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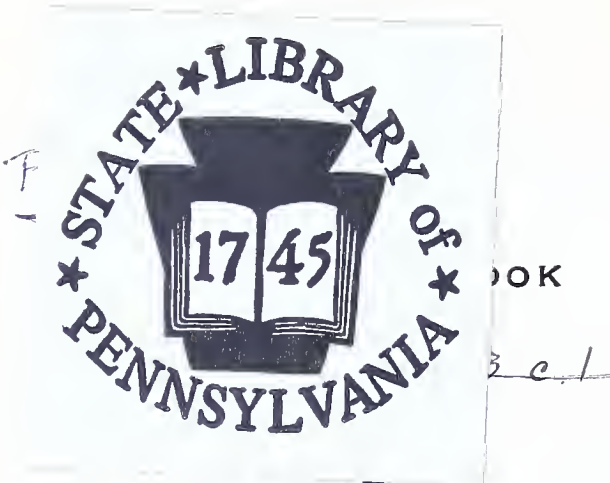
Three Archæological Sites

Somerset County
Pennsylvania



Pennsylvania Historical Commission

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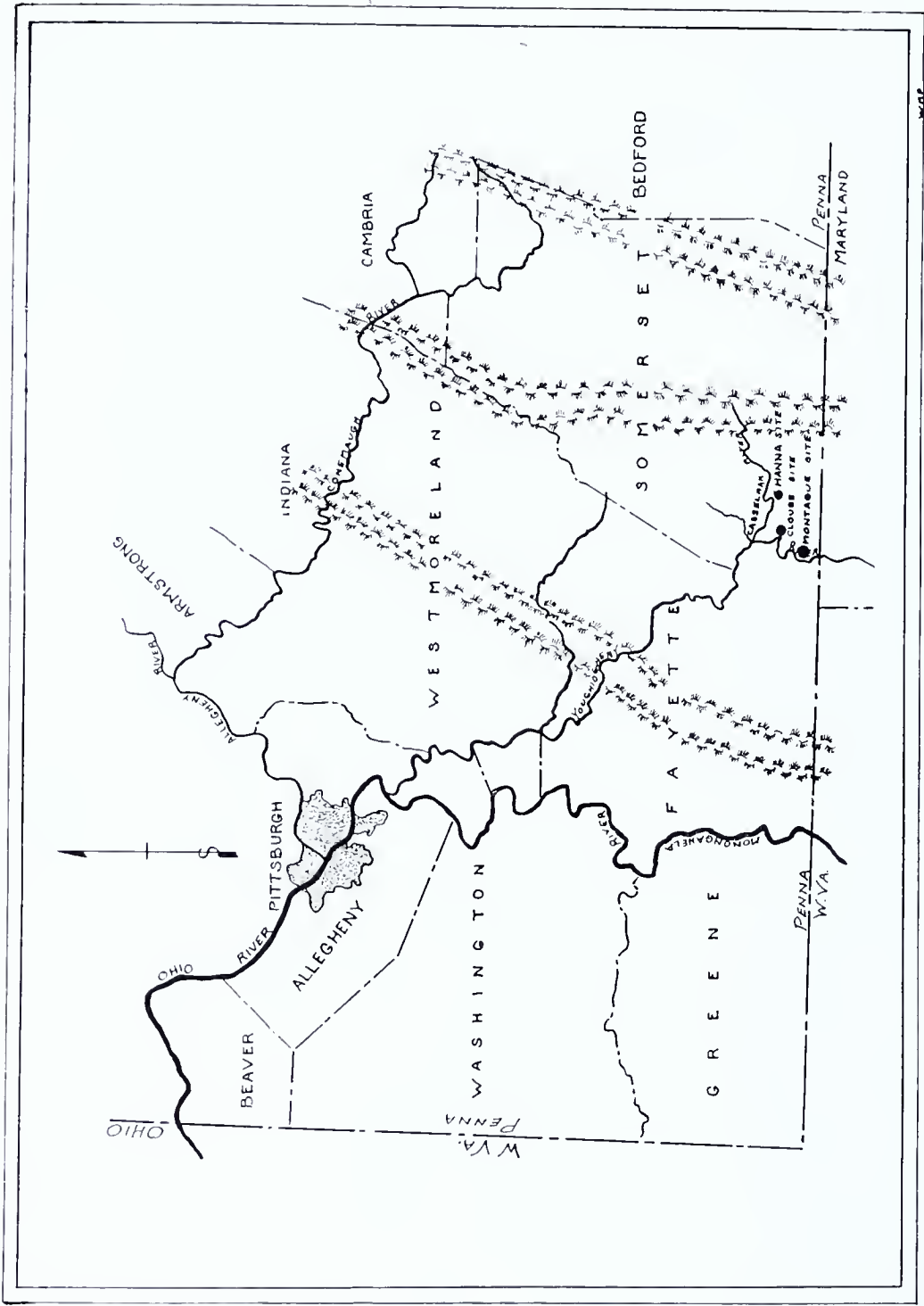
Three Archæological Sites
in
Somerset County
Pennsylvania

Bulletin No. 753

MARY BUTLER



Commonwealth of Pennsylvania
DEPARTMENT OF PUBLIC INSTRUCTION
PENNSYLVANIA HISTORICAL COMMISSION
Harrisburg, 1939



MAP OF SOUTHWESTERN PENNSYLVANIA, SHOWING MONTAGUE, HANNA, AND CLOUSE SITES

FOREWORD

From the dawn of history man has manifested interest in his predecessors. In the fields and forests, and along the streams of Pennsylvania we find evidence of the work and the artifacts of the races who preceded us. In the days of the pioneer little thought was given to the native life of this new land. Early traders, travelers, and missionaries recorded their all too casual observations as they moved westward from the Delaware.

During the past century interest in the people who preceded us has attracted ever increasing attention. The analyzing of the culture of the various Indian groups who lived and traveled along our great rivers has occupied the attention of many scholars. Students of history in search of information can only base their deductions on the written word. Beyond this a curtain has hung across the historic stage. A glimpse behind can be obtained by archæological research. The problems of history and archæology must ever go hand in hand. In no branch of this study is there a more fertile field than southwestern Pennsylvania. On the west are the great mounds in Ohio. Along the rivers we find occasional bits of evidence that point toward unrecorded migrations.

In my efforts to learn something about these men and events of long ago, it has been my good fortune to find others equally interested in this research. The untiring efforts of Dr. Mary Butler to record and interpret data obtained by Works Progress Administration field workers in western Pennsylvania are responsible for what is presented here. I am sure her contribution will lead to a better understanding of our problems and prove to be an inducement for further research and study.

DONALD A. CADZOW

Anthropologist

Pennsylvania Historical Commission

LS05154

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PREFACE

The first archæological work done in southwestern Pennsylvania directly under the auspices of the Pennsylvania Historical Commission was a survey of Somerset County undertaken in the summer of 1934 by Donald A. Cadzow, Archæologist to the Commission. As a result of this survey, excavation was started on May 5, 1935, at the Clouse site on the Youghiogheny River and carried on by means of an LWD grant. Work at this site, begun under the personal supervision of Mr. Cadzow, was discontinued July 19, 1935, for lack of funds, and taken up again from July 2 to 7, 1936, as a part of a WPA archæological project headed by Edgar E. Augustine of Addison, Pennsylvania. This same project had previously excavated the Hanna site on the Casselman River from November 1, 1935, to March 1, 1936, and the Montague site on the Youghiogheny River from March 15 to July 1, 1936. During July and August, it located twelve more sites in Somerset County, nine in river bottoms, three on hill-tops. The writer represented the Historical Commission in this County from April 24 until August 10, 1936, and in Greene County from August 10 to November 23, 1936.

The three sites excavated in Somerset County belong to a phase of Woodland Indian culture that seems at present characteristic of southwestern Pennsylvania, and is here called the Monongahela Woodland Culture, since the material identifying it comes so far from country drained by the Monongahela River and its tributaries. These sites show no great depth of deposit but include features, such as stockades, houses, and burials, that mark village, rather than camp sites. This disproves the earlier assumption that there were no Indian village sites on the southern Allegheny Plateau, and that the Indians used the mountains only for hunting territory, finding conditions there too rigorous to permit permanent settlement.

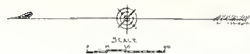
On August 10, 1936, a historical and archæological survey of Greene County was begun on a WPA project headed by Frank B. Jones of Waynesburg, Pennsylvania. Those sites of which the writer has personal knowledge produced material basically similar to that of Somerset County. Comparative

material from the country lying between Greene and Somerset Counties is furnished by the excavations made in Westmoreland and Fayette Counties in 1929-1930 by Robert Engberg for the Historical Society of Western Pennsylvania, and those carried on during the past forty years in Washington County by George S. Fisher of Finleyville, Pennsylvania. Everything we have seen to date points to the Indian occupation of southwestern Pennsylvania as having formed a consistent and distinctive local phase of the archaeological culture, widely distributed through the northeastern United States, that has until very recently been called Algonkin and is here referred to as Woodland.

This report, written early in 1937, presents the archaeological information available at that time from the Somerset County work described above. This information is limited because local conditions permitted no study of skeletal material and animal bones and no analyses of artifacts. Much of the material was not seen *in situ* by the writer, and the fact that in many instances depths and circumstances attending discovery were not available renders documentation incomplete and all cultural and historical conclusions tentative. The material referred to from Westmoreland, Fayette, Washington, and Greene Counties is drawn on for comparison and conclusion. Nothing is known archaeologically of Cambria County to the north, Bedford County to the east, or the Maryland territory directly south of Somerset County.

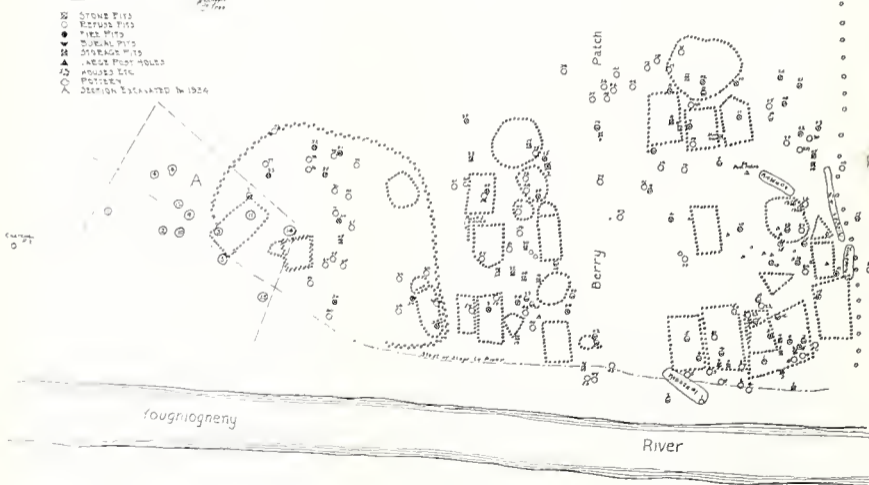
The writer wishes to express gratitude and appreciation to Mr. Edgar Augustine for his unfailingly prompt and patient help in preparing this report; to Mr. George W. Miller, Jr., head of Pennsylvania WPA Project Number 10934, working under Mr. Samuel Smedley of the Delaware County Park Board, for having the map, plans, and drawings made by Mr. William Peyreferry; to Dr. Stanley T. Brooks of the Carnegie Museum of Pittsburgh for identification of the *Marginella apicina* shells; to Dr. James B. Griffin of the Ceramic Repository of the University of Michigan, Mr. William A. Ritchie of the Rochester Museum of Arts and Sciences, Dr. Thorne Deuel of the University of Chicago, and Mr. Neil M. Judd of the United States National Museum, for information, advice, and assistance. The photographs reproduced in Plates 1, 2, 3, a, 13, c-p, 16, a, were taken by Mr. Paul Swank of Somerfield, Pennsylvania, assistant project head in Somerset County.

MONTAGUE SITE SOMERFIELD PENNA.



Public Route No 181 Road

- ☒ STONE PITS
- REFUSE PITS
- FIRE PITS
- BURNED PITS
- STORAGE PITS
- ▲ ABBOT POST HOLES
- ⊕ POWDER ETC
- POTTERY
- ⊗ SECTION EXCAVATED IN 1924



MONTAGUE SITE

Description of site. The Montague site is on the farm of Frank Montague, eight-tenths of a mile south of the town of Somerfield, Pennsylvania, which lies on the National Highway at the point where that road crosses the Upper Youghiogeny River from Somerset into Fayette County (frontispiece). The site lies at an elevation of 1,390 feet, on the east bank of the Youghiogeny, in a river flat approximately eight feet above water level. The foot of Winding Ridge rises, parallel to the river, along the eastern edge of the site behind the road to Somerfield. The site (Plate 3, a) covers approximately one and a half acres, just north of the farm house, of the dark topsoil that points to Indian occupation, and is used at present for a truck garden, berry patch, and corn field. There is a suggestion that the river at one time made a sharp curve to the east across the upper portion of the site, but probably at a period previous to occupation. The river did not rise at the time of the disastrous floods of March, 1936, due to the protection afforded it by the Deep Creek Dam, but the difficulty of establishing satisfactorily the western line of the stockade, omitted on the plan (Plan 1), suggests erosion of the eastern bank of the river during some earlier flood.

The "Great Crossings" ford of the Youghiogeny, located by early records at Somerfield, and presumably used by Washington on his way west during the ill-fated expedition of 1754, is held by many to have been where the Montague farm now lies. Local tradition says that an Indian village called Squaw's Fort stood at the Great Crossings in historical times. Nothing found during excavation of the site on the Montague farm could be taken as evidence of a heavily used ford or an Indian village of Colonial times. Occasional early historic objects, such as hand-wrought nails and a musket lock, were found in digging. It is not at present possible to be sure at what depth these occur, but none was found in an aboriginal pit nor associated with Indian artifacts. A white man's charcoal pit was found north of the site.

An archaeological survey of Somerset County, made during the summer of 1934 by a small party directed by Mr. Cadzow, established the existence of a pre-Contact Indian village on the

Montague farm. That part of the site excavated during the survey is shown on Plan 1 as the section at the northern end of the field marked A. The pots found with Burial 1 and shown in Plate 3, c, d, Plate 4, b, comprise the material available from these excavations. The 1936 excavations uncovered the entire area shown on Plan 1 as lying south of the berry patch, and that northwest of the berry patch as far as the limits of the stockade. Excavation of the berry patch consisted of trenches run from east to west between the lines of bushes. Excavation northeast of the berry patch, where evidence of occupation was lacking, was confined to test trenches. The evidence at present points to the northern limits of the site being those shown on the plan. While the site may well have continued south of the area excavated, further work in this direction was prevented by the position of the garden and farm house and yard.

Stockade and Houses. Removal of the topsoil showed the ground beneath to be covered with post-moulds, the circular stains left by decayed saplings, averaging two and one-half to three inches in diameter. It was possible, by following consistent lines of these stains in which larger ones appeared at irregular intervals, to trace the outline of a roughly circular enclosure, about 120 feet in diameter, and of twenty-nine houses, nine circular, from ten to thirty-five feet in diameter, eighteen rectangular, and two apparently triangular, within and directly south of the enclosure (Plan 1). Although the structure of the latter seemed to have been no heavier than that of the houses, its size, and the lack of any trace of interior supports for a possible roof, led to its being considered a stockade contemporary with and in direct relation to the houses. A line of large post-moulds about eight inches in diameter and three feet apart, at the southern end of the site, appeared to mark a white man's fence, because of the condition and position of the stains, and the lack of smaller post-holes in between the larger ones.

