

TRADE BEADS FOUND AT LEEDSTOWN. NATURAL SIZE

SMITHSONIAN MISCELLANEOUS COLLECTIONS

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INDIAN SITES BELOW THE FALLS OF THE RAPPAHANNOCK, VIRGINIA

(WITH 21 PLATES)

BY

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(WITH 21 PLATES)

INTRODUCTION

During the summer of 1608, the year following the settlement of Jamestown, parties of the colonists made two successful and, considered in retrospect, very important expeditions along the shores of Chesapeake Bay. They discovered many streams that flow into the bay and came in contact with the natives who occupied the territory. The second party left Jamestown July 24 and returned late in August, after having explored the country to the northward, to the mouth of the Rappahannock. They entered the river and continued up the stream to the large island at the falls, near the present city of Fredericksburg, as far as their boat could be taken. The valleys beyond were occupied by the Manahoac tribes, a Siouan group ever enemies of their Algonquian neighbors; many camps and villages of the latter were then standing on the banks of the Rappahannock below the island and had been passed by the English when they ascended the stream. However, no villages were encountered within a distance of 10 or 12 miles of the falls; that part of the valley appeared to have been recently abandoned by the Algonquian tribes.

The country claimed and occupied by the Manahoac tribes in 1608 has already been described,¹ together with examples of material from various localities, and consequently, it is now thought desirable to present, for comparison, a brief description of sites that have been discovered on the banks of the river, beginning at Leedstown, the early colonial settlement some 40 miles below the falls, and continuing up the valley.

I am again indebted to Capt. H. K. Baisley, United States Army Air Corps, for aerial photographs of the areas described; and to F. M. Aldridge, of Fredericksburg, and R. G. Paine and E. G. Cassedy, of the Smithsonian Institution, for assistance in locating sites and material.

¹ Bushnell, David I., Jr., *The Manahoac tribes in Virginia, 1608*. Smithsonian Misc. Coll., vol. 94, no. 8, 1935.

DISCOVERY OF THE RAPPAHANNOCK

At the time of the establishment of Jamestown, May 1607, many settlements of Algonquian tribes stood on the banks of the Rappahannock, from the mouth of the stream far inland to the vicinity of the falls or rapids near the present city of Fredericksburg. Some were comparatively large villages with smaller camps nearby.

The river was first explored by the colonists late in the summer of the following year, 1608, when they penetrated the wilderness as far as the falls and there came in contact with the Manahoac tribes who claimed the lands to the westward.

As the English advanced up the Rappahannock from the Chesapeake, they saw many native villages, and when near the settlement of the Rapahanock, probably in the present Richmond County, opposite the town of Tappahannock, they were treacherously attacked by the Indians but escaped injury. A short time before reaching the Rapahanock village the English were joined by the friendly Indian Mosco, who later served them as guide and interpreter. They continued up the river and discovered other Algonquian camps and villages, and to quote from the narrative (p. 426):² "The Kings of *Pissassack*, *Nandtaughtacund*, and *Cuttatawomen*, used us kindly, and all their people neglected not any thing to *Mosco* to bring us to them." The three villages will again be mentioned, and the sites described.

The brief accounts that have been preserved of the encounter of the English with the Manahoac, who had gathered just above the large island, are of the greatest interest and importance. And as related by the Manahoac Indian from Hassininga, through the Algonquian interpreter, while in the vicinity of the falls they were near "the bounds betwixt the Kingdome of the *Mannahocks* and the *Nandtaughtacunds*." Thus it appears that the latter name was applied to the Algonquian group that occupied the country along the Rappahannock just below the falls, and therefore nearest neighbors of the Siouan or Manahoac tribes. Again when referring to the Rappahannock (p. 348):

Upon this river on the North side are the people *Cuttatawomen*, with 30 fighting men. Higher are the *Moraughtacunds*, with 80. Beyond them *Rapahanock* with 100. Far above is another *Cuttatawomen* with 20. On the South is the pleasant seat of *Nantaughtacund* having 150 men. This river . . . is replenished with fish and foule.

² Smith, Capt. John, *The generall historie of Virginia*, 1624. All references to Smith's writings are quoted from the English Scholar's Library edition, edited by Edward Arber, Birmingham, England, 1884.

Many additional names appear on the Smith map, a section of which is reproduced in figure 1. Of the five groups mentioned in the preceding quotation the last two were within the limits of the region

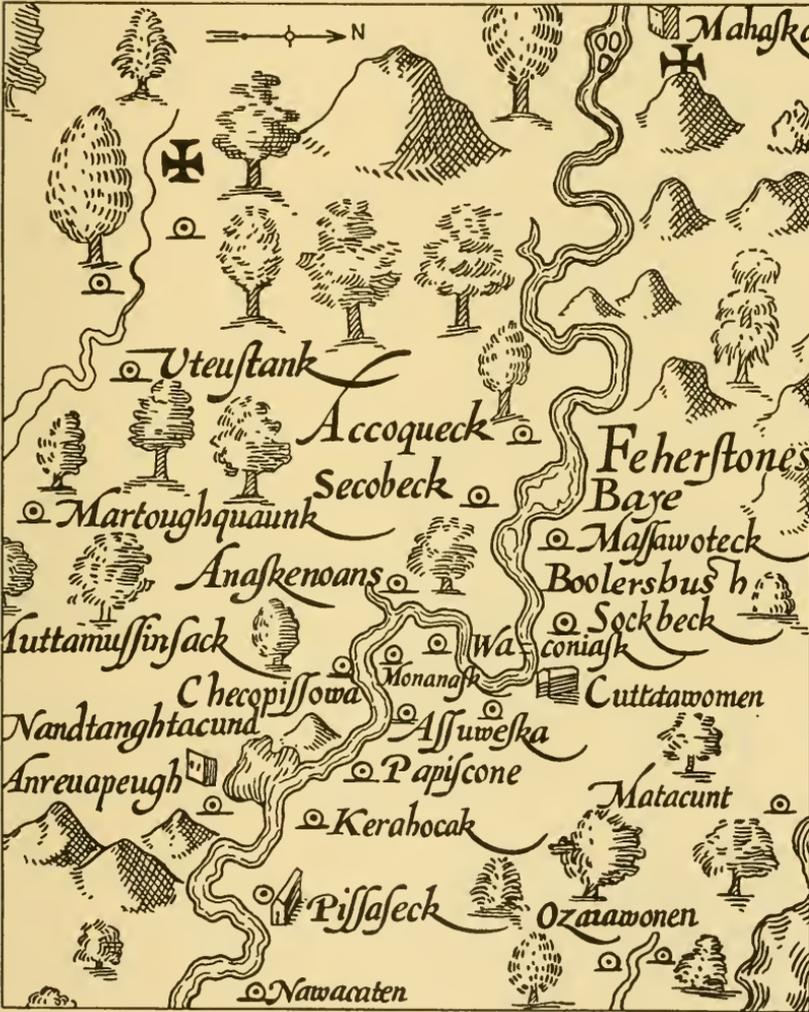


FIG. 1.—Section of the Smith map, 1624, showing the many native villages that stood on the banks of the Rappahannock from the vicinity of Leedstown to the falls at Fredericksburg.

now being considered, which extends from Leedstown, on the left bank of the Rappahannock in Westmoreland County, up the river to the falls at Fredericksburg.

ACTS RELATING TO THE INDIANS PASSED BY THE GENERAL ASSEMBLY DURING THE SECOND HALF OF THE SEVENTEENTH CENTURY

Great changes necessarily occurred among the native tribes of Virginia after the English entered the wilderness and occupied much of their land. Unrest developed, and it is evident that soon after the middle of the century the native tribes whose villages stood on the banks of the Rappahannock, beyond the English plantations, were regarded with grave apprehension.

In November 1654, among "Orders of Assembly", as transcribed by Hening,³ is one "Concerning the March against the Rappa' Indians." This reads in part (p. 389): "Whereas divers complaints have bin made by the inhabitants of the counties of Lancaster, Northumberland and Westmoreland concerning divers injuries and insolenyces offered and done by the Rappahannock Indians, unto them." The order then states the number of men to be furnished by each county, "with arnes, amunition and provisions, with boates and other necessaries for their voyage to the said Rappahannock townes." But it is not known to which villages this referred.

Late in the spring of 1656 occurred the sanguinary encounter between colonists and Indians, the latter thought to have been a Siouan tribe from farther up the Rappahannock, who had moved to the vicinity of the falls of the James. It was a period of much concern to the frontier settlements of Virginia where the native tribes were being harassed by their enemies from far northward.

Many laws affecting the Indians were enacted and enforced in Virginia during the succeeding years. Some made specific reference to the people of the Rappahannock valley, others were more general and applied to all tribes alike. Trade was frequently the subject of the acts, and these now shed light on the economic problems with which the colonists were then confronted. Brief quotations from Hening should prove of interest:

Act CXXXVIII of the "Grand Assembly Held at James City March the 23d 1661-2" was a digest of earlier laws relating to the Indians some of which reveal facts of historical importance.⁴

First concerning food:

And be it further enacted that for the better releife of the poore Indians whome the seating of the English hath forced from their wonted conveniencies

³ Hening, William Waller, *The Statutes at Large*; being a collection of all the Laws of Virginia, from the first session of the Legislature, in the year 1619, vol. 1, New York, 1823.

⁴ Hening, *op. cit.*, vol. 2, p. 140.

of oystering, fishing and gathering tuckahoe,⁵ cuttyemniions^{5a} or other wild fruites by which they were wonted for a greate parte of the yeare to subsist, Be it therefore granted, enacted and confirmed that the said Indians upon

⁵ Smith wrote in 1612, when referring to the food of the Virginia Indians with whom he had come in contact (op. cit., p. 58): "The chiefe roote they have for foode is called *Tockawhough*. It groweth like a flagge in low muddy freshes. In one day a *Savage* will gather sufficient for a weeke. These rootes are much of a greatnes and taste of *Potatoes*. They use to cover a great many of them with oke leaves and fernes, and then cover all with earth in the manner of a colepit; over it, on each side, they continue a great fire 24 houres before they dare eat it. Raw it is no better then poison, and being roasted, except it be tender and the heat abated, or sliced and dried in the sun, mixed with sorrell and meale or such like, it will prickle and torment the throat extremely, and yet in summer they use this ordinarily for bread." This was undoubtedly the same plant that was gathered by the Indians a generation later, and to which reference was made in the Act just quoted. But it is evident that in later years many, if not all, edible roots became known as tuckahoe to the English colonists, although they may never have been known as such to the Indians.

A century later, in 1749, Peter Kalm (*Travels into North America*, second edition, London, 1772) mentioned several plants to which the name tuckahoe was then applied. He wrote (pp. 387-388): "*Taw-ho* and *Taw-him* was the Indian name of another plant, the root of which they eat. Some of them likewise call it *Tuckah*; but most of the Swedes still knew it by the name *Taw-ho*. It grows in moist ground and swamps . . . Nor did the Indians ever venture to eat them raw, but prepared them in the following manner: They gathered a great heap of these roots, dug a great long hole, sometimes two or three fathoms and upwards in length, into which they put the roots, and covered them with the earth that had been taken out of the hole; they made a great fire above it, which burnt till they thought proper to remove it; and then they dug up the roots, and consumed them with great avidity. These roots, when prepared in this manner, I am told, taste like potatoes. The *Indians* never dry and preserve them; but always take them fresh out of the marshes when they want them. This *Taw-ho* is the *Arum Virginicum*, or *Virginian Wake-robin*."

The following note by Dr. Frederick V. Coville tends to identify the plant first called *Tockawhough* by the Virginia colonists: "*Peltandra virginica*. The old Indian name, tuckahoe, appears never to have been adopted by botanists as the common name of this important Indian food plant. It has been called Virginia wakerobin because of its close relationship to *Arum maculatum*, the wakerobin of England. It has also been called by botanists arrow-arum, because of its arrow-shaped leaves." Dr. Coville was convinced of the correctness of the conclusion, but desired to determine for his own satisfaction the edibility of the roots before the statement should appear in print. In the endeavor to collect roots of the plant, *Peltandra virginica*, we visited Hunting Creek, on the Virginia side of the Potomac just below Alexandria, Dec. 29, 1936, but were unsuccessful as the leaves had disappeared because of the lateness of the season, and the roots could not be identified. Dr. Coville was taken ill a few days later and died on Jan. 9, 1937, and thus the work remained unfinished.

^{5a} The wild fruit to which the name cuttyemniions was applied has not been identified, but the etymology of the word has been determined by John P. Har-

addresse made to two of the justices of that county they desire to oyster or gather wild fruite in, as aforesaid, they the said justices shall grant a lycense to the said Indians to oyster or gather fruites as aforesaid.

But the time was to be limited, and the Indians were to have with them "only such tooles or implements as serve for the end of their comeing." No guns were to be carried.

The use of badges in identifying Indians when they visited the English settlements is mentioned in the same act. It was stated in part:

. . . because an intervall betweene the Indians and English cannot in the present neernesse of seating be soe laid out as may wholly secure the English from the Indians comeing in and pilfering things from them if a free intercourse be admitted, *Be it therefore enacted* for the prevention thereof and to the end that the nations may be distinguished and soe if they are taken in the manner of doing any injurys the sufferers know to what kings to addresse themselves for remedy, that badges (vizt.) silver plates and copper plates with the name of the towne graved upon them, be given to all the adjacent kings within our protection. And that all the said kings give it in charge to their people that none of them presume upon what occasion soever to come within the English bounds without those badges upon them or one with a badge in their company, and if any damage or injury be done to any Englishman by them or any of them, that then the king or greate man of the place the badge denote shalbe answerable for itt; and if any shall notwithstanding this injunction be found in our bounds without any such badge⁶ or not accompanied with one that shall have them, that then it shall be lawfull for any Englishman to apprehend and carry him or them before any justice of the peace who shall keepe him or them in safe custody untill their king or greate man ransome them by paying one hundred armes length of rohonoake⁷ for each Indian soe taken . . .

ington, of the Bureau of American Ethnology, who states: "The name 'cuttymnions' evidently refers to some small black or dark-colored berry, the species of which has not been determined. The name is to be analysed as follows: cutty-, black, phonetically kate or makate; -min, berry of any kind; -an or -in, suffix denoting plural of inanimate objects, pluralizing the element -min. The name therefore means small black colored fruits or berries."

⁶Certain of the large metal plates discovered by Judge Graham in burials on the banks of Port Tobago River, Maryland, may have been used as badges; however, the surfaces of the specimens are greatly corroded, and if names had been engraved on them as mentioned in the Act, all traces have disappeared.

⁷The writer is of the belief that this referred specifically to the small shells, *Marginella virginiana* Conrad, which occur in vast quantities in the waters of the Chesapeake. The shells were perforated and strung on threads of sinew to serve as ornaments. The belief is suggested by a brief reference found in the small printed catalog of the Museum Tradescantianum, published in London, 1656. On p. 47 of the catalog is mentioned: "Pohatan, King of Virginia's habit all embroidered with shells, or Roanoke." This was one of the pieces associated with the famed coronation of Powhatan during the autumn of 1608, when the

The reply to a question submitted to the Governor of Virginia, by the Lords Commissioners of Foreign Plantations in 1670 was: "The Indians, our neighbours are absolutely subjected, so that there is no fear of them."⁸ This referred to the Indians within the colony. However, if peace prevailed within the colony, there was always much to fear from beyond the frontiers.

The Assembly of March 1675-6, anticipating an invasion of the colony and attacks on the outlying settlements, passed "An act for the safeguard and defence of the country against the Indians." This act, after mentioning the garrison to be located on the Potomac in Stafford County, continued: "one hundred and eleven men out of Gloucester county to be garrisoned at one ffort or place of defence at or neare the ffalls of Rapahanack river, of which ffort major Lawrence Smith to be captain or cheife comander."⁹

The acts passed "At a Grand Assemblie, Holden at James Cittie the fifth day of June, 1676", included much of importance concerning the Indians of the colony and others who lived beyond the bounds. This assembly was held while the colony was dominated by Nathaniel Bacon and his followers, and consequently the acts became known as Bacon's Laws. Act I was "An act for carrying on a warre against the barbarous Indians", which referred to the Conestoga, who had harassed the Virginia frontiers and had later sought refuge near the Occaneechi far south in the present Mecklenburg County, Va. The act mentioned the number of troops to be raised in the several counties, supplies to be collected, and other questions relating to the proposed campaign.

latter "gave his old shoes and his mantle to Captain Newport" (Smith, op. cit., p. 125). The remarkable specimen is now in the Ashmolean Museum, Oxford, England. The ornamentation was formed by attaching great numbers of the shells, *Marginella virginiana*, to the deer skins of which the "habit" or "mantle" was made. As defined in the Handbook of the American Indians (Bureau of American Ethnology, Bull. 30): "Roanoke. A name applied, with several variants, by the Virginia colonists, to the shell beads employed by the neighboring Indians as articles of personal adornment or media of exchange; a case of substitution of a familiar word for one that was ill understood and probably more difficult to pronounce. Capt. John Smith (1612 and 1624) gives the Powhatan name for shell beads in the form of *rawrenock* and *rawranoke*, and William Strachey defines *rarenaw* as 'a chain of beads.' The root *râr* means to 'rub', 'abrade', 'smooth', 'polish.' The original word may have been *rârenawok*, 'smoothed shells', pl. of *rarenaw*."

⁸ Hening, op. cit., vol. 2, p. 513.

⁹ Hening, op. cit., vol. 2, p. 327.

Act II was "An act concerning Indian trade and traders." This prohibited trade with the Indians and then continued:

Provided nevertheless that it shall and may be lawfull that such Indians who shall serve the English in the warr, and onely such be supplied to the value of their wages and pay for the takeing prisoners in such necessary things as they shall want, armes and ammunition wholly excepted, and it is hereby intended that our neighbour Indian friends bee not debarred from fishing and hunting within their owne limmits and bounds, useing bowes and arrowes onelie. *Provided also* that such neighbour Indian friends who have occasion for corne to releive their wives and children, it shall and may be lawfull for any English to employ in fishing or deale with fish, canooes, bowles, matts or basketts, and to pay the said Indians for the same in Indian corne, but noe other commodities . . .³⁰

This is of the greatest interest in proving that the English made use of dugout canoes obtained from the Indians, and also pottery vessels, rush mats, and baskets made in the Indian villages. The use by the colonists of such material of Indian make was probably general throughout the English settlements. It is likewise evident that fish were obtained by the English from the Indians, and much game may have been procured from the native hunters, who continued to use their bows and arrows.

During the meeting of the assembly, June 1676, when forces were being gathered for the intended expedition against the "barbarous Indians", it was ordered that "the forte in Rappahannack countie commanded by major Lawrence Smith, which was settled or intended to be settled by vertue of a late act of assembly, be forthwith deserted . . ." The troops were to be ordered to other posts on the frontier where conditions were more serious. This was only 3 months after the order had been given for the erection of the frontier "ffort or place of defence", and if ever erected, which is doubtful, it would probably have resembled the palisaded structures so characteristic of the wilderness far beyond the mountains a century later.

By the autumn of 1677 the growing importance of trade with the neighboring Indians was acknowledged by the burgesses, and acts were passed setting forth the manner in which it was to be conducted. On October 10, 1677, the Grand Assembly met at the house of Capt. Otho Thorpe, at Middle Plantation. Act III of that date, "An act lycensing trading with Indians", was of great importance. It read in part:

Forasmuch as the totall prohibition of tradeing with Indians is experimented and found hurtfull and prejudiciall to his majesties colony and the inhabitants

³⁰ Hening, *op. cit.*, vol. 2, p. 350.

thereof; *Bee it therefore enacted by the governour, councill and burgesses of this present grand assembly, and the authority thereof, and it is hereby enacted,* that all Indians whatsoever being in amity and friendship with us from henceforth shall have free and full liberty to come in amongst us and bring in any comodities whatsoever to the severall places and at the severall tymes hereafter sett downe, and mentioned, and to trade with, sell or truck, for the same with the English, resorting thither, but noe where else for any comodities whatsoever, and that such marts of ffares continue fforty dayes and noe longer, (that is to say) . . . the place for the marte or ffaire in Rappahanock river to be appointed and set downe by the justices of the peace in Lancaster county, being mett and satt in the court, the begining of which marte or ffaire to be yearly the twentyeth day of Aprill and the twentyeth of September . . .

A similar "marte or ffaire" was to be held in Stafford County, beginning on April 30 and September 30 each year.¹¹

A description of a gathering at a "marte or ffaire", with Indians and colonists coming together to trade, would be of the greatest interest, but none is known to have been preserved. Nor is there any known record of when or where such a gathering took place.

Two years later the protection of the outlying settlements again caused anxiety. The first act of the Grand Assembly "begunn at James Citty the 25th of April, 1679" was "for the defence of the country against the incursions of the Indian enemy." This provided "that fower houses for stores or garrisons be erected and built at the heads of the fflower greate rivers." The Rappahannock was one of the four. Two structures were to be erected at each chosen site, of the same dimensions, described as "one store house to be strongly built, and well covered to be sixty foot long, and twenty two foote broad, and one small house of tenn foot square to be strongly built for ammunition." Maj. Lawrence Smith of Gloucester County was in command at the falls of the Rappahannock. The frontier posts were maintained until the autumn of 1682, when it was ordered "that the said severall forts and garrisons be dismantled . . ." ¹² The Indians were no longer feared as formerly, and to supply the garrisons proved a burden to the colony.

Thus, just three-quarters of a century after Captain Smith had been conducted by his Indian captors to their settlements on the banks of the Rappahannock, the native population of the entire valley had been dispersed and the sites of many of their villages, with the surrounding cornfields, had become plantations of the English colonists.

¹¹ Hening, *op. cit.*, vol. 2, p. 410.

¹² Hening, *op. cit.*, vol. 2, p. 498.

MOVEMENT OF TRIBES INDICATED BY NAMES ON THE
AUGUSTINE HERRMAN MAP, 1673

The history of the Indians of the Rappahannock valley during the years from 1650 to 1670 would undoubtedly reveal a movement and shifting of many tribes from the localities in which they were encountered in 1608 and prove that others from a distance had entered the region.

Although no references to the actual migration of native tribes from Maryland across the Potomac to Virginia have been discovered, it is evident that soon after the middle of the seventeenth century such movements did occur and that tribes or parts of tribes crossed to the right bank of the stream and thence continued to the Rappahannock, where they established new homes. This alone would explain the occurrence of certain names on the Herrman map, which was issued in 1673. A section of the map, representing that part of the Rappahannock valley now being considered, is reproduced in figure 2. The names that were recorded on that part of the river in 1608 have disappeared and have been replaced by some that were at that time applied to villages beyond the left bank of the Potomac.

The official records of Maryland are replete with references to the native tribes with whom the settlers came in contact. Many lived within the Province, others came from beyond the bounds. Brief quotations from the records will make clear the causes which are thought to have led, ultimately, to the removal of many tribes from their earlier habitat. But such movements had continued through the centuries.

On March 24, 1652, just 20 years after Cecil, Lord Baltimore, had received from Charles I the charter for Maryland, it was stated that:³³ "Whereas there is Great Suspicion that the Indians intend Some Mischeife to the Inhabitants of this Province", for which reason Thomas Gerrard was ordered to raise a sufficient force and "repaire to Portoback or Choptico and (if he think fitt) either disarme or Secure the persons of any of the Said Indians till Examinacon had touching the premisses or further Order."

Later in the same year a document of importance was recorded, being: "Articles of Peace and freindshipp treated and agreed upon the 5th day of July 1652 Betweene the English Nation in the Province of Maryland on the one party, And the Indian Nation of Sasquesahanogh on the other partie . . ." But this was not concluded for

³³ Archives of Maryland. Proceedings of the Council of Maryland, 1636-1667. Maryland Hist. Soc., Baltimore, 1885.

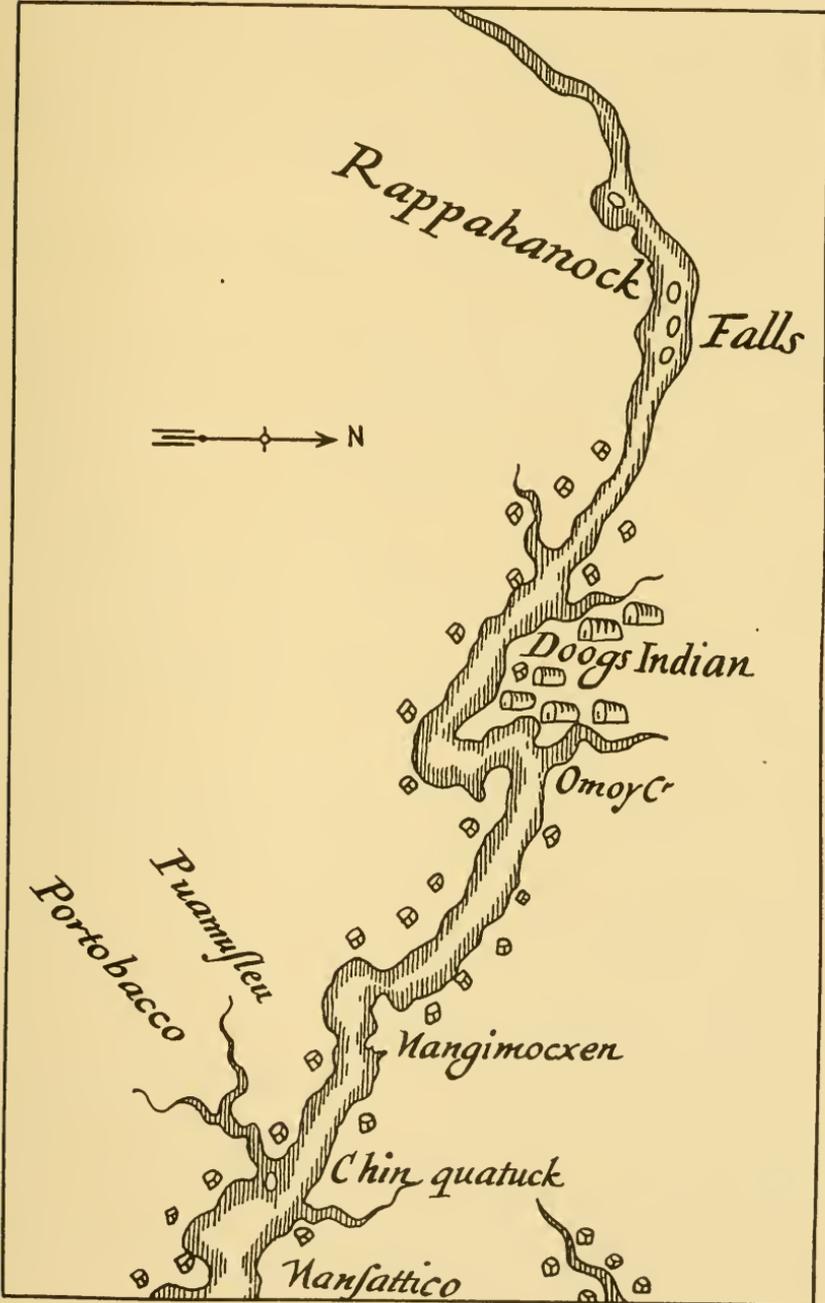


FIG. 2.—Section of Augustine Herrman map, 1673. The Rappahannock from below Leedstown to the falls.

some years (not until September 16, 1664), after other questions had been decided." "Then was taken into Consideracon the Articles of peace with the Sasquesahanough Indians dated fift of July 1652."

