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CAMP BUILDINGS IN JOCKEY HOLLOW,
1780

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TABLE OF CONTENTS

	<u>Page</u>
List of Illustrations	III
Introduction	1
I. PLAN OF THE BRIGADE CAMPS	2
II. CONSTRUCTION OF SOLDIERS' AND OFFICERS' HUTS	5
III. FURNISHINGS	10
IV. ADDITIONAL BRIGADE AND REGIMENTAL BUILDINGS	11
V. GENERAL BUILDINGS	13
VI. CONCLUSIONS	15
FOOTNOTES	23
BIBLIOGRAPHY	28

LIST OF ILLUSTRATIONS

	<u>Page</u>
1. Rochefontaine's Map of the Jockey Hollow Encampment	20
2. Erskine's Map of the Jockey Hollow Encampment	21
3. Drawing of the Stark Brigade Camp	22

INTRODUCTION

The interpretation of the Continental Army's encampment in Jockey Hollow during the winter of 1780 should incorporate a thorough knowledge of the physical aspects of the camp. The numerous and varied buildings erected in Jockey Hollow constituted an important part of the setting of the encampment and this report summarizes the documentary information apropos of those structures that is currently available.

I

Plan of the Brigade Camps

In Jockey Hollow the soldiers constructed their huts according to a plan, still undiscovered, given to them by Washington.¹ It is said that the army first created an organized hut village in Loantaka Valley, about three miles east of Morristown, in the winter of 1777, but Washington's general orders concerning the Valley Forge encampment point to it as being the first organized and huted winter encampment during the Revolution.² In preparing for the next winter's encampment at Middlebrook, New Jersey, Washington noted the shortcomings of the previous encampment and enjoined strict adherence to orders concerning the placement and construction of buildings.³ The arrangement of the Pennsylvania Line at Middlebrook served as the model when the army moved to Morristown in December, 1779, and several general orders stressed the commander-in-chief's desire for uniformity in the camp. If any huts were built out of line, for example, they were to be torn down and rebuilt.⁴

As the brigades approached Morristown, their quartermasters preceded the soldiers in order to obtain information about the prospective camps of their various units; the quartermasters in turn led their brigades to those areas.⁵ As shown on the Rochefontaine and Erskine maps (Figures 1 & 2), the New Jersey, Connecticut and Maryland Lines, plus Hand's Brigade, formed the first line in Jockey Hollow, while the Pennsylvania and New York Lines, plus Stark's Brigade, formed the second line. When the brigades reached their camps, the regimental commanders appointed officers to superintend

the erection of the huts. This task in the 6th Maryland Regiment fell to the lot of the junior officers, who were to serve in rotation. As a result of the drive for uniformity, a visitor to Jockey Hollow on December 18 subsequently wrote that the soldiers' huts were placed in "more exact order than Philadelphia."⁶

Early in January, 1780, the commander of the New Jersey Brigade, in preparing for an inspection by Washington, directed that any hut out of line should be pulled down.⁷ But what was the stipulated arrangement for the huts and how faithfully was it adhered to? Although the plan of the encampment has not been found, it apparently called for a regiment to have twenty-four huts, twelve men to a hut, built in three rows, as had been done at Valley Forge and Middlebrook.⁸ Despite the plan, it is obvious that not all regiments hutted in three rows. The Connecticut and New Jersey Lines, at least in part, appear to have hutted in two rows; Brigadier General Edward Hand requested that his brigade be allowed to hut in four rows if his front could not be extended; and in Stark's Brigade Sherburne's Regiment had only two rows of huts.⁹ The exact distance between the rows is unknown, but as four yards separated the quarters at Middlebrook and as three and a third yards separated the rows in a plan of an encampment drawn by Clement Biddle in November, 1779,¹⁰ perhaps ten to twelve feet separated the rows of huts in Jockey Hollow.

Although the number of rows of huts in a regiment perhaps varied from two to four, within a row the huts were apparently built in groups of two. Joseph Martin, in his A Narrative of Some of the Adventures, Dangers and Sufferings of A Revolutionary Soldier,

describes the huts of the Connecticut Line as standing in groups of two: two in front and two in back, then six or eight feet beyond them two more huts in each row, and so on to the end of the regiment. Unfortunately, he did not give the distance separating the ¹¹buildings in each group. The drawing of the Stark Brigade camp (Figure 3) substantiates Martin's description, as it shows the huts arranged two by two, with the chimneys at the right ends of the huts. This arrangement probably explains why an early writer on the Jockey Hollow encampment said he saw what appeared to be chimney ruins for some double huts when he viewed two rows of stone heaps in the Jersey Brigade area.¹² The number of huts in a row, as well as the number of rows in a regiment, was probably governed by the strength of a regiment and the terrain.

The huts of a regiment stood in line and faced the regimental and brigade parade grounds. At Middlebrook, the regiments were separated by thirty feet¹³ and perhaps a similar distance separated the regiments in Jockey Hollow. A street ran between each regiment, as shown in the drawing of the Stark Brigade, but the drawing does not show a broad street through the center of each regiment. At the Middlebrook encampment, a street twenty-four feet wide passed through the center of a regiment and a regimental street between twelve and fifteen feet wide apparently existed in the regiments of the Connecticut Line in Jockey Hollow.¹⁴

As at Valley Forge and Middlebrook, the officers' huts stood behind and parallel to those of the enlisted men.¹⁵ The huts for subalterns, lieutenants and captains were about twelve or thirteen yards behind the last row of soldiers' quarters and fifteen to twenty yards behind them were the huts for the field officers (Figure 3).¹⁶ The number of officers' huts varied according to the number of officers in each regiment.