The wall of one rectangular house was, like that of the stockade, formed by a double line of posts, irregularly spaced. An L-shaped line of post-moulds may have marked a rack on which to hang provisions. One way of building an Indian house, that might very well apply to those found on the Montague site, is described by Loskiel, writing of the Delawares and Iroquois in 1794: "An Indian hut is built in the following manner: They peel trees, abounding with sap, such as lime trees, &c., then cutting the bark into pieces of two or three

yards in length, they lay heavy stones upon them, that they may become flat and even in drying. The frame of the hut is made by driving poles into the ground, and strengthening them by cross-beams. This framework is covered both within and without with the above-mentioned pieces of bark, fastened very tight with bast or twigs of hickory, which are remarkably tough. The roof runs up to a ridge, and is covered in the same manner. These huts have one opening in the roof to let out the smoke, and one in the side for an entrance. The door is made of a large piece of bark without either bolt or lock; a stick, leaning against the outside, being a sign that nobody is at home." (Loskiel, p. 53.)

Burials. Twenty-four burials were discovered, twenty-three of them scattered through that section of the site which lies south of the stockade, Burial 1, found in 1934, being the only one located inside the stockade. Burials 3, 5, 6, 8, 9, 11-13, 16, were inside houses, Burial 1, below the corner post of a house, and Burial 24, above a line of post-moulds marking a circular house wall; the remaining burials were in the open. Six of the skeletons found were adults, one adolescent, and eighteen children (Plate 1, a), Burial 24 being that of twins (Plate 2, b). The adults, adolescent, and seven of the children were buried in a loosely flexed position, all but two lying on the back, and nine children in an extended position, none with any apparent attempt at orientation. Disturbance made it impossible to determine the original position of the two remaining infant skeletons.

Burial was made apparently by the simple process of digging a hole in the ground, putting the deceased inside, and filling it up again. In one instance, that of Burial 2, an adult, the grave was said to have been sketchily lined with stone. Burial 14, an infant, was six inches below refuse pit 72, and showed some signs of having been affected by fires built in the pit, and Burial 13, the only adult whose dolicocephalic skull was recovered in good condition, was beneath Refuse Pit 15 (Plate 2, a), with four rocks set on edge just above the skeleton. The only burials remarkable in any way were Burial 8 (Plate 1, b), that of an adult buried without his head and clutching a bone fish hook in his left hand, and Burial 24, in which twin babies were extended side by side.

Five of the adults and six of the child burials had associated artifacts (Table 1), the richest collection of these, found with

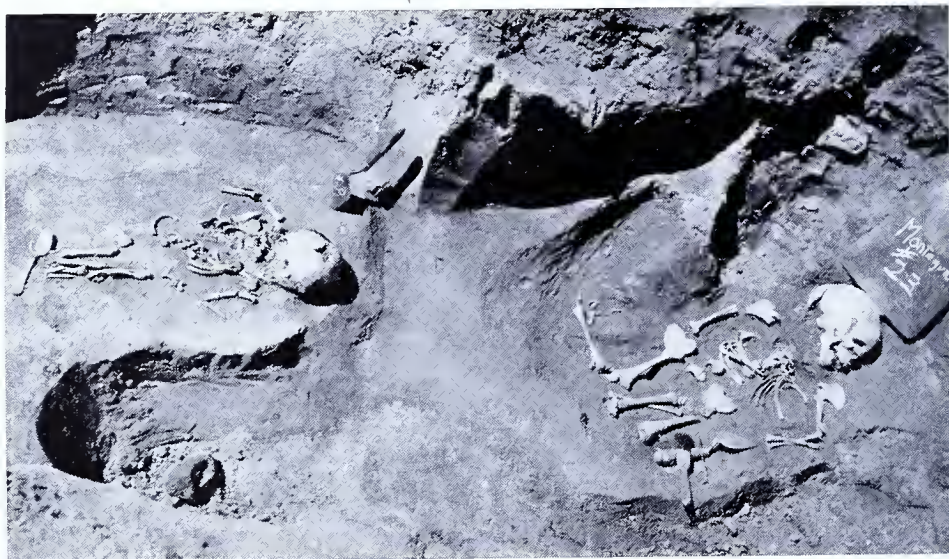


PLATE 1

(a) BURIALS 20 AND 23, MONTAGUE SITE.



PLATE 1

(b) BURIAL 8, MONTAGUE SITE.



PLATE 2

(a) BURIAL 13, MONTAGUE SITE.
(12 inches shown on tape)

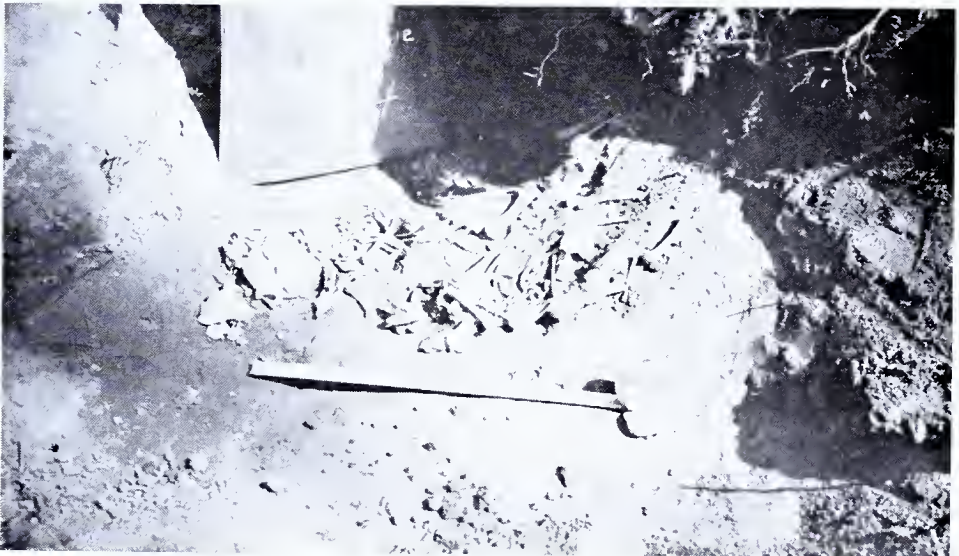


PLATE 2

(b) TWIN BURIAL 24, MONTAGUE SITE.
(12 inches shown on tape)

TABLE 1. BURIALS, MONTAGUE SITE

No.	Age and Sex	Head Pointed	Position	Depth of Burial below Surface	Associated Artifacts
1	Adult		Flexed		2 pots, Pl. 3, c, d
2	Adult male	N.	Loosely flexed	30 inches	Fragments of pottery pipe stem and of shale gorget, deer toe arrow point, unworked bear canine, all to the right of skeleton near head; may not have been related to burial
3	Infant, ca. 2 years	E.	Extended	26 inches	None
4	Adult male	S.	Loosely flexed	30 inches	4 arrow points, 1 triangular, 3 notched, in right hand
5	Infant, 1-2 years	E.	Extended	16 inches	None
6	Infant	N.	Extended	16 inches	None
7	Adult, old woman	S.	Loosely flexed	24 inches	None
8	Adult male	N. E.	Loosely flexed	24 inches	Skull missing. Bone fish hook in left hand, Pl. 1, b
9	Infant, 2-4 years	N. E.	Loosely flexed	15 inches	6 drilled wolf teeth under jaw
10	Child, ca. 10 years	S. E.	Loosely flexed	32 inches	8 bone beads as necklace, 3 turtle leg bones, 2 small pots to right and 1 to left of trunk, Pl. 4, a, d, e
11	Child, ca. 5 years	E.	Loosely flexed	24 inches	None
12	Infant, 1-2 years	N.	Extended	12 inches	None
13	Adult male	E.	Loosely flexed	34 inches	2 tubular shell beads, Pl. 2, a
14	Infant	S. E.	Flexed	22 inches, 6 inches below refuse pit 72	2 tubular bone beads, 1 disc shell bead, Pl. 14, e
15	Infant, ca. 1-2 years	W.	Flexed	14 inches	None
16	Infant, ca. 2-3 years	S.	Extended?		43 tubular shell beads, 8 shell imitation-elk-tooth pendants, 14 shells beads (<i>Margarita apicina</i>)
17	Infant	S.	?	18 inches	None
18	Child, ca. 10-12 years	S.	Loosely flexed	22 inches	None
19	Infant	N. E.	?	12 inches	None
20	Infant, 1-2 years	S.	Extended	20 inches	3 bone beads, 5 shell imitation-elk-tooth pendants, 9 tubular shell beads, around neck; serrated shell, fragment of deer jaw, at right side of trunk
21	Adolescent, ca. 12-14 years	E.	Loosely flexed	28 inches	None
22	Child, ca. 4-6 years.	S.	Loosely flexed	15 inches	None
23	Child, ca. 5-6 years	N. E.	Extended?	28 inches	Small pot, fragment of tooth pendant, potsherds, Pl. 1, a
24	Infants	N. E.	Extended	16 inches	Pl. 2, b

a small child (Burial 16), including fourteen *Marginella apicina* shells from the Gulf of Mexico. The high infant mortality rate shown by early Indian cemeteries casts its shadow on their descendants. Harrington, writing of modern Oklahoma Delawares, says, "A new born child, in Lenape belief, did not obtain a firm hold on this world for some time after its arrival, its little spirit being easily coaxed away by the ever-present ghosts of the dead. For this reason it was wrapped as soon as possible in adult's clothing, by way of disguise, so that the ghosts would not notice it was new-born. Similarly deer-skin strings or strips of corn husk were tied on the wrists of children so that the ghosts would think they were tied fast to earth; and holes were cut in their little moccasins so that they could not follow the spirit trail." (Harrington, 1913, p. 212.)

Unforeseen local developments prevented measurements and study of the skeletal material.

Pits. One hundred and forty-six pits were excavated to the south of and inside the stockade (Plan 1). The depth of all but twenty of these was only one and one-half to two feet, a measurement which included from five to twelve inches of top-soil; eight reached a depth of three feet, one refuse pit a depth of four feet, and another that of five feet. Pits were classified as fire, storage, and refuse, any refuse pit over ten feet in length being called a midden. Potsherds and animal bones were found in almost all pits; flint spalls, mussel shell, stone, bone, and pottery artifacts, usually broken, occurred as shown below (Table 2).

TABLE 2. PITS AND CONTENTS—MONTAGUE SITE
P—Complete pipe, S—Stem, O—Ornament, T—Tool.

	Total Number	No. Artifacts but Potsherds	Potsherds	Animal Bones	Flint Spalls	Shells	Pottery Pipes	Ground Stone	Chipped Stone	Bone	Shell	Total Artifacts
	Number of Pits						Number of Artifacts					
Fire -----	38	21	37	30	7	3	6 (3P)	1 P 1 O 4 T	9	20 1 T		24
Storage -----	26	7	26	24	11	5	1	1 O 10 T	19	28 O 11 T		70
Refuse -----	82	34	81	60	18	20	12 (3P)	2 O 14 T	49	27 O 20 T	2 O	126
Totals -----	146	62	144	114	36	28	19	33	77	89	2	220

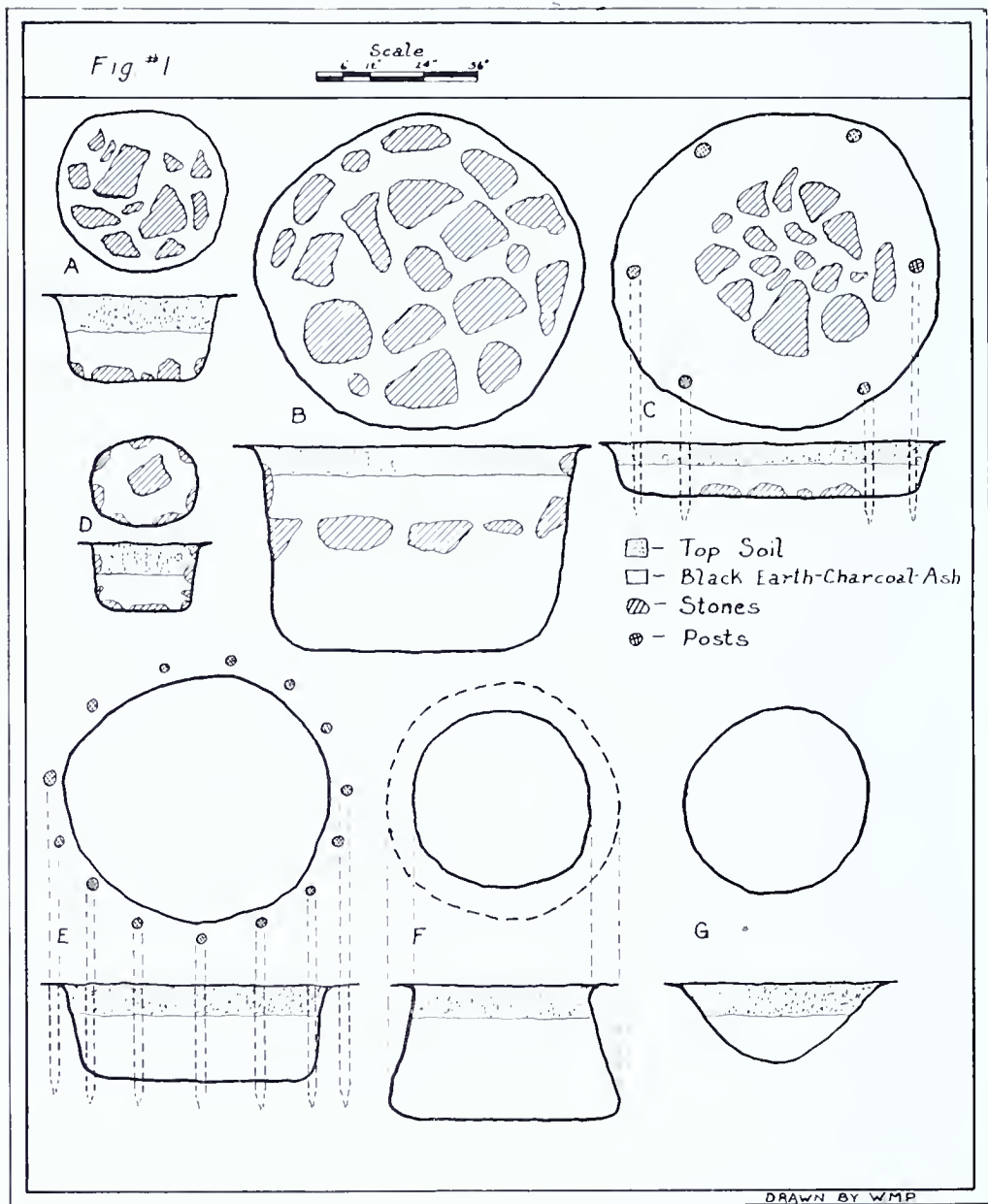


FIGURE 1
 PITS, MONTAGUE SITE: (a-c) FIRE PITS; (d, e) STORAGE PITS;
 (f, g) REFUSE PITS

Fire Pits. These were pits in which a layer of stone on the bottom provided the basis for a fireplace (Figure 1, a). One pit, F. P. 36, had stones along one side as well as in the bottom, two, F. P. 37, 38 (Figure 1, b) were entirely stone-lined, and another, F. P. 29, had six posts in a ring around it (Figure 1, c). Only three of the thirty-eight fire pits were more than two feet deep; the average horizontal diameter was about three by three feet, the smallest being one by one and one-half feet, the largest six by six feet. Seventeen pits (forty-five per cent) produced a total of twenty-four artifacts exclusive of potsherds (Table 2).










Storage Pits. This term was applied to all pits that were surrounded by a ring of post-moulds (Figure 1, e). These presumably had sapling walls built to support a lid and hold food supplies, and were subsequently used for refuse. Only one of the twenty-six storage pits was more than two feet deep. The average breadth and length were about four by five feet, the smallest being two by three feet, the largest five by nine feet. Nineteen pits (seventy-three per cent) contained seventy artifacts, excluding potsherds (Table 2). Two small stone-lined pits (Figure 1, d), were probably used for storage.

