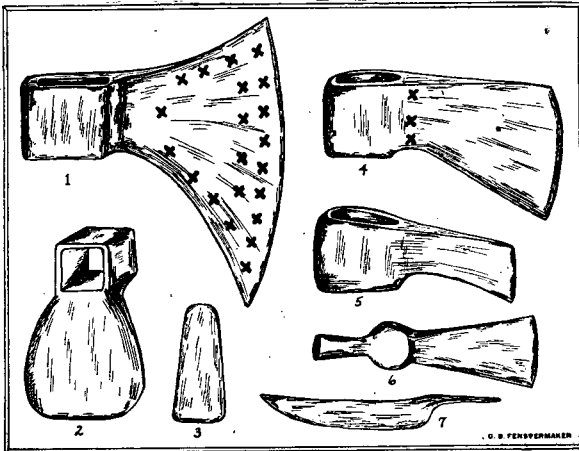


Fort Susquehannock Indian Axes

The iron industry which once enjoyed financial success in Lancaster County is reflected by the discovery of various types of iron axes in the Washington Borough

Captain John Smith referred to in 1609 when he was surprised to see the Indians using the white man's latest weapons of defense. Numerous axes, knives, brass ket-

tles and beads of many varieties were accumulated at the fort site along the Susquehanna. Many of these items were of Swedish and Dutch manufacture. English silver coins dated 1724 and 1725 were also uncovered and are now some of the prize currency pieces in my collection.



vicinity. Scattered evidence of the historic trader days are found here which may be pieced together to show that the Susquehanna Indians were among the first users of the iron axes. These implements used for war purposes and hunting were also utilized by the squaw for domestic purposes. The oldest axes and knives, however, were probably obtained from the French along the St. Lawrence River.

It was these implements that

IRON FORGES
The first successful iron enterprise in colonial America was established by Thomas Dexter and Robert Bridges who formed the "Company of Undertakers" at Lynn, Mass., in 1645. Crude iron furnaces sprang up in Pennsylvania and throughout the colonies especially in sections where bog iron ore could be obtained. As the migratory trader tide spread westward iron furnaces marked his trail, the old ones being abandoned while new ones were set up by the

pioneers along the western frontier.

The county of Lancaster was a reservoir for supplies during the Revolutionary War since the residents here were skilled in the manufacture of guns and other iron implements. In those days the iron forges in this country were reputed to be among the best in the country.

The early type battle-axes however, were made especially for the Indian and probably were imported from Europe. Some of the crudest axes as illustrated here were made at the colonial forges in America. No. 1 is the old English broad type axe; No. 2 is a sketch of an adz used for wood working; No. 3 is an iron celt or skinner for scraping and taking the hides off animals. These replaced the stone ones in use; No. 4 is a common type of axe used by the squaw for breaking the firewood. This type was buried with the female body together with brass kettles.

The X marks on the Nos. 1 and 4 pieces were marks of identification placed by the maker. Any number of such marks may be found on specimens of various designs.

No. 5 is a rare style, heavy duty, piece, some of which were found in pits with thousands of mussel shells. The blunt end was utilized in opening the mussels. No. 6 was a convenient style and thin type model for carrying around in the belt for use in hand to hand fighting and scalping. The handle, of the No. 7 specimen, rotted away, was made of animal bone or horns. These knives are very numerous on trader sites.

All of the above articles were very rusty when discovered and after being out of the ground for a number of weeks formed a heavy crust of iron shell which fell off and revealed only a thin outline of the article that had been buried for several centuries.

Indian Musical Instruments

Music, principally in the form of songs, has always played a very important part in the lives of American Indians. The carrying on of almost every form of human activity was formerly accompanied by singing. Even today, despite

the advance of white civilization, thousands of songs are still performed.

To a great degree, singing is connected with religion. Since the Indian introduces his native religion into everything he does, it

follows that one or many songs accompany nearly every action. The basic idea of singing seems to be that by means of it the Indian is able to add to his own inherent magical powers some portion of that mysterious power which fills all things in nature.

