

**AT CAYADUTTA,  
Finding of the Engraved Awl of Bone.**

# Cayadutta

## A Great Pre-Colonial Mohawk Village-site

BY PERCY M. VAN EPPS.

A fascinating revelation for the archaeologist exists in the Mohawk valley—a wonderful discovery of which the general public have had but the slightest inkling and of which many of our archaeologists have as yet heard but little, or having heard, have but imperfectly realized its importance. We find here an ancient Mohawk village-site with its lines of defense yet visible, its ash-beds and refuse heaps filled with all manner of mementos of a wellnigh vanished race and all this within five minutes' ride from one of our greatest thoroughfares, the New York Central railroad. This place, which was certainly abandoned by the Mohawks before colonial days, had lain hidden in its forest seclusion for over two hundred years, unknown, undreamed of save by one prophetic delver in ancient things, S. L. Frey of Palatine Bridge, who, in a scholarly paper read in Utica before the Oneida County Historical Society, pointed out from certain analogies that a third great pre-colonial village-site of the Mohawks might yet be found, two such having been known for years.

It was the lot of George Chapin of Fonda, himself an ardent antiquarian, to accidentally stumble upon this "living-place" of the ancient Mohawks. It is situated in a forested area on the east bank of the Cayadutta Creek, a small stream coursing southward through Fulton and Montgomery Counties, N. Y., which after doing considerable mill duty at Gloversville and Johnstown, finally empties into the Mohawk at Fonda. The site was discovered in 1892. Chapin at first told of his find to a few friends only, and for some little time the knowledge of its discovery was kept a profound secret. But it was too good to keep, and eventually the numerous "antika" men of the Mohawk country began to get wind of the find and ever since the site has been a prolific mine from which the many local antiquarians have delved many fine and occasionally unique, examples of the handicraft of the ancient Mohawks. It will be noticed, perhaps, that I use the adjective ancient; pre-colonial would be a more accurate term,

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for it is positively shown by the utter absence of any articles of European or Colonial origin, such as plentifully occur at village sites of a later era, that this village was for some reason abandoned before the arrival of the Dutch in the valley, or prior to the year 1623.

A very plausible theory, and one which is probably not far from the truth, regarding the occupancy and desertion of this village is that the site, naturally secluded and of easy defense, was chosen by the Mohawks at the time of their flight from Canada, after being nearly exterminated in a war with some Algonkian nation, and that here and in the two sister villages to the westward on the Otsquaga and Garoga creeks, both equally secluded from the main river valley, they dwelt in peace and security until after many years they became again a strong nation and finally becoming a member of the great federation of the Five Nations abandoned their secluded forest homes and boldly erected their famous long houses upon the very banks and heights of the Mohawk. This exodus probably occurred but few years previous to the first appearance of the Hollanders.

The Cayadutta village was situated on a high bluff overlooking the stream to the westward. The north and south limits of the site were naturally defended by quite precipitous ravines deeply worn into the underlying slates and shales, thus the only side requiring an artificial barrier as a protection against possible assault was to the eastward, which defense consisted probably of a row of stockades or palisades, as this border of the village plot is distinctly marked by a shallow ditch, still easily traced, which by a semi-circular sweep from ravine to ravine enclosed the habited area.

I say this ditch is easily traced—after one's attention is directed to it, for shallow as it is and obscured with leaf mold many would cross it without notice. In walking along its course a person has more than once to turn aside to avoid encounter with large trees which have chosen this slight depression for their home.

A moderately heavy forest growth now covers the entire site and its immediate environs, and it appears that the timber was never entirely removed, consequently it can at once be seen that a systematic method of exploration in the way of trying to define the limits of the long houses, etc., though very desirable, would have been wellnigh impossible. The soil completely filled with a tangled network of roots, both great and small, makes the search for relics a slow and very laborious operation.

The method of search for the Cayadutta relics is generally after this manner. First the collector goes about over the village plot sampling the soil here and there in order to locate a promis-

ing spot, i. e., an ash-bed. Finding such, he gets down on his knees and with knife or axe, and iron hook, begins the task of digging amongst and combing and cutting out the many troublesome roots. As the measure of his patience and strength so is his reward.