During the same year that peace was made with the "Indian Nation of Sasquesahanough" trouble developed with the natives on the Eastern Shore, across Chesapeake Bay.

As recorded in the Proceedings of the Council, on November 25, 1652, at a Court held at St. Marys, an expedition was planned against the Indians of the Eastern Shore. It was that day "ordered and appointed that Sufficient forces be Speedily raised for a march against the Said Easterne Shore Indians, and for that purpose every Seventh man throughout the province is to be pressed for this Service . . ." Such an expedition was considered of the utmost importance for the safety of the people of the Province, but it was soon ascertained that the Indians on the Eastern Shore against whom the expedition was directed, as well as others living west of the Chesapeake, had knowledge of the proposed invasion. Consequently, on December 18, 1652, "with divers other very Materiall reasons as the danger of being frozen in and otherwise", it was decided to defer "the designe till a more Seasonable time and opportunity."

On May 2, 1661, the General Assembly, as recorded in the Proceedings, feared the invasion by Indians from the north. Both houses assented to—

An acte Impowring the Governour and Councell to Rayse forces and mayntayne a warre without the Province and to ayde the Sasquehannough Indians. Whereas it doth appeare to this prsent Generall Assembly that this Province is in Eminent danger by a warre begun in itt by some forreigne Indians as it hath been made appeare by credible informacon given of a person lately killd and of others that are probably cutt off by these forreign Indians. And that in humane probabillity our neighbour Indians the Sasquehannoughs are a Bullwarke and Security of the Northerne parts of this Province. And that by former treatyes with that nacon they have very much assured us of their affecons and friendship And that they expected the like from us . . .

That same month peace was renewed between the people of Maryland and the Indians, but this was distinct from the document dated July 1652 and again September 16, 1664. It is presented in the Proceedings of the Council, and reads in part: "Articles of peace and amity concluded on the behalfe of the Lord Proprietary of the Province of Maryland and the Sasqsahannough Indians at a treaty begun at Spes Utia the 16th Day of May 1661 . . ."

⁴Archives of Maryland. Proceedings and Acts of the General Assembly of Maryland, 1637-1664. Maryland Hist. Soc., Baltimore, 1883.

The agreement was for mutual help and understanding. The fifth article reads: "That the Sasquesahannoughs shall finde the English Souldiers with sufficient fish and flesh, and bread ready beaten." The last item is thought to have been tuckahoe, as described on page 5.

Troublé continued within the Province and on November 17, 1663, the following statement was made to the Council:

Whereas Sundry Complaints have been made unto mee by the Queene of Portaback in behalfe of her Selve and Indians undr her, Intimating how that they have not only left their Towne standing by the water, but have removed themselves farther of even to their utmost bownds of their land—Leaving place to the English to Seate on their ancient plantacons by the River side the English not being (as they informe mee) contented with what Land is allready freely granted Doe still take up land and Seate themselves very nigh unto the said Indians whose stocks of Cattle and hoggs doe and will yearely destroy their Corne fields by which meanes they must of necessity come to ffamine they not knowing the way and meanes to fence in their Corne ffeilds as the English doe will soon come to destruccon . . .

The English were then ordered to remain away from the Indian lands.

The northern Indians again invaded the Province and soon reached the banks of the Potomac and the shore of Chesapeake Bay. As recorded in the Proceedings of the Council:

Att a Cuncell held the 27th June 1664: Then was taken into Consideracon the prservacon of the province agt the incursion of the Cinego Indians¹⁵ who lately killed some English in Ann Arundell County & alsoe entred the County of St Marys, Ordred tht Warr be pclaimed agt the Cinego Indians tht a Reward of a hundred Armes lenght of Roan Oake be given to evry pson whether Indian or English tht shall bring in a Cinego prisonr or both his Eares if he be slayne . . .

Many Maryland Indians may at this time have crossed the Potomac to seek new homes in Virginia, where they became established on more ancient sites that had been seen by the English in 1608 and which were shown on the 1624 map. However, it is evident that all did not abandon their lands beyond the Potomac in Maryland, and the names of many tribes were joined in a treaty made 2 years later. This was recorded in the Proceedings of the Assembly:

Articles of peace & amity concluded agreed upon between the Rt. honorable Caecilius Lord & Prop^r. of the Province of Maryland & Avalon Lord Barron, of Baltmore & the Indians of Pascattoway Anacostanck, Doags, Mikiki-womans, Manasquesend, Mattawomans, Chingwawateick, Hangemaick, Porto-backes, Sacayo, Panyayo, & Choptico the 20th day of Aprill 1666.

The treaty contains many interesting references to conditions and customs, and to the privileges accorded the Indians.

¹⁵ The Seneca Indians; the name Seneca, however, was usually applied to all members of the Five Nations.

Augustine Herrman finished gathering data for his map during the year 1670 and then forwarded it to London, where the plates were engraved by William Faithorne and where the map was issued in 1673.¹⁶ Consequently, the names that appear on that part of the map which is reproduced in figure 2 were the names of villages then inhabited—comparatively recent settlements which occupied more ancient sites. The different tribes or groups whose names they bore were not encountered on the banks of the Rappahannock by the first party of English from Jamestown, who ascended the stream in 1608.

Portobacco and Doogs Indian, names on the map, are obviously the Portobackes and Doogs mentioned in the treaty of 1666. The former was one of the best-known tribes of Maryland, and when the English ascended the Potomac in 1608, their village was mentioned as "Potapaco with 20 [men]." This was in the present Charles County, Md. The name which in English is bay or cove later became corrupted into Port Tobacco.¹⁷ True, the name would have been applicable to the great bay, now known as Port Tobago or Port Tobacco, on the south side of the Rappahannock, but it does not appear to have been so designated in 1608, certainly not on the 1624 map.

Beverley,¹⁸ writing after 1692, referred to the scattered tribes then living in different parts of Virginia. He said in part: "In Richmond Port-Tobago, bout five Bow-men, but Wasting." This was Richmond County, on the left bank of the Rappahannock adjoining Westmoreland. The small remnant probably numbered about 20 individuals and was decreasing. This particular group may never have lived south of the river, in which event they had retained the name by which they were known in 1608, when living on the Maryland side of the Potomac, although they had become separated from other members of the tribe.

The identity of the tribe or tribes known as the Dogue or Doag Indians has not been clearly determined. The name does not occur in early records of Virginia and evidently does not appear until after the middle of the seventeenth century. The tribe is believed to have been part of the Nanticoke, on the Eastern Shore of Maryland,

¹⁶ Phillips, P. Lee, *The rare map of Virginia and Maryland*, by Augustine Herrman. Washington, 1911.

¹⁷ Judge William J. Graham, Washington, D. C., who examined many sites on both sides of the Port Tobacco River, described them in a paper: *The Indians of Port Tobacco River, Maryland, and their burial places*, n.p., n.d. [1935].

¹⁸ Beverley, Robert, *The history and present state of Virginia*, book 3, p. 62, London, 1705.

whence they may have removed, some having crossed the Potomac and continued to the banks of the Rappahannock. The tribal name is found in Maryland on early land grants and surveys:¹⁹ "Doegs Point in Mattawoman Creek", Prince Georges County, 1699; and "Doags Neck", Charles County, 1657, both counties bordering on the Potomac. Also several references to tracts in Kent County, on the Eastern Shore, dated 1704 and 1705: "On a branch called Dogue Branch and on the north side of Chester River", and again "on the north side of a Branch called Dogue Branch just below a meadow called Chester Meadow."

The latter references are interesting as they apply to places within the region still occupied at that time by the Nanticoke.

Chinquatuck²⁰ of the Herrman map may be the Chingwawateick of the 1666 treaty.

The occurrence of the names on the Rappahannock should be accepted as proof that at some time before 1670, when northern Indians were invading Maryland and harassing the English settlements and native villages alike, many of the Indians whose lands had thus been invaded sought refuge across the Potomac in Virginia. The different groups may have been rather small, but of sufficient size to cause their old tribal names to become identified with the sites they occupied.

SITES OF ANCIENT SETTLEMENTS

The locations of many native settlements are shown on the Smith map of Virginia, often referred to as the 1624 map. These differed greatly in size and importance, and some were the villages of chiefs whose influence may have extended to the smaller groups outside the principal settlement. The names of such villages are accompanied on the map by a small representation of a habitation, the "Kings howses" as they were described in the legend. Three such relatively important towns stood on the banks of the Rappahannock within approximately 40 miles of the falls. The first of these settlements to be reached in ascending the river was Pissaseck, on the left or north

¹⁹ I am indebted to William B. Marye, Baltimore, Md., for the references quoted.

²⁰ According to information furnished by Judge Alvin T. Embrey, Fredericksburg, Va., this small stream, which enters the left bank of the Rappahannock and which bounds Woodlawn, the old Turner plantation, was formerly known by the name Chingoteague, and was so recorded on several deeds, as in Deed Book 1, p. 620, and Deed Book 1A, p. 147, King George County, Va. The name at once suggests Chincoteague Bay on the Eastern Shore, being part in Virginia and part in Maryland.

bank; next above was Nandtanghtacund, on the shore of a deep bay on the opposite side of the stream; and far above was Cuttatawomen, on the left bank. Other settlements, evidently of less importance, are indicated on both banks of the river, but none is shown within about 10 miles of the falls. It appears that in 1608 there were no Algonquian camps on the Rappahannock for some distance below the great island, westward from which the country was dominated by Siouan tribes, whose steady movement down the valley may have caused the abandonment of the Algonquian villages.

It is thought that some sites indicated on that part of the 1624 map, figure 1, have been identified. These will now be briefly described, beginning with Pissaseck, thence up the river, thus approaching the "bounds betwixt the Kingdome of the *Mannahocks* and the *Nandtaughtacunds*." All are shown on the map, figure 3.

PISSASECK

This large settlement stood on the left or north bank of the Rappahannock, and although not specifically mentioned in the early narratives as being one of the native villages encountered in 1608, during the exploration of the river, its position, as well as its importance, is shown on the 1624 map by a "Kings howse." It occupied a level area high above the river, below and adjoining an extensive marsh, known as Drakes Marsh, where even now much game and wild fowl is killed each year. It was an ideal site for a native village, and the vast amount of broken pottery and innumerable objects of stone that are and have been recovered from the surface prove it to have been one of great extent and one that had been frequented through generations. The position of the village agreed with the general description of the environment of native settlements as presented by Strachey.²¹ He wrote (p. 70):

Theire habitations or townes are for the most part by the rivers, or not far distant from fresh springs, comonly upon a rice of a hill, that they may overlooke the river, and take every small thing into view which sturrs upon the same. Their howses are not many in one towne, and those that are stand dissite [dispersed] and scattered without forme of a street, farr and wyde asunder.

The site of the ancient village is shown in the aerial photograph reproduced in plate 2. It stood on the far or left bank of the river—now expanded and assuming the appearance of a lake—above the

²¹ Strachey, William, *The historie of travaile into Virginia Britannia*. Hakluyt Society, London, 1849.

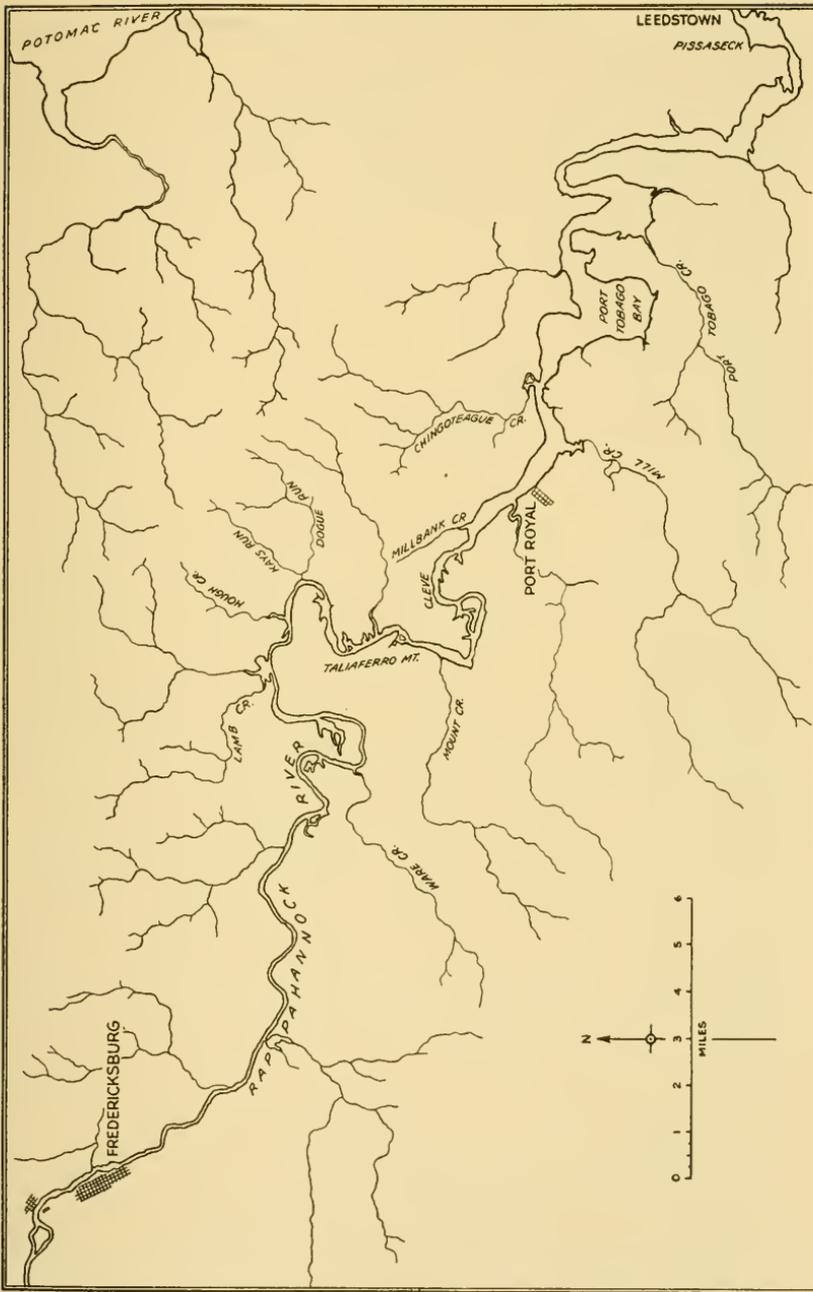


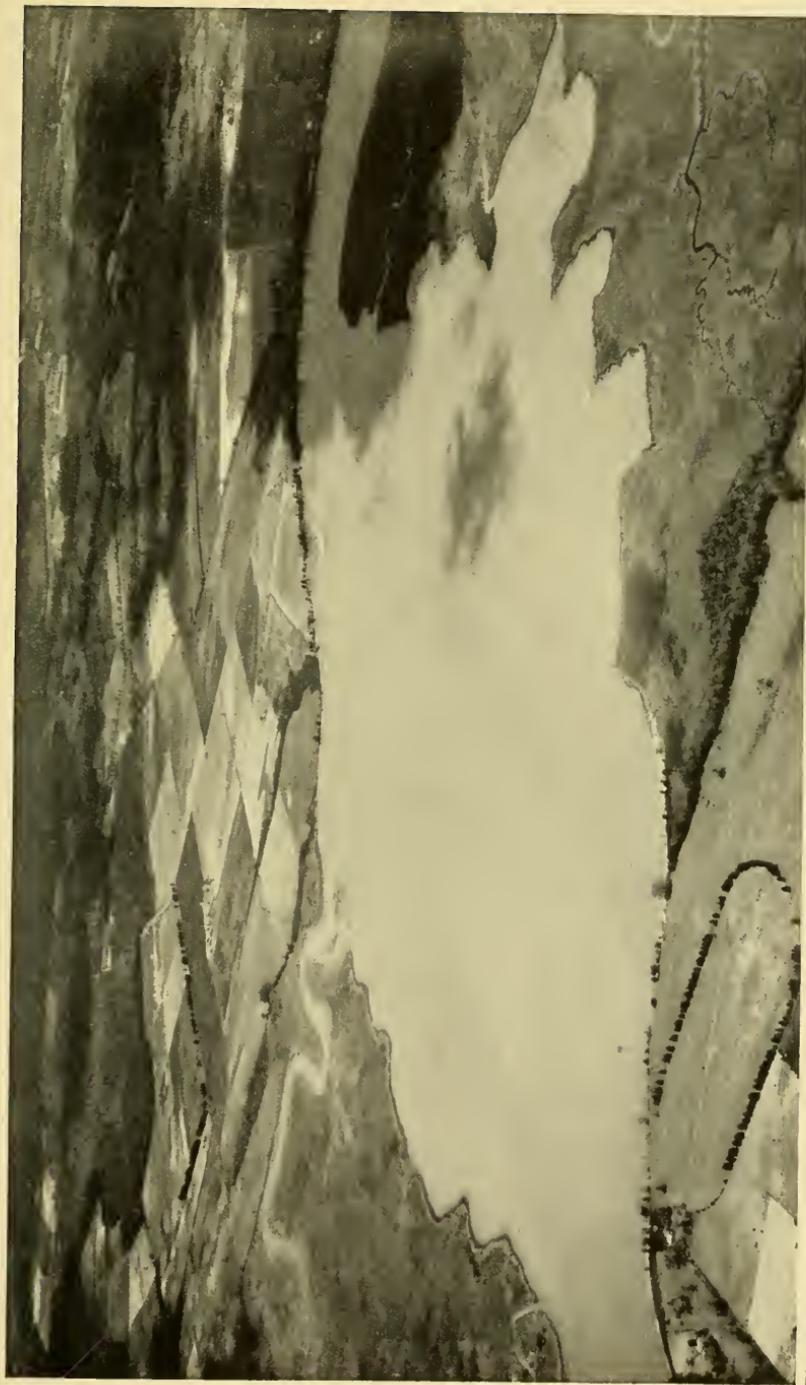
FIG. 3.—The Rappahannock from Leedstown to the island at the falls above Fredericksburg.

small white arrow which points with the current. The few houses just within the cloud-shadowed area to the right are all that remain of Leedstown. During the days of Indian occupancy the greater part of the land was covered with forests which extended to the edge of the water, and here, not far distant from the river, were the scattered habitations with the fields and gardens nearby.

English traders were probably established at or near Pissaseck by the latter part of the seventeenth century, and a "marte or ffaire" may have been conducted in the vicinity. The old road leading to the Potomac undoubtedly follows the route of a more ancient trail that led to the native settlements. The region continued to become of greater importance to the colony and was more thickly settled with the building of warehouses on the bank of the river. Here was soon to be reared the town of Leeds.²² Scant traces of the colonial town remain, and these are now encountered intermingled with the stone implements and bits of earthen vessels made and used by the earlier occupants of the region. However, the brick structures erected in the town covered only part of the land that had formerly been included in the native settlements, assuming the site to have been occupied and reoccupied through generations, long before the coming of the English.

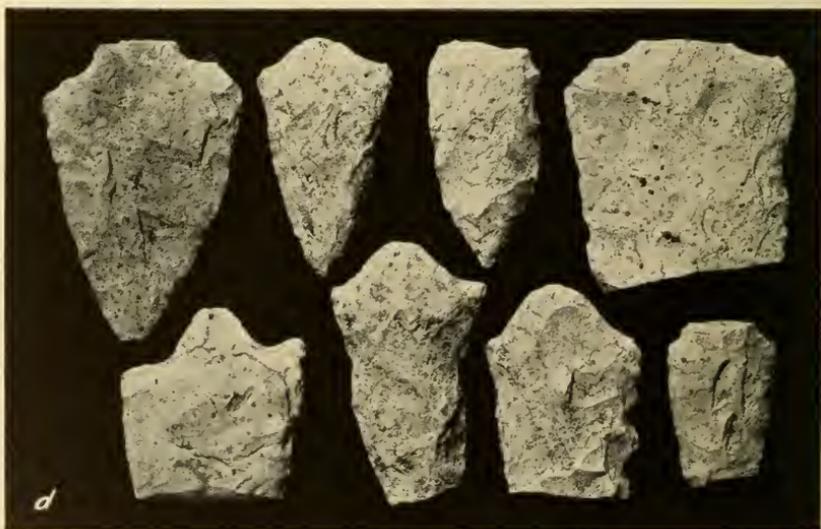
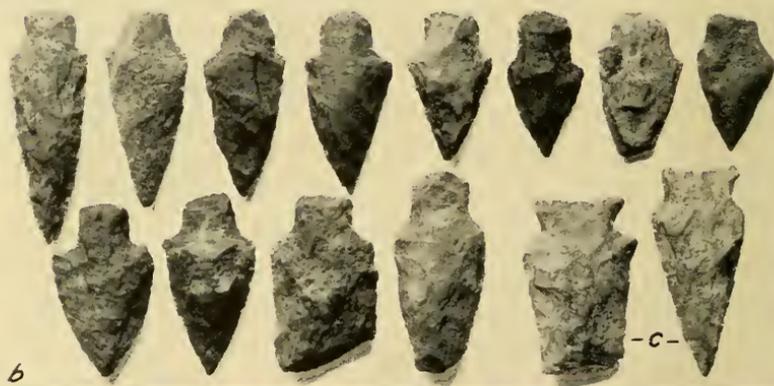
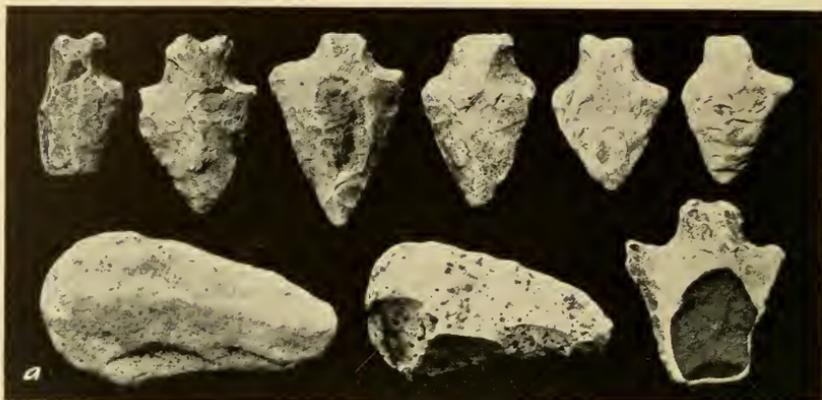
Again referring to the aerial photograph: A triangular tract is visible immediately above the white arrow. This is 15 acres in extent and is bordered by the river for more than 1,200 feet. The material now illustrated and described came from the surface of this tract, the greater part of it having been found in the extreme western part—the left as shown in the photograph—a short distance back from the river. Although having been discovered on the surface, exposed by the plow and erosion, it is within reason to believe it is material that had accumulated in refuse heaps, overgrown with vegetation, later to become scattered and spread as the ground was cleared and cultivated. This hypothesis alone would explain the great variety of flaked objects, believed to indicate different periods of occupancy,

²²The General Assembly, convened at Williamsburg, May 1742, passed an act for the establishment of a town "on the north side of Rappahannock river, in the County of King George, where the church and public warehouses are built . . . The said town shall be called by the name of Leeds." (Hening, *op. cit.*, vol. 5, pp. 193-197). The area to be occupied, with the placing of streets and buildings, was described. Later, it was known as Leedstown, which became an active center of trade, with wharves and warehouses, whence quantities of tobacco and other products of the colony were sent to England, and where sailing vessels landed supplies for the rich plantations on the Northern Neck.

