FLINT AND STONE WORK

Fuller's Hill

About fifty flint arrow points were found at Fuller's Hill, over thirty-five being of the isosceles type. (Plate IX), Rows C and D exemplify this variety. Most of the isosceles points were of the indigenous black flint, but a few were fashioned out of white and transparent chert. The workmanship was in all cases the same with close attention to all three sides.

The other flints were of the types illustrated in Row E and apparently constituted less than one-third of the flints in use around this camp. This type was even less in evidence at the Fullerton Farm.

Flint was evidently a commodity of some value, if the use of a poor grade shaly limestone for points is a criterion. These are represented in Row B, and numbered about one dozen. None had received any great attention, or if so, the effects had been obliterated by a tendency to cleave.

A few crude drills and broken scrapers were found. The presence of corn and corn cobs would lead one to expect the discovery of hoes and grinding paraphernalia, but only one pestle was noted (Plate II; Fig. 12). Numerous hammer stones (Figs. 5, 6, 7, 9, 10, 11), discoidals (Figs. 1, 2, 3, 4), and one rubbing stone (Fig. 8), were uncovered in the upper eight inches.

The pipes of limestone and slate (Plate IX; Figs. 4 and 5, respectively) are described under Burials No. 1 and No. 8. The base of the pipe represented in Fig. 3 was evidently once part of a masterpiece. The material was of granitic structure and had been rubbed down to a celt like edge at the base. A line was neatly incised about 1/2 inch from the extremity. The stem aperture had been drilled out in perfect symmetry. One can only conjecture on the missing portion.

A problematical piece—the "cup stone" (Plate II; Fig. 13), is quite common on Fuller's Hill. As many as four depressions on the various planes of the rough cube were noted. The rock used was always a sandstone.
Fullerton Farm

The Fullerton arrow points may also be characterized as of the isosceles group (Plate IX; Row A.). Less than one of ten were of the shanked variety. One is shown in Row A., No. 1. One flint, serrated on the two long edges, was found (Row A., No. 2). The others of the isosceles pattern were finished smoothly. None of the shaly limestones used at Fuller's Hill for making points, was utilized as such at the Fullerton Farm. The color of all of the isosceles flints was a dark gray to black. The shanked point was made of a red and brown banded chert.

A number of pipe stems made of a calcareous sandstone were found, usually well made, as the material was conducive to working. The bore in all cases was remarkably cylindrical. The type drill used was not found, but it was probably the same one that was used in drilling the straight bored shell beads found at Fullerton's, which, too, are cylindrical in bore. One embryo pipe stem was found (Plate X; Fig. 5). The outside had been completed, but the boring had not been attempted.

Discoidals, hammer stone, and rubbing stone were found in abundance near the surface and in the fire pits. One of the smoother discoidals had been perforated. Two small pestles were located in fire pits. One was broken, while the other was whole.

A small celt of diorite was found on the surface (Fig. 3). Quite a few of the so-called "cup stones" were found throughout the diggings. Their usage is problematical, in view of the great number of holes possible on any one surface. Then too, the depressions, which are quite uniform in size, are not restricted to one side of the stone, but may appear on all sides. One case where all six sides were favored was observed in one of the local collections. The holes were shaped as shallow basins, usually about one and one-half inches in diameter and from one-half to one inch in depth. Were the cups restricted to any one surface, they would appear as common geologic phenomena, but the presence on a number of sides precludes this possibility.

One broken slate medallion was found in one of the pits. It would have been about three-quarters of an inch long and one-half inch wide.
BONE AND BEAD WORK

Fuller's Hill

The bone and bead work at Fuller's Hill, Plate XI, shows a diversity of forms. Eleven of the twelve awls were made from animal long bone sections (Figs. 13, 14, 15, 17, 18, 19, 20, 21, 22, 23, 24), the other being of the scapular type (Fig. 16). They were neatly finished at the tips, but there had been a tendency toward rough finish at the handle end. Utility was evidently more important than the aesthetic effect. Only one cylindrical bone section had been transformed into an awl (Fig. 15).