The greater number of Indian songs are sung to the accompaniment of instruments which produce a strongly marked beat, such as the drum, rattle, and the notched resonator or morache; evidently because rhythm is associated in the Indian mind with the supernatural.

● DRUM. There are three main types of this instrument. The small hand drum, which usually has but one head, but which may have two. The large two-headed drum, commonly made of wood. The water drum, a keg shaped article equipped with a single removable head and containing a certain amount of water.

The hand drum is made by stretching a piece of hide over a circular band of wood several inches wide. The drum is usually from 10 to 16 inches in diameter. The cords which keep the head taut are tied together in the back and form a handle. Such a drum can easily be carried and so is commonly used where circumstances require that the drummer move about.

The large two-headed drum is generally made by hollowing out a section of log and stretching skin over each end. There is considerable variation in size, from about

1 foot to 3 in height and 1 to 2½ feet in diameter. Metal kegs and washtubs, and ordinary brass drums of white manufacture are sometimes used. In the southwestern Pueblos the large drum is usually held and beaten by a single standing player, while on the plains and in the east it is placed on the ground and struck by several seated men. Sometimes the drum is suspended from stakes, held by others than the player, or supported by a group of players.

The water drum is made by hollowing out a log from one end only. Near the solid end a small hole is bored to allow the water to escape. The head is made of a large piece of skin which is held tightly in place by a hoop which fits closely to the sides of the instrument. Before playing the head is removed and water is placed in the opening. The head is then dampened and replaced. The presence of the water adds greatly to the resonance of the drum. Such drums are not very large, 18 inches being an average height. This type is most common in the north central section of the country.

The heads of nearly all drums are painted with decorative or symbolic designs. Very often these pictures are connected with something seen in a dream by its owner.

In the southwest single headed drums are made of pottery. On the northwest coast long wooden boxes are beaten by the heels of men seated upon them. Poles or

planks and stiff flat sections of rawhide are struck by some tribes. Inverted bowl shaped baskets and half gourds also serve as drums.

● **RATTLES** are used by all tribes. The most common type consists of a hollow container filled with small loose objects and fastened on a short handle. The guard is probably the most used container. Small rawhide globes are common among the Pueblos and in the plains region. The northern Woodland tribes made rattles of birchbark or elm bark boxes. On the northwest coast extremely elaborate carved and painted wooden rattles are found.

The Iroquois made rattles of turtle shells. In the southwest clay rattles are used.

Another type of rattle has a number of small objects suspended so as to strike each other or some hollow article to which they are tied. Dew claws of animals, teeth, shells, pods of plants, copper and tin jinglers and bells are all tied to sticks, to articles of clothing or ceremonial paraphernalia so as to strike together with any motion. The Pueblo tribes tie such objects to small turtle shells, which are worn under one knee. Flat or castenet-shaped wooden clappers are used on the northwest coast.

● **NOTCHED RESONATOR.** This appliance, often called by the Spanish word "morache," has two

parts, a stick, long bone or similarly shaped article on which are cut a long series of quite deep notches, and a shorter smooth stick or bone, often a shoulder blade, to rub back and forth over the notches. Usually one end of the notched stick is placed on a drum, an inverted basket, a dried, hollow pumpkin rind, a sheet of iron or the like which will give resonance to the rattling of the smooth stick over the notches. The other end is held by the player. This noise making contrivance is now confined to the southwest though in one form or another it has been found in many places in the world.

● **WHISTLES** are made from the wing bones of large birds, wood, reeds and, formerly, of quills. These latter were used by the Mandan, who tied rows of large quill whistles together like pan-pipes. The Hupa of California made pan-pipes of bone. The bone whistles, commonly from eagle wings, are characteristic of the medicine-men and Sun dancers of the plains tribes. They produce a single, shrill high note. The wooden instruments are long slender open tubes with a whistle mouthpiece. They produce 8 or 10 high notes and are used in courting and some dances. Reed whistles are used on the northwest coast.