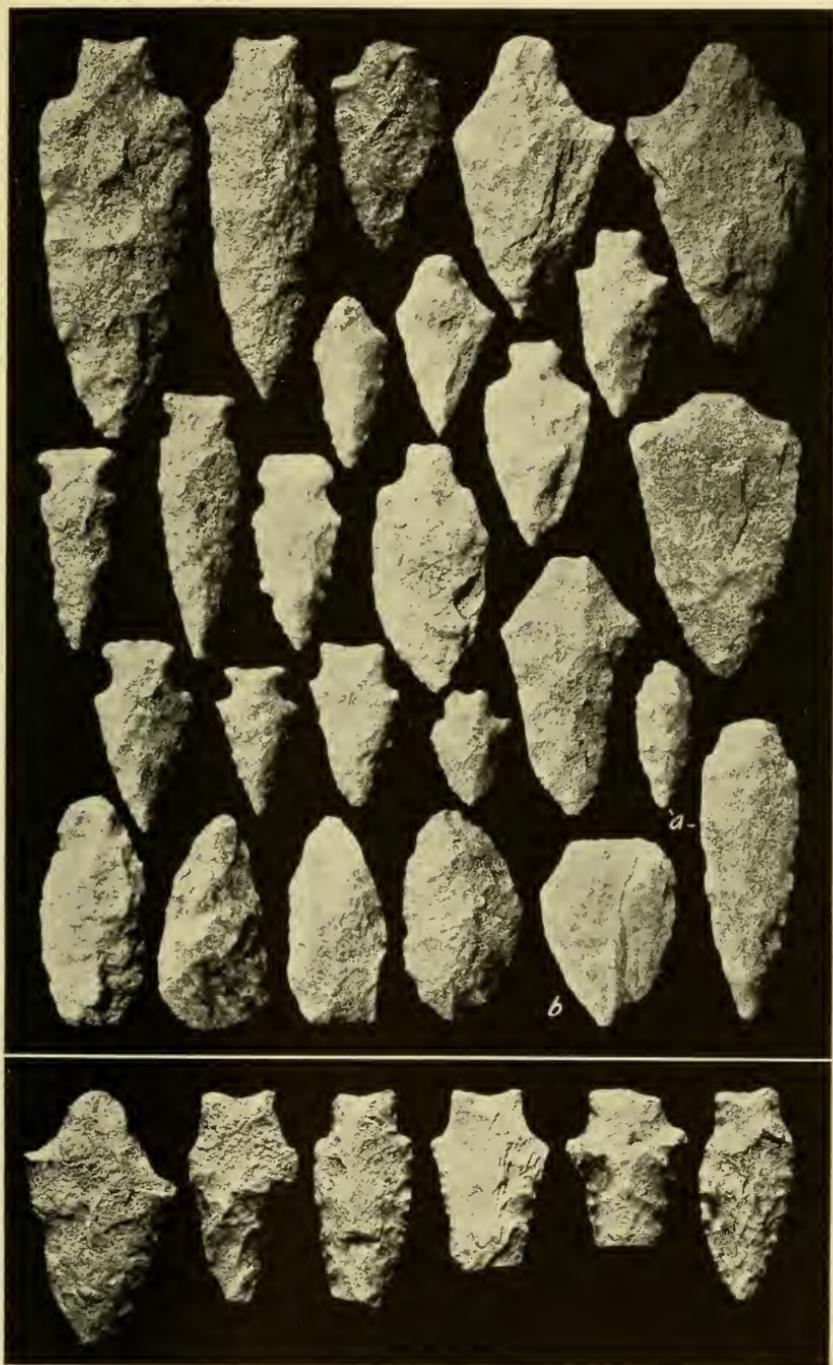


Photograph U. S. Army Air Corps.

NORTH OVER THE RAPPAHANNOCK, SHOWING LEEDSTOWN AND THE SITE OF PISSASECK

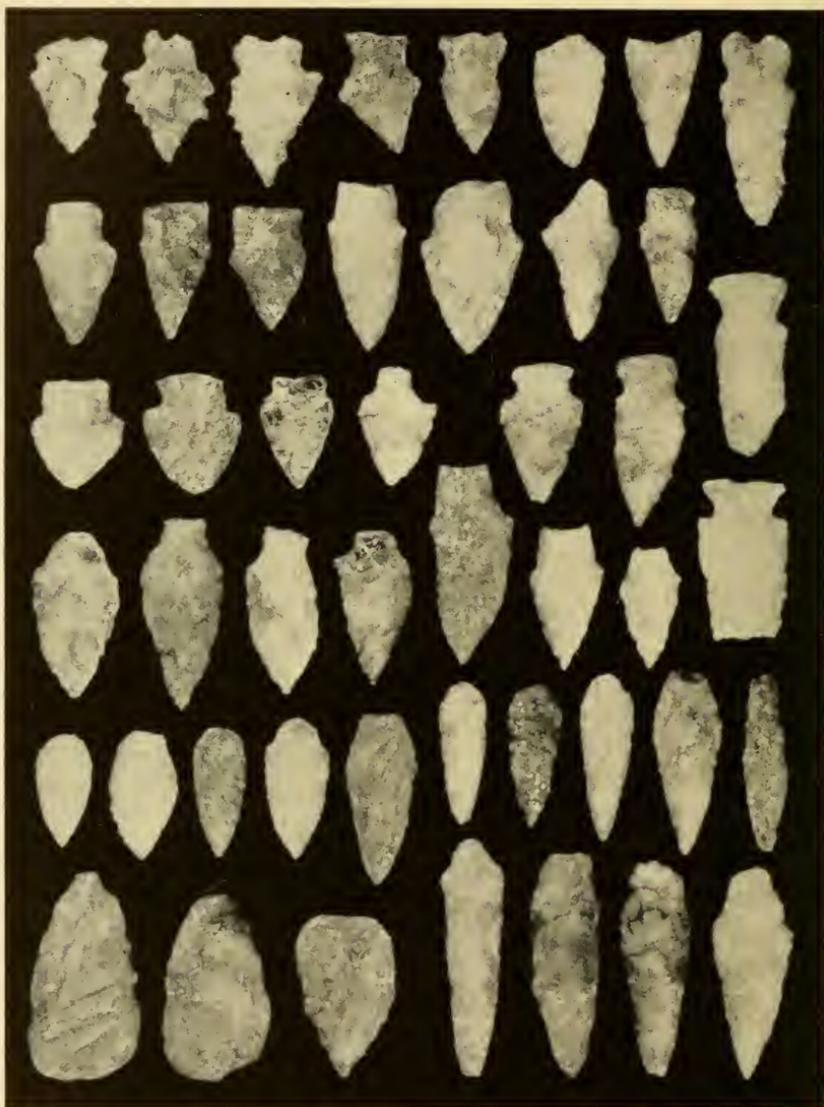


SPECIMENS FROM THE SITE OF PISSASECK
 $\frac{1}{2}$ natural size. a-d, U.S.N.M. nos. 378065-68.



SPECIMENS FROM THE SITE OF PISSASECK

$\frac{1}{2}$ natural size. Above, U.S.N.M. no. 378069; below, U.S.N.M. no. 378070.



SPECIMENS FROM THE SITE OF PISSASECK

$\frac{1}{2}$ natural size. Above, U.S.N.M. no. 378071; below, U.S.N.M. no. 378072.

and the vast amount of fragmentary pottery, now recovered from the site. And, of course, the variety of objects, rather than the quantity, is of the greater interest.

To describe the material briefly:

Plate 3.—Specimens *a*. Seven examples of projectile points or knives, and two side scrapers, made of dark brown argillite, now weathered and bleached to a light yellowish color. The large broken blade in the lower right corner has recently been fractured, thus revealing the natural shade of the argillite and the extent to which the surface has been altered through long exposure. The condition and appearance of the specimens suggest great age. The specimens closely resemble certain material recovered from sites in the Delaware valley, artifacts belonging to the so-called argillite culture, which have been discovered in the yellow sand or soil below a stratum of black surface soil.²³

Specimens *b*. Twelve projectile points made of dark, very compact, argillitic slate. These also resemble specimens from the Delaware valley figured and described in the works just cited.

Specimens *c*. Two specimens made of rhyolite of a light bluish-gray color, showing flow structure and slightly altered. A cache of 32 pieces, of the same form and material, many of which are in the United States National Museum (U.S.N.M. no. 756), were found in 1861 on the farm of Joshua Pierce, on Rock Creek, Washington, D. C. The farm surrounded the old Pierce Mill, on the bank of Rock Creek, where it is now crossed below Tilden and Upton Streets.

Specimens *d*. Eight examples of comparatively large blades made of rhyolite. The majority are broken, but the portions remaining reveal the characteristic features. All are very thin and are beautiful examples of flaking. These are altered to a greater degree than are the two specimens *c*. The stone, containing crystals of feldspar, was evidently derived from quarries in South Mountain, "a high group of ridges extending from near the Potomac at Harpers Ferry to the southern side of the Susquehanna at Harrisburg, Pennsylvania." The quarries were discovered by Holmes in 1892,²⁴ one, very extensive, "is 75 miles northwest of Washington, and was readily accessible to the inhabitants of Potomac and Patuxent rivers." Numerous scat-

²³ Compare Hawkes, E. W., and Linton, Ralph, A pre-Lenape site in New Jersey. *Anthropol. Publ. Univ. Pennsylvania*, vol. 6, no. 3, pl. 17, Philadelphia, 1916. Also illustrations in Spier, Leslie, *The Trenton argillite culture*, *Anthropol. Papers Amer. Mus. Nat. Hist.*, vol. 22, pt. 4, New York, 1918.

²⁴ Holmes, W. H., *Stone implements of the Potomac-Chesapeake Tidewater Province*. 15th Ann. Rep. Bur. Amer. Ethnol., pp. 73-77, Washington, 1897.

tered specimens and caches of blades have been found in the surrounding country.

Plate 4.—Above, several types of projectile points, knives, scrapers, and drills, made of quartzite. The material was obtained in the form of boulders and pebbles, so plentiful in the region, and is of various colors and degrees of coarseness. The two specimens *a* are drills which had evidently been inserted in shafts. The points are smoothed and rounded, the effect of the rotary movement of the drill when in use. The point of *b* is likewise worn from use. This and the four specimens to the left in the same row may be classed as scrapers.

At the bottom of the plate are six examples of projectile points, or blades, made of diabase. No other similar pieces were found on the site. All are greatly weathered, including the fractured surfaces of the four broken specimens. The great similarity of form and size of the latter is remarkable. These have been altered to a greenish-brown color, are very rough, and resemble certain of the large implements shown in plate 8.

Plate 5.—A very large proportion of all the small flaked objects found on the site are made of white quartz, all of which had been derived from water-worn pebbles. Such pebbles occur here in vast quantities; the majority are small and so provided an unlimited supply of pieces of suitable size for the making of arrowpoints and of a variety of small implements such as scrapers, drills, and knives. Examples of all are illustrated. Some forms are far more numerous than others, and although a great quantity of broken pieces has been recovered from the site, together with many entire specimens, only one example of the triangular type of point has been obtained. Several varieties occurring on sites farther up the valley, beyond the falls, have not been found here.

A single specimen of much interest is shown at the bottom of the plate. It was found a few inches under the surface, some 50 feet back from the brow of the bank that slopes to the river about 15 feet below. It is made of gray flint²⁵ which is unaltered. The flaking is

²⁵ The specimen was examined by E. P. Henderson, of the Department of Geology, U. S. National Museum, who described the material thus: "This is a gray flint-like material showing banding due to the arrangement of small cavities rather than to a difference in composition of the flint. There are a few brown inclusions of limonite in the gray flint. A light brown siliceous area at one end has not been altered to the flint. In this there are also some brown limonitic inclusions. It appears that the original mass was a nodule of flint with a surface of this light brown material inclosing the gray flint. Since there is a similar inclusion in both portions, it is likely that both have formed at the same time; consequently, the difference is not due to weathering."

clearly defined, and the edges are sharp. A characteristic feature of the type is the increase in the width of the blade near the middle, and in many examples a few flakes are removed from one edge near the point evidently in the endeavor to make the latter sharper. Specimens resembling this from Michigan, Illinois, Indiana, and Kentucky are preserved in the collections of the United States National Museum. The specimen from Kentucky deserves special mention. It is made of a dark brown flint, so plentiful through parts of Kentucky and Tennessee, and was found in a cave a short distance northeast of Bowling Green, Warren County, Ky. It was found in 1888 and was sent to the museum at that time (U.S.N.M. no. 1062, loan). The specimen is embedded for a distance of about three-quarters of an inch in a fragment of human pelvic bone, which it had entered from the front through the body. Thus it had served as a weapon and had undoubtedly been attached as a point of a spear. This discovery suggests the manner in which all similar pieces may have been used. Nevertheless, if mounted as knives or daggers they would have been serviceable in many ways.

The specimen from the site of ancient Pissaseck was undoubtedly made west of the Ohio.

POTTERY

A vast amount of fragmentary pottery has been recovered from the site. It is of a brownish color, often with coils clearly defined, and for the most part containing a tempering of crushed quartz or sand, some of which may have occurred naturally in the clay. With few exceptions the fragments bear on the outer surface the impressions of nets or single cords; a few reveal the use of closely woven fabrics. A single shard appears to have been decorated with straight, very regular lines, which had been made by impressing some hard material into the clay when the latter was in a plastic state. One fragment, appearing to be older than the majority, bears the impression of basketry.²⁶

Plate 6.—The nine specimens forming the three upper rows are bits of rims of vessels and show several forms of impressions. The large piece on the top row is part of a rim that measured about 8 inches in diameter. It is coiled ware, and the difference in height of the two ends of the specimen represents the height of one coil of clay

²⁶ I am indebted to E. G. Cassedy, by whom all drawings were made, for assistance in determining the nature of the textiles which were impressed on the pottery vessels.

used in building up the wall of the vessel. The fracture has followed the line of contact of two coils. On the right may be seen the bottom of a coil of clay which had been worked down over the one below, but which had not become closely combined.

The triangular fragment in the top row shows very deep, sharply defined impressions of single cords which continued over the top of the vessel. The cords passed at an angle over the rim, forming a very rough surface. It is flat and does not have the usual curved surface of a rim, which suggests a vessel with a square opening.

The large, worn fragment on the left end of the second row is the only piece found on the site that bears the impression of what is believed to be basketry. The texture of the ware differs from that of the majority of specimens. It is more porous, and on the surfaces are many small cavities caused by the leaching away of the tempering material, thought to have been crushed shells. The rim was indented in a manner somewhat similar to *a*, next to be described, but had become smoothed from use. The vessel was evidently large.

The two forms of rim decoration mentioned are found more clearly defined on other specimens.

Specimen *a*. Coiled ware, with surface greatly weathered and now bleached to a light brownish color. On the surface are many very faint impressions of fine, twisted cords which may have been part of a net. The clay evidently contained a small amount of shell tempering which has decayed, resulting in the few cavities which are now visible on the surface and on the fractured edges. The rim is decorated as shown, exact size, in *a*, figure 4.

Specimen *b*. Very hard, compact ware, which does not show any evidence of coils of clay in forming the vessel. Tempering very coarse sand, two pieces of which project from the right side of the fragment and are visible in the photograph. The surface bears the impression of a net which had been carried over the top and impressed on the rim. This is drawn, natural size, in *b*, figure 4. Many specimens found on the site were similarly decorated.

As previously mentioned, many fragments of earthenware bear the impressions of nets. The meshes of some were small and regular, others were much coarser and made of heavier cords.

Specimen *c*. A very hard ware that contains much sand, some of which is very coarse; one piece of quartz, being as thick as the wall of the vessel, is exposed on both the inside and outside. The surface of this bit of pottery reveals the impression of a beautiful example of net making. The cords are finer than the great majority, and the

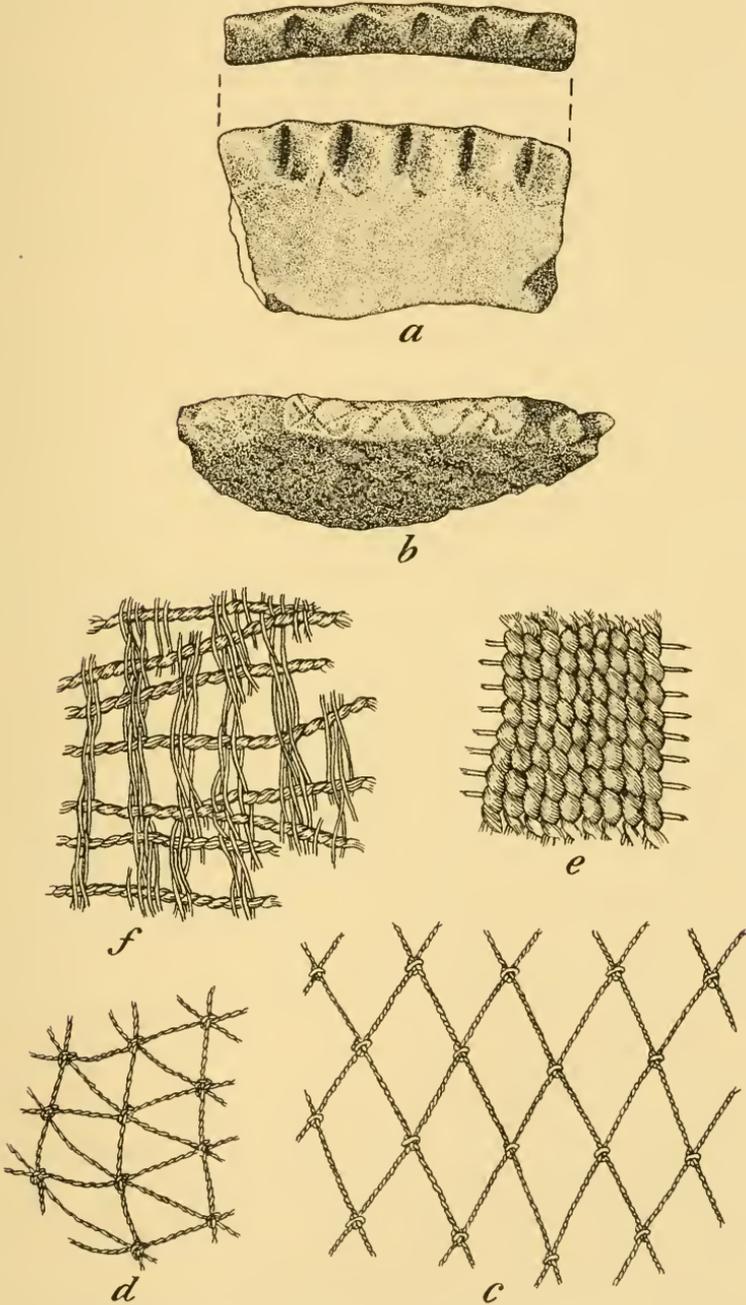


FIG. 4.—Specimens from the site at Pissaseck. Textiles derived from impressions on fragments of pottery. Natural size.

knots are more evenly placed. The net, restored, and drawn natural size, is shown in *c*, figure 4.

Specimen *d*. Coiled ware, porous but very hard. There are numerous small cavities caused by the leaching away of the tempering material, probably crushed shells. The impression on the surface was formed by a net in which apparently an extra series of small cords had been knotted across the original meshes, thus dividing each of the latter into two triangular sections. This unusual feature is more clearly shown in the drawing of the restored material, reproduced natural size in *d*, figure 4.

Specimen *e*. A hard, compact ware, very dark in color, with no indications of a tempering material. The impression on the outer surface was made by a closely woven fabric. The warp elements were very slight when compared with the thickness of the woof. The latter had probably been made of the hair or wool of some animal—possibly the bison. Drawn and reproduced natural size in *e*, figure 4.

Specimen *f*. Coiled ware, compact, with no trace of tempering. This differs from the preceding specimen in that the warp elements are very coarse, appearing to be twisted cords, possibly a vegetal substance. The woof is composed of many small strands. This is restored and drawn exact size in *f*, figure 4.

Plate 7.—Specimen *a*. The ware is very hard and has weathered to a light brown color. It is extremely porous, containing many cavities caused by the leaching away of the tempering material, probably crushed shells. The deep, sharply defined lines on the surface were formed by impressing some hard, rigid object in the clay while the latter was still in a plastic state. This is the only example of this form of decoration encountered on the site.

Specimen *b* is a small knob which appears to have projected from the side of a vessel. The ware is hard, of a reddish color, and contains a small amount of crushed quartz as tempering. The surface bears the impression of twisted cords, evidently a piece of cloth or net which had been pressed against the mass of clay. Nothing similar is known to have been found on the site.

Specimens *c*, *d*, and *e* are three fragments, each showing the edge or beginning of the bottom of the vessel, with a small part of the wall attached. All are of a reddish brown color and contain a tempering of coarse sand. The two pieces *c* and *d* may be parts of the same vessel. On the surfaces are the impressions of cords and nets, the latter being clearly shown in the photograph of *c*.

Specimen *f*. An example of the curious disks, of unknown use, made of bits of pottery vessels and found widely distributed, although

no similar specimen was found on the sites examined along the Rappahannock. Much crushed quartz had been added as a tempering. The impression of tightly twisted cords remains on the outer surface. It is of a very bright, reddish color, different from that of any other specimen found on the site.

The large fragment to the right is part of a massive vessel. It is coiled ware and in places is more than one-half inch in thickness. The surface is hard and slightly pitted, indicating the leaching away of part of the tempering material, although some small pieces of quartz remain exposed. Tightly twisted cords crossed and recrossed the surface, the impressions of which are clearly defined. The lower edge, as viewed in the photograph, is the bottom of a coil or band of clay which had separated from the one against or upon which it had been placed. This parting had occurred while the vessel was still in use, when, it is evident, the parts had been perforated and fastened together by means of a cord or thong. Perforations made for this purpose are frequently found in bits of pottery as well as in fragments of soapstone vessels.

The specimens of earthenware just described are considered typical examples from the site of Pissaseck.

SOAPSTONE

The discovery of many fragments of soapstone vessels proves that at some time in the past much of the material was used by the occupants of the ancient site. The rather small pieces differ in texture and degree of purity, and consequently could have been derived from more than one quarry. Some may have been carried down the Rappahannock from the quarries far up the valley, well within the bounds of the territories dominated by the Manahoac tribes in 1608; other pieces were probably obtained from the extensive outcroppings in Amelia County, or from other sources in the tidewater region which have remained undiscovered.

There are no known references by the early writers to the actual use of soapstone by the native tribes of Virginia at the beginning of the seventeenth century, but it may have been used to a limited extent by some in conjunction with the far more numerous pottery vessels. This condition appears to have prevailed among certain related Algonquian tribes farther north in New Jersey and possibly elsewhere. Peter Kalm, the Swedish scientist, who wrote while in New Jersey in January 1749, mentioned the use of pottery and soapstone vessels by the Indians of the region at the time of the earliest European

contact during the seventeenth century. He wrote²¹ (vol. I, pp. 343-344):

The old boilers or kettles of the *Indians*, were either made of clay, or of different kind of pot-stones, (*Lapis ollaris*). The former consisted of a dark clay, mixt with grains of white sand or quartz, and burnt in the fire. Many of these kettles have two holes in the upper margin, on each side one, through which the *Indians* put a stick, and held the kettle over the fire, as long as it was to boil. Most of the kettles have no feet. It is remarkable that no pots of this kind have been found glazed, either on the outside or the inside. A few of the oldest *Swedes* could yet remember seeing the *Indians* boil their meat in these pots. They are very thin, and of different sizes; they are made sometimes of a greenish, and sometimes of a grey pot-stone, and some are made of another species of apyrus stone; the bottom and the margin are frequently above an inch thick. The *Indians*, notwithstanding their being unacquainted with iron, steel, and other metals, have learnt to hollow out very ingeniously these pots or kettles of pot-stone.

Four fragments of soapstone vessels, recovered from the site of Pissaseck, are shown in plate 7. The specimen in the upper right corner is a bit of a rim, worn smooth from use; it closely resembles the example from Nandtanghtacund, figure 8. The period of occupancy to which the specimens from the Rappahannock sites should be attributed has not been determined, but the statements by Kalm, although treating of the country farther north, suggest the possibility that soapstone may have been used in the Rappahannock villages as late as the beginning of the seventeenth century.

Many of the heavier, cruder forms of implements are still to be found scattered over the site of the ancient village. Typical examples are illustrated in plates 8 and 9.

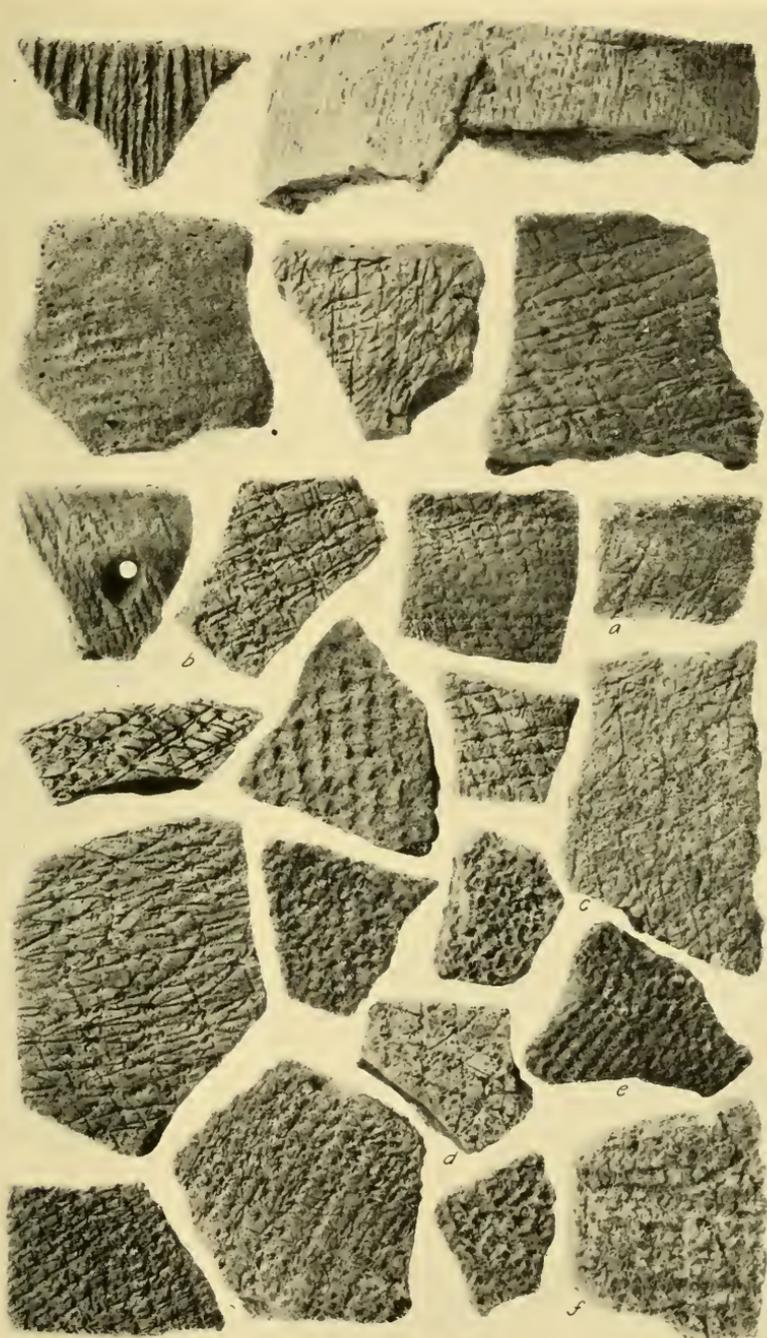
Plate 8.—Specimen *a*. An implement made of diabase, surface slightly weathered, and resembling many specimens found on sites above the falls. The groove had been formed by pecking and is smooth from long use.