A bone needle fragment (Fig. 11), round in cross section, was discovered in one of the fire pits. It was highly polished, which facilitated the observance of the circular, spiral, and longitudinal striations.

Problematical pieces of worked bone were found in abundance (Figs. 1, 3, 7, 8, 9, 10, 12). A piece of deer mandible notched on the lower margin, calls for speculation (Fig. 2). Perhaps it was a method of scoring in a game.

Antler tips were at times fashioned for usage. Some were sharpened at the tips and hollowed at the other end, evidently to be used as arrow points. The example in Fig. 4, was hollowed but not pointed, having probably been intended only as a stunning force. Other pieces, about one inch long, were made into what are commonly known as "feather separators", to be used in the head-dress (Figs. 5 and 6). They were solid and were flattened on one side or two parallel sides.

As always, a great number of worked bone and antler pieces were found, to which no usage can be assigned. Some were undoubtedly finished for their purpose, while others evidently were not. It has been the custom among local collectors to name such pieces as are to be seen in Figs. 7 and 9, "loon calls" or "pheasant whistles," etc., but the fallacy of this needs no development.

The two turtle shell cups (Plate VIII; Figs. 4 and 5); were found in fire places. Number 4 was neatly trimmed, rounded and polished on three sides of the edge, leaving a slight protuberance on the fourth to serve as a handle. Many crossed striations were left on the lip from much usage.
Of beads, a variety were found, with the simple bone cylinder predominating (Plate XIII; Fig. 1). They were made of the mid-sections of small animal bones. A bead stock (Fig. 2) ready for dissemination into thirteen small beads, was uncovered in one of the fire pits. Other beads included pierced bear phalanges (Fig. 3), elk teeth (Fig. 4), a fox tooth (Fig. 5), a small pierced animal scapula (Fig. 6), cowry shell and copper beads (Fig. 7), copper, (Fig. 8), cowry shells, and long bone sections rubbed down flat and pierced as in Figure 9. Shells were at times used decorative ly. (See section on Worked Shells).

Slate was only once used as a bead medium (Fig. 10), and that specimen represented only the outline of the finished product, it being undrilled.

The description of the cowry shell and copper beads found with Burial No. 4, will be found under—Burials— Fuller's Hill.

**Fullerton Farm**

The bone and bead work found at the Fullerton site had attained to quite a development. The awls numbered eighteen (Plate XI; Figs. 4 to 19); the longest being five inches (Fig. 9). They were all made of animal long bone sections, except one, which was of the scapular type (Fig. 16). Most of them were highly finished at the points, with a tendency toward rough finish at the handle end. If the blunt end was at all smooth, it was because of a natural junction of the bone as in Figures 8 and 10. Utility again seemed to be stressed. Two bone chisels (Fig. 20 and 21) had also had considerable attention paid to the service ends. Number 20 had been fired in an attempt at tempering, and still retained a blade that could do a deal of cutting and scraping. A number of chisel blade fragments showed copper impregnation. The meaning of this association is not certain, but it, nevertheless, implies a knowledge of the metal. Copper, however, does not appear to have played a great part in the life of the people.

Antler points were again found to have been used for arrow points and “feather separators.” The arrows (Fig. 1) were hollowed to allow for insertion of the shaft. One of the “separators” is shown in Fig. 3. Worked pieces
of doubtful import were found in abundance, one of which appears in Fig. 2. It is an animal rib with a number of striations near the medial end. It may have been used as a rubber.

Beads were made of diverse materials, the most common again being those from the midsections of animal long bones (Plate XIII; Fig. 1). Others included fish spines pierced at the base, pierced animal toe bones (Fig. 2), and small animal humeri bored through the distal end (Fig. 3). One large bear tusk drilled through the crown (Fig. 4), and one diamond shaped piece of slate, not perforated, were also found. The latter was probably intended as a pendant and measured one inch by one-half inch. None of these had any direct relationship to any of the burials, being found in the tepees and fire pits.