This rude and unsystematic method of research has resulted in much of the ground being dug over many times, but at the first digging some of the smaller relics are usually overlooked and some fine objects have been gotten by such secondary research. If some genius would only invent a modification of the X-ray machine whereby one could perceive what lies under the soil—under which particular refuse-heap this beautiful carved pipe lies, or near which stump that perfect vase ornamented with its diamonds of cross-hatching reposes—then the archaeologist would have an easy task at Cayadutta.

The most noticeable thing to a novice at Cayadutta is the enormous quantities of pottery fragments which seem to be present over the entire village area. An impulsive collector said in speaking of Cayadutta: "Did you ever see so much crockery in your life?" One cannot scrape away the fallen leaves without finding a potsherd, whether on the site of an ash-bed or not, and wherever an excavation is made in one of these ash-beds or fire-places the number brought to light is legion. Quite often can be found several fragments broken from the same vessel, but in no instance have I yet learned of any vessel being completely restored in this manner, though on my first visit I had the good fortune to find a tiny vase almost entire, just a portion of its rim broken away. This interesting little memento, just 1 3-4 inches tall, is rather rudely ornamented with a zigzag of dots around its neck, while encompassing its body is a double line of finger nail markings.

By far the larger portion of the potsherds are ornamented, the decorative design nearly always consisting of impressed lines and strokes or dots, sometimes arranged in continual parallelism, sometimes in conjunctive groups of diamonds, triangles and other figures. The ornamentation was applied to the upper portion of the vessel only. Nearly all of the vessels used in this village appear to have had a rather sharp angle at a short distance below the rim, seldom if ever more than two inches below, and below this angle the decorative design was rarely applied. The angle itself was almost invariably ornamented by a series of nicks or cuts perpendicular with the vessel. Some fragments, however, show this latter design obliquely impressed. This angle so marked appears as a noticeable feature on nearly all Mohawk pottery wherever found.

Cayadutta has yielded a considerable number of handsomely made little celts of slate and these with some other forms of slate tools recovered were likely used as pottery markers, for certainly, on account of the softness of their material, their form as celts is only in imitation and they would have served admirably for this purpose. Judging from the curvature shown by many of the sherds they have been broken from vessels of enormous diameter; far larger in circumference than any modern potter would dare to imitate even with the better paste in hand. However, these vessels, great in breadth, were but shallow in depth and as they were never suspended over the fire but were placed on a bed of earth prepared for the purpose and heat given to their contents by means of hot stones being placed in them, they answered every purpose of the user. It has been thought by some that these large vessels were used in boiling down the sap of the maple.

Next to the ever present potsherd the amateur archaeologist will find himself wondering at the quantities of mussel shells which he will unearth from the ash-beds and he would perhaps infer that the only food of the old-time people of Cayadutta was the fresh-water clam did he not also dig up numerous bones and teeth of various kinds of wild animals. The deer, the bear, the beaver, the raccoon and many other denizens of the primitive woods and streams are represented thus. The curved, chisel-edged, and oftentimes beautifully colored teeth of that primitive woodman, the beaver, are quite often found and are much sought after by the collector. A few incisors of the bear have been found nicely polished and perforated for suspension in a necklace. Other beads of bone, and some of red slate cut in various neat patterns, have also been unearthed. I have yet to learn of any perfect stone celt or axe found at Cayadutta, but I have seen several broken celts which when perfect must have been efficient weapons as well as beautiful examples of the stone worker's art. As before remarked, quite a number of celts in miniature have been recovered but as these nearly all are made from slate or other soft stones it is supposed that they were used as pottery markers by the women of Cayadutta on whom no doubt fell the task of moulding, ornamenting and baking the fragile vessels of clay.

A considerable number of slim and delicate arrow-heads of the triangular pattern with unnotched base have been found, some buried deeply in the refuse and others, possibly the greater number, lying directly on the surface. Many have been thus found by simply raking away the twigs and leaves and slightly stirring the coating of leaf-mold.