Specimen *b*. Axe made of diabase, so greatly altered that it is not possible to distinguish the flaked from the natural surface of the stone.

Specimen *c*. Pestle, made of diabase, with condition of surface similar to that of *b*. This was evidently a natural boulder which had been shaped by pecking rather than by flaking. Both sides are roughly pitted.

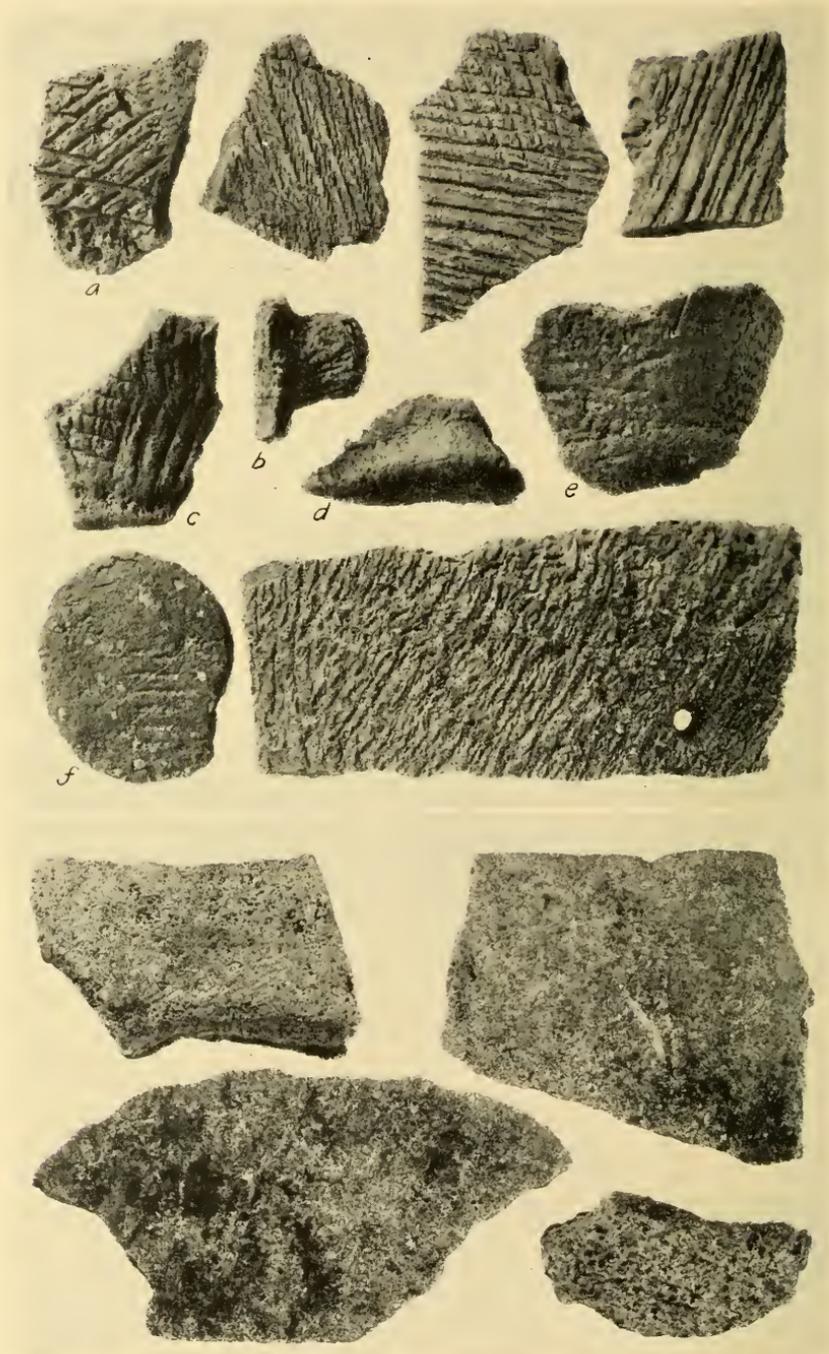
Specimen *d*. Hammerstone; a natural quartzite pebble with the greater part of the surface showing effect of use.

²¹ Kalm, Peter, *Travels into North America*. 2d ed., 2 vols. London, 1772.



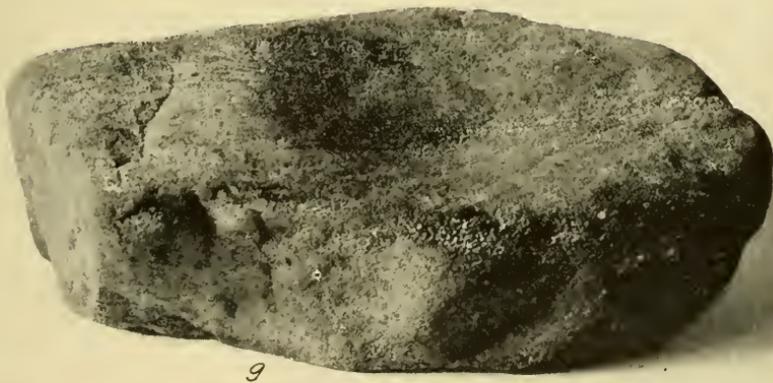
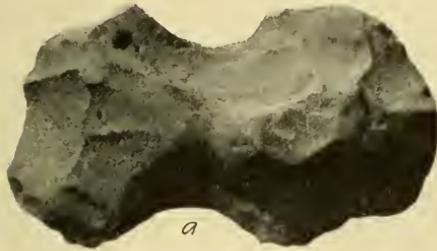
SPECIMENS FROM THE SITE OF PISSASECK

$\frac{1}{2}$ natural size. U.S.N.M. no. 378073.



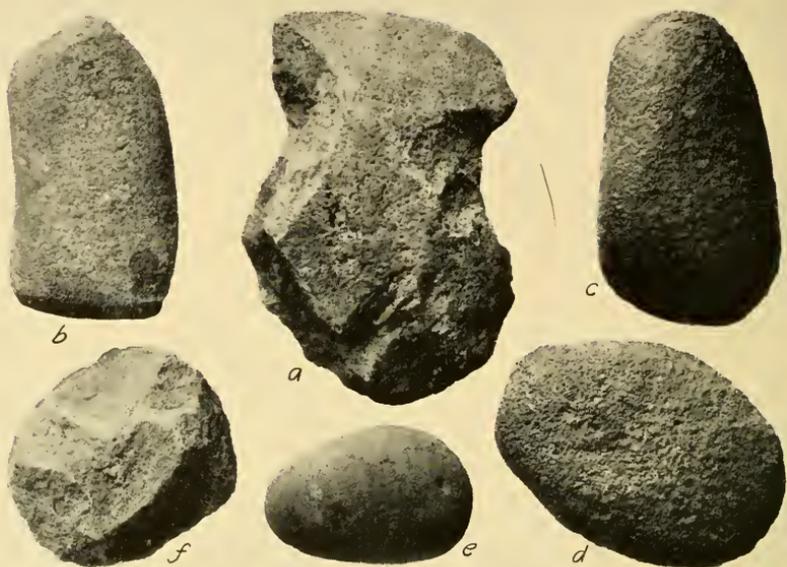
SPECIMENS FROM THE SITE OF PISSASECK

$\frac{1}{2}$ natural size. Above, pottery, U.S.N.M. no. 378073; below, soapstone, U.S.N.M. no. 378074.



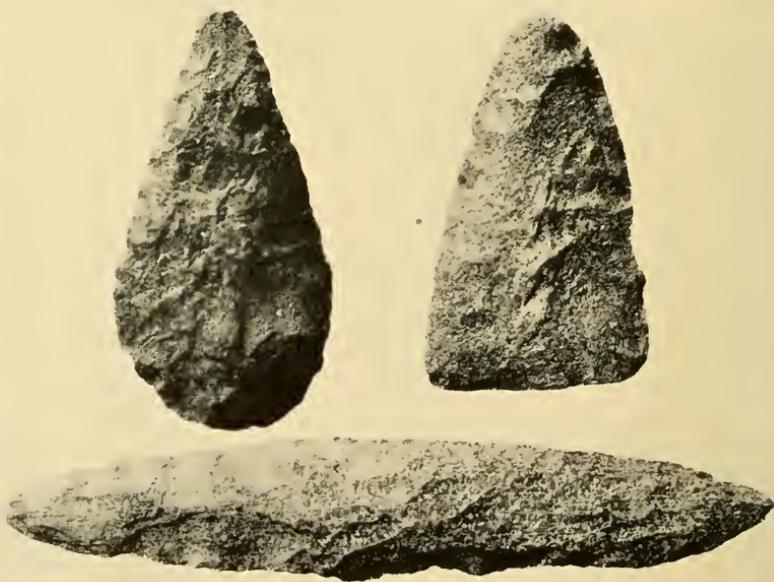
SPECIMENS FROM THE SITE OF PISSASECK

$\frac{1}{3}$ natural size. *a-f*, U.S.N.M. nos. 378075-80; *g*, U.S.N.M. no. 378080a.



1. SPECIMENS FROM THE SITE OF PISSASECK

$\frac{1}{3}$ natural size. *a*, U.S.N.M. no. 378081; *b-f*, U.S.N.M. no. 378082.



2. SPECIMENS FROM NEAR LEFT BANK OF THE RAPPAHANNOCK
ABOVE GREENLAWS WHARF

$\frac{1}{2}$ natural size.

Specimen *e*. Hammerstone; a quartzite pebble, about 2 inches thick. Deeply pitted on the two opposite surfaces.

Specimen *f*. Hammerstone formed of a piece of coarse sandstone. Both surfaces deeply pitted.

Specimen *g*. Mortar made of an irregular block of coarse, dark brown sandstone.

Plate 9 (upper part).—Specimen *a*. Massive implement formed of a piece of coarse quartzite which had been struck from a boulder. It appears to have been attached to a handle and used as a hoe.

Specimens *b*, *c*, and *d*. Three hammerstones made of diabasic rocks, with surfaces showing different degrees of weathering.

Specimen *e*. Small quartzite pebble which had been used as a hammerstone.

Specimen *f*. A very roughly chipped implement made of diabase, with surface deeply weathered.

CACHE OF TRADE BEADS

A cache of trade beads found at Leedstown a few years ago proved to be of great interest. Examples of the beads are shown in plate 1, but before describing them in detail and telling of the locality and manner in which they were encountered, it will be well to refer briefly to the manufacture and use of glass beads by the early colonists at Jamestown.

Beads of many sorts were known to the Virginia Indians in prehistoric times; consequently, those brought by the first settlers—being of a new and unknown material and often of a brilliant color—became of the utmost importance when trading with the natives. So important were they that it was soon decided to manufacture some in the colony, rather than to import all from Europe, and it is evident that quantities were thus produced at a house erected for that purpose not far from Jamestown.

On April 30, 1607, before arriving at the site of future Jamestown, some of the English landed and visited the Indian village of Kecoughtan, about the position of the present Hampton, where they were treated kindly by the natives. The English were offered food and, so the narrative continues (p. lxiv):²⁸ "After we were well satisfied, they gave us of their Tobacco, which they tooke in a pipe made artificially of earth as ours are, but far bigger." A dance followed and when it had ended "the Captaine gave them Beades and other trifling Jewells."

²⁸ Percy narrative in Smith, *op. cit.*

When trading with the Indians, during the summer of 1608 at a time when Powhatan was present, the colonists received a large quantity of corn in exchange for "a pound or two of blew beads." About this time the first glass was made at Jamestown.

The spring of 1609 found the colonists engaged in many endeavors; houses were being erected, a well was dug, and they "produced a tryall of Glasse." This was done at "the Glasse-house, a place in the woods neare a myle from James Towne",²⁹ which had probably been erected during the preceding year. To what extent beads were then made, or were produced during the years that immediately followed, is not known.

The second attempt to establish glass making in the colony was a more serious consideration. On June 11, 1621, at a Court held for Virginia,³⁰ "Intelligence was given y^t one Cap^t: Norton made an offer & would undertake to pcure 6 straungers skillfull in makinge of Glasse and Beads to goe over to Virginia to be employed in the saide worke for the Company for no other consideraçion then onely the halfe profitts of their labo^{rs} . . ." The proposition was accepted by the Company on June 13, and Norton agreed to "carry over with him 4 Itallyans and two servants of his owne . . . which six psons shall within three moneths after their Arivall in Virginia sett upp a Glass ffurnace and make all manner of Beade & Glasse . . ."

But it soon became known that the cost of the undertaking would be greater than anticipated and that the Company "were not able to goe through wth itt." It was then deemed best to let it be "free to pryvate Adventurers to undertake the same . . ." And so Captain Norton was released from his agreement. This was on July 16, 1621, and as stated by "certaine adventurers now present they did now acquainte this Courte that itt was not their intent therby utterly to exclude the Company from a buisiness of this speciall consequence unto them all (seeinge the Comoditie of Beads was like to prove the Verie Coyne of that Country) . . ."

In the "Instructions to the Governor and Council of State in Virginia,"³¹ dated July 24, 1621, is included the following: "Item whereas Cap^t William Norton and certaine Itallians now by the general Company and other worthy mynded adventures att a verie

²⁹ Smith, *op. cit.*, p. 467.

³⁰ *In* The Records of the Virginia Company of London, vol. 1, p. 484. Library of Congress, Washington, 1906.

³¹ *In* The Records of the Virginia Company of London, vol. 3, p. 477. Library of Congress, Washington, 1933.

great charge sent for the erecting of a glasse furnace in Virginia wee hartylie desire yow to afford them all favor possible."

It is evident the Company in London feared that bartering too many beads with the Indians would lessen their relative value, and in a letter to the Governor and Council in Virginia, dated August 12, 1621, stated (op cit., p. 495): "The making of beade is one of Cap^t Nortons cheife employmente w^{ch} beinge the mony you trade wth the natives we would by no meanes have through to much abundance vilified or the Virginiane at all pmitted to see or und^rstand the manufacture of them: wee therefore pray you seriously to consider what proportion of beade can be vented and their worth not abated, and intimate the proportion to Cap^t Norton and his Italians, and certifie the same to us in yo^r next letters, that accordingly we may limitt the quantitie that shall from time to^rtime be made."

The importance of beads, and of blue glass beads in particular, was thus acknowledged,³² and it is evident that vast quantities were made and traded to the Indians.

The use of beads was frequently mentioned in the early records of the colony. One such account of more than usual interest forms part of the Minutes of the Council and General Court.³³ At a court held at Jamestown, November 8, 1624, Robert Poole told that while on a trading voyage, "wherein he was employed for Mr Thresurer," he had bought corn from the Indians, and had exchanged "thirteene armes length of some beades for Another Tubb [of corn]." "Further he sayeth y^t Capt Croshaw gave for a great Canoe w^{ch} he bought 10000 of blew beades, saying y^t he would give Mr Thresurer satisfaction for the beds.

"Also he sayeth y^t he paide for matts 20000 of blew beads, of w^{ch} matts there was used to seele ye shipp 20, *and*

"Further he sayeth that he gave to the great man of Potuxsea to be their guid to Pocotonck 6 or 800 of blew bead."

From this it may be assumed that innumerable blue glass beads, made at Jamestown, served the treasurer of the Colony as a medium of exchange when dealing with the Indians.

Happenings in England during the early years of the seventeenth century undoubtedly led to the endeavor to establish a glasshouse in

³² Strachey, in his "Dictionarie of the Indian Language," gave "Blew beades, vnetagwushomon."

³³ The Virginia Magazine of History and Biography, vol. 21, p. 46, Virginia Hist. Soc., Richmond, 1913.

Virginia. In 1615³¹ the importation of foreign glass into England was prohibited, but 5 years later permission was granted to import "rare and curious glasses." About that time, 1620, "an attempt was made to set up glass works in Scotland," with workers from Venice. If beads were included among the articles that were not to be imported from a foreign country, which would have included Venice, it became necessary to make all that were required for the Indian trade. Such may have been the reason for the establishment of the industry at Jamestown in 1621.

DISCOVERY OF THE BEADS

Just east of the triangular tract, within the shadowed area in the aerial photograph (pl. 2), the river bank rose normally some 6 or 8 feet above the gravelly beach. At some time in the past the bank had been cut away for a distance of more than 150 feet, and the surface for a like distance back from the water had been graded, thus forming a level area approximately 150 feet square sloping gradually to the edge of the water. In the middle of the far boundary of the graded area, facing and paralleling the river and 8 or 10 feet higher than the beach, are the remains of an ancient brick foundation, and about midway between this and the river are other bricks which appear to be part of a wall. Locally, and traditionally, this graded square is known as the Old Arsenal, a term which during the seventeenth and eighteenth centuries would have applied to a place where boats were built, also where arms and all military equipments were manufactured or stored. Such was probably the site at Leedstown, with the customhouse nearby.

The graded square has long been cultivated. When the ground was plowed early in the spring of 1925, a few beads were found on the surface near the center of the area. That night, as related by an old negro who lives nearby, a heavy rain fell and the following morning many beads were scattered over a very limited space. This caused a search for more, and soon great numbers of beads were encountered a few inches below the soil that had been disturbed by the plow.

The 13 varieties of beads illustrated in plate 1 are thought to include examples of all that were discovered in the cache. There may have been others, but if so, they have not been traced. Their history is not known, nor has it been possible to determine when or for what reason

³¹ Nesbitt, Alexander. Glass. New York, 1879. This is one of the South Kensington Museum Art Handbooks.

they were placed as found. All may have been contained in a wooden keg or box which decayed and disappeared, thus allowing the beads to remain closely embedded in the surrounding earth.

The beads will be described and references made to identical or similar specimens from other localities that are now preserved in the collections of the United States National Museum, and to some that have been received at the Museum during the past 2 years for study or identification, but which have not remained in the collections. Many other kinds of beads occur on the sites, but only those resembling the specimens from Leedstown will now be considered.

Two of the 13 varieties found in the cache prove to be of the greatest interest and later will be described in detail. The first three, top row of the plate, are types that were widely distributed by the traders; they have been made for centuries and may still be obtained. As they are so numerous and so scattered, no specific references will be made to sites where they have been discovered.

Top row.—Left, transparent or translucent glass, light green; middle, opaque glass, black; right, transparent or translucent glass, medium shade of blue.

Second row.—Core transparent or translucent green glass, with thin glaze³⁵ of red glass covering entire surface. Over the surface of the red glaze are three groups of parallel lines, each group consisting of three lines, alternating white, blue, white.

Similar beads: Tennessee, Sullivan County, U.S.N.M. no. 136810; Alabama, Madison County, Hobbs Island in Tennessee River; Georgia, Bibb County, Macon; Pennsylvania, Bainbridge County, burial, U.S.N.M. no. 35773.

Third row.—Core transparent or translucent green glass, with thin glaze of red glass covering entire surface. Over the surface of the red glaze are four groups of parallel lines, each group consisting of three lines, alternating white, black, white. No other examples traced.

Fourth row.—Core translucent or transparent green glass, with thin glaze of red glass covering entire surface.

³⁵ Beck, Horace C., Classification and nomenclature of beads and pendants. In *Archaeologia* . . . Published by the Society of Antiquaries of London. 2d ser., vol. 27, Oxford, 1928.

P. 55: "Glaze is a form of glass. It can vary very much in its composition, but it always contains silica and an alkali."

P. 56: "When a bead has been covered with a thin layer of vitreous enamel or glaze, it is called a *Glazed bead*."

Similar beads: Tennessee, Sullivan County, U.S.N.M. no. 136810; North Carolina, Mecklenburg County, burials, U.S.N.M. no. 138808; Georgia, Bibb County, Macon, 1935, burials on plateau, also from surface of Mound D; Florida, Pinellas County, Maximo Point, Tampa Bay, beads somewhat smaller, U.S.N.M. no. 35775; Maryland, Prince Georges County, burial near Piscataway, U.S.N.M. no. 5839; New York, Monroe County, near Brockport, U.S.N.M. no. 16685.

Fifth row.—Translucent or transparent dark blue glass, longitudinally striped with fine lines of opaque white glass.

Similar beads: California, Santa Barbara County, Santa Rosa Island, U.S.N.M. no. 20236.

Sixth row.—Translucent or transparent dark blue glass.

Similar beads: Tennessee, Sullivan County, U.S.N.M. no. 136810; Alabama, Cherokee County, site on Coosa River, U.S.N.M. no. 99217; Alabama, Elmore County, near junction of Coosa and Tallapoosa Rivers, site of Fort Jackson, earlier old French Fort Toulouse, U.S.N.M. nos. 91557 and 91564; Alabama, Madison County, Hobbs Island in Tennessee River; Georgia, Bibb County, Macon, burial on the plateau, 1935; North Carolina, Mecklenburg County, burials, U.S.N.M. no. 138808; Florida, Hillsborough County, near Tampa Bay, U.S.N.M. no. 35335; Florida, Orange County, mound, U.S.N.M. no. 150100; Louisiana, Avoyelles Parish, U.S.N.M. no. 331724; Pennsylvania, Lancaster County, on Susquehanna River, U.S.N.M. no. 27048.

Seventh row.—Cane or tubular beads.³⁰ Core translucent or transparent green glass, with thin glaze of red glass over entire surface.

Similar beads: Tennessee, Sullivan County, U.S.N.M. no. 136812; Alabama, Madison County, Hobbs Island in Tennessee River; Virginia, Stafford County, average smaller, burial from site of Potomac village, at mouth of Potomac Creek.

Eighth row.—Cane or tubular beads, opaque white glass.

³⁰ Beck, op. cit., p. 60, described this type of bead:

"*Cane beads.* To make these the glass was made into a rod or tube which was called a cane. These canes were sometimes made of one glass only; at other times they were made of different coloured glasses arranged in a pattern.

"To make a bead, a cane, usually tubular, was selected of approximately the same diameter as the bead required. A piece the length of the bead was cut off this cane. In some cases this was used as a bead without any further work on it. In other cases it was finished by either grinding or reheating. Beads made in this manner are called *Cane beads.*"

Similar beads: Tennessee, Sullivan County, U.S.N.M. no. 136812; Alabama, Madison County, Hobbs Island in Tennessee River; Louisiana, Avoyelles Parish, U.S.N.M. no. 369258.

Ninth row.—Cane or tubular beads, opaque light blue glass. No other examples traced.

Tenth row.—Wire-wound beads,³⁷ opalescent white glass.

Similar beads: Tennessee, Sullivan County, average smaller, U.S.N.M. no. 136812; Georgia, Bibb County, Macon, 1935, from surface of Mound D; Georgia, Whitfield County, U.S.N.M. no. 15539; Alabama, Talladega County, U.S.N.M. no. 364574; Mississippi, Lee County, more globular, U.S.N.M. no. 209619; Louisiana, Avoyelles Parish, average smaller, U.S.N.M. no. 331724.

Two bottom rows.—Cut rock crystal, with eight facets on perimeter.

Similar beads: Florida, Pinellas County, Maximo Point, facing Tampa Bay, U.S.N.M. no. 35775; Florida, Hillsborough County, 14 beads from burials near Tampa Bay, U.S.N.M. nos. 35334-35344; Florida, Orange County, U.S.N.M. no. 150100.

The references in the preceding lists often apply to a single bead, seldom to more than two or three, which had been found with many others of different types. Some had been discovered in burials, others had been recovered from the surface of village or camp sites. In two instances no examples of similar beads have been traced in the collections of the United States National Museum, although it is to be expected that some are preserved in other collections, both public and private. The relatively few specimens recorded may indicate the range of the several forms, rather than the frequency with which they have occurred.

The history of the remarkable cache is not known, nor has it been determined from what country or countries the material may have come. It is doubtful if any of the beads were made at Jamestown; consequently very little can now be added to the brief descriptions already given. Two of the types (fifth row and two bottom rows) present problems which may be difficult to solve, but the solution of which would undoubtedly aid in determining the place of origin of other beads encountered with them in the cache.

³⁷ Beck, *op cit.*, p. 60, referred to beads of this type:

"*Wire-wound beads.* A thin stick of glass heated until it had much the consistency of toffee was wound round a wire. During the process the glass was pulled out into a thread, and there is frequently a projection on the bead showing where this thread was broken off. When, however, as often happens, the bead has been reheated for subsequent decoration, this projection generally disappears. Beads made in this manner are called *Wire-wound.*"

Aside from the specimens from the Leedstown cache, the collections of the National Museum contain only one series of the transparent blue glass beads with longitudinal stripes of fine threads of opaque white glass paralleling the perforation. These were recovered from an ancient Indian burial on Santa Rosa Island, Santa Barbara County, Calif., by Stephen J. Bowers in 1876 (U.S.N.M. no. 20236). The islands were discovered by the Spaniards under Cabrillo in 1542 and were visited frequently thereafter by ships under the same flag. Although the beads from the bank of the Rappahannock are corroded, with their surfaces roughened, those from California appear as fresh and smooth, as when placed in the graves. This contrast in condition of the two groups may be attributed to the difference in the amount of moisture, the variation of temperature, and the composition of the earth by which they were surrounded. All are thought to be of the same age and to have come from the same source—some glasshouse in Spain.

Cut rock crystal beads, similar to those recovered from the Leedstown cache, have been discovered on the west coast of Florida, but are not known from any other part of the United States. They have been found in mounds and burials within a limited area extending southward from the north shore of Tampa Bay to the vicinity of Key Marco, a distance of about 175 miles. Other forms of beads and pendants, likewise made of rock crystal, have been discovered in Florida associated with the type occurring at Leedstown, but only the latter will now be considered.