II

Construction of the Soldiers' and Officers' Huts

The construction of the soldiers' and officers' huts during the worst days of the harsh winter of 1780 proved to be a trying task. Fortunately, some steps had been taken to expedite the erection of the huts before the soldiers reached Morristown. The general camp site in Jockey Hollow had been selected, as had the individual brigade camps in that area, each with its covering of walnut and oak trees.¹⁷ Strenuous efforts had been made to acquire necessary building materials. Over 200,000 feet of boards and scantling had been gathered, or was on the way to Morristown, and although nails were scarce and expensive¹⁸ a supply of ten and twelve penny nails had been accumulated. Supply personnel had been gathering tools for use during the winter encampment since October and when the troops marched to Jockey Hollow the brigade quarter-masters received axes, saws, files, augers, gouges, adzes, wedges, grindstones and other tools. Even so, the supply was inadequate and some soldiers resorted to theft to acquire tools.¹⁹

As soon as the brigades reached their individual camp grounds, the soldiers set to work. The general orders of December 3, 1779 urged the

officers to push hutting, in consequence of which the commanding officer of the 2nd New York Regiment offered a prize of two gallons of whiskey to the men who completed the first hut. The same officer also offered four gallons of whiskey to the men who completed the best made hut, provided it was not the last one erected. In another regiment, the 4th New York, the commanding officer ordered the men to begin work at eight a.m. each morning. By December 29 most of the soldiers' huts had been completed.²⁰

Just as Washington had required uniformity in the placement of the huts, so did he demand it in their construction. The brigades received a plan for the huts based on the design of the quarters of the Pennsylvania Line at Middlebrook and the brigade and regimental commanders ordered a strict compliance with it and appointed officers to supervise the work.²¹

A general idea of the soldiers' hut can be gained from the evidence drawn from materials pertaining to all of the brigades in Jockey Hollow. In a regiment, the huts faced the brigade parade ground. As all of the regiments camped on slopes, the soldiers probably levelled sites for most of the huts. During the Valley Forge encampment many huts had been sunk into the ground, which Washington prohibited during the following encampment. Because of the intense cold and deep snow during December in Jockey Hollow, many soldiers probably sank their cabins into the slopes in their haste to put roofs over their heads. On February 16, 1780 headquarters ordered drainage trenches dug around such huts.²²

The buildings the soldiers built for themselves probably measured sixteen feet in front and back and fourteen feet on the sides. The exact width of the huts is problematical because the drawing of the Stark Brigade gives the width as fifteen feet and Martin says it was fifteen or sixteen feet. But as Washington's orders stipulated a width of sixteen feet at Valley Forge and Middlebrook (the latter encampment being the model for the huts at Jockey Hollow), as Martin gives either fifteen or sixteen, and as sixteen foot logs were seen in fences in Jockey Hollow some years after the encampment, there is greater cause to assume the width was sixteen rather than fifteen feet. ²³ *With regard to the sides,* depth of fourteen feet seems more certain because that was the depth of the cabins at Valley Forge and Middlebrook and the same measurement appears on the Stark plan. ²⁴ After logs of proper length had been cut, probably eight or ten inches thick, they were notched at both ends and then laid to make a rectangular enclosure about seven feet high. The four walls were chinked with mud or clay. ²⁵ The ²⁶ soldiers then built and covered gabled roofs in this fashion.

When arrived at the proper height, about seven feet, the two end sticks which held those that served for plates were made to jut out about a foot from the sides and a straight pole made to rest on them, parallel to the plates; the gable ends were then formed by laying on pieces with straight poles on each, which served for ribs to hold the covering, drawing in gradually to the ridge pole. Now for the covering; this was done by sawing some of the larger trees into cuts about four feet in length, splitting them into bolts, and riving them into shingles, or rather staves; the covering then commenced by laying on those staves, resting the lower ends on the poles by the plates, they were laid on in two thicknesses, carefully breaking joints; these were then bound on by a straight pole with withes, then another double tier with the butts resting on this pole and bound on as before, and so on to the end of the chapter.

With the preceding accomplished, the shells of the huts had been completed.

Even with the completion of the exteriors, much remained to be done. Inside, the dirt floors were levelled ²⁷ and perhaps pounded to harden their surfaces. As shown in the Stark plan, chimneys were erected next to the centers of the right walls of the huts. There are no dimensions available for the chimneys, but stone, with mud or clay as a mortar, was used to the height of the eaves, about seven feet, then small pieces of wood were used to finish them. Mud or clay was not only used to chink the upper parts of the chimneys, but was plastered inside them as a protection against fire. ²⁸ Doors were placed in the front walls, next to the ends opposite to the chimneys and were probably made from planks. The plan of the Stark Brigade shows them to be about three quarters of the height of the front walls and Thacher states that at Middlebrook they were hung on wood hinges (Figure ²⁹ 23). Windows were placed in the centers of the front walls, midway between the floors and the eaves. Some soldiers apparently failed to cut windows in the fronts of their cabins and in May Washington ordered them to make windows ³⁰ in their huts for proper ventilation (Figure ³¹ 23). There are no details available about the windows, but their construction must have been rough. Many must have just been cut out of the logs. The windows probably lacked any transparent material.

After the soldiers' quarters had been completed, the men then built the officers' huts. Many such huts had been finished by the new year, but evidently a large number of officers did not move into their own huts until late February or early March.

No general plan, evidently, guided the construction of the officers' quarters. We do know that they sat behind the soldiers' billets, faced the brigade parade, and probably occupied levelled sites. Also, probably many of them had to have ditches dug in back of them to carry off rain and melting snow. No dimensions are available, but Thacher says apropos of the Middlebrook encampment that the officers' huts usually had two apartments. That statement is borne out by the plan of the Stark Brigade, which shows two chimneys and two doors for all but three of that unit's officers' quarters. Even in those instances where huts have but one chimney in the Stark plan, they have two doors.