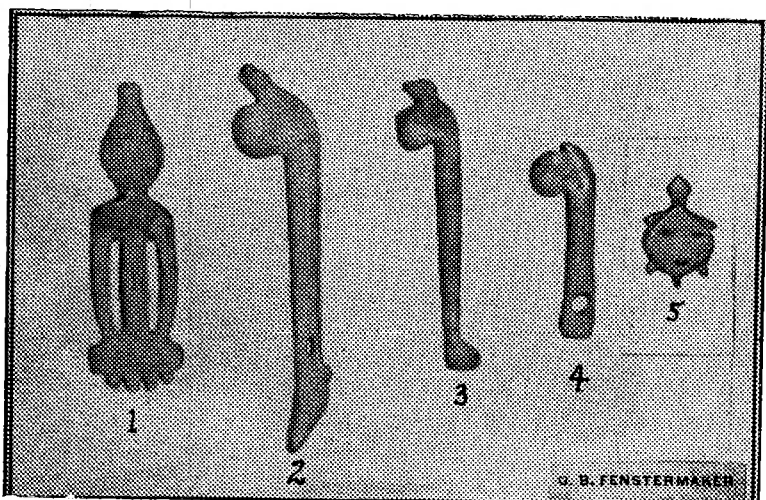
*(Courtesy The Amerind Society
of California Archaeology.)*

Gambling Games

● SHADES of gambling methods as plied in the Eastern States are beginning to come to light, but any attempt to curb such practices would be as vain now as in the days when the Iroquois Indians made Pennsylvania soil their hunt-

semble actual miniature pieces of various segments of animals.

The objects illustrated in the above picture were carved from animal bones more than four centuries ago. The state of preservation is remarkable and today these



IROQUOIS GAMING DEVICES

ing grounds 400 years ago.

The "lucky throw," as many of our games of chance today are run and decided, determined the winners of the articles at stake. The chief game of which we speak, perhaps, could be called "heads and tails" tossing. This classification would perhaps be more appropriate than the term as it is used today, for in Indian times the objects which were tossed did re-

same pieces are on display in the Fenstermaker collection at the State Museum in Harrisburg. During a tense moment at one of these games the sounds emerging from the excited Indians might have caused the American sports fan today to think himself at an athletic contest.

Talking to the "bones" was a common practice in those days. Some of the good luck players

must certainly have been a conglomeration of confusing syllables. Taking these "bones" illustrated, the phonetic pronunciations of their proper names would be:

Duck—(So-Wack)

Deer—(Nau Gant)

Fox—(Nonk-Wat-Wa)

Wolf—(O-Ta-Yo-Nee)

Axe—(Aw-Do-Gut)

Turtle—(Ha-No-Wa)

Battle Ax—(Hen-No De-Yo-Da-Watt-Aw-Do-Gut)

All of the bone carved objects mentioned above were found on an excavated Iroquois Indian village located in Lancaster County.



THE "POT OF LUCK"

The carving number 1 is shaped like the bill, wings, and tail feathers of a duck; number 2, a mini-

ature battle ax carving is a replica of a deer head and a split hoof; number 3 resembles another type of ax with the fox or wolf head and paw of either animal; number 4 is just a plain type ax, possessing a lower scoring value; number 5 is the turtle, the most important of the objects as far as scoring point value was concerned. The distinction was determined by the facial markings on the top of the shell.

Playing the game was simple. The entire group of bones was arranged on a large shell and then tossed from the shell into a large brass kettle. The positions in which these bones landed determined the arithmetical scoring of the toss. As many as a dozen Indians could play the game which usually lasted for hours until the one hundred or two scoring goal was reached. The spirit of gambling and reckless chance reached the tensest of moments in the lives of young warriors.

THE FORCES OF NATURE

will be illustrated with an excellent example of an iron trader knife fused with a group of arrow heads. See it in the June Issue of the News.