The specimens mentioned as having come from Pinellas and Hillsborough Counties were collected by S. T. Walker in 1879.³⁸ Many others were found during the progress of recent archeological explorations under the direction of the Bureau of American Ethnology, supervised by M. W. Stirling. They were encountered in several localities, within the bounds previously designated, and all came from burials thought to have belonged to the years following soon after the first contact of Spaniards and Indians about the last half of the sixteenth century. Whether they had been traded or given to the Indians, or had been recovered by the natives from a Spanish wreck on the Gulf coast, may never be known; however, they were undoubtedly brought to America in a Spanish ship.

The crystal beads from the cache on the Rappahannock and those from the west coast of Florida are identical in form and size. They

³⁸ Walker, S. T., Preliminary explorations among the Indian mounds in southern Florida. *In* Ann. Rep. Smithsonian Inst. for 1879, Washington, 1880.

have the same number of facets on the perimeter. On all, the plane surface from which the perforation was begun is rough, suggesting the use of a saw in preparing the mass, and the opposite end of the perforation emerges in a distinct concavity which was made when the drill broke through the thin wall of crystal.

The two distinct types of beads found in the Virginia cache—the blue glass with fine white lines and the cut rock crystal—should, with a degree of certainty, be attributed to a Spanish source, and this suggests that all beads in the Leedstown cache were of Spanish origin.

During the sixteenth and seventeenth centuries Spain produced glass equal to that made in other parts of Europe; consequently, it is inconceivable that beads required for trade in foreign lands would have been brought from other countries. Barcelona was the center of the glass industry, which would undoubtedly have included the manufacture of beads. Thus it had been for centuries, and in the words of Señor Juan F. Riano, in a catalogue of Spanish objects in the South Kensington Museum:³⁹

Jeronimo Paulo, who wrote in 1491 a description in Latin of the most remarkable things at Barcelona, says they also send to Rome and other places many glass vessels of different sorts and kinds, which may well compete with those of Venice. Marineus Siculus, who writes at the beginning of the sixteenth century, says that the best glass made in Spain is that of Barcelona; and Gaspar Baneiros in his *chronographia*, published at Coimbra in 1562, mentions that excellent glass was made at Barcelona, almost equal to the Venetian.

These were the years during which Spanish vessels so frequently touched the coast of Florida and had intercourse with the native tribes. Although it has not been possible to trace definitely the source of the crystal beads, it is believed they were cut in Spain and brought to America during the latter half of the sixteenth century.

The beads, crystal as well as glass, found in the cache on the bank of the Rappahannock, may have been carried to Virginia in a ship under the English flag, but when, where, and how they had been obtained by the English would form an interesting bit of history.

KERAHOCAN

A village bearing the name of Kerahocak is shown on the 1624 map several miles above Pissaseck. It stood on the left bank of the Rappahannock opposite Port Tobago and Green Bays, probably about the position of Greenlaws Wharf, which is visible in the aerial photograph, plate 10, and is also indicated on figure 5. Here as elsewhere,

³⁹ Quoted by Nesbitt, *op. cit.*, pp. 101-102.

fragmentary pottery, arrowpoints, and other artifacts have been collected.

Three specimens found a few years ago⁴⁰ a short distance above the wharf are illustrated in plate 9, figure 2. They were discovered several feet below the surface, not far from the river bank, and may have been associated with a burial. All are finished objects with edges smoothed from use.

Specimen at left is an unusual form and well chipped. The material is dark rhyolite with many small phenocrysts of quartz and feldspar.

Specimen at right is made of grayish quartzite, probably derived from a pebble found nearby. The edges are greatly worn, and the entire surface appears smooth from long use.

Specimen at bottom is a piece of exceptional interest. It is made of fine-grained rhyolite, with flow structure, of a grayish color. As viewed in the photograph the right lower edge, near the point, reveals the effect of much use, being worn to a greater degree than is any other part of the surface. It had evidently been mounted and used as a knife or dagger, with the left end, for a distance of several inches, inserted in a handle. Length 8 inches. The surface is only slightly altered and in this respect resembles that of the two specimens *c* shown in plate 3. The rhyolite was probably derived from a quarry in South Mountain, south of the Susquehanna, in Pennsylvania.

NANDTANGHTACUND

As previously mentioned, this is the name of a large village that appears on the 1624 map. It is placed on the right, or south, bank of the Rappahannock, on the shore of a large bay, the early Indian name of which has not been preserved but which is now known as Port Tobago or Port Tobacco Bay. Just below the site of the village, which is indicated by a "Kings howse", is the name of a smaller settlement which may have been part of the larger village.

Nandtanghtacund⁴¹ was evidently seen by Captain Smith late in December 1607, or early in January 1608, while he was held captive by the Indians and before he was taken to Powhatan at Werowocomoco. He was conducted to many native villages and, as one narrative states (p. 398):⁴²

they led him to the *Youthtanunds*, the *Mattapanients*, the *Payankatanks*, the *Nantaughtacunds*, and *Onawmanients* upon the rivers of *Rapahanock*, and *Pa-*

⁴⁰ Now in the private collection of F. M. Aldridge, Fredericksburg, Va.

⁴¹ The spelling of names often differed in the text from the forms appearing on the map; the latter is followed in the present article unless quoted literally.

⁴² Writings of Capt. John Smith. Arber ed.

tawomek; over all those rivers, and backe againe by divers other severall Nations, to the Kings habitation at *Pamaunkee*: where they entertained him with most strange and fearefull Conjurations.

This was before the exploration of the Rappahannock by the colonists during the summer of 1608 and may explain the presence of certain names on the map issued in 1624.

Traces of a very extensive settlement, a site that had been long frequented or often occupied, have been encountered on the eastern shore of Port Tobago Bay, where much material, including fragmentary pottery, is to be found scattered over the surface of a wide area extending eastward to the marsh bordering Green Bay. This was the site of ancient Nandtanghtacund, later occupied by the Porto-

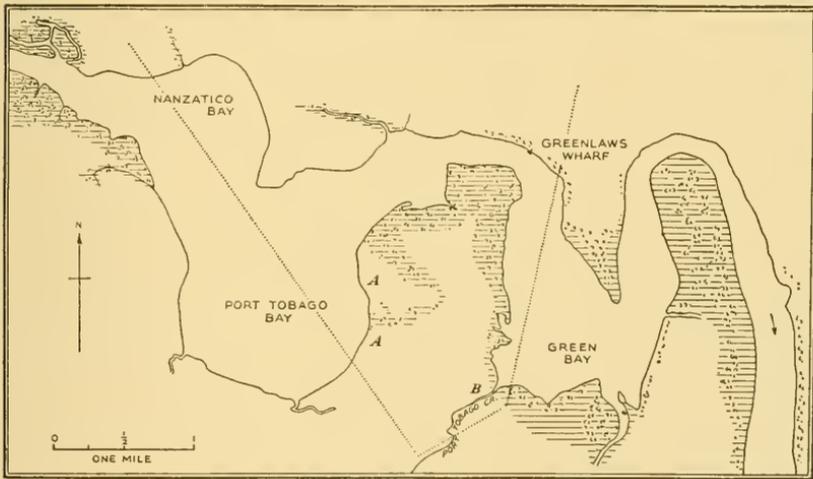


FIG. 5.—Map indicating position of Nandtanghtacund, later Portobago village. The area included within the dotted lines is shown in the aerial photograph, plate 10.

bacco, which is so clearly shown in the aerial photograph reproduced in plate 10, and indicated on the map, figure 5.

Nandtanghtacund was a settlement of importance during the days of Indian occupancy of the valley, but as it lay far beyond the frontier of the colony until after the middle of the seventeenth century it may have been seldom visited by the English before the native population had become greatly changed from what it was in 1608, at which time Smith referred to "Nantaughtacund having 150 men", indicating a total population of approximately 700.

In October 1669 "An act ffor destroying Wolves" became necessary in the colony. This read in part: ⁴³ "It is enacted that the Indian

⁴³ Hening, op. cit., vol. 2, p. 275.

tributaries be enjoined and assessed to bring in a certain number annually", and in the list that followed, in Rapahanock County, were first the Portobaccoes having 60 "Bowmen or hunters", who were assessed 12 heads; and secondly the Nanzcattico and Matthehatique who together had 50 men and were assessed 10 heads. The Portobaccoes are assumed to have occupied the site of ancient Nandtaughtacund, with the Nanzcattico living on the opposite side of the river. The position of the Portobacco village is shown on the Herrman map, issued in 1673, a detail of which is reproduced in figure 2.

Rappahannock County was created in 1656, at which time it extended on both banks of the river, but in the year 1692 it was divided, and that portion that stood on the right bank became Essex County and that on the north, or left, bank, Richmond County. Caroline County was formed in 1728 and included part of Essex County. Tobago or Tobacco Creek, from the southwest shore of Green Bay, became the boundary between Essex County on the east and Caroline County on the west; consequently the greater part of the site now being considered is just within Caroline County.

Another reference to the villages is found in a document that was prepared about 30 years after the appearance of the Herrman map. It occurs in a communication to the Board of Trade in London, dated Williamsburg, Virginia, July 18, 1702.⁴⁴ The principal rivers of the colony are mentioned, together with the names of the Indian tribes whose villages stood on their banks. Following Rappahannock River: "Indians and No. of.—Portobago or Nanzattico, 30 [men]; Wicocomoco." Thus at the beginning of the eighteenth century the remaining Portobago and Nanzattico were considered as one, and they probably occupied a single village.

Jefferson, in his references to the native tribes of Virginia,⁴⁵ included the Nantaughtacunds—thus following the spelling found in Smith's text—whose chief town had in 1608, so he believed, stood on Port Tobacco Creek in Essex and Caroline Counties. In this Jefferson clearly identified the ancient site with the association of the two names.

Being able to trace the settlement from the earliest days of the Colony, when primitive ways of life prevailed, it is gratifying to present a brief description of the village as it was in the year 1686, soon after contact with the English had caused many changes in the

⁴⁴ *In* The Virginia Magazine of History and Biography, vol. 1, no. 4, p. 363. Virginia Hist. Soc., Richmond, 1894.

⁴⁵ Jefferson, Thomas, Notes on the State of Virginia, Philadelphia, 1788.

customs of the native inhabitants. However, outwardly the group of bark-covered habitations, with their surrounding fields and gardens, and the dugout canoes drawn up on the sandy beach, did not differ in appearance from that of many small villages first seen by the colonists in 1607.

PORTOBAGO VILLAGE, 1686

A brief narrative of a visit to an Indian village on the bank of the Rappahannock, in Virginia, is contained in the journal of a young French Huguenot who traveled through the colony during the autumn and winter of the year 1686.⁴⁶

Durand reached Virginia in October 1686 and, after varied experiences in a new country where he had difficulty in making himself understood, continued northward through Gloucester and Middlesex Counties to the right bank of the Rappahannock. He then crossed the Rappahannock to Lancaster County, thence up the left, or north, side of the stream, through a country sparsely settled and with roads that followed Indian trails.

“And so we entered into the county of Rappahannock. . . . We went the next day to Portobago, for so is called Mr. Wormeley’s “rich plantations in this vicinity.” This was an extensive tract, with 8 or 9 houses. “I perceived also that about two thirds of these lands were in timber, and others in prairies which I was told, were the plantations that the Savages occupied 5 or 6 years ago. Three of these Savages came to visit us as soon as we arrived, they brought him two large wild turkeycocks and one tame one, the wild ones weighed about 40 pounds apiece. We saw their village on the other side of the River, and the next day having expressed a wish to see them at home, Mr. Wormeley ordered three horses sent over the water.” That afternoon they crossed the river to the south, or right, bank where the Indian village stood, and having mounted “rode

⁴⁶The title page of the small book, in French, does not reveal the name of the author; however, it is stated in the text that he was a native of Dauphiné and a member of the Huguenot family of Durand. The title page reads: *Voyages d'un Francois, Exilé pour la Religion, avec Une Description de la Virgine & Marilan dans L'Amerique. A La Haye, Imprimé pour l'Autheur, 1687.*

The volume, with the exception of the part treating of the Indian village which is now translated and presented, was privately printed in English by Fairfax Harrison, 1923.

⁴⁷Ralph Wormeley (1650-1701), of Rosegill on the lower Rappahannock, where Durand had remained a few days. He was a burgess from Middlesex in 1674, advanced to the Council in 1677, and Secretary of the colony from 1693 until his death.

through all lands on that side of the river, which were greater in extent than those on the north side where we were lodged . . . Having explored all of this region we went to the Indian village."

The Indian settlement which had been seen from the left bank of the river when looking across the stream is thought to have stood on the eastern shore of Port Tobago Bay, on the site of ancient Nand-tangtacund, from which it may not have differed greatly in appearance. Durand's brief description of the village and its people, as they were in December 1686, just two and one-half centuries ago, follows:

These Savages have rather pretty houses made of tree bark the walls as well as the roofs, so well put together with thongs of deerskin that neither rain nor wind disturb them at all. They are a people darker than the Gipsies (Egiptiens) we have in Europe. They mark their faces with cuts in the shape of a snail shell, in which they put powder, and thus they are marked for life.⁴⁸

The women of the house wear only a deerskin to cover their least decent parts, in winter they wear the hairy side next the skin, and in summer put skin to skin. They build their fire in the middle of the house, their beds around it they inter-weave a certain strong grass which they find along the river resembling straw,⁴⁹ and they do it on four little forks (quatre petites fourches), these serve them for seats to sit upon.

In the village the men wear only a wretched shirt of white or blue cloth, and from the time they put it on they never take it off, it falls off of them in tatters, for they never wash anything. Aside from the deerskin the women are entirely naked the rest of their bodies, their little children completely naked, no matter how cold it is. The men do nothing except hunting and fishing, the women raise Indian corn (Bled Sarrasin) which is common among them, any one takes it who needs it.⁵⁰ They make also pots and vases from earth and pipes to smoke, the Christians buying their pots or vases fill them up with Indian Corn

⁴⁸ This refers to tattooing, but to what extent it was practiced by the people of the Rappahannock is not known. From Durand's statement it may be inferred that he had seen both men and women who had followed the custom. But Smith did not mention men when he wrote some years before; he stated (op. cit., p. 66): "They adorn themselves most with copper beads and paintings. Their women some have their legs, hands, breasts and face cunningly imbrodered with diverse workes, as beasts, serpentes, artificially wrought into their flesh with blacke spots."

⁴⁹ A sedge, *Scirpus americanus* Pers. Quantities of this grow in shallow water near the banks of the river.

⁵⁰ This is rather vague. Adair (History of the American Indians, London, 1775), who wrote of the tribes farther south, stated that (p. 430): "Formerly, the Indian law obliged every town to work together in one body, in sowing or planting their crops; though their fields are divided by proper marks, and their harvest is gathered separately . . ." William Bartram (Travels through North and South Carolina . . . London, 1792), referred to the same customs in these words (p. 510): "In the spring, the ground being already prepared, on one and the same day, early in the morning, the whole town is summoned, by the sound of a conch shell, from the mouth of the overseer, to meet at the

and that is the price,⁵¹ they all smoke as well as the men, but they do not raise any tobacco, it is given them in exchange for game or fish.⁵²

They marry among themselves but it is only to avoid confusion among the children, for as soon as a young man takes a wife he builds a little house, leaves his father and mother and retires to it. They have some knowledge, but a very imperfect knowledge, of the true God, they believe that he is creator of all that they see, and of the growth of what is necessary to life, but that he does not lower himself so far; that the demons which are inferior to him were created for that purpose, and so they fear them because they are from time to time tormented by them. They have no other ceremony in their marriages unless it be the assembling of the village, and the man having chosen she whom he wishes to take gives her a roe's foot or a deer's, and she gives him an ear of corn, which signifies that the husband will keep the house provided with meat and the woman with corn.⁵³

The Ministers of this region take no pains to convert them to Christianity and instruct them, although the greater part of them know how to speak English. When we left them they made a present to Mr. Wormeley of a dozen deerskins, and to Mr. Parker and to me a handful of pipes each.

public square, whither the people with their hoes and axes; and from thence proceed to their plantation, where they begin to plant, not every one in his own little district, assigned and laid out, but the whole community united begins on one certain part of the field, where they plant on until finished; and when their rising crops are ready for dressing and cleansing, they proceed after the same order, and so on day after day, until the crop is laid by for ripening. After the feast of the busk is over, and all the grain is ripe, the whole town again assemble, and every man carries off the fruits of his labour, from the part first allotted to him, which he deposits in his own granary; which is individually his own." But a large crib was provided in the town in which grain was placed, voluntarily, and in such quantity as the individual chose, which served as "a public treasury . . . and to which every citizen has the right of free and equal access, when his own private stores are consumed." Durand may have known of a similar custom prevailing at Portobago village.

⁵¹ Evidently the value of the corn that a vessel would hold was the accepted value of the vessel itself. As previously recorded, an act passed the Assembly in June 1676 that allowed the English to obtain various articles from the Indians, mentioning "canoes, bowles, matts or basketts, and to pay the said Indians for the same in Indian corne, but noe other commodities."

⁵² *Nicotiana rustica* has been identified as the plant formerly raised by the Indians of Virginia. Discussed by W. A. Setchell in Amer. Anthropol. vol. 23, no. 4, 1921.

⁵³ Adair (op. cit., pp. 139-140) referred to this ceremony: "When the bridegroom marries the bride, after the usual prelude, he takes a choice ear of corn, and divides it in two before witnesses, gives her one half in her hand, and keeps the other half to himself; or otherwise, he gives her a deer's foot, as an emblem of the readiness with which she ought to serve him: in return, she presents him with some cakes of bread . . . Formerly, this was an universal custom . . ." However, Adair was writing of conditions and customs in the country far south of Virginia and many years after Durand visited the village on the Rappahannock in 1686.

Since it was already dark we called the boat to take us away, because we needed considerable time, the River being very wide, for it carries even in this place vessels of six tons, although distant 30 leagues from the sea.

The small Indian village, occupied in December 1686, is thought to have stood on the eastern shore of Port Tobago Bay, the region designated A on the map, figure 5, and so clearly shown in the aerial photograph reproduced in plate 10.

MATERIAL FROM THE SITE OF NANDTANGHTACUND

It is known that during past years innumerable arrowpoints and other small flaked objects, stone implements and weapons of many forms, as well as quantities of fragmentary pottery, have been recovered from the site of the ancient village. But all does not belong to the same period of occupancy; some specimens are thought to be far older than others. Much may even now be found, revealed by the plow as the surface is gradually lowered or when the bank facing the water falls away. As a result of constant plowing and cultivation of the land through generations the pottery has been reduced to small fragments and many of the stone objects broken. Even in this condition, however, all prove to be of interest.

In the endeavor to show examples of different types of objects that have been recovered from the area, several specimens found some years ago⁵⁴ have been included and described with others collected during recent visits to the site. Nevertheless, it is realized that few of the many forms that would have been encountered in the village are included in the present sketch. Examples illustrated in plates 11, 12, and 13 will be briefly described:

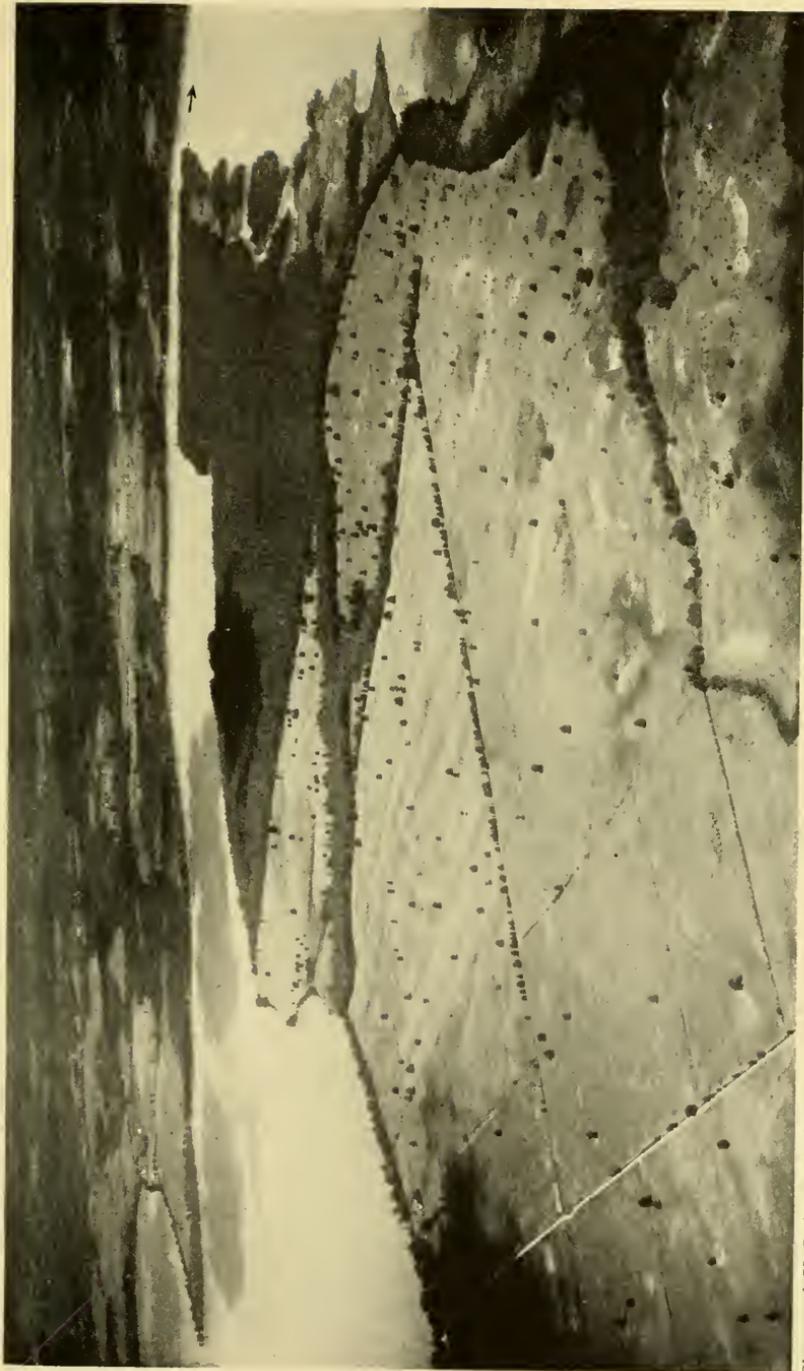
Plate 11.—Specimen *a* is a small axe or weapon, chipped and deeply weathered. Material, a diabasic rock. This is attributed to an early period of occupancy that preceded, possibly by centuries, the historic village.

Specimen *b*. One of several similar celts found on the surface near Port Tobago Creek, area B on map, figure 5. Thick, oval in section, smoothed and polished through use. Material, a very dark, greenish diabase.

Specimen *c*. Double-edged implement, worn and polished. Material, diabase.

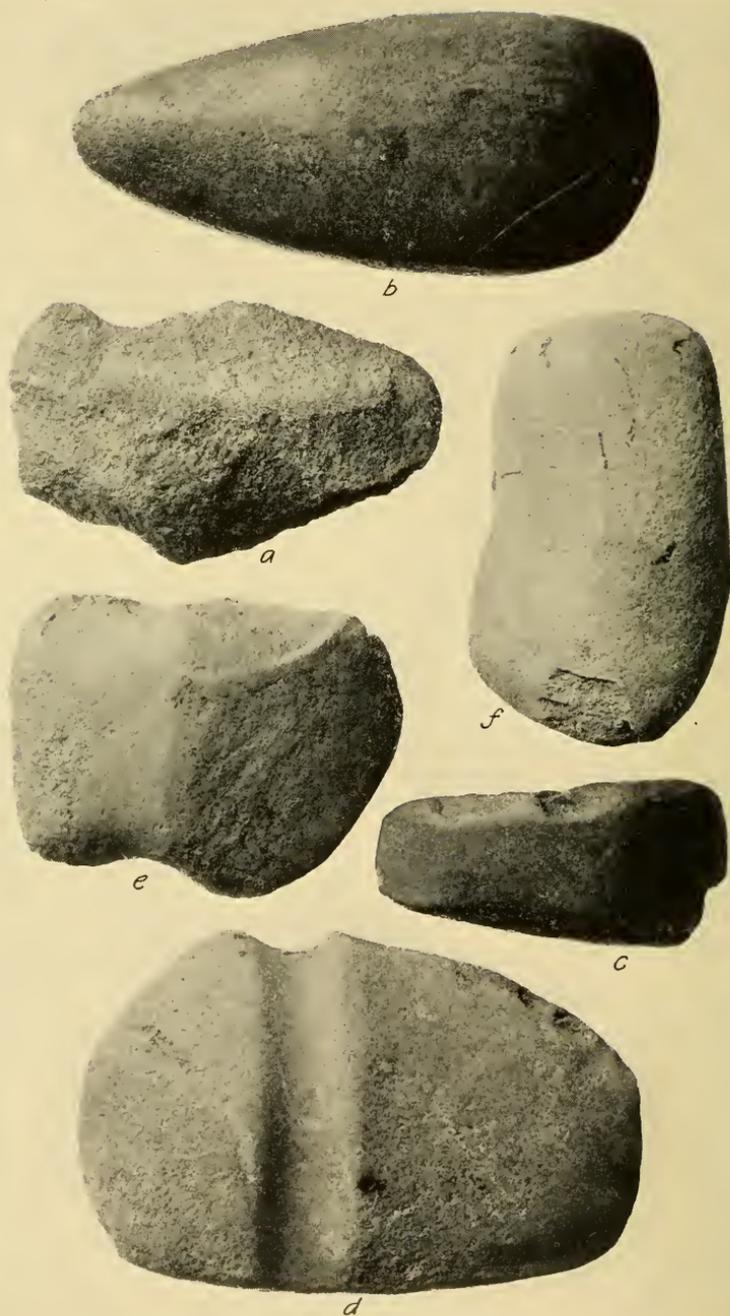
Specimen *d*. Grooved axe, found on the surface near shore of Port Tobago Bay.

⁵⁴ Specimens *b* and *c*, plate 11, and *a*, plate 12, are in the collection of F. M. Aldridge, Fredericksburg, Va.