The construction of the officers' huts probably duplicated that of the men's quarters, i. e., a shell of notched logs raised to about seven feet, topped by a gabled and shingled roof. Inside there were dirt floors and chimneys made of stone and small logs. It is interesting to note that where there was only a single chimney in an officer's hut in the Stark plan, it stood in the center of the hut. As the illustration of the Stark Brigade also shows, there was a great variety in the placement of the windows and doors in the huts; sometimes the arrangement was a window, then a door, then another window, and then a second door; or a double door in the center and a window on either side; or a door next to either end and a window near each door; and so on. The same drawing also

indicates that there were from four to six lights, usually the former, in the windows, which in turn suggests that the windows of the officers' huts contained glass.

III Furnishings

Furnishings and equipment probably took up much room in both the soldiers' and officers' huts. When there were twelve soldiers in a hut, the bunks alone must have made the hut quite crowded because there were probably two tiers of three bunks each along the back wall, a similar tier along the wall opposite the fireplace, and single tier along the front wall. In regiments of reduced strength, there were bunks of only two tiers along the walls. The bunks were probably made of planks supported by vertical supports. A soldier's bedding consisted of straw, if available, and at least one blanket. In addition to the bunks, there may have been some stools or benches, a table, and some shelves. Perhaps most huts had a kettle or two, plus a broom and several candle holders.

A soldier's equipment also occupied sorely needed space. His musket, bayonet, ammunition, bayonet belt, cartouche box, knapsack, and clothing had to be kept in the hut. Until stopped, the men in Hand's Brigade stuck their muskets in the log walls by their bayonets. The musicians also had to find room for their fifes and drums.

Practically nothing definite is known about the furnishings of the officers' huts. We can surmise that they also were crowded with some furniture and much equipment, including spontoons, but that is all that it is possible to do at the present time.

Nothing is known about the hardware for the cabins.

IV

Additional Brigade and Regimental Buildings

Although the soldiers' and officers' huts dominated the encampment, a number of additional buildings stood in the brigade camps. These buildings played important roles in the life of the soldiers and even though we know little about them they have to be considered.

Among the most important of the additional brigade buildings were the brigade guard houses. On February 8, 1780 Washington ordered every brigade to build guard huts at the "proper places"; twenty days later he directed that any brigade still without guard houses should build them immediately.⁴⁵ Apparently each brigade had two guard houses, a front one and rear one. In the Pennsylvania Division, for example, the 2nd Pennsylvania Brigade rebuilt its front guard house in March and in May the 1st Pennsylvania Brigade repaired its rear guard house. The front guard house probably stood on or near the brigade parade and the rear one somewhere in back of the brigade. Perhaps the guard house that Emory McClintock in his Topography of Washington's Camp of 1780 and Its Neighborhood says stood on the southeast slope of Sugar Loaf served as the rear guard house for one of the Pennsylvania Brigades.⁴⁶ These structures must have been constructed in the same general fashion as the soldiers' huts, although they were probably larger and with two or more rooms. Nothing is known about their furnishings or hardware.

Very little is known about the remaining brigade buildings. The huts for the brigade quartermaster, conductor of military

stores, commissary, forage master, and wagon master stood behind the last row of officers' huts, in the center of the brigade, in the 6th Maryland Brigade⁴⁷. It is doubtful that this arrangement existed throughout the camp, however, as the conductors' hut in the New Jersey Brigade was permitted to be out of line and the conductor of the 1st Pennsylvania Brigade, who lived outside of camp, was only ordered to move into a hut selected by the quartermaster on April ⁴⁸27. In Hand's Brigade an extra hut, twelve feet square and about six or seven feet high at the eaves, was built for the conductor late in February⁴⁹. Among other things, the conductor had charge of the travelling forages that the armorers used to repair damaged weapons⁵⁰. In the case of the commissary, the commander of the New Jersey Brigade allowed his hut to be out of line and the commissary of the 1st Pennsylvania Brigade only moved into camp in late April⁵¹. In addition to the preceding buildings, each brigade probably had a bake house. The soldiers of Stark's Brigade were ordered to build a bake house on March 28, and ruins of what appeared to be bake ovens were seen in the Maryland and Connecticut Line areas over a century ago⁵². Perhaps each brigade also had a slaughter house. An unused slaughter yard stood on the right of Stark's Brigade and McClintock says that a slaughter house "occupied a site just below the line of trees on the south slope of Sugar Loaf" in the Pennsylvania Line⁵³. Because of its nature, the artillery park probably had several buildings for its special use. A magazine stood in the Artillery Park, for example, but nothing is known about its location or construction⁵⁴.

Our knowledge of special regimental buildings is practically non-existent. Regimental paymasters and quartermasters are referred to in orderly books, but did they have special huts in which they could carry out their duties?⁵⁵ The regimental clothier of the 4th Pennsylvania Regiment had to use his own quarters in distributing clothing, and he describes it as containing clothing, six or eight taylor⁵⁶s, men waiting for uniforms, and himself seated on a chest. With regard to other regimental buildings, where were the Negroes and women; who were attached to the regiments housed?⁵⁷

V

General Buildings

Standing apart from the several brigade camps were a number of structures that served all of the encampments. On December 4, 1779 the commander-in-chief directed that an orderly room be erected on the left of the second line, between the New York Line and Stark's Brigade.⁵⁸ The ridge line of Mt. Kemble ran between those two units and the orderly hut, along with the alarm post, stood somewhere on that elevation (Figures 1 & 2). The hut was to have two rooms and was to be used for the distribution of orders and the holding of court-martials. As late as March, soldiers still worked on it. Its use as an orderly room apparently ended on April 18, when Washington directed that a hut in the area formerly occupied by the Maryland Line be used for that purpose.⁵⁹ The orderly room must have been constructed in the same fashion as the soldiers' huts, but probably was larger than those buildings and it may have had two chimneys.