Refuse Pits. These were the pits that had no distinguishing characteristics apart from blackened soil containing ash, charcoal, and artifacts, usually broken (Figure 1, g). Thirteen of the eighty-two pits were more than two feet deep, one pit reaching a depth of five feet from the surface. The average breadth and length were three by four feet, the smallest being two by two feet, the largest seven by eight feet. Six of these pits ranging in length from nineteen to forty feet, in width from two and one-half to ten feet, were called middens because of their unusual size. Forty-eight pits (fifty-eight per cent) contained 126 artifacts.

Five of these pits, R.P. 78-82, ranging in depth from two to three feet, expanded toward the bottom, forty to forty-eight inches diameter, in marked contrast to all the other pits at this site (Figure 1, f). They contained no animal bones, flint spalls, or shell, and the only artifacts aside from potsherds found in them were a notched arrow point, a triangular arrow point and two stone disks. Similar pits, deeper but expanding in the same ratio, are reported from two Fort Ancient sites in Ohio (Hooton and Willoughby, Figure 1, b; 2, d; 3, b, d; 4, a, c; Mills, 1917, p. 341).

It is interesting to note that the pits classed as fire-places have a much smaller proportion of artifacts than the others but the largest proportional number of pipes and pipe stems. But it must be remembered that the classification established above is entirely arbitrary and that there is a strong probability that most refuse pits were originally storage caches, and most storage pits used eventually for refuse. "They preserve their crops in round holes, dug in the earth at some distance from the houses, lined and covered with dry leaves or grass. They commonly keep the situation of these magazines very secret, knowing that if they are found out, they must supply the wants of every needy neighbor, as long as anything is left. This may occasion a famine, for some are so lazy, that they will not plant at all, knowing that the more industrious cannot refuse to divide their store with them. The industrious therefore not being able to enjoy more from their labor than the idle, by degrees contract their plantations. If the winter happens to be severe, and the snow prevents them from hunting, a general famine ensues, by which many die. They are then driven by hunger to dress and eat the roots of grass or the inner bark of trees, especially of young oaks." (Loskiel, p. 68).

TABLE 3

RIM SHERDS									
	A	B	C	D	E	F	G	H	I
MONTAGUE	6	149	9	18	192	12	181	53	35
HANNA		102		6	34			24	
CLOUSE		18		1	12			7	

Pottery: Vessels. This site was rich in potsherds, the 656 rimsherds recorded, 134 of them decorated, comprising about fifty-five per cent of the total number of artifacts (Table 3). This pottery is prevailingly cord-marked and grit-tempered, though a smooth surface and shell-tempering occur too often

to be considered rare. The two last named traits tend to appear together, although shell tempering is more frequent than a smooth surface.

Of the fifteen complete vessels recovered, five were small, and two lacked rims (Plate 3, b-e, Plate 4). Shapes and frequencies are shown in Table 4. The vessel with constricted neck and beveled side (Plate 3, b-e, Table 4, a-e) is characteristic of southwestern Pennsylvania. Vessels somewhat similar in shape but lacking the flaring rim and definite bevel or bend in the side, occur in pottery of the Chesapeake-Potomac group in Virginia, and on sites in Wisconsin where the pottery, according to Holmes, is indistinguishable from that of non-Iroquoian coastal sites (Plate 4, c). Vessels with relatively straight sides and rounded bases, of which several examples were found on the Montague farm, occur on early undifferentiated Iroquois sites (Table 4, h). Three slightly convex rimsherds (Table 3, d) may represent a prototype of the double collar found on Susquehannock pottery. A crude vessel which may illustrate a similar rim comes from southeastern Kentucky (Webb and Funkhouser, Figure 30). A distinctive trait of pottery from the Montague site is the rounded point, occurring twice or four times on a vessel rim. This is sometimes plain (Plate 5, b, Table 5, b), sometimes nicked (Plate 5, c, d, Table 5, c), or with an applied knob below it (Plate 6, b).

Applied Decoration. Thirty-six rimsherds have a plain or nicked point, forty-five more have some form of applied decoration (Plates 5-8). The types of indented applied decoration shown in Plate 5, f-i, Plate 6, d, and Plate 5, j-k, Plate 6, e, f, and called here respectively notched point, and grooved knob, seem affiliated with the Fort Ancient culture (Table 5, d, e). The non-committal term, knob, has been used in this paper, since it is difficult to know where to draw the line between lumps of clay applied as ornaments and those intended as lugs for carrying the pot. There are seventeen examples of the types of knob shown in Plate 7, a, b, e-g, i-j. Similar decoration occurs on the Fort Ancient sites of Feurt (Mills, 1917, Figure 32, 1, 3), and Fox Farm (Smith, H. I., Plate XXVII, 1-6, XXVIII, 8). There are three examples of Plate 7, l, two of Plate 7, m, and one of Plate 7, c, d, h, k; of these, the human face (Plate 7, h) is an early Iroquoian trait, and the vertical flange (Plate 7, m) resembles Susquehannock decoration.



PLATE 3

(a) MONTAGUE SITE
View of Site, looking south.



PLATE 3

(b-e) POTTERY VESSELS, MONTAGUE SITE
(Centimeter scale)



PLATE 4
(a-e) POTTERY VESSELS, MONTAGUE SITE
(Centimeter scale)

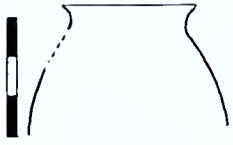

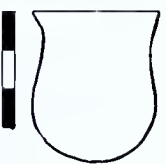



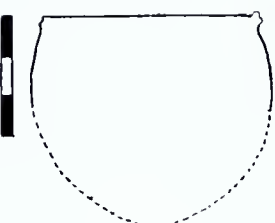
TABLE 4 (i). POTTERY VESSEL SHAPES, MONTAGUE SITE

V—Complete vessel. S—Segment of vessel.

Scale shown=15 centimeters		Rim Straight	Rim with 2 Points Usually Nicked	Rim with 1 Point, Nicked	Rim, with 4? Applied Knobs	Comparative Material
a) Pl. 3, e, d		2 V				<i>Pa.</i> Greene Co. Bruckner site—1 V <i>cf.</i> { <i>Ga.</i> Holmes, Pl. CXVII, a N. C. Wilkes Co., Holmes, Pl. CXXX, g <i>Wis.</i> Holmes, Pl. CLXXXIII; Me-Kern, Pl. LXXVI
b) Pl. 9, b						<i>Pa.</i> Westmoreland, Fayette Cos., Engberg, 1931, fig. 14, pp. 162-63 Washington Co., G. S. Fisher Coll., Finleyville, Pa.
c) Pl. 3, b, e		1 V 1 S		1 V		
d)		4 S	4 S	1 S	1 S	(One segment with incised chevron on shoulder) <i>Pa.</i> Clouse site, 1 S with 4-pointed rim Pl. 6, b
e)		2 V 1 S				<i>Pa.</i> Hanna site, Pl. 16, b

TABLE 4 (ii). POTTERY VESSEL SHAPES, MONTAGUE SITE

V—Complete vessel. S—Segment of vessel.

	Scale shown=15 centimeters	Rim Straight	Rim with 2 Points Usually Nicked	Rim with 4 Points, Nicked	Comparative Material
f)		4 S	1 S		<i>Pa.</i> Clouse site, 2 S
g)	Pl. 4, a 	1 V			<i>N. Y.</i> Canandaigua site, Ritchie, 1936, b, Pl. XVII, 1 <i>Westfield</i> site, Wright Coll., Erie, Pa. <i>cf. S. E. Ky.</i> Webb & Funkhouser, fig. 30 <i>N. C.</i> Caldwell Co., Holmes, Pl. CXXIX, bottom row center
h)	Pl. 4, e 	2 V 1 S		1 V	<i>N. Y.</i> Westfield site, Wright Coll., Erie, Pa.
i)		1 V 1 S			<i>Pa.</i> Hanna site, Pl. 16, b Fayette Co., Eng- berg, 1930, Pl. VIII, 3, p. 94
j)		1 S			<i>Pa.</i> Westmoreland Co., Engberg, 1930, p. 96
k)	Pl. 4, b 	1 V			
l)	Pl. 5, f 	1 S			

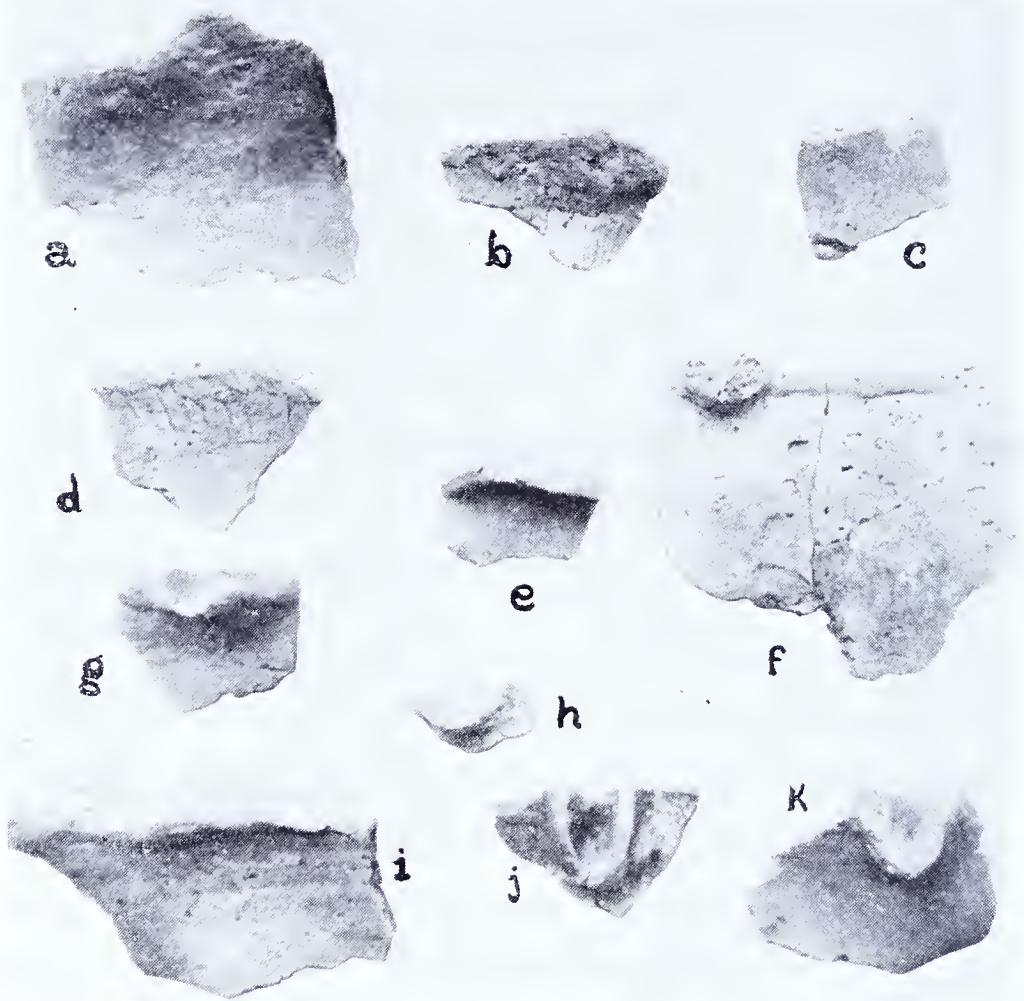


PLATE 5

RIMSHERDS, MONTAGUE SITE

(a, b) with rounded points; (c, d) with nicked points; (f-i) with notched points;
 (j, k) with grooved knob; (e) with beaded point. See Table 3.

(c) is 5 centimeters wide.

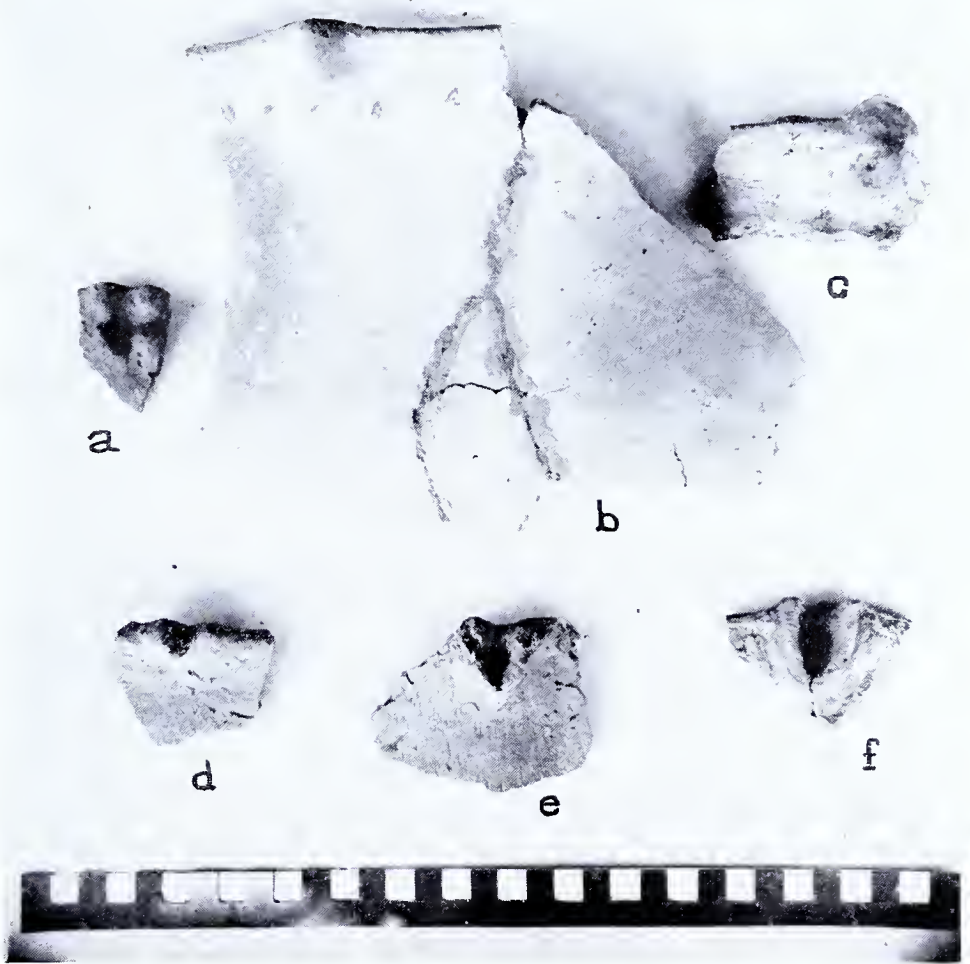


PLATE 6

RIMSHERDS, MONTAGUE SITE

(a) with four applied knobs; (b, c) with applied knob on point at neck, (b) showing beveled side; (d) with notched point; (e, f) with grooved knobs. (Centimeter scale).