These arrow-heads are of a delicacy of make and of a pattern of which like examples are very seldom, if ever, found anywhere in the surrounding region. Were they but made from obsidian, chalcedony, agate and other semi-precious stones they would rival the famous bird points of Oregon, with such precision were they chipped from the dull blue and grey flints utilized by the archaic flint-knapper of Cayadutta. A series of nine examples now before me shows forms ranging from 3-4 to 1 1-2 inches in length, while the greatest breadth shown by any of this lot is slightly less than 7-8 of an inch; the majority range decidedly narrower. It is supposed that they were used for bringing down birds and squirrels from the trees in the village plot. Perhaps they were made for the lads,—their first practice in archery. This supposition would reasonably account for the absence of such specimens from among the surface finds of the valley.

But little actual working in flint was done in the village, unless the refuse chips and spalls were carefully gathered and carried beyond the habitable limits. As any such disposal of refuse was indubitably foreign to the Indian's sense of neatness, unless driven to such procedure by some current superstition, the all-powerful lever that swayed the savage mind, we must conclude that the workshop of the maker of spear and arrow-heads was somewhere outside for but very few flint chips have been seen in the village area. Also but few of the larger and heavier form of arrow-heads, such as are plentifully found in the region roundabout,—arrows of the chase and of the battle.

The Cayadutta rubbish-heaps have given us a few oddly fashioned knives (so-called) of flint. Some antiquarians will have it that these implements were not made for knives but were used as scrapers, in the dressing of hides and the like. Some of these tools, for certainly tools they are, whether knife or scraper, are diamond or lozenge-shaped, while others are tanged as though for insertion in handles, which latter, it seems probable, were nearly always fashioned from bits of antler. In my collection I have one of these handles of antler, from Cayadutta, which is somewhat split or checked at the perforation, exactly as a carpenter would by hard usage split an unferruled file or chisel handle of wood. The oblong perforation for the insertion of the flint blade has a depth of 1 1-4 inches or nearly half the entire length of the handle. The working of this perforation into the hard substance of the antler without the aid of metal tools must have been a laborious task. The surface of the handle conforms nearly to the original taper of the prong whence made, but the whole surface has been scraped and polished until all original roughness has been removed. The perforation being

made in the larger end and the other has been cut to a neat finish, leaving an obtuse point with many facets, much as a small boy sharpens a lead pencil. Altogether the example has made a neat and very efficient handle for some flint blade.

Many other pieces of antler have been found at Camp Cayadutta, nearly all showing some trace of cutting or abrasion. I have from this site a large basal section of antler having a channel or groove over four inches in length which has been cut or scraped into one side of the specimen, to a depth of 3-8 of an inch, with the apparent idea of dividing the section longitudinally for some purpose. The striæ made by the flint (?) tool in cutting are very plainly to be seen in the sides of the groove. Another peculiarity of the specimen brings vividly to mind the days of the stone age, for plainly visible are the gashes made by repeated blows from a stone axe in separating a prong or point.

The deer was a useful creation for the Indian. What the bamboo is to the Asiatic was the deer to the Redman. It furnished him with food, clothing, shelter, and with the materials from which he fashioned tools, weapons and trinkets without number. As by the enterprise of the managers of our great modern abattoirs every part of the Texas steer is made to serve some useful purpose, so did the dweller in ancient Cayadutta utilize every portion of the slaughtered deer, he himself could not gorge, which residue, could we trust the accounts of certain old historians, was probably small. The skin served him many purposes, as did the sinews and antlers and even the dried hoofs were strung in rows upon a belt and used as a knee rattle in the dance. After the larger bones had been duly scraped and licked they were split or broken to obtain the marrow, leaving the smaller ones to be worked up in many useful ways. Awls, needles, hooks, punches, arrow-flakers, whistles, charms and ornaments,—these and many other forms were fashioned from bones. Of bone awls numerous and many exceptionally fine examples have been dug up at Camp Cayadutta. The finest example yet observed is an elegant and symmetrical tool, just 5 1-4 inches long, carrying a point of almost needle-like sharpness. It has a color that would be the envy of a meerschau enthusiast, and a polish no jeweler could better. Longer awls than this have been found here but none equal in finish and symmetry of form.