In addition to the orderly room at the alarm post, there were one or more huts there to house the soldiers detailed to maintain the alar

post. A fatigue party was sent from the artillery, for example, on
December 18 to begin the "hutting" at the alarm post. In all
probability, any huts erected there duplicated the soldiers' huts
in design and construction.

There may have been some huts for the commissary department in
Jockey Hollow. The remains of some large huts perhaps used by the
commissary lay south of the Tempe Wick road, just across from the
camp of Hand's Brigade.

VI

Conclusions

I. Soldiers' and Officers' Huts

A. Organization

1. Following Washington's orders, the encampment was developed on a planned basis and each brigade had a designated camp site.
2. The soldiers' huts in a regiment were built in two or three rows (possibly four) that faced the brigade parade; within the rows stood a sufficient number of huts, built in groups of two that were six to eight feet apart, to house the regiment's men. About thirty feet separated each regiment's huts in a brigade; perhaps some regiments had a regimental street about fifteen feet wide located in their centers.
3. The officers' huts stood behind and parallel to the last row of soldiers' huts; first, the junior officers' huts, twelve to thirteen yards behind the soldiers' huts, then those of the field officers', fifteen or twenty yards back of them.

B. Construction

1. The soldiers' huts were built in conformity with a prescribed design. Although the plan is not extant, a typical hut stood on a levelled site; measured sixteen feet in front and back and fourteen feet on the sides; and was made of logs notched at either end and laid to

about a height of seven feet, with chinking of mud or clay. The hut had a gabled and shingled roof; a chimney that stood at the right end and was made of stone^{to} about the level of the eaves, then of twigs and mud; a dirt floor; a window in the center of the front, probably without glass; and a door next to the left wall.

2. The officers' huts stood on levelled sites, had unknown dimensions, but were larger than the soldiers' huts and were divided into two apartments. They stood about seven feet high at the eaves; had gabled and shingled roofs; dirt floors; a chimney at either end, or one in the center, a door at or near either end (or a double door in the center of the front) and two or three windows (with four to six lights) arranged according to the location of the doors.

C. Furnishings and Equipment

1. The furnishings and equipment in a soldiers' hut included the following:
 - a. Bunks, triple or double tiered, made of planks.
 - b. Bedding of straw and at least one blanket.
 - c. Probably some stools or benches, a table, and some shelves.
 - d. A camp kettle or two, a broom, and some candle holders.
 - e. Muskets, bayonets and bayonet belts, ammunition, cartouche boxes, knapsacks, and uniforms; musicians had drums and fifes.

2. Officers' huts were probably crowded with similar furnishings and their equipment.

II. Additional Brigade and Regimental Buildings

A. Organization

1. The sparse information about brigade guard and bake houses, and the other brigade and regimental buildings, indicates that the various brigade and regimental commanders determined their specific locations.

B. Construction

1. Presumably, these buildings were constructed with the same materials and by the same methods as were the soldiers' huts. The size of each building was probably determined by the structure's use.

C. Furnishings and Equipment

1. The furnishings, or lack of them, in the additional structures must have been determined by their uses. In the conductor's armory, for example, there was a travelling forge.

II. General Buildings

A. New Orderly Room

1. This building was located on the top of Mt. Kemble, between the New York Line and Stark's Brigade. It had two rooms and was constructed in the same manner as the soldiers' huts.

B. Huts at the Alarm Station

1. The huts for the troops at the alarm station were apparently erected near the orderly room. They were very probably similar to the soldiers' huts

in the brigade camps.

C. Commissariat Huts

1. Some commissariat huts may have stood just south of Tempe Wick Road, across from the site of Hand's Brigade's Camp.

A final conclusion is that we need to know much more about the camp buildings in Jockey Hollow if we are to be able to interpret the encampment of 1780 effectively. Only intensive historical and archeological research will produce the necessary information.