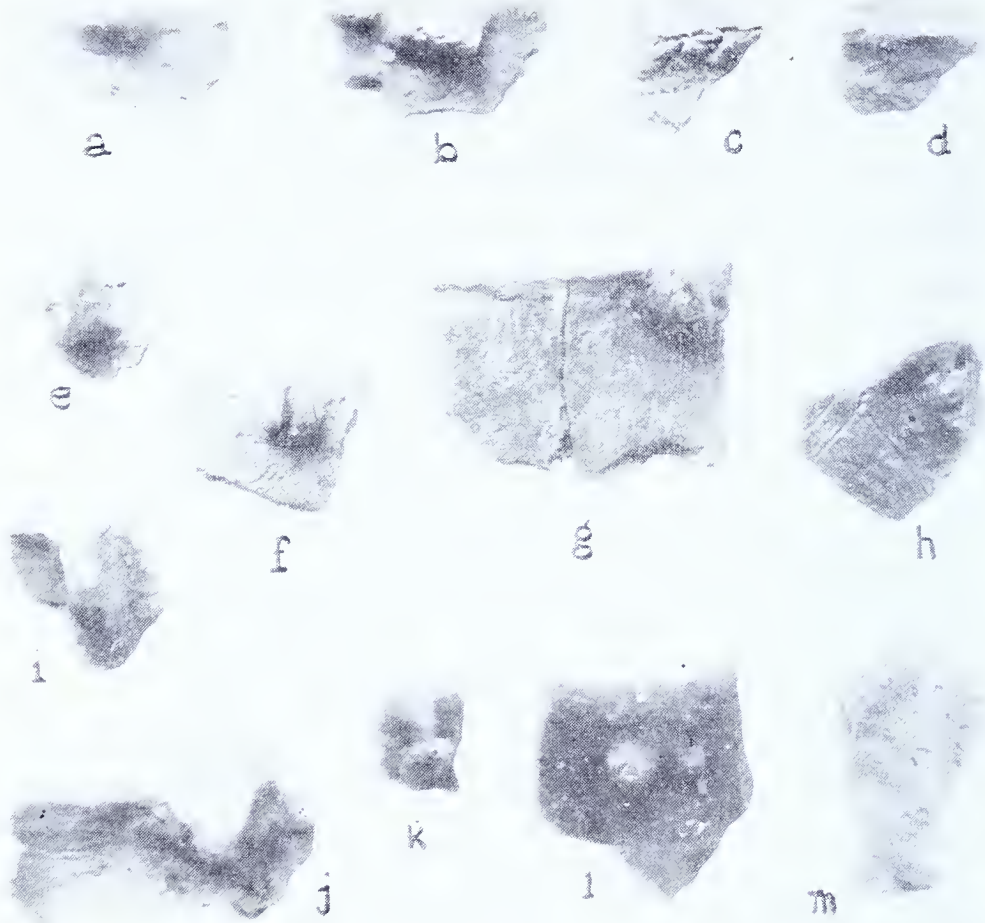






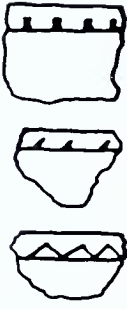


PLATE 7

RIMSHERDS, MONTAGUE SITE

(a, b, e-g, i-l) with applied knobs; (c, d) with horizontal flanges, (c) with roulette decoration; (h) with human face; (m) with vertical flange.
 (a) is 6 centimeters wide.

TABLE 5	Somerset County			Greene County		Comparative Material	
	Montague	Hanna	Clouse	White	Bruckner		
a)			1	2	2	<i>Pa.</i> Fayette Co., Engberg, 1931, p. 163	
b)		16	9	4	2	35	
c)		20	1		1	9	
d)		9			2	18	<i>Pa.</i> Fayette Co., Engberg, 1931, p. 163 <i>O.</i> Feurt site, Mills, 1917, fig. 32, 8 <i>W. Va.</i> St. Mary's, USNM, 32484 <i>Ky.</i> Fox Farm, AMNH, 20/163 <i>Ill.</i> Fulton Co., Cole & Deuel, p. 47
e)		8					<i>Pa.</i> Westmoreland, Fayette Cos., Engberg, 1931, fig. 14 <i>O.</i> Feurt site, Mills, 1917, fig. 32, 2, 5-7 <i>Ky.</i> Fox Farm, Smith, H L., Pl. XXVI, 1-8 <i>W. Va.</i> St. Mary's, USNM, 32130, lacking nick
f)		21					<i>Va.</i> Piedmont area characteristic, Holmes, Pl. CXXXIII, b. p. 150 <i>Tenn.</i> Harrington, 1922, Pl. LV, a <i>Wis.</i> Barrett, 1933, fig. 73
g)		4					<i>O.</i> Baum site, Mills, 1906, fig. 11 Jackson Co., Mills, 1912, fig. 5, with rectilinear wide-line incising on neck <i>Ky.</i> Fox Farm, H, I. Pl. LVIII, 3, with rectilinear wide-line incising on neck <i>Tenn.</i> Harrington, 1922, p. 181, Pl. LIV, LV; sometimes scalloped fillet <i>W. Va.</i> Henrico Co., AMNH, 20,0/8550 <i>Md.</i> Ferguson site, Accokeek; Shepard site, Poolesville; with roulette marks on neck <i>Va.</i> Piedmont area, Holmes, Pl. CXXXIV, with roulette marks on neck

¹ Abbreviations used in Tables 5 to 7 are:

AMNH—American Museum of Natural History, New York City.

MAI—Museum of the American Indian, Heye Foundation, New York City.

PSM—Pennsylvania State Museum, Harrisburg, Pa.

USNM—United States National Museum, Washington, D. C.

Roulette Decoration. There are only four examples of the type of indented vessel decoration that consists of parallel lines of fine nicks and is usually called roulette. The term is used here to include not only such marks, which may have been made by a postulated denticulate wooden wheel, as the name implies, but broader ones, similarly placed, that may have been made by a twisted cord or a string of beads. One example is a horizontally-flanged rimsherd (Plate 7, c), two, referred to below, are rimsherds with applied bands, and the fourth is a sherd from a vessel side (Plate 10, m).

Incised Decoration. An applied band about two and five-tenths centimeters wide is found on the outside of twenty-one rimsherds (Table 5, f). Five have a horizontal zig-zag line incised on the band (Table 5, g), two have slanting across it, parallel lines of roulette decoration (Plate 10, l), and six have gouges so placed along the lower edge of the band as to give the impression of a rudimentary form of the notched collar found in Western Iroquois pottery (Plate 8, h-k). This type of decoration is also found on Fort Ancient pottery, and in a modified form, with slanting roulette marks often replacing the gouges, on vessels from sites along the Potomac in Maryland¹ and Virginia (Table 5, g).

In all, twenty-six rimsherds and one sidesherd are decorated by rows of gouges parallel to the edge (Plate 8), twenty-four rimsherds and forty-two side sherds by incised lines. The outstanding feature of cut pottery decoration on the Montague site is a wide-line rectilinear incising on a smooth surface. Two fragmentary shell-tempered vessels so decorated were found, of the beveled-sided, constricted-neck shape, already referred to as characteristic of this general area (Plate 9, a, b). Similar wide-line incising, so done with a blunt tool that the groove cut, approximately two-tenths of a centimeter wide, is of an equal depth, from edge to edge, occurs in rectilinear designs on Fort Ancient sites (Mills, 1917, Figure 32, 10; 1906, Figure 11; Smith, H. I., Plate LVIII, 1-5). It is also found sporadically in New York, New Jersey, Maryland, West Virginia and Wisconsin. But the particular combination of shape, design, and surface, here described is, to the writer's knowledge, confined at present to southwestern Pennsylvania, where it is

¹Ferguson Site, Accokeek, wherever mentioned, by courtesy of Mrs. Alice L. Ferguson; Shepard Site, Poolesville, wherever mentioned, by courtesy of Dr. Waldo R. Wedel of the U. S. National Museum.

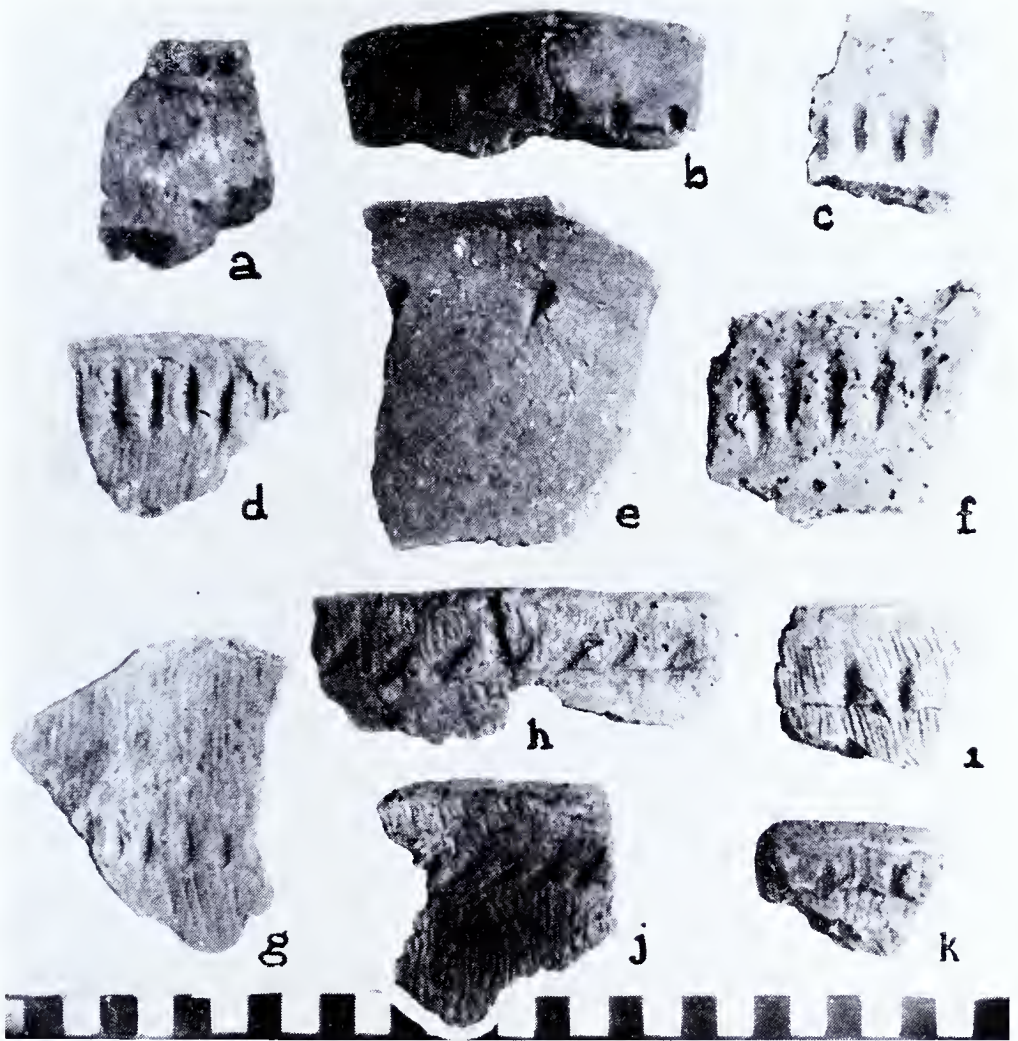


PLATE 8

RIMSHERDS, MONTAGUE SITE

(a, with punched decoration; (b-k) with gouged decoration, (g) beveled side sherd, (h, i, k) rims with applied band, see Table 3 (Centimeter scale).

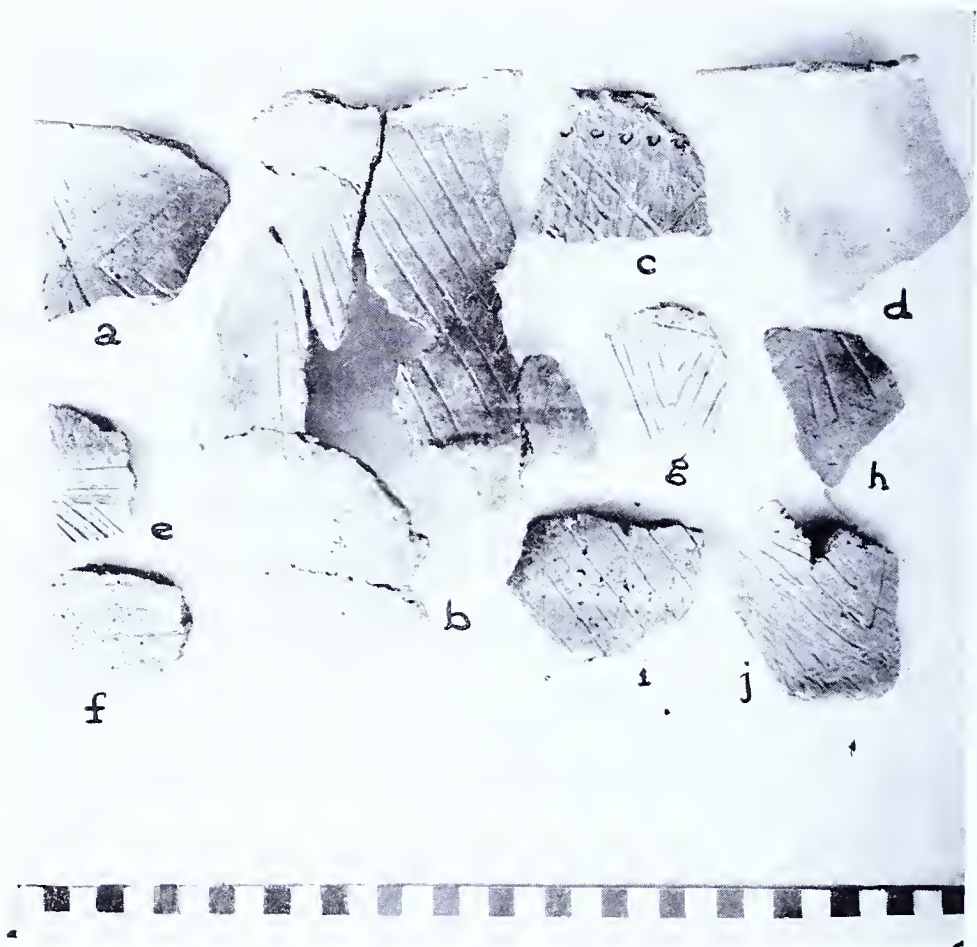


PLATE 9

POTSHERDS, MONTAGUE SITE

(a, b, c, f, h) wide-line incised decoration; (d) undecorated sharply flaring rim-
sherd; (e, g, i, j) incised sherds (Centimeter scale).



PLATE 10

POTSHERDS, MONTAGUE SITE

(a, d, e, i, j) fine-line incised rimsherds; (b, c, g, h) punched decoration (a, d, g, h) reed-marked?; (l, m) roulette decoration; (n-q) incised decoration.
 (Centimeter scale.)

found on the site under discussion, and on those farther west in Westmoreland, Fayette and Washington Counties, investigated by Robert Engberg and George Fisher (Table 4, b).

Thirty-six potsherds, none rim pieces, were decorated by rough incising of the ordinary type, nine bearing fragments of the chevron design that is considered an Iroquois trade mark (Plate 9, g, j, Table 4, d). Six sherds had incised decoration combined with lines of circular indentations (Plate 9, c, 10, a-d, g, h), which on five of the sherds seems to have been made by a bone or a reed stem; four of these (Plate 10, a, d, g, h) were of a light, porous ware distinctive enough, when taken in conjunction with the unusual decoration, to suggest possible trade pieces.

Fifty-two rimsherds, classed as undecorated, had along the edge, which was one to two centimeters thick, a groove (thirteen sherds), a series of gouges (four sherds), punctate marks (four sherds), or slanting parallel cuts from edge to edge (thirty-one sherds). Four pointed and three rounded base fragments were found, and one vertical vessel handle (Plate 12, r), unassociated with any vessel to which it could have belonged.

Pottery: Pipes. Pottery pipes at this site were, as far as could be determined, entirely of the elbow type where the stem joins the bowl at an obtuse angle. They were small, the bowl diameter ranging from one to three centimeters, the bowl height from two and three-tenths to four centimeters. They were, with one exception, well made, and ranged in color from buff through red-orange and gray to black. They comprise one complete pipe, twelve bowl fragments, and twenty-six stem fragments.

Incised Decoration. There were two examples of this kind of decoration, seldom found on pottery pipes in southwestern Pennsylvania. One was the complete pipe mentioned above, which came from Refuse Pit 75 (Plate 12, s), and was crudely made and heavy, with an all over latticed design carelessly scratched on the surface. The other was a small bowl fragment on which slanting vertical lines filled the space between three parallel horizontal lines.