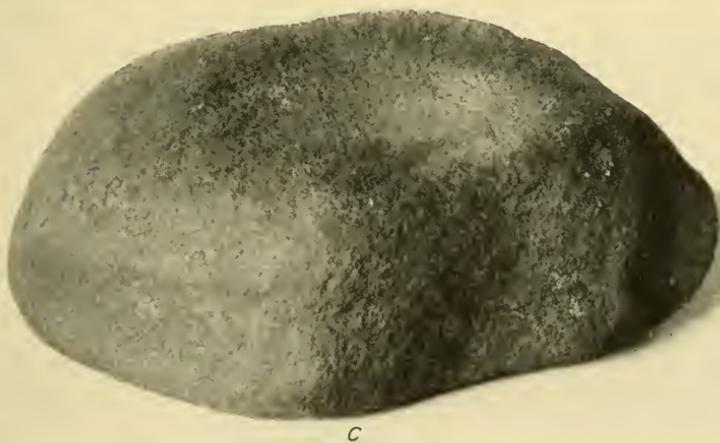
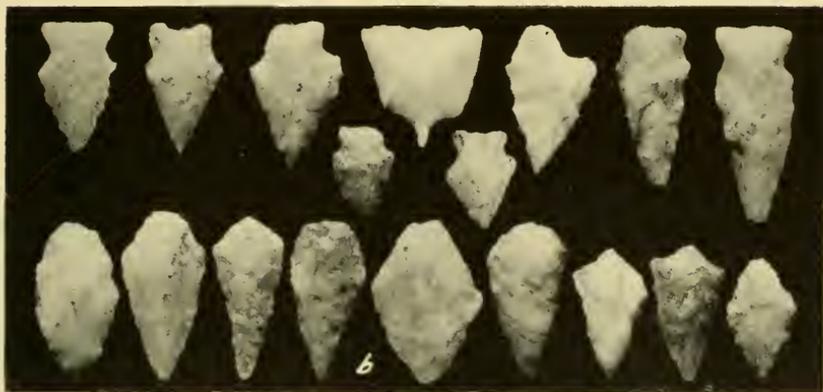
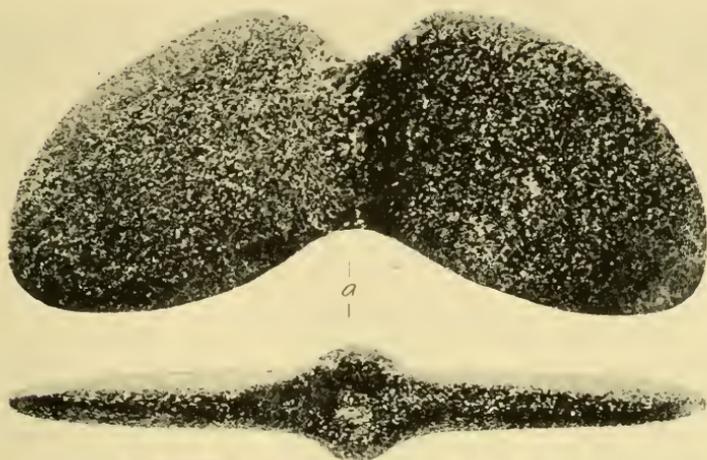
Photograph U. S. Army Air Corps.

SITE OF NANDTANGHTACUND WITH PORT TOBAGO BAY ON LEFT

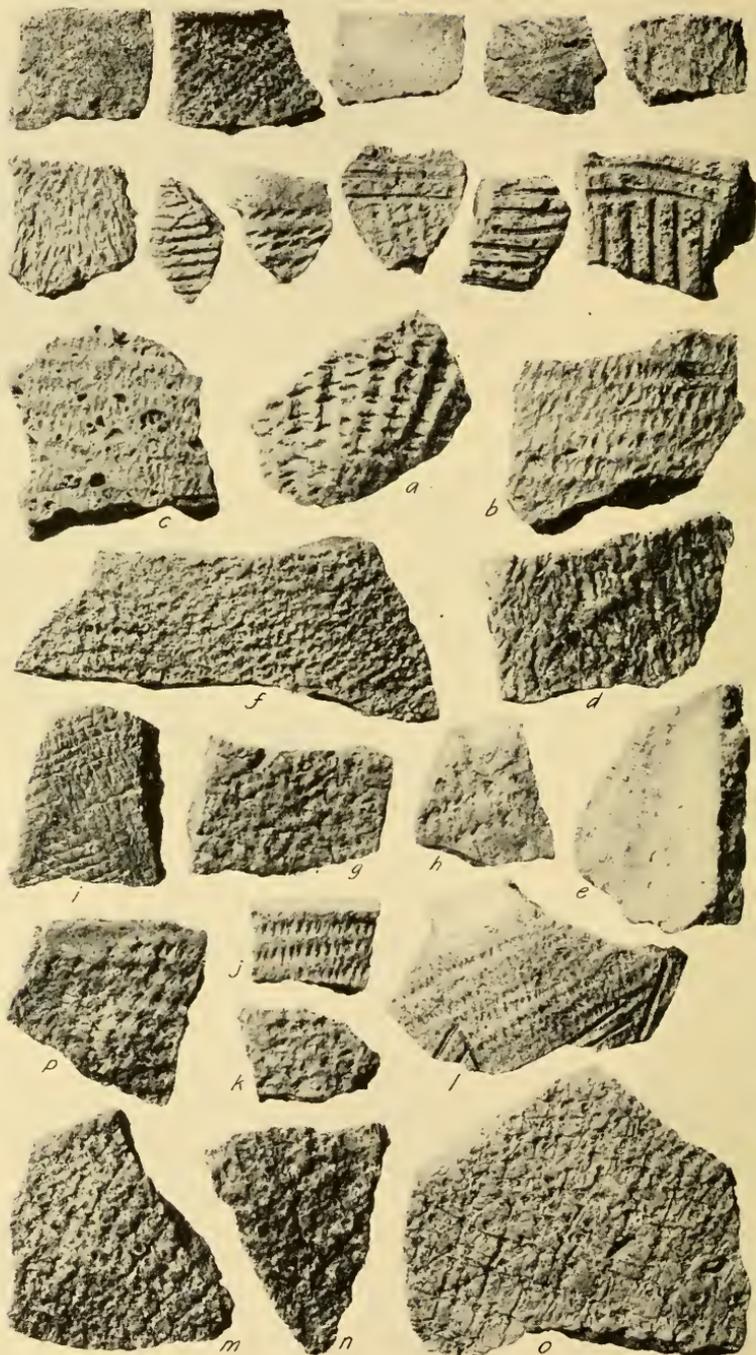


SPECIMENS FROM THE SITE OF NANDTANGHTACUND

$\frac{1}{2}$ natural size. *d*, U.S.N.M. no. 378083.



SPECIMENS FROM THE SITE OF NANDTANGHTACUND
a and *b*, $\frac{1}{2}$ natural size; *c*, $\frac{1}{4}$ natural size. *c*, U.S.N.M. no. 378084.



FRAGMENTS OF POTTERY FROM THE SITE OF NANDTANGHTACUND
 $\frac{1}{2}$ natural size. U.S.N.M. no. 378085.

Specimen *e*. Grooved axe, found on area B, near Port Tobago Creek. Fractured, but the edges were later worn smooth by use.

Specimen *f*. Hammerstone; a natural quartzite pebble with ends battered, showing evidence of use.

Plate 12.—Specimen at top is an unfinished banner stone of excellent workmanship. The surface, now greatly weathered, had been partly polished, and the perforation had been started. Material, a very hard greenish hornblende gneiss. Found on the surface near Port Tobago Creek.

The small white quartz objects shown in the plate include several characteristic forms, but the beautifully chipped specimen in the middle of the top row is unusual. It was found near the left bank of Port Tobago Creek, and within a short distance a similar specimen of the same size, made of a dark crystalline rock, was discovered.

A massive mortar, found on the surface near the shore of Port Tobago Bay, is shown at the bottom of the plate. Material, a dark, reddish brown coarse sandstone. It is between 4 and 5 inches in thickness and about 12 inches in length.

POTTERY

Twenty-seven fragments of earthenware are illustrated in plate 13, of which number 22 were discovered near the shore of Port Tobago Bay, many being found along the face of the bank that rises from 5 to 7 feet above the gravelly beach. The remaining 5 pieces, including the first, third, and fifth from the left in the top row, and specimens *c* and *g*, were found on the surface near the left bank of Port Tobago Creek, the area designated B on the map (fig. 5).

It is evident that the shoreline of the bay has changed during the two and one-half centuries that have elapsed since the site was visited by Durand. The waters of the bay have encroached upon the land then occupied by the village, and consequently the ground that now forms the shore may, in 1686, have been far back from the water.

Numerous pieces of pottery, stone implements, and other objects of Indian origin, have been found in the water some distance from the bank, and it is within reason to think that similar material occurs farther out, in deeper water, where it had been deposited when the soil was washed away. Therefore the 22 specimens shown in plate 13 came from a part of the settlement that had been many feet from the shore. The surface extending to the edge of the bank has been cultivated for generations, which readily explains the fragmentary condition of the pottery. The larger pieces, however, were found on

the beach and in the face of the bank below the level where the earth had been disturbed by the plow.

The 11 specimens shown in the upper part of plate 13 reveal various kinds of surface decoration including the impression of a fabric, of twisted cords, and of another material, and deep lines. The fragments vary greatly in texture and are thought to have been made during different periods of occupancy. The five pieces forming the top row are bits of rims of vessels and may be described briefly, beginning at the left:

1. Coiled ware. Tempering, crushed quartz.
2. Coiled ware. Tempering, sand or crushed quartz.
3. No evidence of coils. Clay contains a quantity of fine sand which was probably natural. Vessel is a very light yellow with top or rim flat. Thickness at top $5/16$ inch.
4. Coiled ware. Tempering, small amount of crushed quartz, and evidence of crushed shell which has decayed and disappeared, causing small cavities to remain.
5. No indication of coils. Much very fine sand mixed with the clay. Vessel of light color.

Second row, beginning at left:

1. No trace of coils. Clay contains much fine sand or crushed stone. Rather fragile with surface weathered a light gray.
2. No trace of coils. Tempering, sand or crushed stone.
3. No evidence of coils. Very dark inside with surface weathered light gray. Tempering, coarse sand.
- 4, 5, 6. Three pieces similar to others found higher up the Rappahannock opposite the large island at the falls.

When describing the specimens found opposite the island it was suggested that a vegetal substance had served as the tempering. This belief had been suggested by the presence in one piece of small cavities filled with particles of carbon which, when leached away, would have caused the porous condition of the ware. However, the occurrence of a piece of shell, $\frac{1}{4}$ inch in width, exposed in the middle of the edge of the largest of the 3 fragments, at right end of the second row, proves conclusively that crushed shell had been employed as a tempering material, either solely or in conjunction with some other substance, all traces of which have disappeared. The pitted surface, and the cavities throughout the ware, resulted from the disappearance of the tempering material, whatever it may have been.

The indented lines on the surfaces of the fourth and fifth specimens from the left were formed by some hard, smooth, and very regular object that was impressed upon the plastic clay before the vessel was fired. The lines on the fifth example are sharply defined and reveal a median ridge extending the entire length. Several fragments of pottery bearing the same impressions were found on sites above the falls of the Rappahannock; it therefore appears to be a recognized form of ornamentation practiced by the potters of the region.

The fragments of pottery illustrated in plate 13 have been chosen from many pieces discovered on the site. The 16 specimens designated by the letters from *a* to *p*, inclusive, have been selected to determine as far as possible, with a degree of certainty, the form of basketry or type of fabric that had been impressed upon the plastic clay when the vessel was made. The pottery is shown one-half size, but the fabric and basketry that is revealed by the impressions is restored and drawn exact size. The letters attached to the drawings reproduced in figures 6 and 7 are the same as those on the specimens in plate 13 from which the impressions were derived. They may be described as follows:

Specimen *a*. Coiled ware. Tempering crushed quartz. A piece of exceptional interest, as it proves the use of a rigid basket in shaping a pottery vessel. This fragment came from near the base of the vessel as is indicated by the convergence of the warp elements. This is clearly shown in the drawing at top of *a*, figure 6. As the basket widened, additional warp elements were inserted, to be held together by what may have been a continuous coil of a more pliable material. The inside of the fragment is next shown with the line of contact of two coils of clay indicated by the broken line. Below is sketched a view of the fragment from above, with a bit of the basket, restored, pressed against the outer surface of the vessel. The convex surface of a coil which is exposed in the fragment is indicated in the drawing, looking from above.

Specimen *b*. No evidence of coil. Tempering, crushed shell or vegetal substance, all of which has disappeared. The impression of coiled basketry is clearly shown on the surface.

Specimen *c*. No evidence of coil. Tempering leached away, causing the ware to be very porous. The surface bears the impression of coiled basketry.

Specimen *d*. Coiled ware. No trace of tempering. The impression suggests a coarsely made matting, having a foundation of flat splints

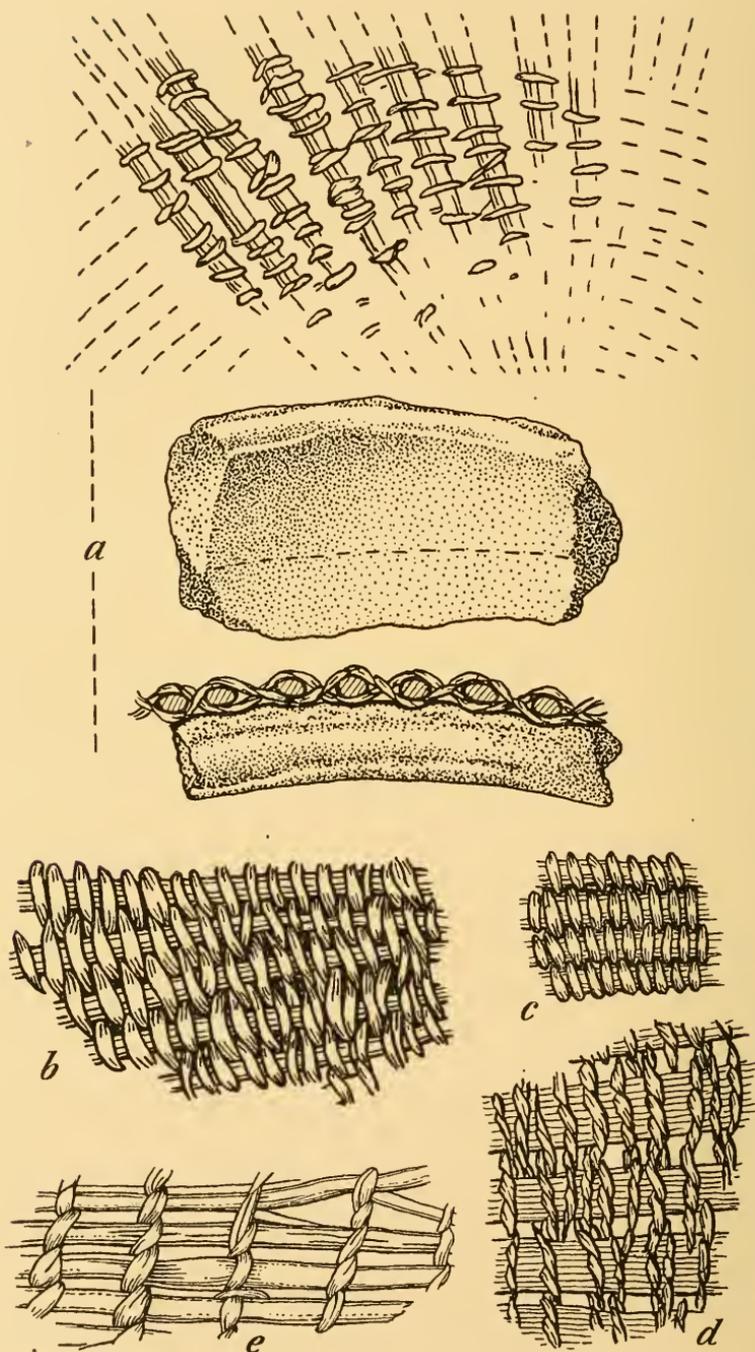


FIG. 6.—Specimens from the site of Nandtangtacund. Textiles derived from impressions on fragments of pottery. Natural size.

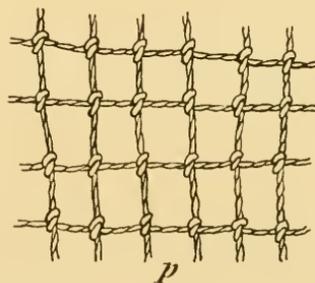
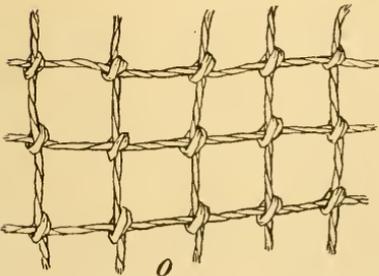
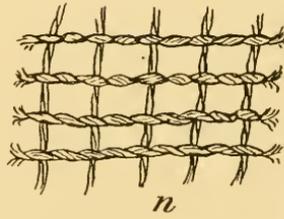
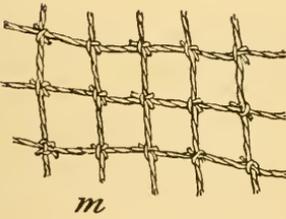
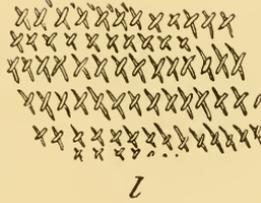
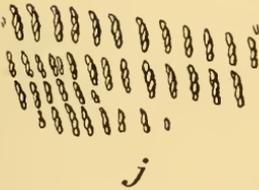
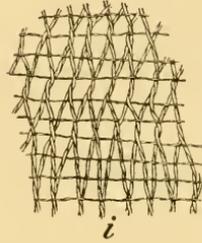
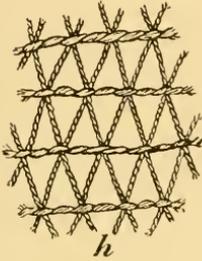
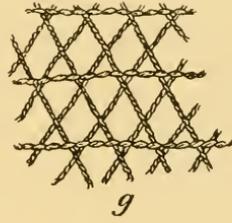
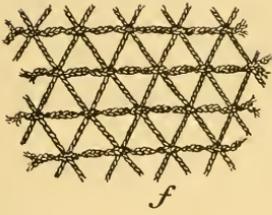


FIG. 7.—Specimens from the site of Nandtanghtacund. Textiles derived from impressions on fragments of pottery. Natural size.

or of reeds that had become crushed and flattened, held together loosely by twisted cords. An example of twined weaving.

Specimen *e*. No indication of coil. A small amount of fine sand mixed with the clay may be natural. It has not been possible to determine the type of vessel of which this is a fragment. The surface shown in the photograph is part of the inside of the vessel, and is very dark and smooth. On the right is the outer wall on which the impression appears. The outer surface is a yellowish brown color. Plain twine weaving.

Specimen *f*. Coiled ware. No evidence of tempering. Very hard. The impression on the surface was made by a piece of fabric of twined openwork weave, the unusual detail of which is that the horizontal cords appear to have been plaited rather than twisted.

Other examples of braiding or plaiting have been recorded. Holmes⁵⁵ illustrated a fragment of pottery from Georgia on which the decoration had been formed by impressing plaited cords upon the plastic clay, forming parallel straight lines. And during recent work in Manatee County, Fla., "charred fragments of braided and woven hair" of beautiful workmanship were found in a burial pit discovered in a mound not far from Little Manatee River.⁵⁶ Consequently, braiding such as is represented on the small piece of pottery from the Rappahannock site, although rarely encountered, is not unknown.

Specimen *g*. Coiled ware. Tempering, a small amount of crushed stone or sand. The surface bears the imprint of an example of twined openwork weave, having a crossed warp, differing in this respect from *f*.

Specimen *h*. Coiled ware. Clay impure and contains much fine grit. The impression of a fabric similar to that shown on *f* occurs on the surface, but the cords were twisted, not plaited.

Specimen *i*. No evidence of coil. Tempering, a quantity of fine sand or crushed quartz. The impression on the surface was formed by a piece of openwork fabric less regular in weave than the majority of examples and made of extremely fine threads.

Specimen *j*. Coiled ware. Much fine grit mixed with the clay. This is a fragment of the rim of a vessel. The impression on the surface suggests coiled basketry, with twisted cords forming the woof passing over and under a foundation made of some firm but flexible material.

⁵⁵ Holmes, W. H., Prehistoric textile fabrics of the United States derived from impressions on pottery. *In* 3d Ann. Rep. Bur. Ethnol., p. 423, 1885.

⁵⁶ Stirling, M. W., Smithsonian archeological projects conducted under the Federal Emergency Relief Administration, 1933-34. *In* Ann. Rep. Smithsonian Inst., 1934, p. 381, 1935.

Specimen *k*. No indication of coil. No tempering. The impression on the surface was made by a rather closely woven fabric formed of coarse, loosely twisted cords, probably bison hair. In texture this resembles charred fabrics found in mounds in the Ohio valley, as well as work of historic tribes.⁶⁷

Specimen *l*. Coiled ware. No evidence of tempering. The impression on the surface is very unusual and may have been made by either a basket or a piece of woven fabric. Two groups of woof elements, which may have been twisted cords, crossed as they passed over and under parallel warp. The straight lines, which were added after the impressions had been produced, are similar to those on the fourth and fifth specimens on the second row already mentioned.

Specimen *m*. Coiled ware. Tempering, small amount of sand or crushed quartz. At the crossing of many of the cords forming the net meshes there is a short depression in the clay, made when it was in a plastic condition. This is difficult to explain by any knot. It may not have been a part of the net proper but fragments of small feathers that had been attached to the meshes, an art practiced by the Indians of Virginia as well as by neighboring and related tribes both north and south. An account of the Delaware⁶⁸ and their native arts during the years 1654-1656 sheds light on customs that may not have differed from those practiced by the Indians of the Rappahannock during the same years. Lindeström wrote in part when referring to their use of feathers (p. 221): "They also make very fine and beautiful quilts of painted bird feathers. In the first place they tie them with meshes like nets, yet very fine; then they fasten the feathers in the meshes, so neat and strong that not one feather can come loose from it; it would sooner go clear off." This was also translated "The feather would sooner break off than come loose." Were small pieces of quill to remain in the knots of the net, the impression in clay would resemble that on the surface of *m*.

Specimen *n*. No evidence of coil. Tempering, crushed shell or vegetal substance, all traces of which have disappeared. Very hard. The impression on the surface was made by an open, netlike fabric. This was made by holding a single woof element between two strands

⁶⁷ Compare Holmes, W. H., Prehistoric textile art of eastern United States. *In* 13th Ann. Rep. Bur. Ethnol., p. 36, pls. 6, 7, 1896.

⁶⁸ Lindeström, Peter, *Geographia Americae* with an account of the Delaware Indians, based on surveys and notes made in 1654-1656. Translated from the original manuscript with notes, by Amandus Johnson. The Swedish Colonial Society, Philadelphia, 1925.

of the warp which were twisted as they advanced with the woof between.

Specimen *o*. No indication of coil. Tempering, small amount of shell or vegetal substance, leached away, causing cavities. The very distinct impression of a coarse net appears on the surface.

Specimen *p*. Ware similar to *o*, but having the impression of a finer mesh. Part of the rim of a vessel.

Thus it has been possible, by means of impressions on bits of pottery, to gain some knowledge of the art of weaving and textile making as practiced by the inhabitants of the ancient village.

SOAPSTONE

Many fragments of soapstone vessels are encountered on the site, and it is evident that the material was used extensively by the people

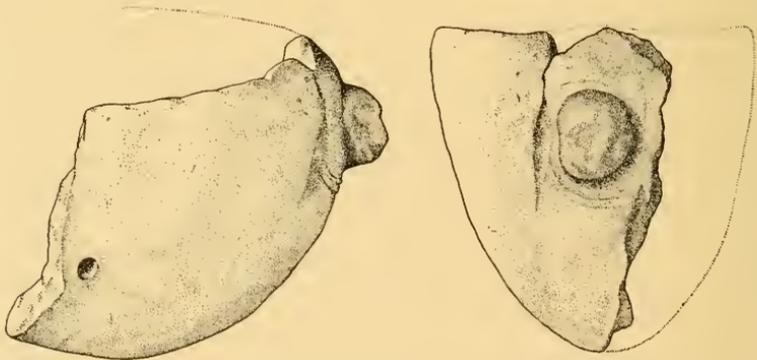


FIG. 8.—Fragment of a steatite vessel from site of Nandtanghtacund.
 $\frac{1}{3}$ natural size. U.S.N.M. no. 378093.

of the village. Here, as at Pissaseck, vessels made of soapstone may have been used as late as the beginning of the seventeenth century.

The most interesting piece of any sort found on the site is a fragment of a steatite vessel. This was discovered partly embedded in sand at the edge of the water of Port Tobago Bay, near the position of the upper A on the map, figure 5. Two views of the fragment are shown in figure 8, one-third natural size. The specimen appears to have had a very narrow base—so narrow that it could not have stood in an upright position without support. One conical perforation near the edge indicated that it had been broken and the parts held together by cords before being lost or discarded. But the most unusual feature is the knob in the middle of the narrow end, and this, although greatly worn, suggests a human face or head, with lines on the surface of the bowl both above and below. Undoubtedly, a similar ornament or

handle was placed on the other end of the vessel in the same relative position. The greatest thickness of the wall is 1 inch, just below the knob. The entire surface, both inside and outside, is very smooth, resembling the surface of the rim fragment shown in plate 7, found at Pissaseck.

The villages of Pissaseck and Nandtangtacund were important centers of population at the beginning of the seventeenth century and so continued for some years after the settlement of the colony. The sites of both native settlements are very extensive, and it is evident that they had existed through generations, although the entire area of each as now recognized may not have been occupied at any one time. From year to year, with the return of the people to the villages, different places would be selected for the erection of their habitations, a custom that resulted in a very extensive tract showing evidence of having been occupied, thus causing the sites to appear to be those of very large, widely dispersed settlements. Such a moving about over a restricted area may have continued for a long period and readily explains the occurrence of varied types of objects in many localities.