ILLUSTRATIONS

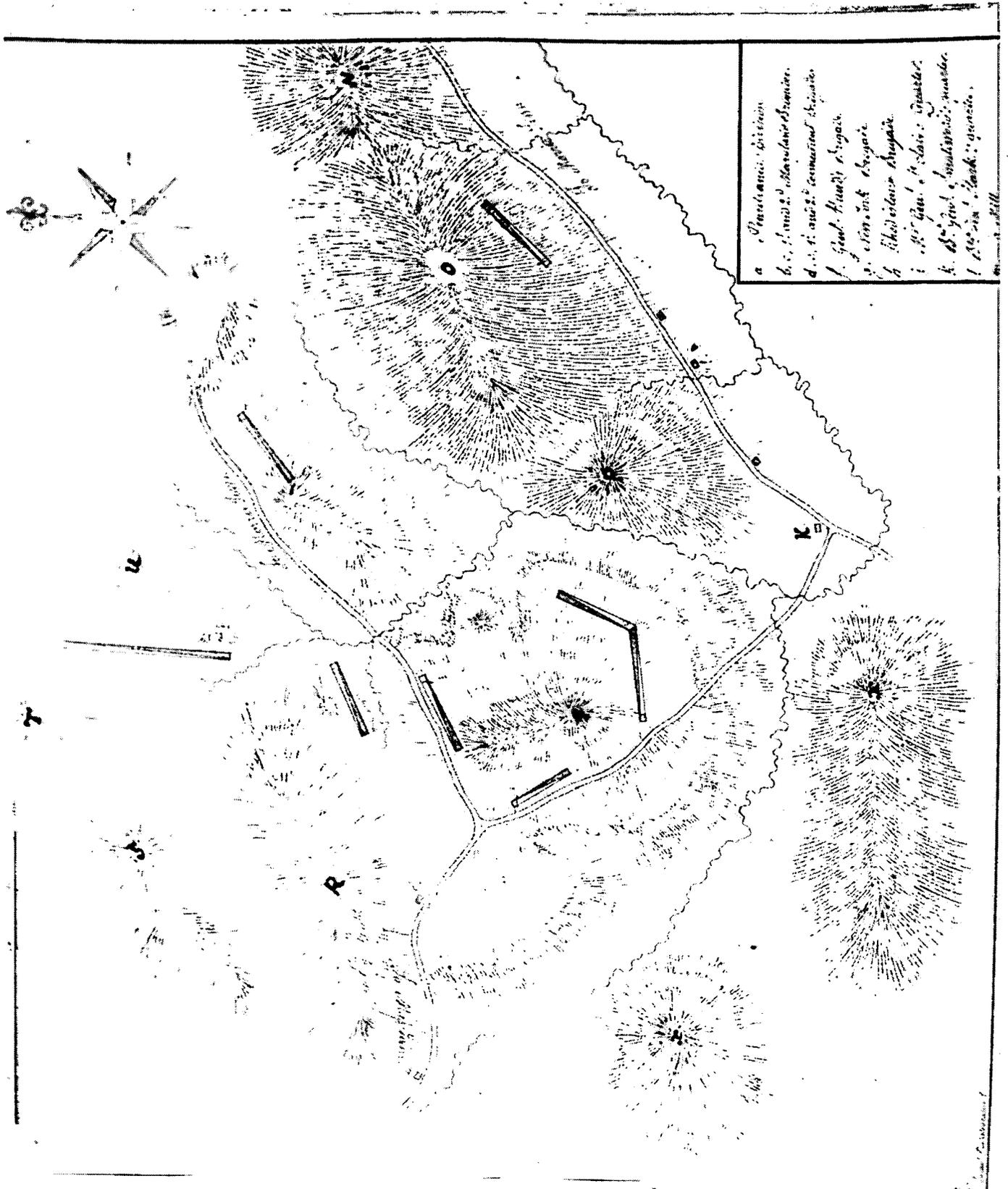


Figure 1. Map of the Jockey Hollow encampment, 1780, by Captain Bichet de Rochefontaine.

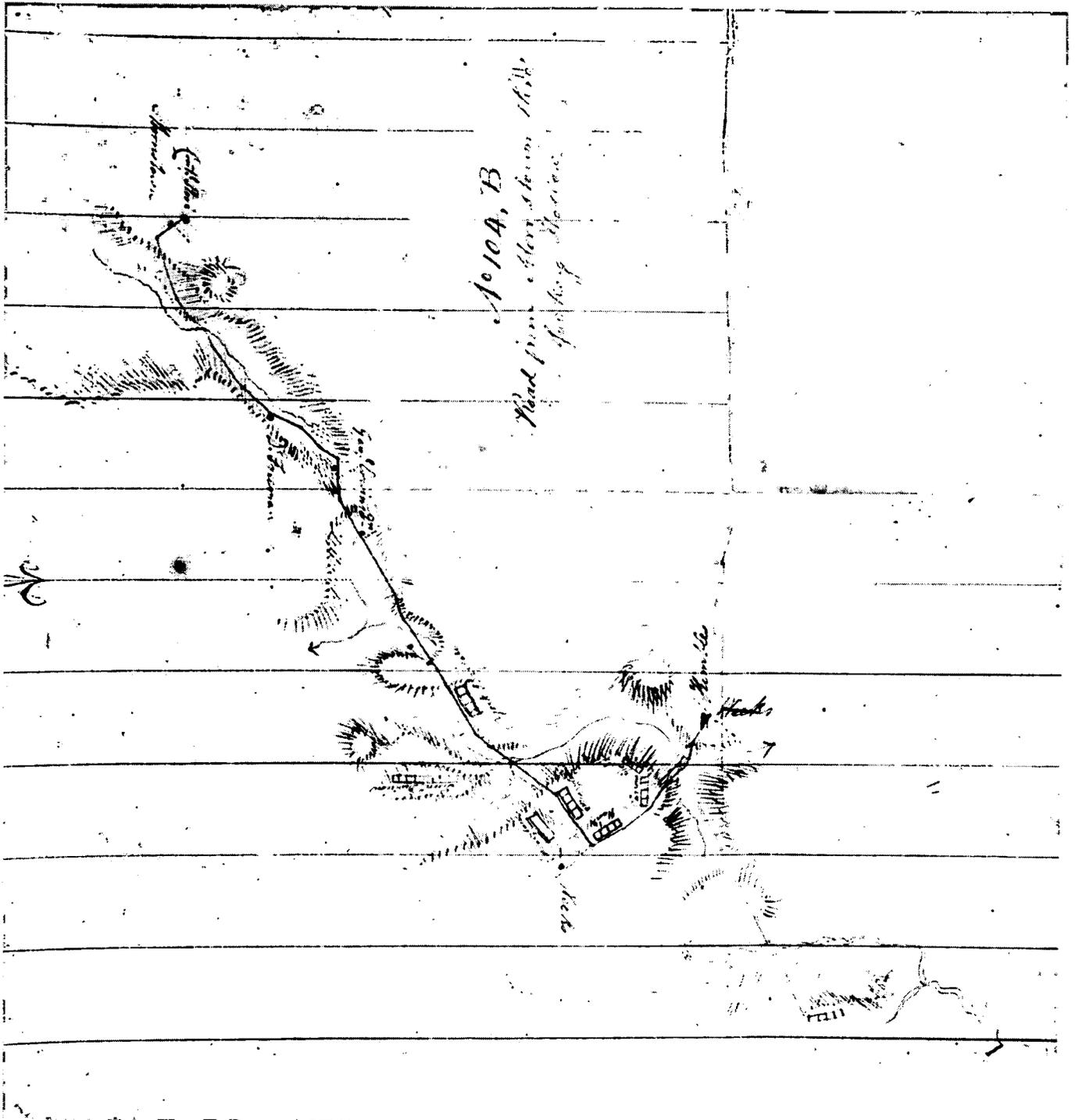


Figure 2. "No. 104, B. Road from Morrystown through Jockey Hollow," by Robert Erskine. New York Historical Society.