TABLE 6

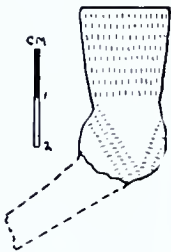
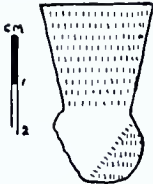
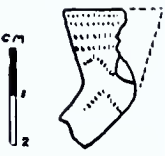
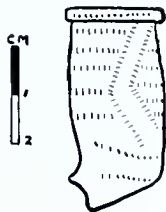
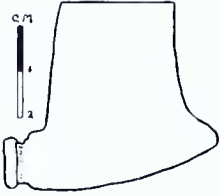

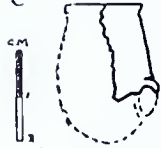

POTTERY PIPES	Somerset County				Greene County				Comparative Material
	Montague	Hanna	Clouse	Miscellaneous	White	Bruekner	Lapping	Miscellaneous	
a) Pl. 17, a, d, f 	15	3	1 Undecorated	2				W. Va. Museum	<i>Pa.</i> Westmoreland, Fayette Cos., Engberg, 1930, Pl. IX, 1, 2, p. 95; 1931, pp. 164-65 Indiana Co., Gearhart Coll., Erie, Pa. <i>W. Va.</i> Pentress. Waynesburg Museum, Waynesburg, Pa. <i>Md.</i> Shepard site, Poolesville
With beaked bowl Pl. 19, e, j					1			6	<i>Pa.</i> Bradford Co., Pennsylvania Archaeologist, Vol. 3, No. 3, 1933, cover
b) 		1	1		2		7		<i>Pa.</i> Allegheny Co., PSM, A326 Lancaster Co., AMNH, T382
With beaked bowl							3		
c) 			Pl. 11, h				3	2	<i>cf. Wis.</i> West, Pl. 35, 1, 4
Stem at right angle Pl. 17, e		1							<i>Wis.</i> West, Pl. 220, 1
d) Pl. 19, b, c 	2		1		1	4	2		
Large, Pl. 19, 1							1	1	
Undecorated, small, Pl. 11, k, 19, i	2		1		2				<i>cf. Tenn.</i> Harrington, 1922, fig. 60 <i>Wis.</i> West, Pl. 220, 2

TABLE 7

STONE PIPES	Somerset County				Greene County				Comparative Material
	Montague	Hanna	Clouse	Miscellaneous	White	Bruckner	Lapping	Miscellaneous	
a)  Pl. 17, h		1		1	1	2		3	<i>Pa.</i> Washington Co., AMNH, T390 Fayette Co., PSM, A320; Moore Coll., Point Marion, Pa. Allegheny Co., PSM, 315, 318 <i>O.</i> Fort Ancient, USNM, 223379 <i>Ky.</i> Fox Farm, Smith, H. I., Pl. XLVI, 5, 6 <i>Ill.</i> Morton Mound, F ^o 14, Cole and Deuel, Pl. X, c, p. 92 With disk lip. <i>Wis., Ia., West.</i> Pl. 144, 3, 6; Pl. 37, 6
c)  Pl. 13, b	1						2		<i>O.</i> Feurt site, Mills, 1917, fig. 60; Gartner site, Mills, 1904, fig. 63; Madisonville, Hooton and Willoughby, Pl. 19, n; Butler Co., USNM, 10016 <i>W. Va.</i> Kanawha Co., Thomas, fig. 301 (McGuire, fig. 93); McGuire, fig. 99 <i>Tenn.</i> Cumberland Co., McGuire, fig. 92 <i>Ky.</i> Pottery, McGuire, p. 473 <i>Md.</i> Worcester Co., MAI, 13/7184 <i>N. Y.</i> Onondaga Co., AMNH, 13/123
e)  Pl. 11, i, j	2				1	2	2		<i>Pa.</i> Erie Co., Stranahan Coll., Spartansburg, Pa., Morrison Coll., Erie, Pa. Fayette Co., PSM, A330; Engberg, 1930; Pl. IX, 5 <i>O.</i> Feurt site, Mills, 1917, figs. 57, 58; Madisonville, Hooton and Willoughby, Pl. 19; West, Pl. 26, 156, 160; McGuire, fig. 48 <i>W. Va.</i> USNM, 340105, MAI, 8/3061 <i>Ky.</i> Fox Farm, Smith, H. I., Pl. XLV, 1, 2, Pl. XLVI, 1-4 <i>Tenn.</i> McGuire, fig. 49 <i>N. C.</i> Distribution of urn-shaped pipe (1897), McGuire, p. 428 <i>Wis., Mich., Mo., West.</i> Pl. 159-62
b) Light grey pipestone  Pl. 13, a	1	1	1	Peck				1	<i>Pa.</i> Union Co., AMNH, T397 Northumberland Co., USNM, 27307a, 272308 Wyoming Valley, PSM, G61 York, Lancaster and Dauphin Cos., PSM, F30 <i>O.</i> Feurt site, Mills, 1917, fig. 59; above plow-line, with grooved axes, cannel-coal pendants, pp. 307, 398 <i>O., W. Va., Md., Va., N. J., Conn., N. Y.</i> AMNH, USNM

Roulette Decoration. Five bowl fragments were decorated apparently by the use of a small, rotary, toothed implement in designs consisting of areas, determined by slanting and straight vertical lines, that were alternately left bare and filled with horizontal parallel lines. As will be seen from Table 6, this type of pipe seems at present characteristic of southwestern Pennsylvania. The specimen listed from Maryland appeared to be a trade piece. Two of these roulette-decorated pipe fragments had a flattened fillet around the rim above a long bowl (Table 6, d), a shape typical of this area and seen again in two of the six undecorated pipe bowls from this site. One undecorated fragment seemed to be a pottery imitation of a sandstone stemless pipe from the same site (Plate 11, j).

Of the twenty-six pipe stems found, fifteen were oval, eleven square or oblong in section, one of the latter having parallel lines of roulette decoration from edge to edge on two adjoining sides. A number of stems ended in "bits" similar to those found on the mouthpieces of modern briar pipes.

According to Loskiel, "The Indians consider it (tobacco) as one of the most essential necessities of life. The species in common use with the Delawares and Iroquois is so strong, that they never smoke it alone, but mix it with the dried leaves of the *sumac* (*rhus glabrum*), or with another herb, called by them *degokimak*, the leaves of which resemble bay leaves, or with the red bark of a species of willow, called by them *red wood*." (Loskiel, pp. 73-74). Zeisberger, also writing of eighteenth century Delawares and Iroquois, says, "A kind of tobacco known as Brazilian tobacco, they also had; to the present day this tobacco, which has but small leaves, is called Indian tobacco." (Zeisberger, p. 28).

Stone: Ground.

Pipes. A stemmed pipe, lacking the bowl, of a modified platform or long-stemmed beaked type (Plate 13, b), found on Fort Ancient sites (Table 7, b), a fragment of a stemless pipe (Plate 11, i), another, just begun, that might have borne an effigy, and an unfinished elbow type, were all made of sandstone. Three fragments were found of highly polished light gray tubes made of the material known as Ohio pipestone. They belong to the so-called Adena type which has the smaller end open, the larger closed, except for a small circular central perforation (Table 7, d).

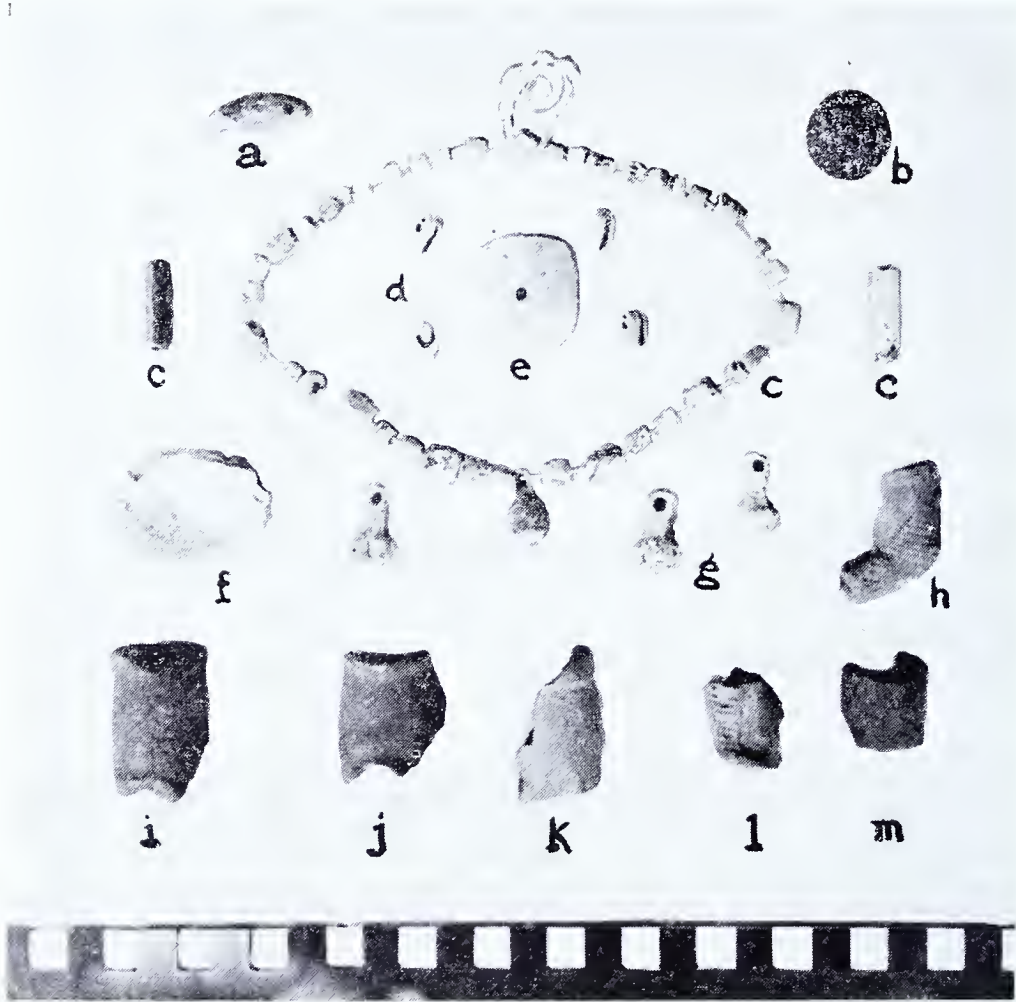


PLATE 11

ORNAMENTS AND PIPES, MONTAGUE SITE

(a) wolf canine pendant; (b) stone bead; (c) tubular shell beads; (d) *Marginella apicina* shell beads; (e) disk shell bead; (f) shell with serrated edge; (g) imitation elk-canine shell pendants; (h, l, m) pottery pipes with roulette decoration; (i) sandstone pipe; (j, k) undecorated pottery pipes. (Centimeter scale.)

Bannerstone. A fragment of bannerstone was found, made of a polished banded slate not found locally. Like all the bannerstones that the writer has seen in this area, it resembled in shape a doubled-bitted axe and had a wing-spread of about eight centimeters.

Ornaments. Altogether, ten gorgets were found on this site. They were all made of local shales, worked into simple oblong and oval shapes, the only complete one being triangular with one suspension hole (Plate 12, i-k, m, n). Two fragments showed evidence of having had at least two holes apiece. An oval pendant of gray-green shale was notched for suspension at one end and had three more notches for decoration (Plate 12, l), and a slate disk bead from Refuse Pit 15 was decorated with fine nicks cut around the edge (Plate 11, b).

Tools. One completely grooved axe was found (Plate 13, c), and a broken grooved adz (Plate 13, i). The materials of the fifteen celts recovered (Plate 13, e-h, j-p) were largely local, including diorite, traprock, serpentine, sandstone, and a poor quality of hematite. Part of a small, highly polished hematite celt was found, three centimeters long, and a celt-shaped shale knife (Plate 12, d). Loskiel says, "Formerly—Their hatchets were wedges, made of hard stones, six or eight inches long, sharpened at the edge, and fastened to a wooden handle. They were not used to fell trees, but only to peel them, or to kill their enemies.—Formerly when they had no axes but those made of stone, as above mentioned, they used to kindle a fire around large trees, and to burn them so long till they fell; then by applying fire to different parts of the stem and branches, they divided them into smaller pieces for use. This custom still prevails in some places.

"They never think of sparing the forest trees, for they not only burn more wood than is necessary for house consumption, but destroy them by peeling. The greatest havock among the forest trees is made by fires, which happen either accidentally, or are kindled by the Indians, who in spring, and sometimes in autumn, burn the withered grass, that a fresh crop may grow for the deer. These fires run on for many miles, burning the bark at the roots of the trees in such a manner, that they die." (Loskiel, pp. 54-55.)

A probable hoe, consisting of half of a reddish sandstone pebble (Plate 13, b), was found in a storage pit. It was notched



PLATE 12

TOOLS AND ORNAMENTS, MONTAGUE SITE

(a-c) flint drills; (d) shale knife; (e-h) flint scrapers; (i-n) shale pendants and gorget fragments; (o-q) flint knives; (r) pottery vessel handle; (s) incised pottery pipe. (k) is 8 centimeters long.

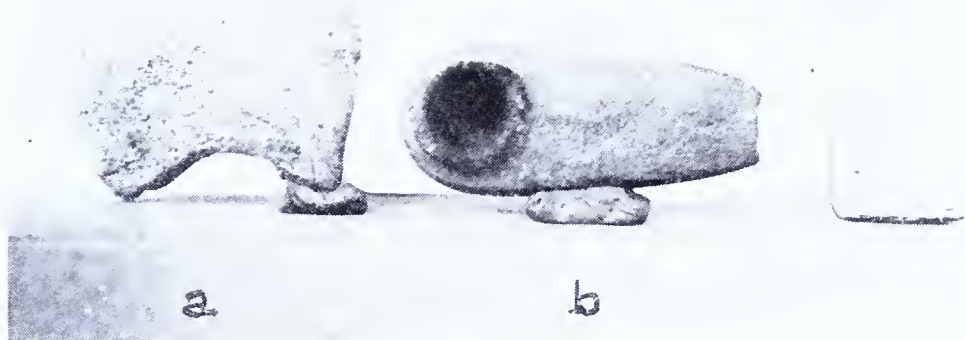


PLATE 13

STONE OBJECTS, MONTAGUE SITE

(a) worked soapstone fragment; (b) sandstone pipe.

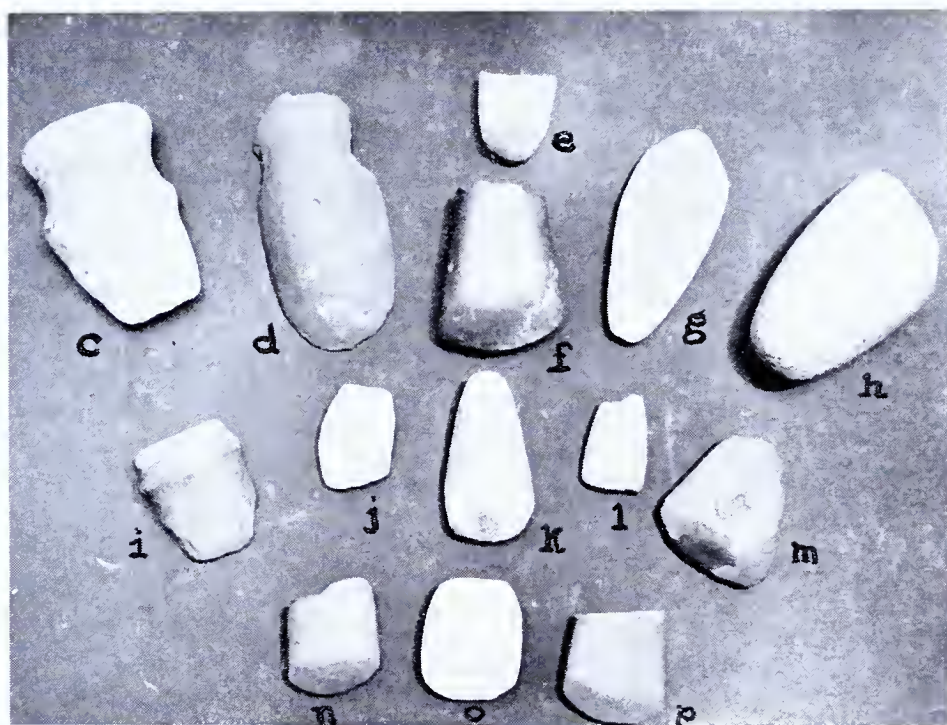


PLATE 13

STONE TOOLS, MONTAGUE SITE

(c) grooved axe; (d) hoe; (i) grooved adz; (e-h, j-p) celts.
 (c) is 12 centimeters long.

for hafting at one end, the only signs of use being nicks at the other end extending a short distance along one side and suggesting that it had been unsuccessfully used for an axe or a hammer.