Seneca Pipes

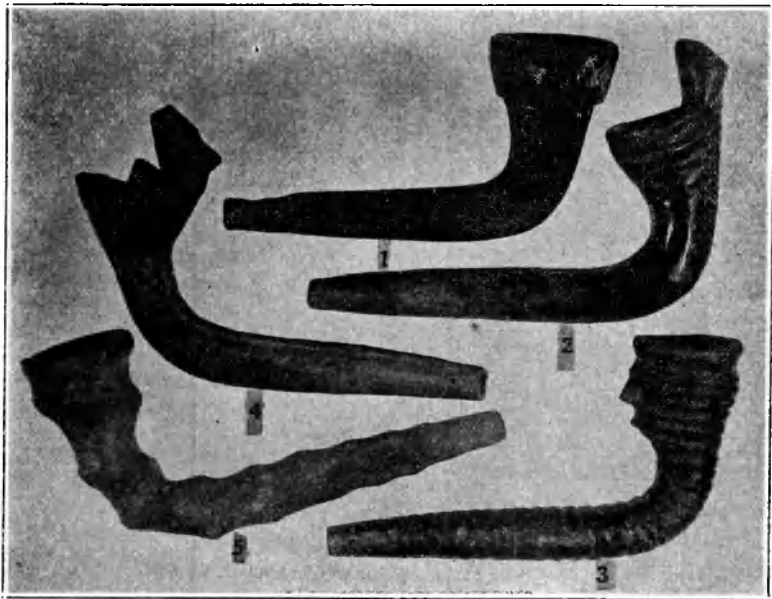
By HARRY L. SCHOFF

Archeologists are convinced more today than ever before that the Iroquois pottery pipes are the finest specimens of the ancient potters' art that may be found north of Mexico.

Five fine pottery pipes found in the burial ground of an early Seneca Indian village, near the western shore of Seneca Lake in the vicinity of Hall, a small hamlet between

Geneva and Penn Yan, N. Y., are illustrated below.

No. 1. Suggests a pottery vessel and probably was copied from one. The patches of white on the bowl are from the decay of shell wampum beads that evidently had been on the pouch that the pipe had been buried in as I found about 225 wampum beads massed around this pipe which was in front of



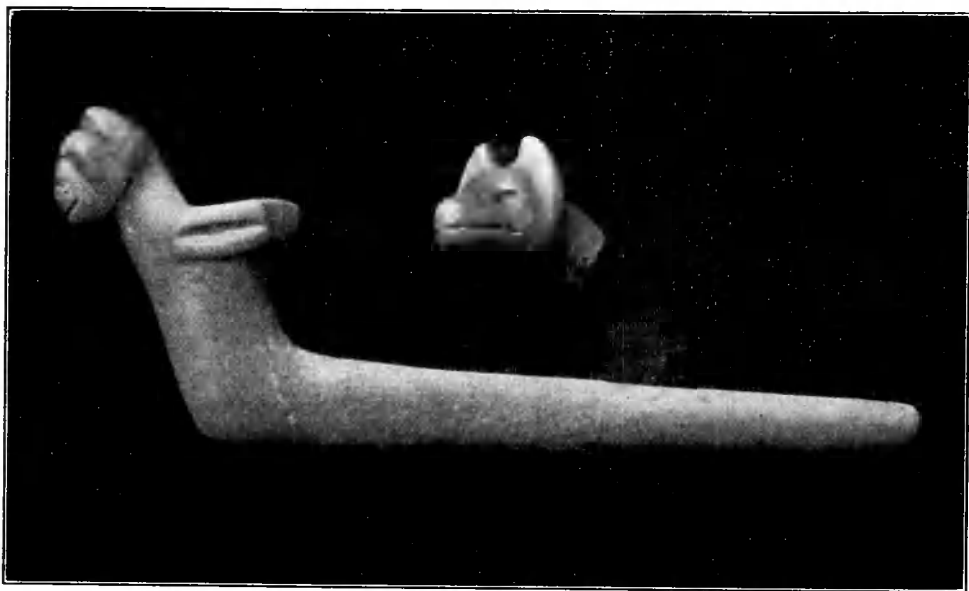
—Photo by H. Glasgow

the flexed skeleton near the hips.