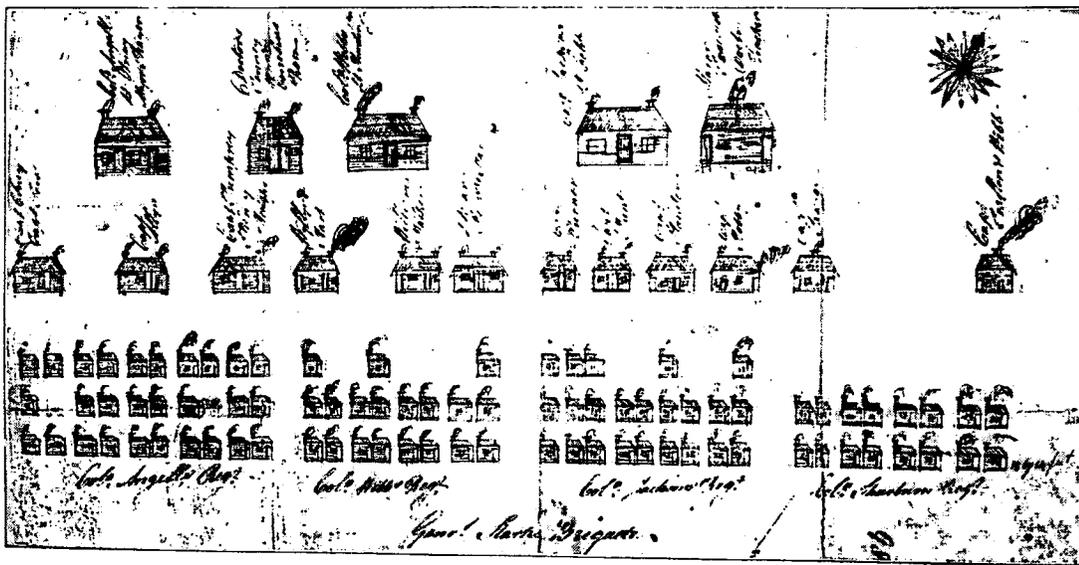


Figure 3. Drawing of the Stark Brigade Camp, Location of original unknown.

FOOTNOTES

1. Edward Hand to Nathanael Greene, Dec. 8, 1779, N. Greene Papers, American Philosophical Society, Philadelphia.
2. Samuel Tuttle, "Bottle-Hill, (or Madison, N.J.,) During the Revolution," 2d ser., IX The Historical Magazine (Mar., 1871), 209-10; General Orders, Dec. 13, 20, 1775, John C. Fitzpatrick (ed.) The Writings of George Washington (39 Vol.; Washington D.C., 1931-44), X, 170-71, 180-81. Tuttle's statements concerning the huts in the Loantaka Valley are very specific and their validity should be tested by future research.
3. General Orders, Dec. 14, 1778, Fitzpatrick, Writings, XIII, 395.
4. Washington to Nathanael Greene, Nov. 17, 1779, and General Orders, Nov. 19, Dec. 3, 1779, ibid., XVII, 118-19, 137, 214-15.
5. William Woodford to Nathanel Greene, Nov. 25, 1779, N. Greene Papers, A.P.S.; Brigade Orders, Dec. 16, 1779, Orderly Book, Webb's Additional Continental Regiment, New York Public Library (photostat); James Thacher, A Military Journal During the American Revolutionary War, From 1775 to 1783 (Boston, 1827), 176-77.
6. Regimental Orders, Dec. 7, 1779, Almon W. Lauber, Orderly Books of the Fourth New York Regiment, 1778-1780, the Second New York Regiment, 1780-1783 (Albany, 1932), 192; Brigade Orders, Dec. 6, 1779, Orderly Book, 2d New York Regiment, New York Historical Society (microfilm); Brigade Orders, Dec. 22, 1779, O.B., Webb; Brigade Orders Dec. 5, 1779, 6th Maryland Regiment, Library of Congress (photostat); Pennsylvania Packet, Dec. 25, 1779 (Microfilm).
7. Brigade Orders, Jan. 2, 1780, Orderly Book, Jersey Brigade, New York Historical Society (microfilm).
8. Edward Hand to Nathanael Greene, Dec. 8, 1779, Greene Papers, A.P.S.; Thomas Ewing, Military Journal of George Ewing (Yonkers, 1925), 25; Joseph Harmar to Frances Johnston, Dec. 23, 1778, Harmar Mss, William L. Clements Library, Ann Arbor, Michigan (photostat).
9. Joseph Martin, A Narrative of Some of The Adventures, Dangers and Sufferings of A Revolutionary Soldier (Hallowell, Me., 1830), 121-22; Joseph F. Tuttle, "Washington in Morris County, New Jersey," The Historical Magazine, 2d ser., IX (June, 1871), 370: Hand to Greene, Dec. 8, 1779, Greene Papers, A.P.S.; Plan of the Stark Brigade Camp, [location of the original is unknown] (photostat).
10. Harmar to Johnston, Dec. 23, 1778, Harmar MSS; Clement Biddle to Nathanael Greene, Nov. 27, 1779, Greene Papers, A.P.S.
11. Martin, Narrative, 121-22.