Miscellaneous. Three net-sinkers were found, and sixty-five sandstone disks and discoidals ranging in diameter from three to ten centimeters. Fifty-five disks were smooth-surfaced, four discoidals, of which one had been used as a hammer stone, were pitted in the center, and six discoidals, of which one was highly polished, and another thirteen centimeters in diameter, had central perforations. There were three sandstone balls, five, six, and eight centimeters in diameter, and three sandstone hemispheres that showed some signs of having been used as rubbing stones. There were seven of the long narrow stones, usually oblong in section, that were presumably used in making pottery and other artifacts. Three of these were of sandstone, the rest of shale, all but two being eight to thirteen centimeters long. These two shale pieces, nineteen centimeters long, showed signs of use on one end, and were probably pestles. There were on this site twenty-eight of the rough pitted stones that have been called anvils. These were unworked, except for a central pitting in one, two, and in one instance, three surfaces, were roughly round, oval or rectangular in section, and from three to five centimeters across. Five showed possible signs of wear along the edges that might have meant use as a hammer. One "cupstone" was found, a larger rock with two hemispherical hollows in the upper surface. One fragment of worked steatite may have been part of a vessel cut down to use as a spoon (Plate 13, a). A sandstone slab, four by four feet by four inches, showing no signs of use, was found in excavation lying on the hardpan (Plan 1).

Stone: Chipped.

Projectile points. Seventy triangular and ninety-four stemmed and notched points were found on this site, nine of the latter being long enough to consider as spear points. A few were of traprock, the rest of gray, white, blue, and black flint. In shape they were similar to the points from the Hanna site shown in Plate 18. Stemmed forms show the most variety, including nine narrow, bulky blades similar to those found on Archaic sites in New York (Ritchie, 1936, a, Plate II).

Knives. Four broad flint blades may have been used as knives (Plate 12, o-q). "Formerly—their knives were made of flint, not in the form of our knives but shaped like arrow heads, *i. e.*, triangular, quite thin, and with the two larger sides sharp. With such knives they stripped off the skin of deer and other game." (Zeisberger, p. 28.)

Scrapers. The four scrapers found were of flint; one a thumb scraper (Plate 12, g), one a reworked arrow point broken off close above the tang (Plate 12, h), one a retouched flake (12, f), and one a flake with the upper surface worked in a manner reminiscent of Folsom points (Plate 12, e).

Drills. Of nine flint drills, three were T-shaped (Plate 12, c), three had a rounded base (Plate 12, b), two a straight base (Plate 12, a), and one a squared base.

Bone.

Ornaments. Seventy-seven tubular beads made from bird and animal leg bones (Plate 14, t) were found, thirteen of them with Burials 10, 14, 20, and a dozen pendants of laterally perforated or notched moose, bear, and wolf teeth (Plate 14, l-o), as well as an animal bone pendant (Plate 14, p). A necklace of six perforated wolf teeth (Plate 11, a) was found around the neck of a small child (Burial 9). Perforated deer and elk phalanges (Plate 14, q-s) may have been ornaments, or parts of that variant of the cup-and-pin game where such bones, strung end to end, with a bone or wooden pin at the end of the string, are thrown into the air in an attempt to catch a particular bone on the pin. A piece of worked bone with two pairs of lines scratched across it (Plate 14, g) may have been a tally for use in this or another game.

Tools: Fishing and Hunting. Two bone fish hooks were found, one grasped in the left hand of adult Burial 13, two sawn fish-hook blanks (Plate 14, h) from which the hooks were cut, and two fragments of what seemed to be shallow-barbed harpoons (Plate 14, i), of a type reported from Fisher's Island (Ferguson, Plate XIII, m). Eight unfinished antler arrow points were found with bases hollowed for hafting, one being nicked around the edge (Plate 14, a, b), and two deer toe points (Plate 14, c, d).

Tools: Domestic. These consist of four scrapers (Plate 15, i, u) for working skins, three of the type shown in Plate 15, u,

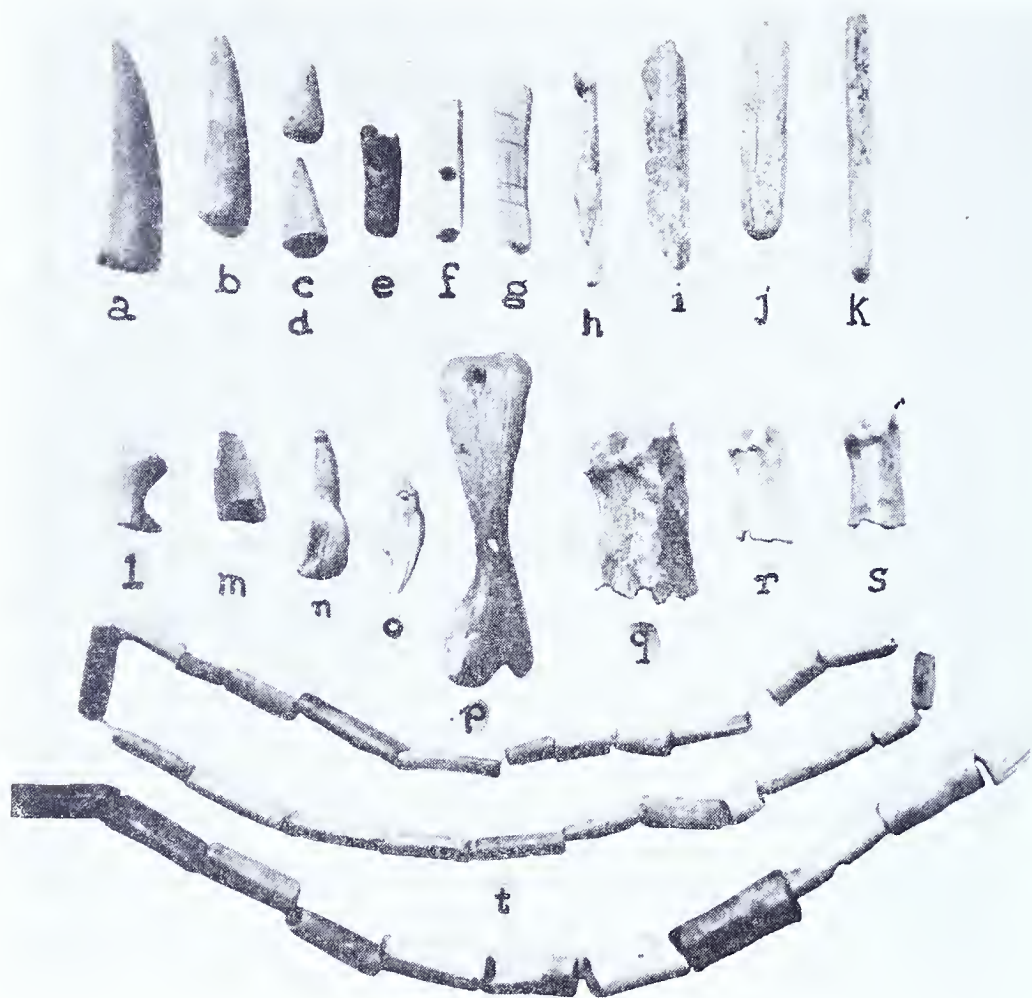


PLATE 14

BONE TOOLS AND ORNAMENTS, MONTAGUE SITE

(a, b) unfinished antler points; (c, d) deer toe points; (e, f) whistles; (g) incised bone; (h) fish-hook blank; (i) harpoon; (j, k) flakers; (l-o) tooth pendants; (p) bone pendant; (q-s) perforated elk and deer phalanges; (t) bone beads. (p) is 9 centimeters long.

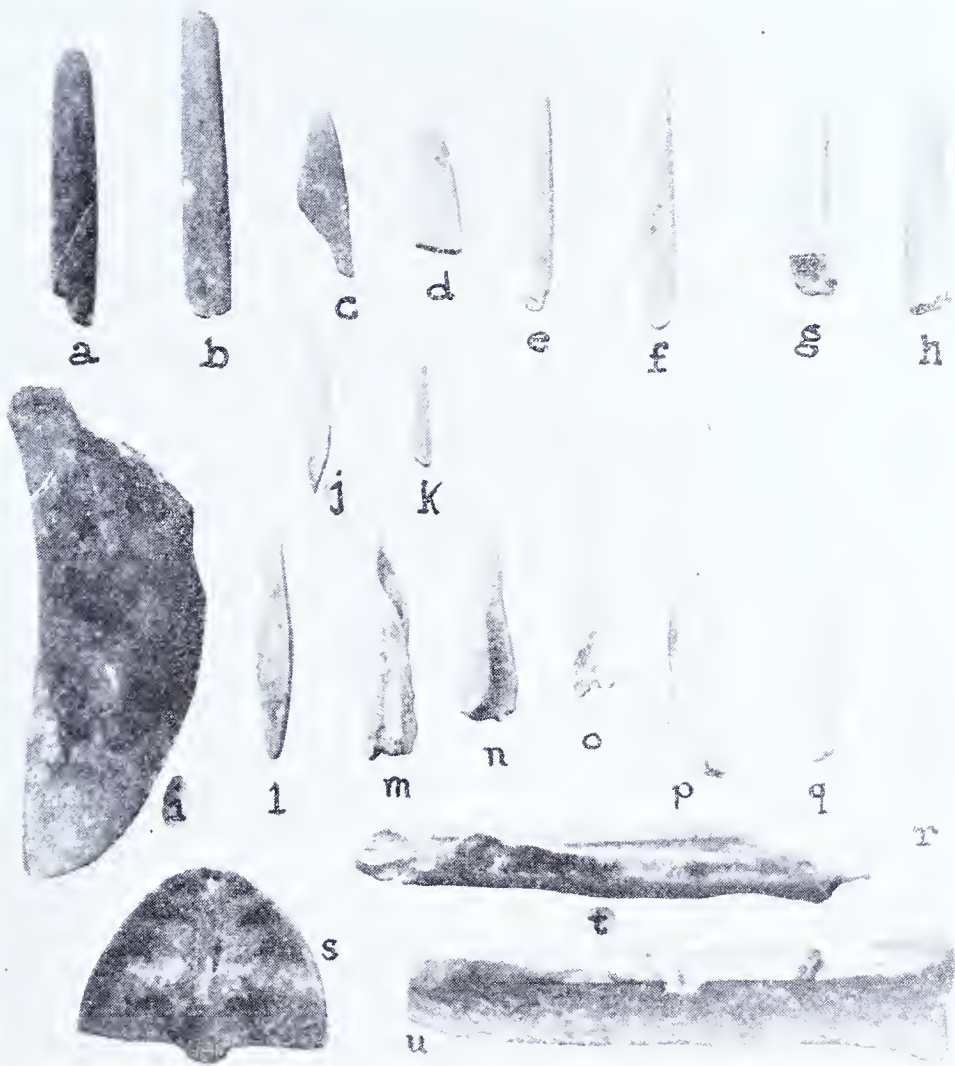


PLATE 15

BONE TOOLS, MONTAGUE SITE

(a-h) flakes; (i, t, u) scrapers; (j-r) awls; (s) tortoise-shell ladle.
 (u) is 15 centimeters long.

six beaver incisors that had probably been hafted as knives, one broken artifact that may have been a gouge or a beamer (Plate 15, t), six pressure flakers (Plate 14, j, k, Plate 15, g, h) for working flint, eight spatulas (Plate 15, a-e), sixteen awls (Plate 15, j-r) used in making clothing, one shaped at the butt for use as a flaker, two turtle shell ladles (Plate 15, s), and two whistles (Plate 14, e, f).

Shell. One disk shell bead (Plate 11, e) was found with Burial 14, another in a storage pit. Thirteen shell pendants (Plate 11, g), found with infant Burials 16 and 20, had apparently been made to imitate the elk canine teeth often used as pendants but lacking on this site. Fifty-four tubular shell beads (Plate 11, c) were with Burials 13, 16 and 20, and fourteen *Marginella apicina* shell beads (Plate 11, d), from the Gulf of Mexico, with Burial 16. These marine shells, evidence in the Alleghenies of the far-flung trade connections of prehistoric Indian tribes, were also used for embroidery on Indian clothing, as shown by Powhatan's deer skin mantle which has come down to us from early days in Virginia with the design of a man with animals worked on it in these shells (Mallery, Plate XV, p. 209).

A number of the mussel shells found, one with Burial 20, many others throughout the site, had a row of nicks along the edge (Plate 11, f). Such serrated shells occur on sites in Ohio (Hooton and Willoughby, Plate 15, j, k, Plate 16, j; Mills, 1900, Figure VII) and in Maryland (Ferguson site). It has been suggested that they were used as saws; Dr. Holmes (Bureau of Ethnology, Report 2, Plate XXIV, 4) refers to one with a handle, as a spoon. Other uses for mussel shells are reported from seventeenth century Virginia by Captain John Smith: "For Barbers, they use their women, who with 2 shels will grate away the haire, of any fashion they please," (Smith, J., p. 99), and again, "They bring their bowes to the forme of ours by the scraping of a shell." (Ibid., p. 102.)

Conclusions. What then do we know about the people who in prehistoric days, built their village where the Montague farm stands today? We know they lived a fairly settled life, raising crops that included tobacco, for we find traces of a stockade and permanent houses, and tobacco pipes; we know they hunted and fished, for we find the bone scrapers used for working skin, arrow points, and fish hooks and net sinkers. We

know they were cultivated people, as the early inhabitants of the country east of Ohio went, since their pottery and pipes show variety and skill in execution and decoration. We know they were in touch with their neighbors and probably on or at the end of a recognized trade route, since we find in a baby's grave a necklace of shells never taken from waters north of the Gulf of Mexico. We know the rate of infant mortality was high since we found eighteen child skeletons as compared to six adults and one adolescent. We know that they were on their guard against attack, since they surrounded their village with a stockade, but that its location was chosen for convenience and shelter, rather than strategic position, since the hills to the east rise steep and close enough to overlook the stockade. This may mean that the stockade was built as a general safeguard and for protection against winter winds and wild animals rather than to foil a specific, badly feared enemy.

How long was the site inhabited? The small number of adult skeletons, and the fact that refuse deposits seldom exceed two feet in depth suggest a relatively short period of time, say somewhere between twenty-five and fifty years. On the other hand, it must have taken quite a while to break enough pots to furnish the potsherds found in such quantity, since we have been led to believe that the Indian housewife was careful of her vessels. The position of the twin burial, B. 24, lying, undisturbed by posts, on the line of a circular house wall, and the quantity of post-moulds covering the site and pointing to building and rebuilding, also suggest length of occupation. The position of Burial 1 under a house wall may point to the same conclusion.