No. 2. Is the "clinging otter effigy" type. It depicts an animal presumably an otter, clinging to the back of the bowl, the hips of the animal are indicated on the back of the bowl and the head is well formed and ears and eyes are clearly shown. This pipe was found in front of the face of a flexed skeleton and with it was two racoon bones and a strip of trade brass 2x5". The brass had stained the bones a beautiful deep green.

No. 3. This pipe is a combination of the human face effigy and plain ringed bowl type. It was found near the elbows of a flexed skeleton and the only artifact with that body.

No. 4. This pipe is one of the rarest types and very few are in existence that are not damaged in some manner. This one, however, is perfect in every detail and is stained a dark red on one side from laying in a mass of war paint. It is known as the blowing mask type and depicts an Indian with a



Effigy pipe and broken off head of another similar rectangular pipe of white clay slate (nodular fire clay) highly polished, 7" in length, found on the Stewart farm, a village site east of Great Island, Clinton, Co., Pa. It is of the Andaste Culture, found in 1909.

false face on blowing ashes through his fingers. This was one of the ceremonies of the "false face society."

No. 5. Is the conventionalized serpent effigy. The coils of the serpent twist to the left. This pipe was the only thing found with this skeleton which was flexed on its right side. This pipe was placed near the elbows of the skeleton.

The village site where these fine pipes were found was probably

very early contact as only one brass kettle was found, together with a few glass beads and one trade axe. In all I excavated twenty-three burial pits and over half of them did not contain any artifacts.

With the later contact burials nearly every one will contain some things of interest so I place the age of this site around 1625, the time the Seneca were just beginning to get European trade articles.

Books of Interest

WISCONSIN

Of the 37 volumes of The Wisconsin Archeologists, 20 volumes were published in the old series and 17 in the new series. Most of the quarterly numbers are in print and may be secured by addressing Charles E. Brown, Secretary, State Historical Museum, Madison, Wisconsin. Price, 50 cents each.

A table of contents of all publications to and including Volume 7, New Series, may be obtained from the secretary. A list of publications for the last eight years, Volumes 8-15, New Series, can also be obtained from him.

FOLK LORE

The University of Minnesota Press has published "Norwegian Emigrant Songs and Ballads" by Theodore C. Blegen, superintendent, Minnesota Historical Society, and Martin B. Rudd, professor of English, University of Minnesota. More than fifty emigrant songs and ballads, some with music, are published. "This is a unique contribution to folk literature and social history."

NEW WORLD MAN

The January, 1937, issue of American Antiquity, quarterly review of American archeology published by the Society for American Archeology, at Milwaukee, contains interesting papers on New World Man, The Occurrence of Coiled Pottery in New York State, Culture Influences from Ohio in New York Archeology by Wm. A. Ritchie, and a Suggested Projectile Point Classification.



THE BEAR HUNT

● *A Typical Iroquois* warrior stalking and tracking down a bear. The bear garment that the warrior wears serves as a good luck piece in making the hunt successful.

THE ARTIFACT REVIEW



For the Amateur Archaeologist Who Wishes to Compare
His Findings



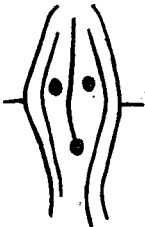
A Thunderbird carved on a rock found on a Texas site. Such picture writing on rocks are common the world over. Many Indian tribes had their own style of writing.

Site—Texas



A Thunderbird of the eagle type, represented by the figure doing the Eagle Dance, was carved on a rock known as Big Indian Rock in the Susquehanna River, below the Safe Harbor power dam.

Site—Lancaster Co., Penna.



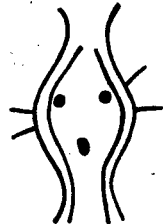
A character depicted by picture writing, showing head, eyes, mouth. The line from the mouth indicates that the person is in the act of speaking. The two lines protruding horizontally from the head indicate rank of the person. This picture was discovered on a rock in the Susquehanna River above the Conowingo power dam.