On the occasion of a late visit I had the extreme good fortune to uncover another awl of rough finish and minus its point, which had been broken away, but with still enough attraction about it to make up a hundred-fold its lack of finish and want of a point, for on its broad side was some aboriginal carving whose tracings at once vividly called to mind the famous

bone carvings of Perigord and La Madelaine. Our Cayadutta carving, however, represents but a fanciful idea; an attempt at ornamentation only, though some have thought that in the wigwam-shaped figures shown on the specimen they could recognize an attempt to portray the Indian hut or lodge in a quite realistic way.

That the Cayadutta villager was a lover of the weed appears evident from the pipes recovered. The most of them are of burnt clay moulded in the common trumpet-shaped form and but slightly ornamented. However, Mr. Robert Hartley of Amsterdam, N. Y., has from here a unique example made from alabaster. The material from which this oddity was carved was likely procured by barter, though possibly the finished pipe was obtained from some western tribe. Perchance we have in this unique example a specimen from the famous aboriginal alabaster quarry in the depths of the noted Wyandotte cave in Indiana.

The evidence first and prominently to hand revealing the artistic tastes of the Cayadutta folk is emblazoned on the omnipresent potsherd. The neat and tasteful patterns often impressed on the clay show us that in this art this people were equal if not superior to some of the adjoining nations. The ceramic ornamentation illustrated in works descriptive of the Indians of the Eastern states and of New Jersey is far inferior in design to that of the Cayadutta potters. In general shape the vessels of Cayadutta were fashioned after a quite similar model with few variants. The smaller ones, had a rounded bottom with a gourd-shaped body whose curve swept gracefully upwards, encircling, then suddenly outwards breaking at a more or less obtuse angle. From this characteristic angle, always notched or ornamented, rose a flat band or rim to the mouth of the vessel. This level band was seldom more than two inches in breadth and was generally moulded with a slight incline towards the mouth of the vessel. It was upon this level portion that the ornamentation was lavishly bestowed; below the angle it was seldom used.

Other evidences of artistic ability are presented in some of the shapely and well proportioned implements, in the engraved awl, in an object of bone (possibly a pin) carved into a rude likeness of the human face, now in the extensive Richmond collection, and in some of the red slate beads owned by Mr. Hartley of Amsterdam. These beads beautifully represent in miniature weapons and ceremonial objects and after their three or four hundred years of rest in the ash-beds speak volumes to us of the tastes of their makers.

Cayadutta is easily reached by rail. After passing through a portion of the beautiful Mohawk Valley we leave the cars of



the New York Central at Fonda. Should we arrive by a West Shore train we must stop at Fultonville and cross the river to Fonda. Here we take passage on the "one-hoss" railroad running northward to Johnstown and Gloversville. This latter road with its high tariff and corps of polite officials we abandon at Sammonsville, the first little wayside station reached. We are now but five minutes' walk from Camp Cayadutta, but the ancient village plot lies concealed in a heavy forest and unless we are under the guidance of some local archaeologist we shall likely miss the mark. Supposing ourselves under such leadership we shall quickly pass through the forest and arrive at the ancient "living-place" of the Maquacs. The ditch marking the line of defense at the rear or eastern side of the village is first reached, crossing this we are at once in the heart of the "diggings". Low heaps of black earth glistening with broken bits of mussel shells confront us on every hand. Here and there little piles of refuse rejected by the last collector as not worth carrying home; a medley of bones, potsherds, burnt stones, mussel shells and occasionally a jaw-bone bristling with a serrated row of ugly-looking teeth from some wild denizen of the woods. Some of these rejects may bear a little examination, as some collectors are too critical and will have nothing but the very best specimens.

