Scores of manuscript items survive from the British Army occupation of Philadelphia during the winter of 1777-78 including maps, surveys, journals, narrative descriptions, account books and receipts.

This document gathers illustrated information on Redoubt No. 1 and is arranged somewhat chronologically with attribution to the source or collection for further research.

André's Journal, an authentic record of the movements and engagements of the British Army in America from June 1777 to November 1778 as recorded from day to day by Major John André. (Boston: Bibliophile Society, 1904), Henry Cabot Lodge, Editor.

View of Philadelphia, November 28, 1777, Archibald Robertson.

A Survey of the City of Philadelphia & it's Environs ... & the several Batteries & Works constructed thereon, 15 Dec. 1777, John Montresor Chief Engineer.

A Survey of the City of Philadelphia and its environs shewing the several works constructed by His Majesty's troops, under the command of Sir William Howe, since their possession of that city 26th. September 1777, comprehending likewise the attacks against Fort Mifflin on Mud Island, and until it's reduction, 16th November 1777. John Montresor, Chief Engineer.

Map of defenses of Philadelphia, 1778, John Montresor.

Index to the General Orders Issued by The Right Honorable General Sir William Howe in North America in the Years 1777 and 1778. N.B. The Index is prefixed to the Orders of each year. John Montrésor, Chief Engineer.

Return of the Number and Nature of Ordnance in the severall Redoubts, Philadelphia, 1 Dec. 1777. John Montresor.

Construction details from the Journals of Col. James Montrésor (1757-1759).

Map of defenses of Philadelphia (ca. 1777, no author, likely British).

View of the enemy fleet before Philadelphia, 19 January 1778. By Lt. Fleury.

Plan of the English Lines Near Philadelphia 1777. Lewis Nicola.

Rochambeau's March to Yorktown (1781-1782) and the "ancienne ligne Anglaise."

Journal of the American War by an anonymous officer of the Soissonais Regiment (ca. 1782)

Philadelphia. Charles P. Varlé (1802).

British Defences of Philadelphia. John F. Watson, Annals of Philadelphia.

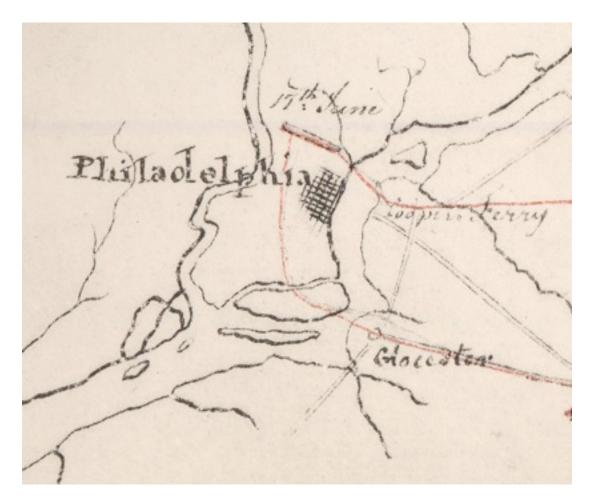
André's Journal, an authentic record of the movements and engagements of the British Army in America from June 1777 to November 1778 as recorded from day to day by Major John André (Boston: Bibliophile Society, 1904), Henry Cabot Lodge, Editor.

October 25, 1777: "The other works were ten redoubts, which were laid out at intervals from the Delaware to the Schuylkill and begun soon after we took possession of Philadelphia. These were afterwards completed." [Vol. I, p. 113].





"Redoubts Near Philadelphia." Vol. I, opp. p. 135 [full and detail view].



"Progress of the British Army Thro' the Jerseys, Anno 1778," [detail view, Vol. 2, opp. title page].

OPERATIONS OF THE BRITISH ARMY UNDER LIEUTENANT-GENERAL SIR HENRY CLINTON, IN THE YEAR 1778. [pages 3-4].

June. In consequence of the determination taken to evacuate Philadelphia, the 5th Brigade (26th, 63d, 7th), 46th and 55th Regiments, Simco's and Stirn's Brigade, were passed over the Delaware at Cooper's Ferry and the waggons with provision and stores for the march packed there under their cover.

17th. The Army received Orders to parade at 6 in the afternoon at their Brigade parades; from these they were marched to the works, behind which they lay on their arms.