Site—Conowingo, Md.



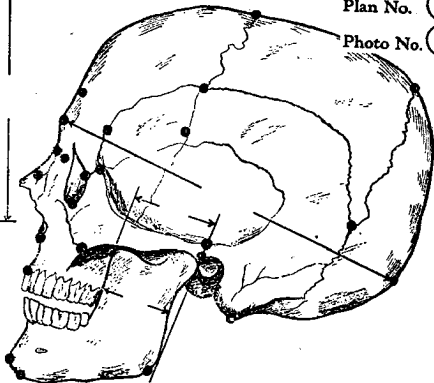
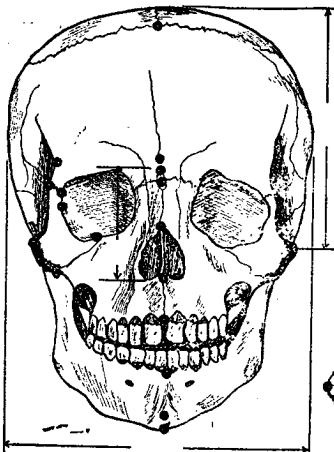
Another picture character similar to the one above, but different in respect of tribal rank noted by the four lines protruding horizontally from the head. This character was evidently of higher rank. Found on a rock in the Susquehanna river.

Site—Conowingo, Md.

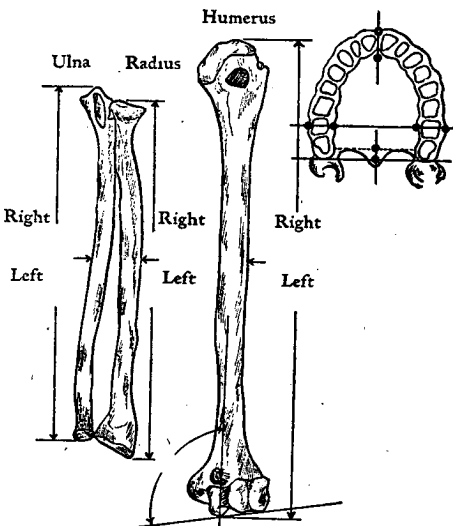
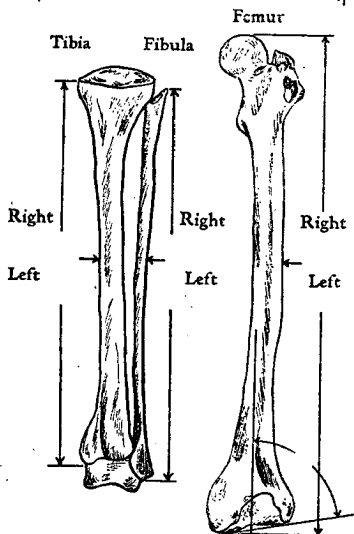


ANTHROPOMETRY CHART

Pit No. ○
 Plan No. ○
 Photo No. ○



Skull Depth from Surface



Date
 Deformations
 Culture
 Remarks

Sex
 Age

Position of
 Right Arm
 Left Arm
 Right Leg
 Left Leg
 Trunk

Copyrighted 1934 by G. B. FENSTERMAKER
 LANCASTER, PA.

BONE CHART

The above chart was developed for use in the field in measuring and keeping records. It will also serve in taking final measurements in the laboratory.

Timely Topics

• from •

Coast to Coast

* * *

NEW YORK SOCIETY

At the Rochester meeting of the New York State Archaeological Association, Arthur C. Parker was re-elected president and William A. Ritchie, secretary-treasurer of the New York State Archaeological Association and also the Lewis H. Morgan Chapter of the Association.

Other officers elected to offices in the New York State Archaeological Association are: vice-president, Charles F. Goddard, Long Island Chapter; 2nd vice-president, Vincent J. Schaefer, Van Epps-Hartley Chapter, Schenectady.