12. Tuttle, "Washington in Morris County," 370.
13. Harmar to Johnston, Dec. 23, 1778, Harmar, MSS.
14. Ibid.; Martin, Narrative, 121-22.
15. Ewing, Journal, 25; Harmar to Johnston, Dec. 23, 1778, Harmar MSS; Martin, Narrative, 121-22; Thacher (Journal, 155-56) says the officers' huts stood in front of the soldiers' huts at Middlebrook, but the weight of the preceding evidence contradicts him.
16. The distances mentioned here are approximate and are based on the distances given in these sources: Harmar to Johnston, Dec. 23, 1778, Harmar MSS; Biddle to Greene, Nov. 27, 1779, Greene Papers, A.P.S. Martin (Narrative, 121-22) says that the waiters' huts stood between the huts of the junior and field officers, but they are not shown on the Stark plan.
17. Washington to Greene, Nov. 30, 1779, Fitzpatrick, Writings, XVII, 209; Greene to [?], Nov. 26, 1779, Greene Papers, A.P.S.; Thacher, Journal, 176*77; Martin, Narrative, 122. The regiments in Stark's Brigade were ordered not to take any wood but from their own area. Brigade Orders, Dec. 16, 1779, O.B., Webb.
18. As early as September 16, 1779, Washington ordered 200,000 feet of boards and scantling for the forthcoming winter's encampment and when the general decided upon Morristown the boards were sent there. Robert Clairborne to John Cox, Sept. 16, 1779, Greene Papers, A.P.S.; Moore Furman to Colonel Berry, Maj. Marsh, Maj. Williamson, and David Banks, Dec. 2, 1779, Moore Furman, Letters of Moore Furman (New York, 1912), 43-44; Moore Furman to Nathanael Greene, Dec. 8, 1779, Dreer Collection, Historical Society of Pennsylvania, Philadelphia.

Although a visitor to the camp on December 18 subsequently wrote that the huts had been built without nails, nails were collected and distributed to the troops. Pennsylvania Packet, Dec. 25, 1779; James Abeel to N. Greene, Nov. 27, 1779, Greene Papers, A.P.S.; Jacob Weiss to James Abeel, Oct. 19, 1779, Park Collection, Morristown National Historical Park; entry for Dec. 3, 1779, Jacob Weiss Receipt Book, Park Coll., M.N.H.P.; Joseph Lewis to Moore Furman, Dec. 25, 1779, Joseph Lewis Letters, Park Coll., M.N.H.P. That the soldiers used some nails, is also supported by Joseph Lewis' statement in June, 1780 that the local people were taking "boards and nails" from the huts. Joseph Lewis to N. Greene, June 30, 1780, Joseph Lewis Letters, Park Coll., M.N.H.P.

19. Jacob Weiss to James Abeel, Oct. 19, 1779, Park Coll., M.N.H.P.; James Abeel to N. Greene, Nov. 7, 1779, William Woodford to same, Nov. 27, 1779, Greene Papers, A.P.S.; Brigade Orders Dec. 1, 1779, O.B., 2d New York Regiment.; Regimental Orders, Dec. 7, 1779, Lauber, O.B., 4 New York Regiment, 192; entry for Dec. 3, 1779, Jacob Weiss Receipt Book, Park Coll., M.N.H.P.; Martin, Narrative, 121.

20. General Orders, Dec. 3, 1779, Fitzpatrick, Writings, XVII, 214-15; Brigade Orders, Dec. 6, 1779, O.B., 2d N. Y. Regt.; Regimental Orders, Dec. 7, 1779, Lauber, O.B., 4 N.Y. Regt., 192; General Orders, Dec. 29, 1779, Fitzpatrick, Writings, XVII, 331-32. Although most soldiers' huts had been completed, many officers' huts were not finished until well after the turn of the year. Thacher, Journal, 186; Col. Ebenezer Huntington to Col. S. B. Webb, Correspondence and Journals of Samuel Blachley Webb (3 vol.; New York, 1893), II, 247.
21. Washington to Greene, Nov. 17, General Orders, Nov. 19, Dec. 3, 1779, Fitzpatrick, Writings, XVII, 118-19, 137, 214-15; Brigade Orders, Dec. 6, 1779, O.B., 2d N. Y. Regt.; Regimental Orders, Dec. 7, 1779, Lauber, O.B., 4 N. Y. Regt., 192; Brigade Orders, Dec. 22, 1779, O.B., Webb.
22. Martin, Narrative, 121; General Orders, Dec. 14, 24, 1778, Fitzpatrick, Writings, XIII, 395, 452-53; General Orders, Feb. 16, 1780, Hawkins' Orderly Book, No. 1, Hazen's Regiment, Hand's Brigade, H.S.P.(photostat).
23. Martin, Narrative, 122; General Orders, Dec. 13, 1777, Fitzpatrick, Writings, X, 170-71; Richard Platt to Gen. McDougall, Dec. 29, 1777, U.S. Revolution, L.C. (photostat); Harmar to Johnston, Dec. 23, 1778, Harmer MSS; Edmund D. Halsey, The Continental Army in Morris County in the Winter of 1779-80, In Publications, I (), Washington Association of New Jersey, 10.
24. General Orders, Dec. 13, 1777, Fitzpatrick, Writings, X, 170-71; Richard Platt to McDougall, Dec. 29, 1777, U. S. Revolution, L.C.; Harmar to Johnston, ^{Oct. 13, 1778} Harmar MSS; Martin (Narrative, 122) gives twelve feet as the length of the logs for the sides, but the weight of the evidence for fourteen feet over-rides his figure.
25. Martin, Narrative, 122; The Brigade Orders of January 2, 1780 for the New Jersey Brigade ordered, in part, that the soldiers' huts be "well daub'd." O.B., Jersey Brigade.
26. Martin, Narrative, 122.
27. Brigade Orders, Jan. 2, 1780, O.B. Jersey Brigade; Erkuries Beatty to Reading Beatty, Jan. 25, 1780, Joseph M. Beatty, "Letters of the Four Beatty Brothers of the Continental Army, 1774-1794, "Pennsylvania Magazine of History and Biography, XLIV (1920), 209-13.
28. Thacher, Journal, 155-56; Martin, Narrative, 122, Tuttle ("Washington in Morris County," 371) says that he counted 365 chimney ruins in Jockey Hollow, but that there must have been more than 400.
29. Thacher, Journal, 155-56.
30. General Orders, May 6, 1780, Fitzpatrick, Writings, XVIII, 337-38.
31. Regimental Orders, May 9, 1780, Orderly Book, 4th Pennsylvania Regiment, L.C. (photostat).