The material found on the two important sites just mentioned may be considered characteristic of the region. It is known, however, that certain forms of artifacts that would formerly have been encountered are not represented in the collections illustrated, but the deficiency will be partly supplied by showing specimens from sites farther up the river which will be briefly described. Nevertheless, were it possible to create large, representative collections from other places on the banks of the Rappahannock above Pissaseck, there would be a marked difference in the appearance of the material as a whole, and some types that are numerous on one site would be lacking or seldom encountered on others.

ABOVE PORT TOBAGO BAY

The right bank of the Rappahannock, at and immediately above the beginning of Port Tobago Bay, is bordered by an extensive marsh. That the high ground adjacent to the marsh was once occupied by a native settlement is indicated by the presence of pottery, now reduced to very small pieces, scattered over the surface. Various stone implements may also be found, together with a few pieces of soapstone vessels. The extent of the occupied area could not be determined, but it may have been comparatively small.

Many of the shards discovered on the surface of the site are smooth, others bear the impressions of cords and textiles, but the majority are so worn that it is not possible to identify the kind of

material that had been impressed on the plastic clay. One fragment is a very hard, dark-colored coil ware, with no trace of tempering. The impression on this suggests that of a rather loosely woven basketry, with both warp and woof formed of firm material, not twisted cords. This is reproduced and drawn exact size in *a*, figure 9.

The wide mouth of Mill Creek is located on the right bank of the river about 2 miles above Port Tobago Bay. A mile or more from the river the creek is crossed by the main highway from Fredericksburg. A small camp site was discovered on the left bank of the creek immediately south of the road. Several argillite points and fragments of very coarse, net-marked pottery were found on the surface. The pottery appears to have belonged to not more than two vessels, and although worn and greatly disintegrated, several of the shards reveal

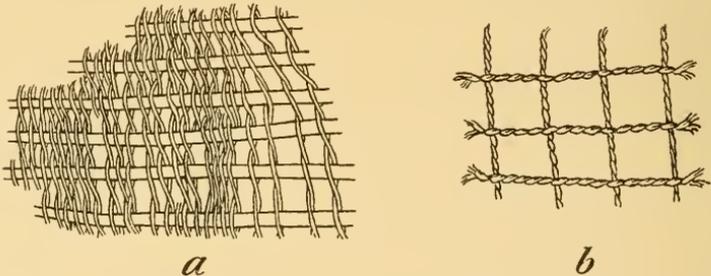


FIG. 9.—Textiles derived from impressions on fragments of pottery. *a*, from right bank of the Rappahannock near Port Tobago Bay. *b*, from camp site on Mill Creek 1 mile above its mouth. Natural size.

the impression of a net which resembles specimen *n* from Nandtanghtacund. This was made by the woof elements being held firmly between two strands which were twisted together as they advanced to form the warp. The net, as restored and drawn exact size is shown in *b*, figure 9. The argillite points are deeply weathered.

Traces of many small camps similar to the one just mentioned—camps of hunters away from the larger villages—could undoubtedly be discovered near springs and on the banks of streams throughout the wooded region.

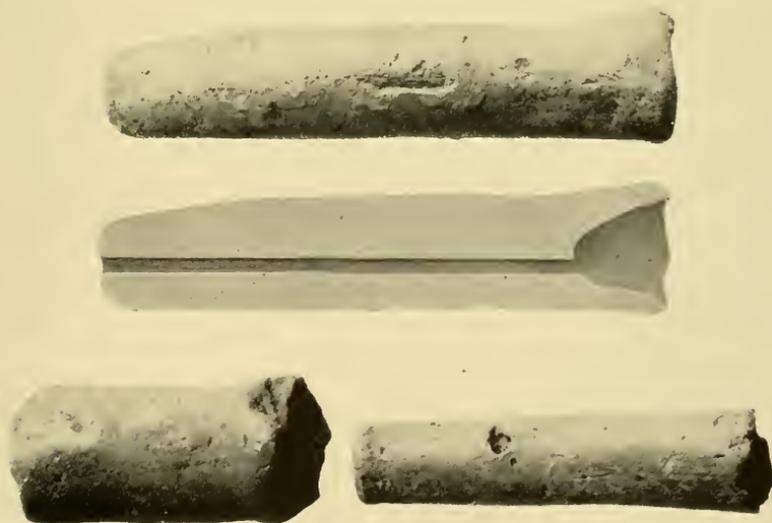
LEFT BANK OF THE RAPPAHANNOCK ABOVE PORT TOBAGO BAY

The names of two settlements appear on the 1624 map on the left bank of the Rappahannock a short distance above the deep bay later known as Port Tobago or Tobacco Bay. The first is Papiscone and just beyond is Assuweska. One of these is thought to have stood at the mouth of Chingoteague Creek, but it is not possible to determine



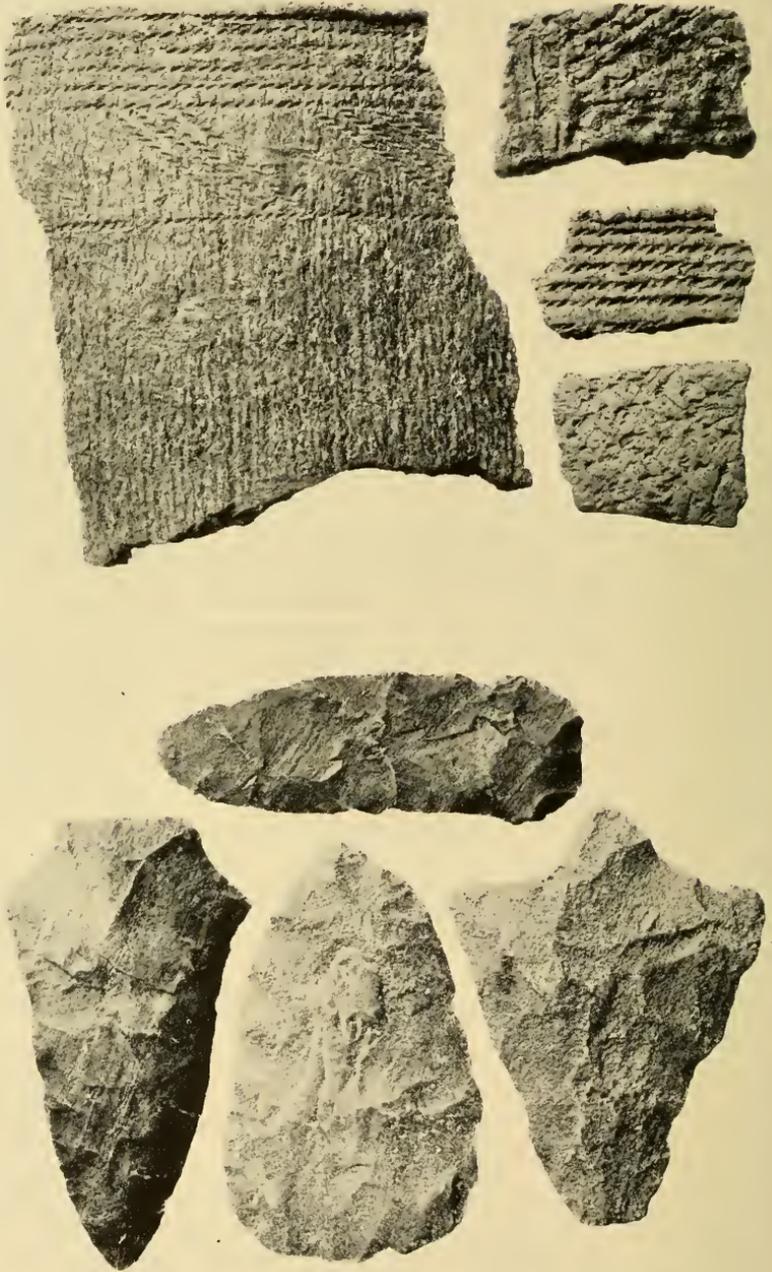
Photograph U. S. Army Air Corps.

1. NORTH OVER THE RAPPAHANNOCK SHOWING MOUTH OF CHINGOTEAGUE CREEK



2. PIPES FOR SMOKING. MADE OF CLAY. FROM SITE AT MOUTH OF CHINGOTEAGUE CREEK

Natural size. U.S.N.M. no. 378086.



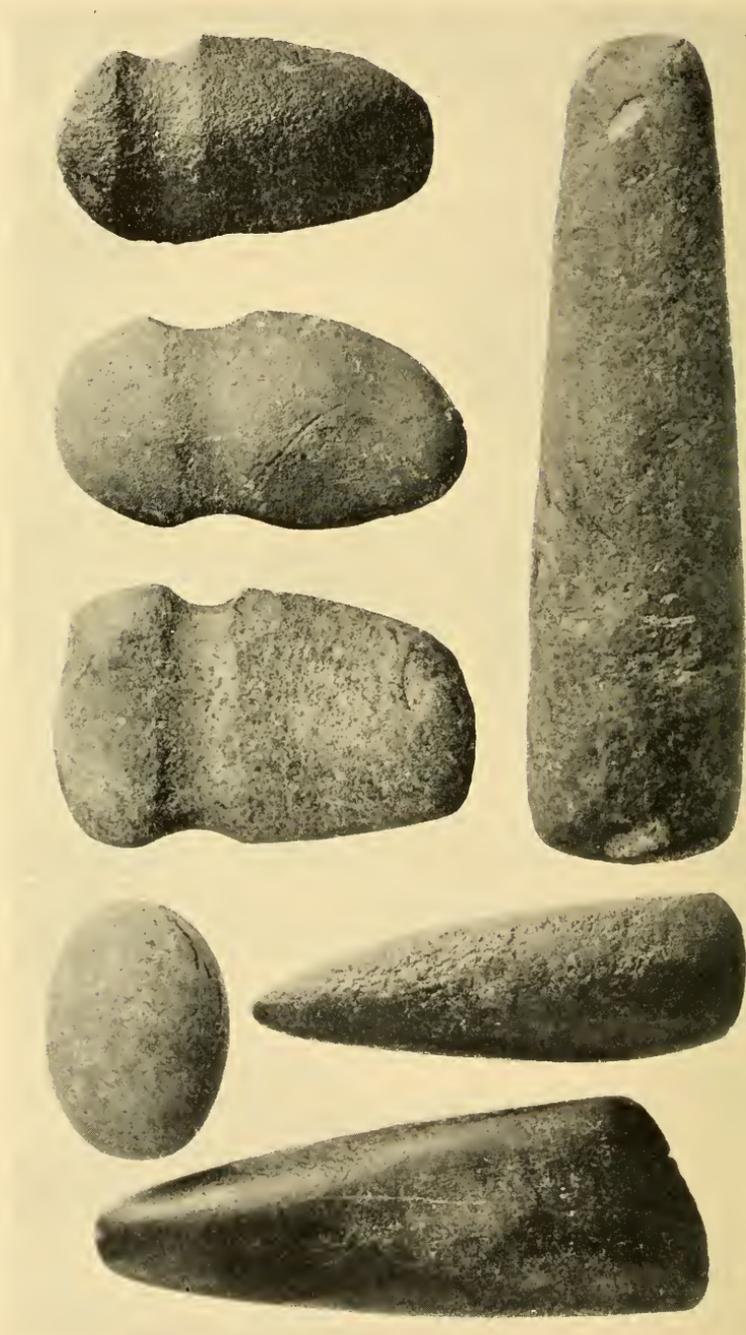
SPECIMENS FROM SITE AT MOUTH OF CHINGOTEAGUE CREEK
 $\frac{1}{2}$ natural size.



Photograph U. S. Army Air Corps.

NORTH OVER THE RAPPAHANNOCK

Cleve, on left bank, above arrow to right. Taliaferro Mount, on right bank, over arrow to left. Potomac River, near mouth of Potomac Creek, in upper right corner.



SPECIMENS FROM RAPPAHANNOCK SITES

Above, from Gay Mont. Below, from Cleve. $\frac{1}{2}$ natural size.

the exact⁶ position of either. Traces of a village have been discovered on the narrow tongue of land which extends upward from the junction of the two streams and which is bordered by the left bank of the river and the right bank of the creek. This is visible in the aerial photograph, plate 14, figure 1. Several large springs issue from the river bank, which rises in places more than 20 feet above the gravelly beach. The site commands a beautiful view of the winding valley, and as evidences of occupancy are encountered for a distance of more than a quarter of a mile, it may have been occupied and reoccupied for many years. It is known that a vast number of small chipped objects, also many larger specimens and quantities of fragmentary pottery, have been recovered from the site of the ancient village. Much may even now be found on the surface, but as the area has been cultivated for many years, the pottery has been reduced to bits, and few entire arrowpoints or objects of any sort are to be discovered.

Small tubular clay pipes have been found within a rather restricted area—just above the small arrow shown on the aerial photograph. One perfect and two fragmentary examples are illustrated in plate 14. All are made of clay without tempering, are of a light brownish color and very hard. The perforation, made when the clay was in a soft condition, had been produced by the insertion of a comparatively rigid, firm substance, probably a slender twig or stem of some plant.

The discovery of pipes in considerable numbers at once recalls the statement made by Durand that when leaving the Indian village of Portobago, to return to the Wormeley house on the north side of the river, he and another member of the party had received as a gift "a handful of pipes each." He had previously told that the women of the village were then making "pots and vases from earth and pipes to smoke." This was during the autumn of 1686, and it is within reason to believe that the pipes to which he then referred were similar to those now being considered. Consequently, this primitive form of pipe was made and used in the Rappahannock villages just two and one-half centuries ago. The bowls are so small that it is difficult to understand how the pipes could have been used unless the leaves of the plants were rolled and inserted in the opening, rather than being crushed and employed in the usual manner.

Additional material from the site is shown in plate 15. Although the pottery now found scattered over the surface has been broken into small pieces by the constant cultivation of the land for many years, larger specimens have been encountered exposed on the face of the river bank below the upper stratum of soil that had been disturbed by the plow. One such piece is illustrated in plate 15. This

large fragment is part of a vessel that measured approximately 11 inches across the rim, with the wall $\frac{1}{4}$ inch thick. The vessel had probably been about 15 inches in height, with a small, conical bottom. It is coiled ware, with a coarse sand tempering. The inner surface is crossed by many small, parallel grooves caused by the object or material used in smoothing the clay when the vessel was formed. The outer surface had first been marked by tightly twisted cords placed vertically, overlapping, and passing over the top of the opening, causing the edge to be very rough and irregular. Six single cords, parallel, form a band about 1 inch in width just below the rim. A single cord is placed parallel to these 1 inch below. Groups of four cords extend diagonally across the intervening space, the groups of four being about $1\frac{1}{2}$ inches apart. All had been impressed on the clay while it was in a plastic condition and before the vessel was fired. The impressions of the cords are easily distinguished in the photograph.

Three smaller fragments are shown to the right of the large specimen. The second bears the impressions of cords placed horizontally as on the large fragment, but the rim had been indented, or rather scalloped, by means of a heavy cord pressed at intervals into the clay. The ware is similar to the large fragment, and, like it, has a tempering of coarse sand. The specimen at the upper right bears the impression of a net over part of the surface, but on the left there are several vertical impressions that appear to have been made by matting or basketry. This combination suggests that a piece of net was placed against some rigid material before the impression was made in the clay.

The third of the small fragments bears the impression of a net, similar to specimens from Pissaseck and elsewhere.

A vast number of small shards were found scattered over the cultivated land, but only three were net-marked, the great majority being similar to the large piece first described.

Four examples of the larger chipped objects, found on the surface during past years,⁵⁰ are shown on plate 15. All are finished specimens with edges worn and smoothed from use. The knife, placed horizontally at the top of the group, is made of dark, brownish rhyolite as is also the large blade at the left. The second piece is made of yellowish quartzite, and that on the right is diabase with surfaces greatly altered. These were selected for illustration from a number of similar specimens as being typical examples of rather unusual material.

⁵⁰ Now in the private collection of A. J. Jones, of Jersey, King George County, Va.

AT MOUTH OF MILLBANK CREEK

Millbank Creek flows into the Rappahannock from the north between 3 and 4 miles above Chingoteague Creek. The present Millbank Creek is believed to have been shown on the Herrman map as Omoy Cr., the first large creek below the "Doogs Indian." Jiles Point, at the junction of the streams, extends between the right bank of the creek and the left bank of the river. The land facing the river is high, but on the other side it is lower and is bordered by a marsh through which the creek flows. The point of land, well protected by the water, is thought to have been occupied by one of the villages indicated on the 1624 map. Much fragmentary pottery and numerous arrowpoints may even now be collected from the surface, and mor-



FIG. 10.—Point resembling the Folsom type made of diabase. Found near mouth of Millbank Creek. Natural size. U.S.N.M. no. 378094.

tars, axes, and other large specimens are often found, all tending to indicate the location of an ancient settlement.

The most important piece known to have been discovered on the site is a Folsom point, made of dark gray flint, which has already been described.⁶⁰ It is a typical example of the eastern form and was found on the surface in a small field, at the extremity of the point of land, that slopes to the marsh bordering the creek. No similar specimen is known to have been found in the vicinity, but nearby, in the same field, was discovered a point made of diabase which closely resembles the Folsom type. This is shown, natural size, in figure 10. It is crude when compared with the first specimen, but, considering

⁶⁰ Literary Digest, June 9, 1934. Also in Bushnell, D. I., Jr., *The Manahoac Tribes in Virginia, 1608*. Smithsonian Misc. Coll., vol. 94, no. 8, pl. 13, Oct. 9, 1935.

the material of which it is made, it is doubtful if a better piece could have been produced. The surface is altered to a far greater degree than are the blades made of the same stone from Pissaseck illustrated in plate 4. The two specimens just mentioned are thought to have belonged to the same period of occupancy or to have been lost by the same nomadic bands.

The third field beyond the mouth of Millbank Creek is visible on the extreme right in the aerial photograph, plate 16. This is the lower part of Cleve, the old house having stood in the midst of the grove, near the river bank, a short distance to the left. Much broken pottery and innumerable objects of stone have been found on the surface of this field, which is just above the white arrow in the photograph. The two celts illustrated in plate 17 were found here. Both are oval in section, symmetrical, and are made of a hard, greenish diabase. The small hammerstone shown with the celts was found in the field nearer the mouth of the creek. It is a natural quartzite pebble battered at both ends.

The fragments of pottery are mostly small, few being more than an inch in length. One such piece bore the impression of a net, several were smooth, all others were cord-marked. The ware resembles in all respects that discovered near the mouth of Chingoteague Creek, on the same side of the Rappahannock several miles below.

CHECOPISSOWA

Much material has been collected from the surface of the fields bordering the right bank of the river, an area clearly shown in the lower left quarter of the aerial photograph reproduced in plate 16. It is part of Gay Mont. This was the locality of a large native settlement, and although it is not possible to be positive in the identification of the ancient sites, it may have been the village of Checopissowa, as indicated on the 1624 map.

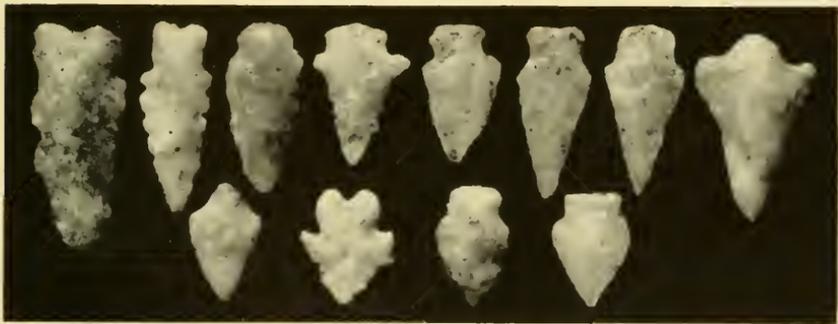
The three small grooved axes and the cylindrical pestle, the latter made of fine-grain quartzite, which are illustrated in plate 17, were found on this site near the river bank. Many of the smaller objects known to have been collected here, and which have been examined, are exceptionally well chipped and represent a variety of forms. The majority of the small pieces, including the projectile points, are made of white quartz.

Fragmentary pottery is plentiful, and many pieces bearing the impression of what is thought to have been rigid basketry are found intermingled with ware that obviously belonged to a recent period of



Photograph U. S. Army Air Corps.

1. East over the Rappahannock. Ancient village site to right of black arrow which points with the current. The Potomac River in the distance.



2. Above, from right bank of the Rappahannock north of Taliaferro Mount. U.S.N.M. no. 378087. $\frac{1}{2}$ natural size. Below, axe from below mouth of Dogue Run. $\frac{1}{2}$ natural size.



Photograph U. S. Army Air Corps.

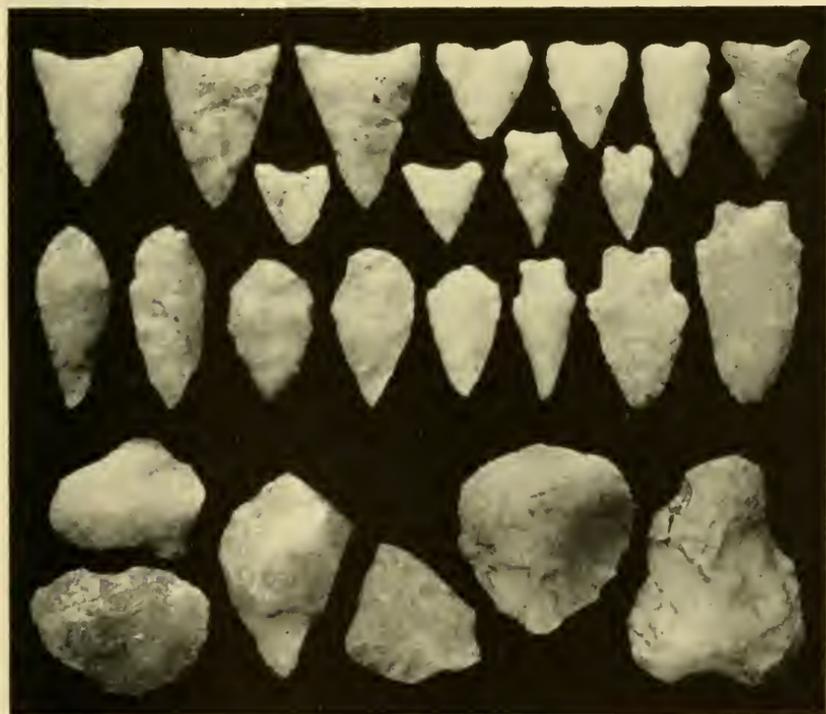
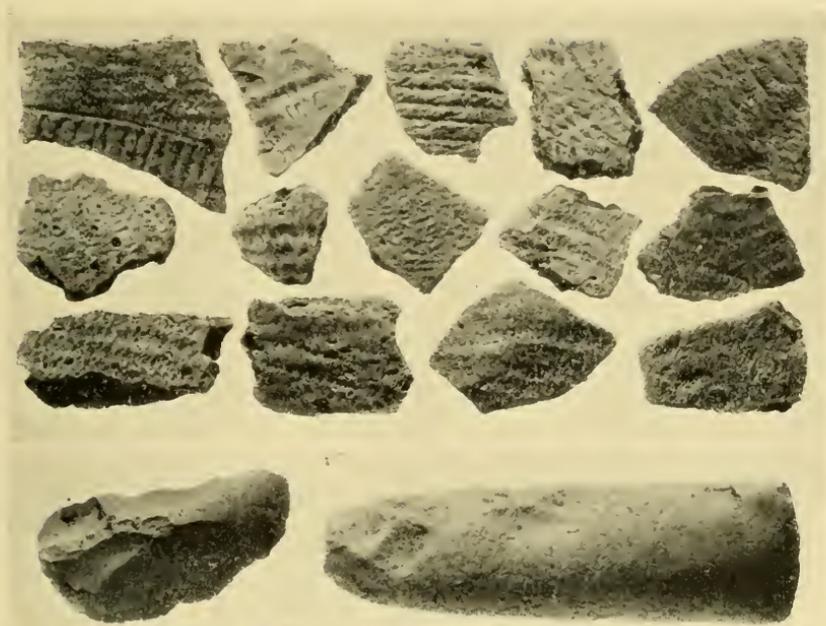
1. Looking across the site, up the valley of the Rappahannock, with Lamb Creek in foreground.



Photograph U. S. Army Air Corps.

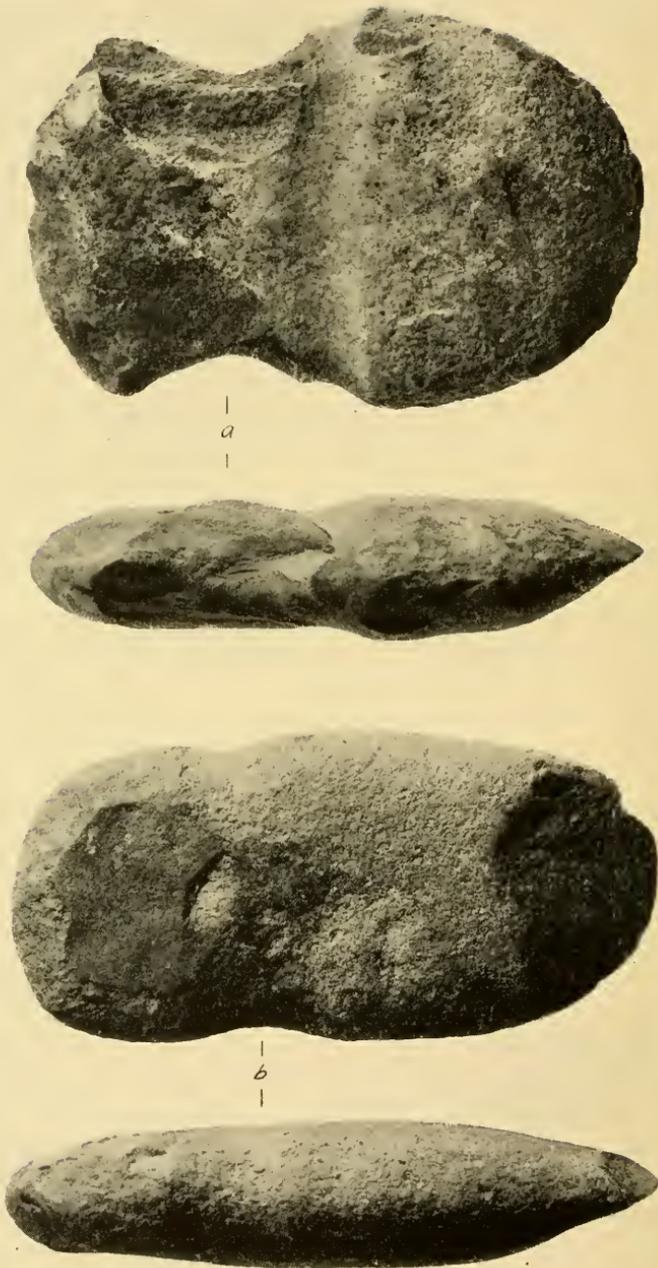
2. Junction of Lamb Creek and the Rappahannock.