Other officers elected in the local organization are: vice-president, Chester A. Peake, D.D.S.; recorder, J. Sheldon Fisher; trustees, Milton Baxter, Keith Pierce, Dr. Charles S. Craig and Fred Hamlin.

* * *

EASTERN STATES ARCHAEOLOGICAL FEDERATION

It has been found necessary to change the dates for the Annual Meeting of the Eastern States Archaeological Federation. The time is expected to be fixed for October 29 and 30.

The Federation includes in its membership state archeological societies of the states along the Atlantic coast line, and is growing rapidly in members and importance of its work.

The October meeting will be held in the Smithsonian Institution, where the members in attendance will have unusual opportunity to view the valuable and rare exhibits and a personally conducted inspection of the section devoted to archeological research will be a feature of the convention.

* * *

THOSE FRENCH PIPES

One of the last clay pipe factories, which once flourished in France, has closed. It was founded in 1825, furnished clay pipes for most of the nations of the world, and at the peak of its production (1895) was pro-

ducing nearly 9,000,000 pipes a year. One of the molders, on the subject of the industry's decline, said, "The workman has forsaken the clay pipe for a briar—it is not so fragile—" Archaeologists will recall the many broken and fragmentary clay pipes yet to be found on many of the Indian camp and village sites of the state and the nation.

* * *

WISCONSIN

While examining some dirt brought to the surface of one of two mounds on the site of the Beaver Dam Boy Scout Camp Shaginappi, Mr. Albert H. Andorfer, a collector and member of the Society, made two interesting finds. One is a copper fish hook, two and one-half inches

GROOVED and Double Bitted
Axes, Mealing Stones, Celts,
Gouges, Game Balls, Pitted
Stones, Spears, Arrow and Bird
Points, Drills, Scrapers.

Reference First National Bank
E. S. Byington, DeQueen, Ark.

INDIAN BOOKS

make you appreciate your col-
lection more fully.

Bureau of American Ethnology Publi-
cations and others. Write for lists.

C. G. DRAKE, P. O. Box 163,
Union City, Ga.

Prehistoric Relics

Gathered from Many Parts of the United States and
Foreign Countries



Fine Southwestern Prehistoric Pottery

Black on white, red on buff, black on red, brown on yellow, plain ware,
onion skin, corrugated or finger nail in following types: Food Bowls, Ollas,
Pitchers, Ladles, Water Bottles, Miniatures and Rare Effigies.

The Murdock stock also includes a varied assortment of prehistoric beads of shell,
stone, bone, quartz, soapstone, jadite, and turquoise. Polished axes, carved war-
paint cups, plain and painted war-paint cups, ceremonial slates, fine arrows, and
many other fine specimens.

State Your Wants • Catalog on Request

E. H. MURDOCK

58 WEST C AVENUE

GLENDALE, ARIZONA

long and of heavy construction, not round but flattened on both sides, and with a remarkably sharp point. At the place where a line would be fastened there are two grooves about a sixteenth of an inch apart. The other discovery was a large flint arrowhead two and one-half inches long, with a bevel extending only along the left side of the blade.

Camp Shaginappi is located on Lake Winnebago, a short distance from Calumet or Pipe Village, Wisconsin.

* * *

NEW YORK

Rochester—A blackberry cake, baked by an Iroquois squaw during pre-Revolutionary days, is being exhibited by the Rochester Municipal museum.

The cake, now deteriorated to a mass of berry seeds, but still holding its original shape, was taken from the grave of an Iroquois brave, according to the museum's assistant archeologist, William A. Ritchie. The cake was discovered in a closed copper kettle, which Ritchie said explained its long preservation.

Indian Relic Collectors

Remember we have a large and carefully selected stock of prehistoric stone relics, old beadwork and trappings, weapons, Navajo rugs and Indian pottery. We have an especially fine offering of the rarer types of ceremonial stones, as well as quantities of nice arrowheads, axes, celts, etc., at reduced prices.