32. See footnote 19, Supra.
33. Outside of being in line, there is nothing that indicates the officers' huts had to conform to a basic design. See Figure 3 for the great number of differences among the officers' huts in the Stark Brigade.
34. Tacher, Journal, 155-56.
35. There is no information available about the arrangement of the bunks, but it is difficult to see how they could have been placed in any other fashion.
36. Brigade Orders, Jan. 2, 1780, O.B., Jersey Brigade.
37. Martin (Narrative, 122) says that the last job in building a hut was "to hew stuff and build us up cabins or berths"
38. General Orders, Dec. 3, 1779, Mar. 8, 1780, Fitzpatrick, Writings, XVII, 214-15, XVIII, 95; Brigade Orders, Feb. 15, 1780, Orderly Book, 2d Pennsylvania Brigade, Park Coll., M.N.H.P.; General Orders, Mar. 19, 1780, Hawkins' No. 1; Division Orders, Mar. 5, 1780, O.B. 2d Pennsylvania Brigade; General Orders, Dec. 28, 1779, Lauber, O.B., 4 New York Regt., 211.
39. For mention of a shelf in a hut in the artillery park, see John Cleves Symmes to Gov. Livingston, Mar. 9, 1780, L. W. Smith Coll., M.N.H.P.
40. Regimental Orders, Feb. 1, 1780, Hawkins' No. 1; Brigade Orders, Apr. 5, 1780, O.B., 6th Maryland Regiment. On March 3, 1780, it was ordered that every hut in Hand's Brigade should have a broom. Brigade Orders, Hawkins' No. 1.
41. The various orderly books previously cited contain numerous references to the soldiers' equipment.
42. Regimental Orders, May 12, 1780, Hawkins' No. 1.
43. Brigade Orders, May 15, 1780, Ibid.
44. Brigade Orders, Feb. 15, 1780, Hawkins' No. 1; Division Orders, Mar. 14, 1780, O.B., 2d Pennsylvania Brigade.
45. General Orders, Feb. 8, 28, 1780, Fitzpatrick, Writings, XVII, 506-7 XVIII, 59.
46. Brigade Orders, Mar. 20, 28, 1780, O.B., 2d Pennsylvania Brigade.; Division Orders, May 27, 1780, Orderly Book, Col. W. Stewart, 1st Pennsylvania Brigade, H.S.P. (photostat); Emory McClintock, Topography of Washington's Camp of 1780 and its Neighborhood Publications, I (1894), Washington Association of New Jersey, 10-11.
47. Brigade Orders, Dec. 13, 1779, O.B. 6th Maryland Regiment.

48. Brigade Orders, Jan. 2, 1780, O.B., Jersey Brigade; Brigade Orders, Apr. 27, 1780, O.B., 1st Pennsylvania Brigade.
49. Brigade Orders, Feb. 25, 29, 1780, Hawkins' No. 1.
50. Brigade Orders, Nov. 20, 1779, O.B., 6th Maryland Regiment; Brigade Orders, Mar. 1, 1780, Hawkins' No. 1; Division Orders, Apr. 11, 1780, O.B., 6th Maryland Regiment; Brigade Orders, May 23, 1780, O.B., Col. W. Stewart's Regiment, ~~1st~~ Pennsylvania Brigade.
51. See footnote 48, supra. Division Orders, Mar. 5, 24, 1780, for the Pennsylvania Line called for the construction and completion of a hut for storing expected state stores.
52. Halsey, Continental Army in Morristown, 10; McClintock, Topography of Washington's Camp, 11-12; Brigade Orders, Mar. 28, 1780, O.B., Webb. Thacher (Journal, 155-56), says the "kitchens [are] in the rear" of the line of huts. Perhaps he meant bake houses.
53. Brigade Orders, Mar. 1, 1780, Hawkins' No. 1; McClintock, Topography of Washington's Camp, 10-11.
54. Brigade Orders, Jan. 29, Feb. 4, 1780, Orderly Book, 2d Battalion Artillery, New York Historical Society (microfilm).
55. For references to regimental paymasters and quartermasters, see the following: Brigade Orders, Dec. 23, 1779, Regimental Orders, Apr. 26, 1780, Lauber, O.B., 4 N. Y. Regt., 206, 329; General Orders, Feb. 19, 1780, Orderly Book, Hagen's Regiment, L.C.; Division Orders, Apr. 11, 1780, O.B., 6th Maryland Regt., Regimental Orders, Feb. 11, 1780, O.B., 2d Pennsylvania Brigade; Brigade Orders, Mar. 9, 1780, Hawkins' No. 1; Brigade After Orders, May 2, 1780, O.B., Webb.
56. Beatty, "Letters of the Four Beatty Brothers," 210.
57. Brigade Orders, Apr. 5, 1780, O.B., Col. W. Stewart's Regiment; Regimental Orders, Jan. 2, 1780, Hawkins' No. 1.
58. General Orders, Dec. 4, 1779, Fitzpatrick, Writings, XVII, 215-16.
59. Ibid.; General Orders, Mar. 15, 1780, O.B., 2d Pennsylvania Brigade; General Orders, Apr. 18, 1780, Orderly Book, Spencer's Regiment, New Jersey Line, New York Historical Society (microfilm).
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