SITE OF CUTTATAWOMEN



SPECIMENS FROM THE SITE OF CUTTATAWOMEN

$\frac{1}{2}$ natural size. U.S.N.M. nos. 378088-91.



TWO SPECIMENS, SHOWING RECHIPPING. FROM SITE ON LEFT BANK OF THE RAPPAHANNOCK, 1 MILE ABOVE MOUTH OF LAMB CREEK

$\frac{2}{3}$ natural size. a, U.S.N.M. no. 378092.

occupancy. Some vessels had been decorated with a roulette, and other shards are similar to the three illustrated on the right, second row, in plate 13. As a whole the pottery from this area differs from that discovered at Pissaseck, but resembles much of the ware found at Nandtantacund and at sites farther up the Rappahannock beyond the falls.

TALIAFERRO MOUNT

Again referring to the aerial photograph of the region, plate 16, Taliaferro Mount is on the right bank, heavily timbered, immediately above the white arrow which is pointing downstream. The mount rises abruptly from the water and is rather steep on the north, but slopes gradually to the south and west. This commanding spot was evidently occupied by the house of Robert Taliaferro, the same to which Lederer referred when he wrote:⁶¹

On the twentieth of August 1670, Col. Catlet of Virginia and my self, with nine English horse, and five Indians on foot, departed from the house of one Robert Talifer, and that night reached the falls of Rappahanock river in Indian *Mantapcuck*.

A few years later Beverley mentioned⁶² “*Tolivers* Mount, upon *Rappahannock* River”, as one of the elevations from which he had “view’d the Country all around over the Tops of the highest Trees, for many Leagues together.” It was evidently a place of renown and had been frequented by the Indians long before the coming of the colonists.

John Fontaine, who accompanied Governor Spotswood on his journey to the mountains during the summer of 1716, left Williamsburg November 9, 1715, for the German settlements on the Rappahannock above the falls.⁶³ Three days later they reached the home of Robert Beverley, “this Beverley is the same that made the History of Virginia.” There they remained until the 19th, and that day, so the journal continued: “About three we came to a place upon Rappahannock River, called Taliaferro’s Mount, from whence we had a feeble view of the Appalachian Mountains, and a fine view of the river, which is navigable for large ships and has several fine islands

⁶¹ Lederer, John, *The discoveries of . . .* Begun in March 1669, and ended in September 1670. London, 1672. Reprint 1902.

⁶² Beverley, Robert, *The history and present state of Virginia*, book 2, pp. 11-12, London, 1705.

⁶³ Journal of John Fontaine. *In* *Memoirs of a Huguenot family*, by Ann Maury. New York, 1853.

in it . . . We saw upon the river abundance of geese, ducks, and water-pheasants."

Although a " feeble view " of the high ground and hills to the north-west may have been obtained, the Appalachian Mountains, as now designated, could never have been seen.

Much material of native origin has been recovered from the area bordering the right bank of the river and extending northward from the foot of Taliaferro Mount. Projectile points and other small chipped objects are plentiful, and typical examples are illustrated in plate 18, figure 2. All shown are made of white quartz. Small pieces of pottery may be found in the same fields near the river bank, indicating the site of a native settlement.

" DOOGS INDIAN "

About 2 miles above Taliaferro Mount the Rappahannock makes a wide bend to the eastward, passing fertile fields which are frequently bordered by low marsh lands. This is shown in the aerial photograph reproduced in plate 18, figure 1, with the camera pointing east. Dogue Run, flowing between heavily timbered banks, joins the Rappahannock from the east (above the white arrow) opposite the end of the large marsh. The name of the run was derived from that of the Doeg tribe after they are thought to have come from Maryland and entered the valley of the Rappahannock. In 1673 this was the country of the " Doogs Indian " as indicated on the Herrman map, figure 2. It is a beautiful section of the valley and was once a vast forest where game abounded. Traces of Indian occupancy are encountered in all parts of the region, and some of the stone implements and weapons which have been found on the surface are unusual forms and many reveal superior workmanship.

The axe illustrated in plate 18, figure 2, was found in the field on the left bank of the river visible in the right center of the photograph. It is a natural pebble of diabase which had been slightly worked into shape. The shallow groove is very smooth, a condition which suggests considerable use. Larger, rather massive specimens of the same type have been found on the site.

Innumerable arrowpoints and other chipped objects have been found on the surface of the field. Some rather large specimens are often discovered. Typical examples are sketched in figure 11.⁶⁴ Of the five specimens shown, four are made of quartzite, and one, that

⁶⁴ These are in the private collection of William Howard, Fredericksburg, Va.

in the upper right, is made of diabase. All are well chipped and symmetrical, and resemble certain specimens from the site at the mouth of Chingoteague Creek, previously mentioned.

The small grooved axe shown second from top in plate 17, is similar to the specimens from the field on the left bank of the river

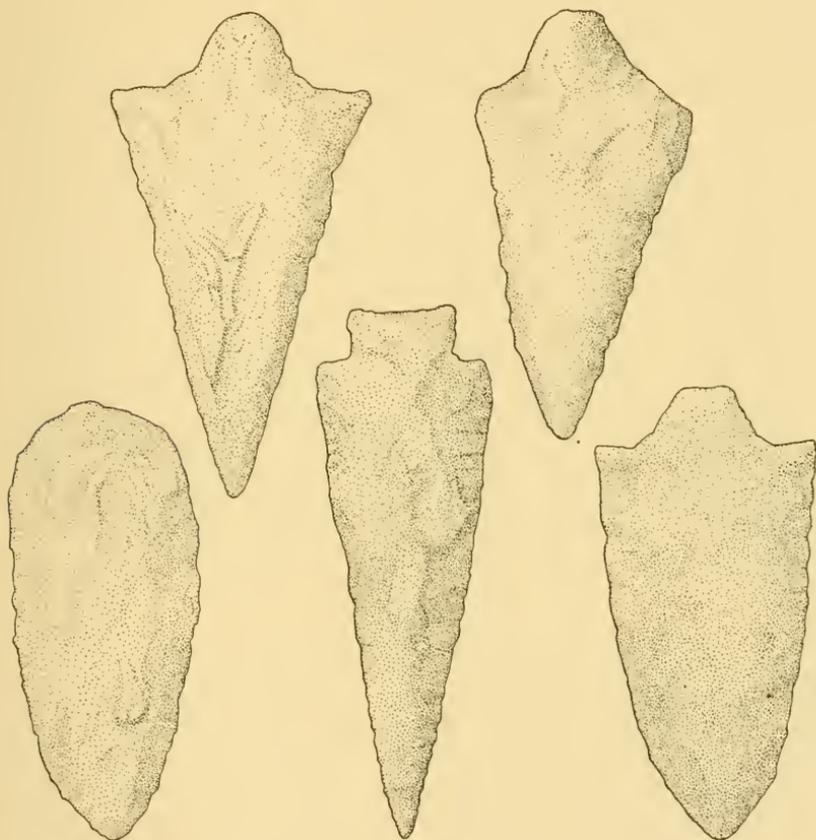


FIG. 11.—Specimens found near Dogue Run. $\frac{1}{2}$ natural size.

below Dogue Run, just described. It likewise was fashioned from a natural pebble of diabasic rock, and the groove has become smoothed and worn from use. This distinctive type of weapon or implement was not encountered elsewhere on the Rappahannock sites. It is believed to have belonged to a late period of occupancy, as may also many of the projectile points, small chipped objects, and fragments of earthenware found in the vicinity.

OPPOSITE THE MOUTH OF HOUGH CREEK

Hough Creek enters the left bank of the Rappahannock about 1 mile above Dogue Run. The Indian name of the creek is not known. The mouth of the creek, bordered by brush and timber, is visible in the aerial photograph, plate 18, figure 1, to the left of the black arrow which points with the direction of the current. On the opposite side of the river, to the right of the arrow, is the site of an ancient settlement which appears to have been abandoned before the coming of the English in 1608. No village is indicated in this locality on the 1624 map. The extent of the occupied area has not been determined. It was probably a permanent village as distinguished from a temporary camping ground. The land is comparatively low and during the freshet of April 1937 was under several feet of water.

The material discovered on the site includes many projectile points and several types of small chipped objects, the majority of which are made of white quartz; consequently, it is impossible to determine the relative age of a specimen by the condition of its surface. But other pieces formed of diabasic rock and a very fine-grain quartzite have become greatly altered and in this respect resemble the two axes found a short distance above on the opposite side of the river, shown in plate 21. A few bits of pottery that bear the impression of basketry, and several fragments of soapstone vessels found near the river bank, likewise suggest an early period of occupancy.

CUTTATAWOMEN

The position of the village of Cuttatawomen, standing on the left bank of the Rappahannock, is indicated on the 1624 map by a sketch of one of the "Kings howses," proving it to have been the home of a chief. However, in 1608 it was not a large settlement, as it was then described as having but 20 bowmen. Mooney was of the belief that the ancient village stood at or near the mouth of Lamb Creek. Traces of a native settlement have been discovered at the junction of the creek and the Rappahannock and may indicate the location of Cuttatawomen. This beautiful site, on the left bank of the river just above the mouth of the creek, is shown in aerial photographs reproduced in plate 19.

The land has been cleared and cultivated for many years, much of it for two centuries or more, before which it had been occupied by native settlements with small clearings for gardens and cornfields. It is known that during past years large collections of stone implements and numerous artifacts of various forms have been recovered

from the surface of the site. Some may even now be found, and specimens discovered during recent visits are illustrated in plate 20. All were collected in the fields bordering the left bank of the river, rising 20 feet or more above the water, extending to the vicinity of the old wharf which is visible in the lower of the two photographs (pl. 19).

The pottery found on the site has been reduced to small fragments; characteristic shards are shown in plate 20. Many of the fragments are believed to be ware that belonged to an early period of occupancy, preceding that of the historic villages of 1608. The impressions on the surface of some pieces appear to have been made by rigid basketry which had been used in shaping the vessels. Crushed shell had evidently served for a tempering material. No example of net-marked ware, so plentiful at Pissaseck and elsewhere, was found on this site.

The two specimens shown below the pottery are made of diabase. To the left is a knife or scraper, formed of a flake struck from a pebble and revealing secondary chipping. To the right is a well-made celt with a sharp cutting edge. The surface is slightly altered.

All pieces illustrated in the lower half of the plate are made of white quartz. The beautiful triangular points are of special interest, as few specimens have been found on other sites, a single example having been discovered at Pissaseck. At the bottom are six roughly formed scrapers or implements that had been used for different purposes, representing several types, all of which bear evidence of much use.

A short way above its junction with the Rappahannock, Lamb Creek makes a sharp bend to the left (pl. 19, lower figure). This is caused by a narrow tongue of land sloping down from the high ground, which rises some 20 feet above the water. The sloping ridge is covered with trees and brush. A large tree, standing separate and apart from others and with a very light spot on the ground to the left of it, at the edge of the cultivated land, may readily be distinguished in the photograph. This large tree is growing from an embankment and ditch which may be traced from the foot of the high ground at the beginning of the marsh bordering the river, over the ridge and down to near the edge of the marsh through which the creek flows. The embankment and ditch follow a straight course. As viewed in the photograph, the embankment is on the far side, facing the level, cultivated fields. The best-preserved section is near the large tree, on the highest part of the ground, where the embankment is approximately 18 inches in height and the ditch about the same in depth.

Nothing is known of the origin of the embankment and ditch. They are very old and may have been constructed during days of Indian occupancy, when the embankment would undoubtedly have been surmounted by a palisade. Nothing similar has been encountered on other Rappahannock sites.

SOCKBECK

About 1 mile up the Rappahannock from the mouth of Lamb Creek, on the same side of the river, is the site of a settlement which gives the impression of being very old. It is near the river, on cultivated land just beyond the cloud-shadowed area shown in the upper of the two photographs reproduced in plate 19. It is a beautiful location which had probably been occupied and reoccupied through generations and may have been the position of Sockbeck as placed on the 1624 map, but, as previously mentioned, it is not possible to be certain of the identification of any site. The extent of the site was not determined.

Some very interesting material was discovered on the surface, including arrowpoints and other small chipped objects, crude hammerstones and pestles, and two axes which are the most unusual specimens found on any site mentioned in the present work. A few bits of pottery are to be found scattered over parts of the site, being more plentiful near the river, but all have been reduced by the plow to very small pieces.

The two axes are shown two-thirds natural size in plate 21. They were found in the same field a short distance back from the river bank. Both are made of fine-grain, dark gray quartzite.

Specimen *a*. When originally made, this was a grooved axe, or axelike implement. It was probably a quartzite pebble that was shaped by pecking or battering the surface until it was reduced to the desired form and the groove made. Then it was lost or abandoned for a long period, during which time the surface became much altered. Later it was partly rechipped, but the groove no longer served its original function, although the implement was again hafted and used. The rechipped portion is slightly altered and is easily distinguished from the more deeply weathered surface of the original axe. A small portion of the natural surface of the pebble remains and is visible far to the left in the photograph of the side of the implement.

Specimen *b*. Made of a thin quartzite pebble. It had been formed by pecking, but part of the natural surface of the stone remains on both sides of the axe. The surface became greatly altered after having

been unused for a long period. Evidently, it was later discovered and resharpened by the removal of several large flakes. The exposed surface thus produced is worn and smoothed from use, and even though it has been in this condition for three centuries or more, the surface remains unaltered, in strong contrast to the appearance of the older portion.

Quartzite weathers or alters so slowly that the present condition of the two specimens is suggestive of great age. But the surface of the secondary chipping of the two pieces has not altered to the same degree, and it is evident the first specimen has been exposed much longer than has the second. The surface of the later chipping on *a* has become altered, whereas that of *b* has remained unchanged. The first may be the older of the two, and both periods during which it was used may have preceded that represented by the historic Algonquian tribes, whose villages stood in the valley of the Rappahannock in 1608.

Beyond this site the left bank of the Rappahannock is bordered by an extensive marsh, and on the opposite side are cliffs rising nearly 100 feet above the water. From the brow of the cliffs it is possible, when conditions are favorable, to see the Blue Ridge Mountains far to the westward.

Evidence of Indian occupancy is encountered throughout the region, which had been occupied and reoccupied through centuries. But it is evident that the greater part of the valley from here to the falls had been abandoned by the Algonquian tribes before the summer of 1608, at which time the English from Jamestown entered the country.

CONCLUSIONS SUGGESTED BY CERTAIN SPECIMENS

Early in the seventeenth century, when the English ascended the Rappahannock, that part of the valley now being considered was comparatively thickly settled, with camps and villages standing on the banks of the river. But, as proved by the discovery of certain objects, the native tribes then encountered were not the first to inhabit the country. The specimens recovered from the sites vary in form and material, and obviously belonged to several distinct periods of occupancy.

The occurrence of a typical eastern Folsom point near the mouth of Millbank Creek, on the left bank of the Rappahannock, presents an interesting problem. It is a beautiful example of the type that has been discovered widely dispersed throughout the country east of the Mississippi, being more numerous in some localities than in others

but all possessing the same characteristic features, similar in many details to the western points. It is a highly specialized form and one believed to have developed from a single center rather than to have arisen independently in different localities at different times.

The discoveries made by Roberts⁶⁵ at the Lindenmeier Site in northern Colorado during the past 2 years have established the great antiquity of the Folsom culture in that part of the country, placed by some at from 8,000 to 10,000 years; by others these figures are considered conservative. But not until a similar site has been uncovered in the eastern part of the country will it be possible to suggest, with a degree of certainty, the age of the eastern Folsom points, as represented by the example from the valley of the Rappahannock. It will be necessary to find specimens resting in an undisturbed, stratified deposit that will permit the geologist to determine the approximate age of the superimposed or surrounding mass. The discovery of such a deposit would be of the utmost value in the attempt to determine the antiquity of man in the eastern part of the continent.

Next in importance to the Folsom point are the two axes illustrated in plate 21. Both bear evidence of having been used during two long-separated periods, and in this respect they are similar to another specimen found some years ago on the bank of the Rapidan.⁶⁶ And as has been suggested in the description, both periods during which one of the specimens from the Rappahannock site was used may have preceded that represented by the tribes encountered by the first English colonists.

Some material recovered from the site of ancient Pissaseck may likewise have belonged to an early period, although this will be more difficult to prove. This refers in particular to the argillite points and scrapers illustrated in plate 3, which are similar to specimens recovered from the stratum of yellow sand, below black soil, in the Delaware valley.

The objects which have been mentioned—a Folsom point, the two axes, and the argillite material—afford conclusive evidence of the existence of several distinct periods of occupancy in the valley of the Rappahannock preceding the coming of the historic tribes, those whose villages stood on the banks of the river at the beginning of the seventeenth century.

⁶⁵ Roberts, Frank H. H., Jr., Additional information on the Folsom complex. *Smithsonian Misc. Coll.*, vol. 95, no. 10, 1936.

⁶⁶ Bushnell, David I., Jr., Evidence of Indian occupancy in Albemarle County, Virginia. *Smithsonian Misc. Coll.*, vol. 89, no. 7, pl. 2, 1933.

Earthenware vessels continued to be made in the Rappahannock villages long after the arrival of the English colonists. There is a reference by the French traveler Durand to the making of "pots and vases from earth" at the Portobago village during the autumn of 1686, and the art may have been practiced into the eighteenth century. Much fragmentary pottery is found on all sites along the river, but it is difficult, often impossible, to distinguish the more recent from the early forms of ware. A few scattered pieces bear the impression of basketry. These are attributed to an early period of occupancy and may have been contemporaneous with the axes previously mentioned.

The impressions of textiles on fragments of pottery from Pisaseck, Nandtangtacund, and other localities serve as a means of determining the kind of nets, mattings, and coarse fabrics made and used in the native villages. Much of the ware so marked and now encountered on the surface was made during the late period and indicates the skill of the people as weavers and potters.

All material described in the preceding pages was discovered on the surface, and the greater part of it may have accumulated in refuse heaps in and about the villages, later, when the land was cleared and cultivated, to be scattered by the plow. It is believed that much remains hidden beneath the surface, implements and ornaments, pottery vessels, fireplaces and traces of the habitations, and burials. The recovery of such material would make it possible to form a clearer conception of the manners and customs, the ways of life, of the inhabitants of the Rappahannock valley long before the settlement of Jamestown, and would aid in determining whence they came.

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Smithsonian Institution in 1937")

ANCIENT SITES ON THE BANKS OF THE RAPPAHANNOCK IN VIRGINIA

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During the spring of 1937 a great freshet swept down the valley of the Rappahannock from the foot of the Blue Ridge, where heavy rains had fallen for several days. The low grounds were inundated, and when the waters had receded it was discovered that many areas had been greatly altered, gullies had been formed, banks of sand had been deposited and, in some instances, the surface soil for a depth of a foot or more had been washed away, causing the heavier masses to settle and remain exposed. Traces of ancient camps and villages were thus revealed.

The valley of the Rappahannock below Fredericksburg is more open, the low grounds more extensive, and the river is wider than above the falls; nevertheless, the force of the great flood was felt far down the stream.

On May 9, when the ground was becoming dry, several places below the falls were again visited to see the effect of the flood and to endeavor to recover some of the material thought to have been deposited by the swirling waters. Fortunately, a site of much interest was encountered. It is on the right bank of the Rappahannock in Caroline County, Va., a mile or more below the mouth of Lamb Creek on the opposite side of the river and is shown in the aerial photograph reproduced in figure 111, to the right of the black arrow which points with the current. This is now a rich and fertile section of the valley, but visualize the same region as it was in 1608, when first visited by English colonists from Jamestown—a dense forest with small groups of mat- and bark-covered lodges dotting the river banks, trails traversing the wilderness, game and wildfowl to supply the wants and requirements of the native hunters armed with bows and arrows, and streams teeming with fish. However, the earlier settlement, traces of which were uncovered by the freshet, is thought to have been abandoned before the year 1608.

When the site was visited on May 9, the surface for a distance of a hundred yards or more from the river bank, and extending to the beginning of the wooded area, was sand and gravel, all vegetation had been swept away, and in places it was deeply gullied. Fragments of

pottery and objects of stone, some broken and others entire, were scattered over the surface, indicating the location of a native village which had been occupied centuries ago. Examples of the specimens collected at that time are shown in figure 112. Above are 15 objects made of white quartz, so plentiful in the valley. Projectile points, knives, and scrapers are included in the group. The four pieces to the left in the second row may have been mounted as knives and their simi-



FIG. 111.—Looking down the Rappahannock. Site of the ancient settlement to the right of the black arrow. (Photograph by U. S. Army Air Corps.)

larity in form and size is remarkable, but being made of quartz the condition and appearance of the surface does not aid in determining their relative age. Below are 9 pieces representing a variety of forms, all made of diabasic rock and with surfaces equally altered as a result of long exposure. At the bottom is a cylindrical pestle, with a short, shallow groove clearly shown in the photograph. Two forms of scrapers may be recognized. All specimens, quartz and diabase, are thought to be of approximately the same age. Some fragments of earthenware found on the site bear the impression of coiled basketry, and this is considered the oldest form of pottery occurring in the Rappahannock valley; other pieces are cord-marked and some are smooth, porous, and deeply pitted through the leaching away of the

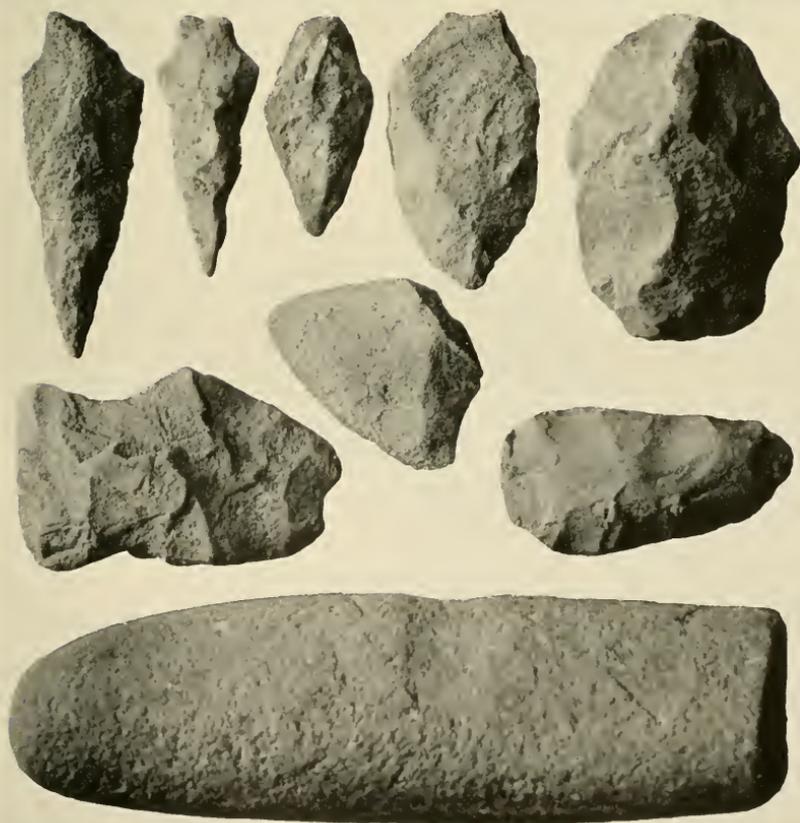


FIG. 112.—Specimens from the site of the ancient settlement. ($\frac{1}{2}$ natural size.)

crushed shell which had served as the tempering material. Bits of soapstone vessels were also found. The types and condition of the objects discovered suggest that this was a permanent village rather than a temporary camp, and the uniformity of the weathering makes it appear that all articles of stone were made and used about the same time.

Later in the year several sites farther up the river, which had likewise been exposed by the spring freshet, were visited and examined. The material discovered, much of which differs from that now figured, will be described and illustrated at another time.

Floods have been recorded ever since the country was settled by the English, when much of the heavy timber was cleared away and the ground was cultivated and leveled. The loosened earth was often inundated and gullied, as during the spring of 1937, and although the masses of refuse which had accumulated in and about the native villages during different periods of occupancy were once distinct and stratified or separated, all became intermingled by the force of the waters. This readily explains the variety of objects, made of various materials, often encountered on the same site. Such conditions prevailed not only on the Rappahannock but in the vicinity of other streams as well.

Some years ago a beautiful example of the eastern form of Folsom points was discovered near the left bank of the river a few miles below the site just described. Unfortunately, it was found on the surface, not beneath it, but this is not significant because, as explained above, the clearing and cultivating of the land enabled the periodic flood waters to change the contour of the land rapidly, and the Folsom point may therefore have once been well below the surface. The occurrence of the point in this region may be accepted as proof that man was here many centuries ago, although just how early he reached the country eastward from the mountains will be impossible to determine until more evidence is available.

During the year 1937, as for several preceding years, a superficial examination was made of many sites both above and below the falls of the Rappahannock. The results were interesting and satisfactory, and have led to the belief that an intensive investigation, including the excavation of certain areas, would prove of exceptional value and shed light on the manners and ways of life, and possibly reveal the identity, of the early inhabitants of the valley.