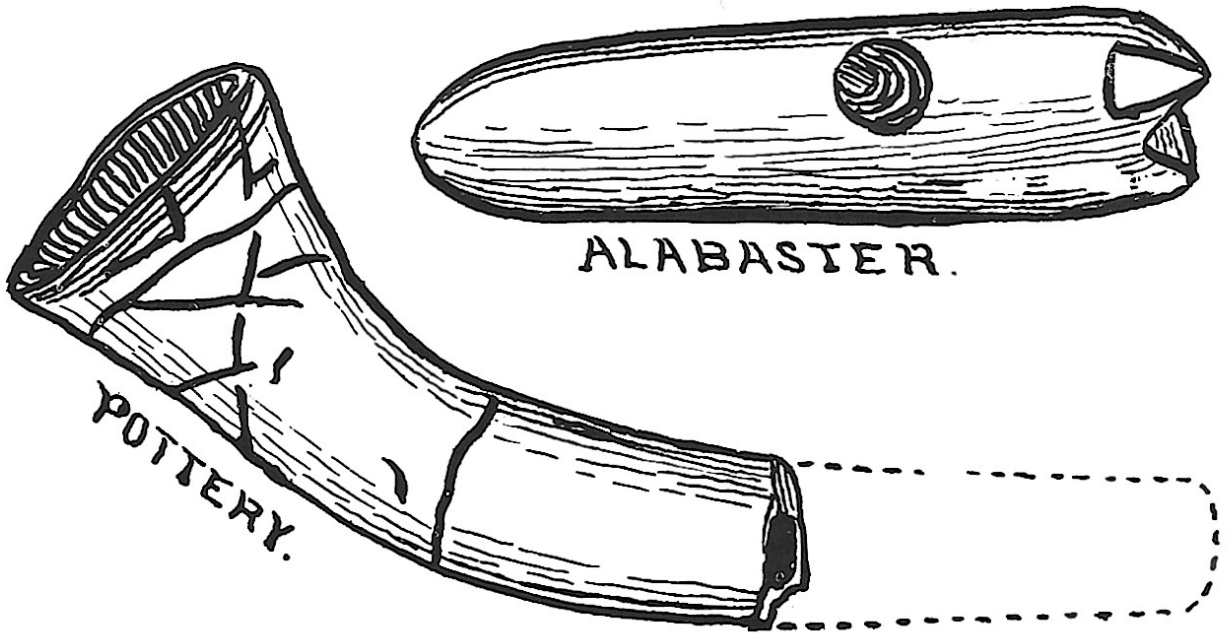
Such collectors are—and will remain—collectors only; they never get to be true archaeologists. Ofttimes in their scramble for choice things they leave many really valuable relics behind. The rains also occasionally wash bare objects of value from the dirt-heaps and perchance if we look closely we may be rewarded by a bead, a carbonized kernel of corn, a curiously curved beaver's tooth or possibly we may happen on one of the tiny arrow-heads so characteristic of Cayadutta.

But now for the real work, and hard work it will prove to be. Let us prospect a little. Sampling the ground here and there we at last chance on a spot that we think promises well; the earth is black and as we dig we note with pleasure that it is rich in mussel shells, an augury of success. Pottery galore! Piece after piece do we gain, but we find but seldom pieces broken from the same vessel; we can reconstruct but little. Clearing away the surface rubbish, leaves, fallen limbs, etc., we enlarge the borders of our excavation. A thousand and one roots to cut. Lend a hand everybody and we will, like the wild man of the Hartz mountains, uproot this sapling; from under its roots we shall surely gather "much antika". If it be summer-time while we struggle to penetrate the mystery of the ash-beds, a legion of mosquitoes will be trying to perforate us.

We are down to the ashes! Is it ashes, that caked, whitish substance? Put it to your tongue; no other answer is needed. In some places we find the hard-packed layer of ashes to be several inches in thickness. Just above this layer of ashes, in the conglomeration of earth, roots, bones, potsherds—innumerable potsherds—mussel shells and other rubbish we shall make our best finds. Below the ashes is hard burnt earth, in this we would find little or nothing: it is a pre-Mohawk stratum. A little lower is the underlying rock-mass of Utica slate.