Antique firearms and weapons, Colt revolvers, a bo original curios and weapons, minerals, fossils, antiques, Currier prints, and coins, are also described in our price list. t/c

Complete illustrated list 10c.

N. E. CARTER

Established 1900

Drawer G Elkhorn, Wisc.

INDIAN RELICS

Fine Arrows, diff. colors, location, etc., each 10c; Perfect Gem points, 10c; Bird points, 10c; Spears, 50c; Birdstone, \$3.00; Axe, \$1.25; Butterfly Bannerstone, \$3.00; Indian Stone Pipe, \$3.50; Five different kinds of Wampum prehistoric Indian money, Disc, star, Tubular, sq. wood Hudson Bay Trad. bead, all 15c; Ind. Relic List & Arrow for 10c; Ind. Relics Bought, Sold & Exchanged, Postage extra.

HOBBY SHOP,

K-401 Crilly Bldg., Chicago.

INDIAN RELICS

Beadwork, Stamps, Coins, Minerals, Fossils, Books, Old West Photos, Fine Texas Spearhead 25c, Fine Flint Drill 25c, Fine Perfect Birdpoint 15c, used Catlinite Pipe Bowl, T shape, \$2.00; Long Temple Mound Copper Needle \$1.50, Catalogue 5c. Indian Museum, Northbranch, Kan.

WE BUY BOOKS ON INDIAN RELICS

STONE AGE and others by Moorehead, SOUTHWESTERN ARCHAEOLOGY by Kidder, National Museum Reports, N. Y. Bulletins by Beauchamp. Give description and price.

P A T C O . .

910 W. 35th Place, Chicago, Ill.

Rediscovering Illinois

An Archaeological Exploration in and Around Fulton County. By Fay-Cooper Cole and Thorne Duell. 342 pages, 73 illustrations, \$2.25, postpaid. J. Ventuella, 910 West 35th Place, Chicago.

Letter-Lines To the Editor

"I just saw the first copy of the 'NEWS' yesterday and am well pleased with it; enclosed find check for year's subscription beginning with the first number."

—DR. F. H. RACER,
Lomita, Calif.

Enclosed find check for annual subscription to the National Archaeological News. Anticipate being very much interested in looking it over and wish it success."

—ROSS PIER WRIGHT,
Erie, Pa.

"Thank you for the first issue of the National Archaeological News. The publication appears to have real merit, and should do much to consolidate interest in archaeology in this country.

IRVING ROUSE, *Secretary-Treasurer*,
The Archaeological Society of Conn.

"Permit to offer comment on the "Snowsnake" article appearing in the first issue of the 'NEWS.' No doubt the illustration is based on Miss Scanadore's fine article, but due to the lack of minor details, the illustration is in error on several points. The track is made on level terrain, and depressions and elevations are strictly avoided if at all possible. The body of the "Snake" is rectangular in shape being about $\frac{3}{4}$ " in width and $\frac{3}{8}$ " in depth, and in recent years, its length has been cut to approximately four feet, probably due to the scarcity of straight-grained hickory in longer lengths."

HENRY P. SUTTON,
Rochester, N. Y.

Editor's Note: Reference is also made by Mr. Sutton to the "Red Man's Fate" article in the first issue of the 'NEWS' and he adds that it is doubtful whether more than ten percent of the Indians on the Cornplanter reservation practice paganism.

"Send us additional sample copies of the National Archaeological News. We have many members in our society who are asking for your publication. I'm sure the magazine will find a place in our group."

AL PEARSALL, *Sec'y.*, Rio Grande Chapter.
The Colorado Archaeological Society,
Monte Vista, Colorado.

The
Amos H. Gottschall
Collection Of
Indian Relics

This famous collection was gathered by Mr. Gottschall over many years of his life and association with Indian Tribes has been consigned to Ira S. Reed. The collection is being offered for sale as a whole or in part, at

81 North Main Street

Sellersville, Penna.

IRA S. REED

Send Today For Catalog Price Fifty Cents