And last, but very far from least, who were these people and when did they live? They were Woodland Indians, belonging to a well-defined local phase of what used to be called the Third Algonkin period, of which other well-defined local phases have been found in New York, New Jersey, and along the Potomac, and which in a large portion of the northeastern United States was followed by a period of Iroquois domination. There is no archæological evidence of an Iroquoian occupation of southwestern Pennsylvania. Colonial history tells us that while the Iroquois claimed over-lordship of that territory during the seventeenth and eighteenth centuries, it was actually occupied by Delawares and Shawnees. It is probable, then, that Indian culture of the Woodland pattern in the well-developed

phase seen on the Montague site, continued in southwestern Pennsylvania uninterrupted up to the time of the coming of the white men.

The Montague site is classed as Woodland because of the frequency of round houses, the prevalence of flexed and absence of secondary burial, the character of pottery vessel and pipe decoration and shapes, and the occurrence of shale gorgets, stone tubes, a bannerstone fragment and grooved axes. The decorated pottery vessels and pipes mark the culture as advanced, both being so far absent in the Northeast from sites of the preceding general period, formerly called Second Period Algonkin.

There is, however, a wave of influence at the Montague site, outstandingly evident in pottery, that is foreign to the Woodland pattern. The straight-sided vessel with rounded base (Plate 4, h) appears on early Iroquois sites. Notched points and grooved knobs on rimsherds (Table 5, d, e), and rectilinear wide-line incised decoration of the Montague type seem definitely associated with the Fort Ancient culture; applied bands, plain and notched, like rudimentary collars at a vessel rim (Table 5, f, g), tie in to Fort Ancient, the Western Iroquois, and the Piedmont area in Virginia. The stone pipes from the Montague site would be perfectly at home in a Fort Ancient village, five refuse pits (R. P. 78-82) are of a type found on Fort Ancient sites and in marked contrast to that characteristic of Somerset County, and a large proportion of the arrow points are triangular, a trait associated with the Mississippi pattern. What does this mean?

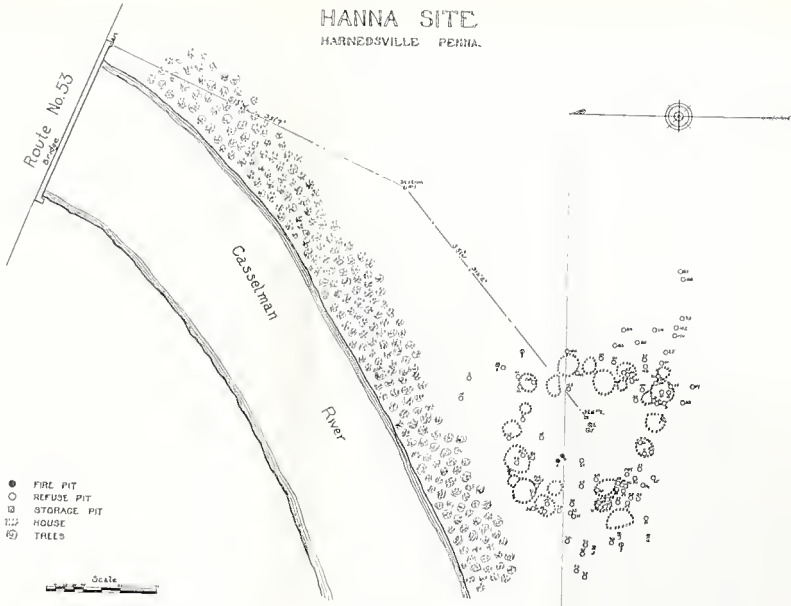
We know that the Fort Ancient culture of Ohio and Kentucky, associated with the "Mound Builders," and the Iroquois culture of the Great Lakes and Susquehanna areas, belong to the Mississippi pattern, the other great group in middle western-northeastern United States archaeology. We know that there is a probable relationship between Fort Ancient and early Iroquois remains and that Fort Ancient shares a number of traits with the Piedmont area of Virginia (Griffin, p. 276). We can say, then, that the people of the Montague site were strongly influenced by a Fort Ancient-Iroquoian group, and may have helped to transmit the resemblances noted between Fort Ancient material and that found in Virginia.

How this influence actually occurred, whether by conquest, absorption, or trade, is something else again. An attempt was made to determine whether there might have been two occupations of the site, each responsible for one of the cultural phases considered. This does not seem probable, although lack of complete documentation, as stated in the Preface, makes definite conclusions impossible. While the plan (Plan 1) of this site suggests two settlements, it must be remembered that the berry patch between the two groups of houses was of necessity only partially excavated.

At the present stage of our knowledge it is hard to assign even a tentative date to a prehistoric site. The best we can say is that the occupation of the Montague site probably occurred at some time during the last five hundred years before the arrival of white settlers on the North Atlantic coast.

HANNA SITE

HARNEDSVILLE PENNA.



HANNA SITE

Description of Site. The Hanna site lies on a farm belonging to B. F. Hanna, Esq., of Rockwood, Pennsylvania, in a cornfield on the east bank of the Casselman River just south of State Highway 53 (frontispiece), and across the river from the town of Harnedsville (elevation 1,382 feet). The site is separated from the river by a strip of woods eighty feet across, from the western edge of which there is a drop of fifteen feet to the water. It was excavated during the winter of 1935-1936, the worst known to local history, and surprisingly enough, it was the very severity of the weather that made the work possible. If the ground had not been covered by a deep fall of snow, it would have been frozen far too hard to penetrate. As it was, the men would shovel aside the snow to find the ground wet but soft; when the day's work was over, they would shovel the snow back again to protect the soil from frost till the next day.

Houses. The Hanna site had no stockade, but its twenty-three roughly circular houses formed an irregular circle about 220 feet in diameter (Plan 2). The houses ranged from eight feet to twenty-four feet across, the post-moulds being two to three inches in diameter with no evidence of larger posts (Plate 16, a). There were no burials found on this site, although trial trenches were run in various parts of the field in the attempt to find a cemetery. Evidence of occupation apparently disappears beyond the completely excavated area defined by Refuse Pits 10, 86, 97, 99 (refuse pit numbers on Plan 2 are not consecutive).

Pits. Of eighty-five pits found inside and outside houses, seven were classed as fire pits because of a layer of stone on the bottom and four as storage pits because of surrounding post-moulds. The average size of pits was as on the Montague site, and the distribution of the objects found in these pits is shown in Table 8.

TABLE 8. PITS AND CONTENTS—HANNA SITE

P—Complete pipe, S—Stem, O—Ornament, T—Tool.

	Total Number	No Artifacts but Potsherds	Potsherds	Animal Bones	Flint Spalls	Shells	Pottery Pipes	Ground Stone	Chipped Stone	Bone	Shell	Total Artifacts	
	Number of Artifacts						Number of Pits						
Fire -----	7	6	4	2			1 T	2	1 T			4	
Storage -----	5		5	5	2		1 S	4	4 O			9	
Refuse -----	73	40	69	62	50	10	5 S	4 T	30	12? O	3 T	1	65
Totals -----	85	46	78	69	52	10	16	5	36	20	1	78	

Pottery.

Vessels. The tempering material and finish of pottery vessels, was, as on the Montague site, predominantly grit and cord-marked with the presence noted of shell and a smooth surface. The Hanna pots and sherds, however, were not only fewer in quantity but far simpler in quality than those from the Montague site. There were only two whole vessels (Plate 16, a, b, Table 4, e, i), but their shape is probably characteristic of most of the pots from this site, 102 of the rimsherds found being straight up and down, thirty-four slightly flaring, and twenty-four definitely flaring (Table 3). Ten rims had rounded points on them, one nicked, and six rims were convex. Only four of the 166 rimsherds were decorated; two with an applied vertical knob, one with lightly incised slanting lines, and another with an incised chevron design on the neck (Figure 2, a). The vessel from which this came was probably a trade piece, being harder-fired than local wares, and in marked contrast to them in shape and decorative design. In these respects it resembles two early Iroquois vessels from a site in western New York (Westfield site, Wright Coll., Erie, Pa.). There were fragments of one pointed, and three round, vessel bases, and two miniature pots.

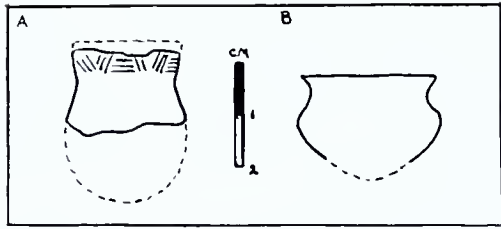


FIGURE 2
POTTERY VESSEL SEGMENTS
(a) HANNA, (b) CLOUSE SITES

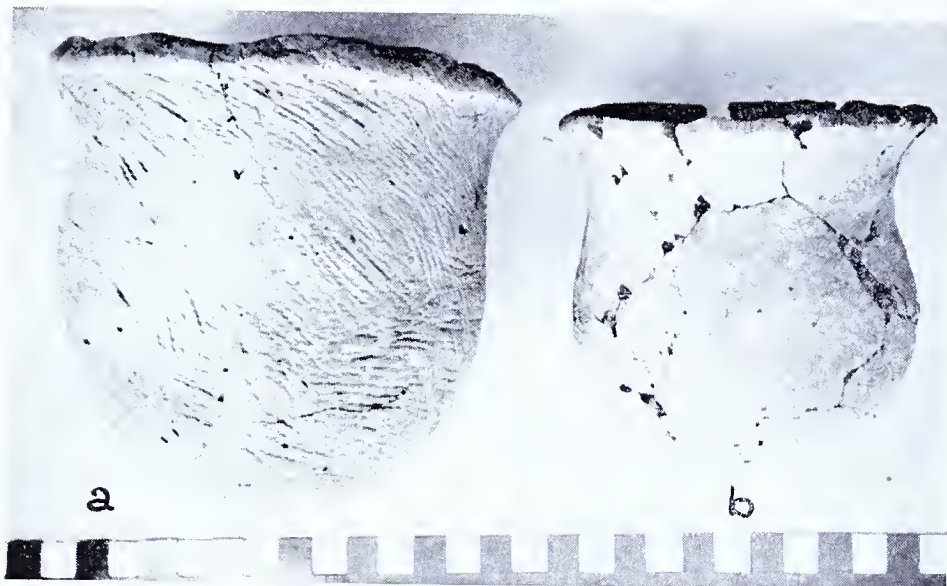


PLATE 16
(a, b) POTTERY VESSELS, HANNA SITE
(Centimeter scale).



PLATE 16
(c) HOUSE OUTLINE, HANNA SITE



PLATE 17

PIPES, HANNA SITE

(a, c, d, f, i) roulette-decorated pottery; (b) stem fragment; (g) undecorated pottery; (h) stone (Centimeter scale).

Pipes. Twenty-five complete and fragmentary pottery pipes, and thirty-two pottery pipe stems, one effigy, twenty-five rounded, and six squared, came from the Hanna site. Six pipes were plain (Plate 17, g), and eighteen roulette-decorated (Plate 17, a-f, i), all of the unusually small size that seems characteristic of this area. The shape shown in Table 6, a, (Plate 17, a, d, f), may, from the frequency of its appearance, be considered most characteristic; the trumpet-shaped pipe (Plate 17, i), is a solitary specimen and may possibly show Iroquois influence. The roulette-decorated effigy pipe fragment (Plate 17, e) suggests the body and wings of a bird, and the stem piece from another pipe (Plate 17, b) suggests an even more conventionalized bird form.

Miscellaneous Objects. One small disk cut from a vessel side was found. These disks, probably used as counters in playing games, or when larger, as pot lids, occur on archaeological sites the world over, but they are rare in Somerset County. A small, broken, perforated piece of worked clay may have been a bead or the mouthpiece of a pipe.

Stone: Ground.

Pipes and Ornaments. A dark-greenish sandstone pipe of a modified platform type common to this area had a groove around the stem (Plate 17, h). Pipes of this type occur on Fort Ancient sites (Table 7, a). One found in an Illinois mound is called a beaked pipe, considered to be indicative of the Mississippi pattern, to which the Fort Ancient aspect belongs, and to be a variant of the equal-armed pipe characteristic of that pattern, in which the stem length is approximately equal to height of the pipe bowl (Cole and Deuel, pp. 92, 210). The short-stemmed beaked pipe from the Hanna site considered here, seems, like the long-stemmed beaked pipe found on the Montague site, characteristic of southwestern Pennsylvania, and is found in the territory south and west of it. The two types seemed to the writer to be related variants of a modified platform type associated with the Mississippi pattern.

A fragment of buff sandstone pipe bowl and four gorget fragments, two sandstone, one slate (one-hole), and one soapstone (two-hole) complete this category.

Tools. All that remained of the chopping artillery of the Hanna villagers was the butt of one completely grooved axe, the butt of a small highly polished hematite celt one and five-

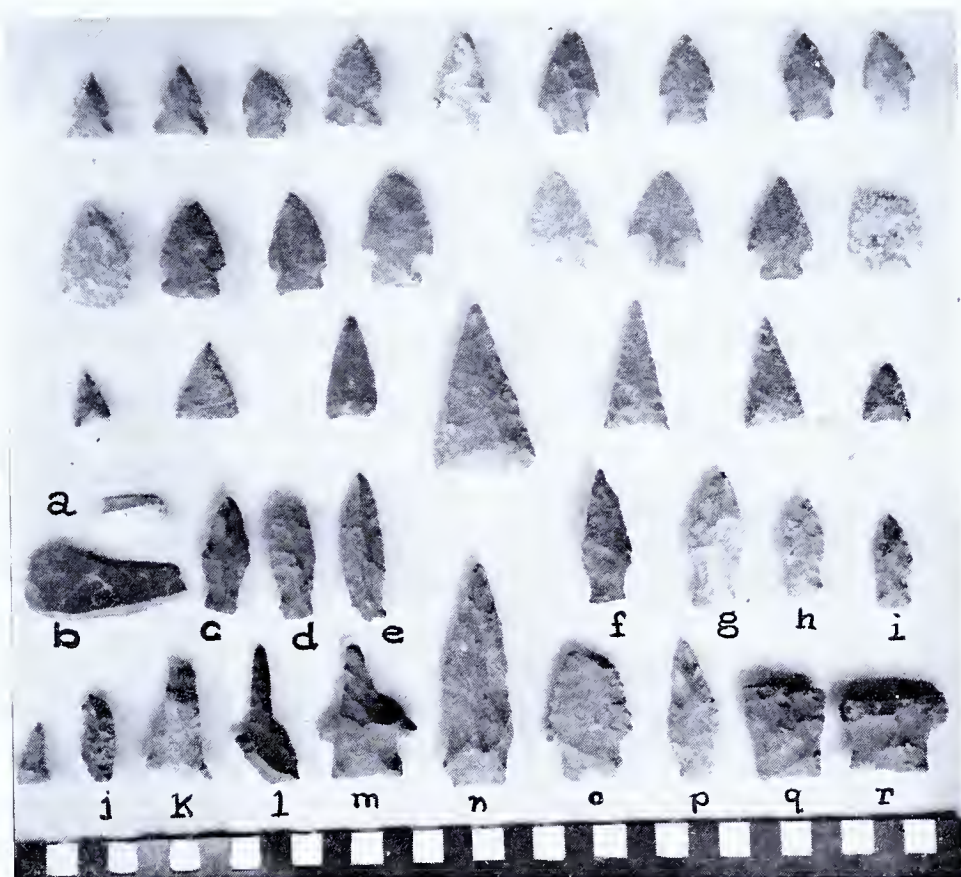


PLATE 18
PROJECTILE POINTS, KNIVES AND DRILLS, HANNA SITE
(Centimeter scale).

tenths centimeters thick, and fragments of six celts, three of granite, approximately five centimeters wide at the edge, one of a poor quality hematite, eight and five-tenths centimeters wide at the edge, and two rectangular in shape, one of local limestone, four centimeters wide at the edge, the other, slightly bigger, of slate, used as an anvil after it was broken.