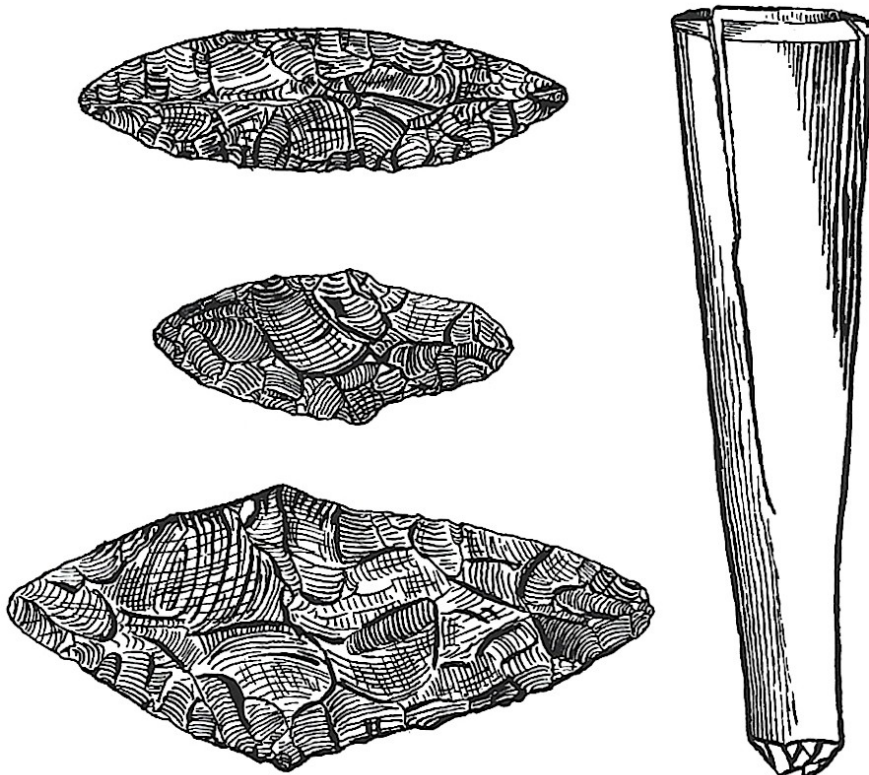
To the right our excavation now goes barren, the bed of ashes dwindles and gives out; no use of further digging in that direction. Let us turn to the left. Good success here, but alas we soon come up against some giant tree whose ponderous subterranean arms wholly prevent our further progress, and we are so confident that under the roots of this very tree is such an elegant pipe, for did we not just find a bit of its stem? The pity of it is this, for it has prevented systematic exploration, yet to Cayadutta's being forest-clad do we owe its preservation intact unto this late day. Continuously wooded the soil has held its treasures well. Had the site been cleared and devoted to agricultural purposes in the early colonial days when little or no attention was given to matters of this nature all of these priceless mementos would have been scattered, broken and irreparably lost. The tools of horn and bone would all have decayed, the fragile pottery fragments would have been comminuted and little would have remained for us save possibly a few of the flint tools.

It is to be greatly regretted that all of the many and varied finds made at Cayadutta could not have been gathered as one great whole and placed in some of our great museums. Much could have been learned from a collection of this sort. Really enough material has been recovered at Cayadutta to stock a small museum. And the manner of exploration,—were it not for the existing forest a systematic exploration, carefully noting the location of every important find, would have been possible. But for the sheltering forest we should not have had any Cayadutta to explore with system or without.



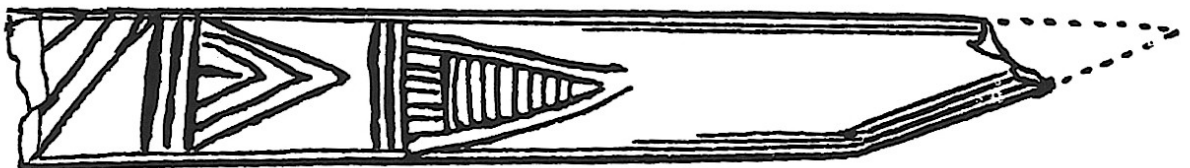
MOHAWK PIPES FROM CAYADUTTA.

Natural Size.



FLINT KNIVES AND A HANDLE OF DEER HORN FROM CAMP CAYADUTTA.

Half Size.



ORNAMENTED BONE AWL FROM CAYADUTTA.

Natural Size.