With burials 13, 14, 15 and 16 were the more unusual bead types—the drilled elk teeth, and mussel and cowry shell beads, the description of which may be found under the topic, Burials—Fullerton Farm. In Plate XII; Figs. 1 and 2 are cowry shells used as bracelets on Burial No. 13, an infant; Fig. 3 is a necklace of mussel shell beads on the same individual, while Fig. 5 represents the cowry shell beads found about the head of the same child. The drilled elk teeth (Fig. 4), and mussel shell beads were found about the neck of another child (Burial No. 15).

The fact that similar beads seemingly were seldom lost in the fire pits, is a measure of the esteem in which they were held. The source of the cowry, a marine shell, is not definitely known, but it is believed that they were migrants from the Gulf of Mexico region. It will be noticed that all of the cowry shells were perforated near the heads to allow for stringing.

**SHELL WORK**

**Fuller's Hill**

Little worked shell was found at Fuller's Hill in comparison to the tremendous number of river shells present. Four buttons were found in various stages of development (Plate XII; Fig. 1). The hole in one of them had been very neatly drilled, while those in the other pierced disc had apparently been roughly worked through. Ten mussel shells were found, to which a serrated, saw tooth
edge had been given (Fig. 5), but to which no use can at this time be attached. Shells were sometimes used as spoons, as indicated by straight line edges worn on the rims. No whole spoons were found.

Shell work was found with two of the burials. Burial No. 4, a child, had a necklace of cowry shell and copper beads (See Burials—Fuller's Hill). Burial No. 2, an aged female, had a piece of worked shell, about an inch long, and pear shaped, between the hips (Fig. 4). Near the neck of the same individual was a shell pendant with the perforation broken through (Fig. 3). The asymmetric, smoothly finished piece of shell in Fig. 2 was probably intended for some use.

**Fullerton Farm**

The shell work at the Fullerton site exceeded that of Fuller’s Hill, although not as much of the native mussel shell was used. It will be recalled that a number of shell necklaces and bracelets were uncovered (See Burials, and Bone and Bead Work). The shell disc and mussel shell bead found with Burial No. 16 are pictured in Plate XII; Fig. 7. Only one serrated mussel shell was found, as opposed to the ten found at Fuller’s Hill. A fragment of a spoon is represented in (Fig. 8). It will be noticed that several decorative notches were cut in the upper edge, Fig. 9 was a dainty river shell, perforated near the hinge. It was probably worn about the neck as a pendant.

**CONCLUSION**

This report, quite obviously, can not have much to do with summary judgements. Such must necessarily await further exposure of the soil in this and neighboring areas. Great strides have been made this season, but in the nature of things, the story must be written in serial form. After the whole territory has been sufficiently worked over to establish any stratigraphy and chronology present; after the river bottom sites and mounds have been thoroughly diagnosed and their relationship, if any, with the elevated Fuller’s, Fullerton, and other hill sites established; after this factual information has been thoroughly correlated with that from the known historic sites outside of the immediate region; and after all early mss. concerning the
Indians of this region have been digested and compared with the record of the soil, and only then, will archaeologists be in position to vividly portray pre-Columbian life in this country. It is common talk in every community that the Alligewi, Iroquois, and Delaware occupied this territory at various times in the past, but to determine when they did and in what order, is one of the problems. And were they the only ones that ever traveled over this region? It is quite possible that some other people antedated them, and because of remoteness in time, did not creep into the early journals on the red man, and are not yet known. What were the trade routes and what were the articles of barter of all these peoples? What were the extents of their domains and how long did they stay? Were they intelligent people, advanced in the higher arts that characterized some of the Indians, or were they imitators with no individual attainment? Were they in the no-man's-land between two or three dominant cultures and if so to what extent did they borrow from each? These questions and many more must remain enigmas, waiting for the future. The difficulties of reconstructing pre-history, however, are patent and need no further observation.