Miscellaneous Objects. Forty disks and discoidals were found, thirty-nine sandstone and one shale, ranging in diameter from two and five-tenths to six and five-tenths centimeters. Twenty-seven disks had smooth surfaces, four discoidals were pitted in the center, and nine perforated. Three of these, among them the shale specimen, had respectively two, five, and six radial lines incised on one surface. One four-notched net sinker, six and five-tenths centimeters square, was found, and nine "anvils" from three to eight centimeters across, along with one stone ball, four centimeters in diameter, four oblong, unworked pieces of shale, seven to nine centimeters long, probably used as rubbing stones, and a fifth, twenty-seven centimeters long, that had been used as a pestle.

Stone: Chipped.

Projectile Points. Thirty-six triangular and ninety-seven stemmed and notched points (Plate 18) included eight of the latter type that were long enough to consider as spear points. There are sixteen specimens, one with serrated edges, of the narrow, bulky, "Archaic" form (Plate 18, c-i).

Knives and Drills. A beveled jasper flake (Plate 18, b) and a gray flint flake retouched along one edge were probably used as knives. Of eight flint drills, two had a straight base (Plate 18, k), two a triangular base (Plate 18, l), one a roughly rounded base, and three a barbed base (Plate 18, m).

Bone and Shell. We have further listed for this site forty-nine bone beads, three perforated deer phalanges, twenty bone tools, including three awls and a beaver incisor, and one small bead.

Conclusions. The similarity between the Montague and Hanna sites shown by location and house-forms, by pottery vessels and pipes, stone and bone ornaments and tools, indicates that people of essentially the same culture lived in both places. Yet the Hanna site is not as productive as the Montague site in anything except pottery pipes and houses. It lacks

a stockade, it lacks the stone tube fragments, the sophisticated pottery and varied pipe types, and the varied bone industry of the larger site. Its houses are all circular, only twenty-seven per cent of its projectile points are triangular and the one object with Iroquois earmarks bears all the signs of being a trade piece.

How do we account for this variation, of which the striking feature is the contrast in pottery vessels, which would point to an earlier date for the Hanna site if it were not for the quantity of pottery pipes found there being equal in workmanship to anything found at the Montague site? We have two alternatives to explain this; the Hanna site belongs to an earlier period, or the Hanna site is contemporary with the Montague, but separated enough from it geographically to miss the outside influence, presumably from the West, responsible for the outstanding development in pottery making at the Montague site. Two points argue against the first alternative; the presence of the pipes, of the same general type as those occurring on sites of the Owasco aspect (Third Period Algonkin) in New York (Ritchie, 1936, b, Plate XIII), and, so far, absent in the preceding period, and the appearance of the incised pot, which, if Iroquoian, presupposes Iroquois somewhere in the offing. It is suggested that the Hanna site belongs to the same general period as the Montague site, that is, the final phase of non-Iroquoian, pre-Contact occupation of the Northeast that has been called in the past Third Period Algonkin, but that the Hanna site was enough earlier in this period, which may have lasted hundreds of years, to account for the cultural differences between the two sites, due, presumably, to stimulus from the West.

CLOUSE SITE

Description of Site. The Clouse site lies in a meadow at an elevation of 1,362 feet, with the Youghiogheny in front to the west, and the hills behind sweeping around on either side in a great semi-circle to join the river (Plan 3). The river is bordered by a road ten feet above it but four feet lower than the meadow. This is a strategic site, since the mountains are high and close enough to provide shelter from winter weather, but too far from the village to permit surprise attacks.

Houses and Burials. Two stockades of double-post construction were outlined in the ground, one about 100 feet in diameter showing no evidence of occupation except a fire pit in the center. The dark "Indian" soil faded out south of the centre of the second, southern, stockade, about 200 feet in diameter, and the only pits found beyond it were in the stockade wall. The appearance of these two enclosures on a site that shows relatively little evidence of occupation, suggests that the northern one was ceremonial and used only for dances and religious ritual.

Five houses were traced in 1934, and under one of them was the burial of an adolescent lying on the back with legs flexed and two bone beads under the pelvis. Complete uncovering of the area within the stockades and testing by trenches of the ground between and beyond showed no further signs of occupation on this site.

Pits. There were eight fire, seven storage, and twenty-two refuse pits on this site, the average fire pit being five by seven by one and a half feet, the average storage pit five by eight by one feet and the average refuse pit four by five by one and a half feet. Fire Pit 2 should perhaps be classed as a storage pit, since it was surrounded by a double row of post-moulds, thirty-two in all, and had ash in the bottom with no stones. The objects found in pits are listed in Table 9.

TABLE 9. PITS AND CONTENTS—CLOUSE SITE

P—Complete pipe, S—Stem, O—Ornament, T—Tool.

	Total Number	No Artifacts but Potsherds	Potsherds	Animal Bones	Flint Spalls	Shell	Pottery Pipes	Ground Stone	Chipped Stone	Bone	Shell	Total Artifacts
	Number of Pits						Number of Artifacts					
Fire	8	1	6	6	4	2	4 S	2 T	5	13? O 7 T		31
Storage	7	3	7	7	4		1 S	5 T	2	18 O		26
Refuse	22	9	20	16	8		1 P 4 S	8 T	4	7? O 2 T		26
Totals	37	13	33	29	16	2	10	15	11	47?		83

Pottery.

Vessels. Pottery from this site conforms in tempering material and surface finish to that from the Montague and Hanna sites, and in simplicity of shape and lack of decoration to that from the Hanna site. There was no decorated pottery except one sherd from the side of a vessel that had a criss-cross design scratched upon it. Of the four vessel segments found, three conformed to local shapes (Table 4, d, f), while the fourth (Figure 2, b) suggests a trade piece, being of a hard-baked black ware, that, like the shape, is foreign to local pottery. Of the twenty-nine rimsherds, eighteen were straight, twelve slightly flaring, seven definitely flaring, and one slightly convex (Table 3). Four rimsherds had rounded points, another had a nick in the edge. One pointed base fragment was found.

Pipes. Four pottery pipe bowls were found, three roulette-decorated, one plain, and twelve pottery pipe stems. They were similar to those from the Hanna site (Table 6, a, b).

Stone: Ground. One fragment was found of the wide open end of a polished, gray pipe stone tube of the so-called Adena type; three celts, one andesite, one limestone, each five centimeters wide at the cutting edge, and one very small, of highly polished hematite, three and two-tenths centimeters

wide and five centimeters long; six stone disks approximately five centimeters in diameter, three of them flat disks, the rest discoidals, two with bi-conical pittings, and one perforated fragment with an incised design consisting of two radial lines connected by two parallel lines. There were twelve of the pitted rocks that may have been used as hammers or anvils, and one oblong piece of shale that had been used as a pestle.

Stone: Chipped. The twenty-nine flint points from this site were a poor lot, most of them being broken or rejects. All were intended to be notched or stemmed except one triangular point, eight and two-tenths centimeters long, with a concave base. One scraper and one straight-base drill were also of flint.

Bone and Shell. Thirty-one bone beads were found, one with nicks along the edge, and one perforated deer phalange. The tools recorded consisted of two small bone scrapers, one antler arrow point, and eight awls, six of them made from varying sizes of bird leg bones, one having a notched butt, and two from bone splinters. One *Marginella apicina* shell was found in a refuse pit.

Conclusions. The Clouse site, occupied apparently for only a short time, seems to be contemporary with the Hanna site, belonging in the early part of the final phase of pre-Contact, non-Iroquoian occupation.

TABLE 10 (i)

MONONGAHELA TRAITS	Hanna Focus	Montague Focus	West., F., Wash. Cos.	Greene County	MONONGAHELA TRAITS	Hanna Focus	Montague Focus	West., F., Wash. Cos.	Greene County
Stockade	X	X		X	Cannel-coal pendants ...				X
Round house	X	X	X		Stone pipes: urn-shape...				X
Oblong house		X			vase-shape				X
Flexed burial		X	X	X	claw-shape				X
Group skull burial				X	long-stemmed beaked ..		X		X
Slab child burial				X	short-stemmed beaked ..	X		X	X
STONE									
					tubular	X	X		X
Grooved axe	X	X	X	X					
Grooved adz		X			Net-sinker	X	X		
Celt	X	X	X	X	Stone-ball	X	X		
Small hematite celt	X	X	X	X	Pestle	X	X		
Drills	X	X	X	X	BONE				
T-shaped drills	X	X			Antler points	X	X		X
End scrapers	X	X			Deer toe points		X		
Flake knives	X				Fish hook		X		X
Triangular knives	X	X			Harpoon		X		
Triangular points	X	X	X	X	Scraper		X	X	X
Notched points	X	X	X	X	Beamer		?		
Stemmed points	X	X	X	X	Beaver tooth knife	X	X		
"Archaic" points	X	X			Tortoise shell ladle		X	X	X
Stone disks	X	X	X	X	Perforated phalanges ...	X	X	X	X
Stone gorgets	X	X	X		Flakers	X	X	X	X
Bannerstone		X			Awls	X	X	X	X

TABLE 10 (ii)

MONONGAHELA TRAITS	Hanna Focus	Montague Focus	W., F., Wash. Cos.	Greene County	MONONGAHELA TRAITS	Hanna Focus	Montague Focus	West., F., Wash. Cos.	Greene County
SHELL					POTTERY VESSELS (Continued)				
Serrated shell -----		X			Fire-line incised -----		X		
Disk bead -----	X	X		X	Wide-line incised -----		X	X	
Imitation-elk-tooth pendants -----		X	X		Chevron design -----		X		
<i>Marginella apicina</i>	X	X	X	X	Point on rim -----	X	X		X
POTTERY PIPES					Knob on rim -----	X	X		
Obtuse angle -----	X	X	X	X	Notched point on rim --		X	X	X
Roulette decoration ----	X	X	X	X	Grooved knob on rim --		X	X	X
Incised decoration ----		X			Nicked collar -----		X		
POTTERY VESSELS					Bevel-sided, constricted-neck jar -----		X	X	X
Grit temper prevalent...	X	X			Straight-sided, round-based jar -----		X	X	
Shell temper prevalent..				X	Bowl -----		X	X	



PLATE 19
POTTERY VESSEL, BRUCKNER SITE, GREENE COUNTY
(a) vessel. (Centimeter scale.)



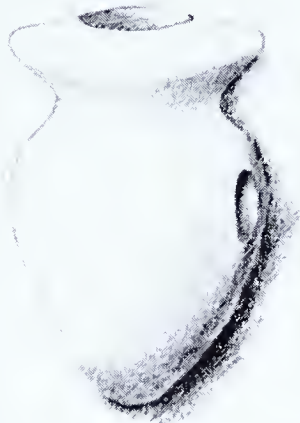
PLATE 19
PIPES, BRUCKNER SITE, GREENE COUNTY
(b-j, l) pipes; (k) stem of pipe. (Centimeter scale.)



a



b



c



d

PLATE 20

STONE PIPES, GREENE COUNTY

(a) John Lapping site; (b, d) David White site; (c) Brave site.
(a) is 4 centimeters high.



PLATE 21

STONE PIPES, GREENE COUNTY

(a, f) Inghram (Spragg) site; (b) A. J. Young farm; (d, g) John Lapping site.
 From the collections of the Greene County Historical Society, Waynesburg, Pa.



PLATE 22
BONE OBJECTS, GREENE COUNTY
(Centimeter scale).

SUMMARY AND CONCLUSIONS

We have in Somerset County three sites of a well-defined phase of Indian culture, that is consistent, distinctive, and well-developed, according to the standards of prehistoric life in what is now the northeastern United States. This has been called the Monongahela Woodland Culture because of the similarity of archaeological material from Westmoreland, Fayette, Washington and Greene Counties to that found on the Somerset County sites; because of the distinctive local characteristics of this body of material, so far reported only from the Monongahela River drainage in southwestern Pennsylvania; and because of its basic resemblance to archaeological material from the Northeast that is considered to belong to the Woodland pattern.

Conforming to the terminology now coming into use in the widespread attack on the problems of Middle Western and Northeastern archaeology, we could call this the Monongahela aspect of the Northeastern phase of the Woodland pattern, or even the Monongahela phase of the Woodland pattern (cf. Ritchie, 1936, b, diagram), depending on the eventual extent of, and variation in, Monongahela material. The variation so far noted between the eastern (Somerset, Westmoreland and Fayette Counties) and western (Washington and Greene Counties) parts of the area will be seen in Table 10, material from the Bruckner site in Greene County, comparable to the Montague site, being shown in Plate 19, and that from other Greene County sites in Plates 20-22. It will be noted that the traits, such as vase- and claw-shaped pipes, and cannel-coal pendants, lacking in the eastern section but present in the western, are found on Fort Ancient sites, and seem to point to a growth of Mississippi pattern influence in stone material as one moves west across the Monongahela. But pottery vessels in the western section, on the other hand, are prevailingly simple, with no sign of the wealth of decoration, presumably due to the same influence, found on the Montague site. During three and a half months' survey of nine sites in Greene County only one crudely incised vessel was found. This had roughly parallel vertical scratches on the neck and came from the Bruckner site. The implication seems to be a specific Fort Ancient-Iroquoian influence at the Montague site, a general one in the western section of the Monongahela area.

The variation within the eastern section of this area considered in this report gives us two groups for our three sites, the Montague site on one hand, the Hanna and Clouse sites on the other. Conforming to the new terminology, we would refer to these as the Montague focus, with the Montague site as the only component to date, and the Hanna focus, with the Hanna and Clouse sites as components.

How can we fit the Indians who built these Monongahela villages into the early history of Pennsylvania? Archaeology in the Northeast started by an attempt to push back into prehistoric space the two great groups of Indians, Iroquois and Algonkin, found in the area by the first white settlers. Although the basic difference between these groups was, as shown by their names, that of language, each representing a major linguistic stock, each group had also distinguishing characteristics of material culture. When therefore, prehistoric Indian villages were found in the northeastern United States, the material from them was interpreted in terms of Algonkin and Iroquois, the Indians of historic times. This method could not, obviously, provide a basis for comprehensive study of Northeastern archaeology, for it not only gave purely linguistic names to long-dead people known to us only through their material culture, but arbitrarily applied unwarranted limitations to prehistoric movements of peoples in the Northeast. A linking up of our ethnological knowledge of seventeenth century Indians with our archaeological knowledge of prehistoric Indians must eventually be done if we are ever to have the complete picture of early life on this continent warranted by the wealth of material lying close beneath the surface of the ground. But we must have much more, accurately documented, archaeological material than we have at present before we can undertake this phase of our job in the Northeast. It has come more and more to be realized that this area is not, archaeologically, an isolated after-thought, but that it was, hundreds and possibly thousands of years before the white man came, an integral part of a closely knit network of Indian culture that stretched from Canada to Mexico. Our first task is to work out the pattern of this network, and the shifts and changes that took place in it, using terms that will serve as common denominators for the varied phases of archaeology from Maine to Missouri and beyond.

We know that in historic times the Delaware and Shawnee occupied the country west of the Alleghenies as late as 1794. "The above mentioned mountains are the eastern border of the Indian country toward Pennsylvania and the colonies." (Loskiel, p. 9.) But these Delawares and Shawnees had been driven from coastal and southern territory early in the eighteenth century by the westward thrust of the white settlers. We have no knowledge of what people they may have found when they crossed the mountains. The Miami lived in central Ohio in the seventeenth century, but there is no record of their having come as far east as the Monongahela. Delaware tradition says that in the distant past when their people pushed east to the coast across the Ohio and the territory of the hostile Alligewi, some of them stayed behind. But this offers no immediate solution for our problem, since the Monongahela archæological material does not in its outstanding characteristics resemble known Delaware material. We have at present no other historical clues to the archæological problem presented by the material found in southwestern Pennsylvania.

But it may be that here we shall work down to the historical from the archæological, and that the connection between the Monongahela and Fort-Ancient-Iroquois groups may throw new light on the place and importance of southwestern Pennsylvania in early Indian history.

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