18th. Before daybreak, General Grant with the 1st and 2d Brigade and the Hessian Grenadiers marched in different Columns to Glocester Point, where he crossed the Delaware in flat boats.

At sunrise the 3d and 4th Brigades and the Guards were put in motion and came to Glocester Point, where they also crossed. The Grenadiers and Light Infantry passed last. The Vigilant was stationed a little above the point and her guns could graze the neck of land thro' which the Troops passed, so as to render the embarkation very secure. No shot was fired, nor did an Enemy appear until the whole were on the opposite shore. The 46th and 55th marched the same morning from Cooper's Ferry to Glocester Point, where they joined their respective Brigades.

"View of Philadelphia," November 28, 1777.

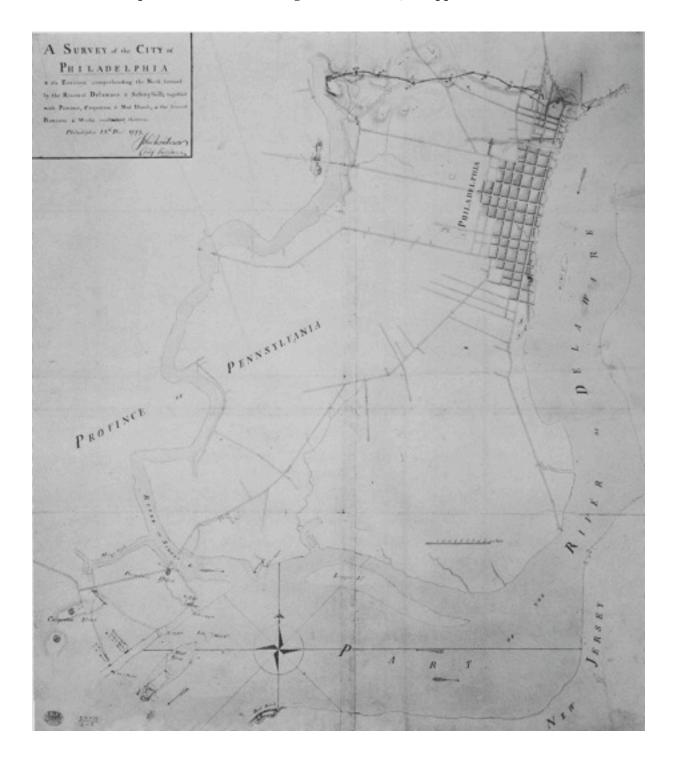
-[Lieutenant General Royal Engineers] Archibald Robertson. Collection: <u>Spencer Collection, New York Public Library</u>.



"While the British army occupied Philadelphia, in the year 1777 and '78, they damned in all the Cohocksinc meadows, so as to lay them all under water from the river, and thus produced to themselves a water barrier of defence in connection with their line of redoubts across the north end of the city. Their only road and gate of egress and ingress northward, was at the head of Front street where it parts to Germantown, and by Kensington to Frankford." (John F. Watson, Annals of Philadelphia). Philadelphia was a garrisoned city housing about 60,000 residents and soldiers. The closest flour mill was in Frankford, five miles north, so the British set Redoubt No. 1 to the north of the dammed Cohocksink to protect the causeway so food and firewood could also be brought down Frankford Road from the Loyalist farmers in Bucks County.

Slightly upstream from the dam was a causeway (now Laurel Street) that linked Front Street from Philadelphia, where Front Street & Germantown Road meet in Northern Liberties, to the beginning of the Frankford Road in Kensington—the major transportation route north. To the left (east) is "Point Pleasant" in Kensington including three buildings that are likely part of Masters Distillery, also know as the "Three Stores." The bluffs of Northern Liberties are to the right (west). This view includes the tall steeple of Christ Church (2nd & Market Streets) and the lower steeple of St. Peter's (3rd & Pine Streets). The purpose of the gabled-roofed frame structure in the middle of the water remains unknown—fishing?, to mark a navigation hazard? The Cohocksink Creek was turned into a canal and then a sewer before 1900, allowing many historians to confuse this with Pegg's Run (now Willow Street, just north of Callowhill St).

"A Survey of the City of Philadelphia & it's Environs ... & the several Batteries & Works constructed thereon, 15 Dec. 1777, John Montresor Chief Engineer." —Collection of the British Museum, copied from Martin P. Snyder, "City of Independence—Views of Philadelphia Before 1800" (Praeger, New York, 1975), pp. 118.



"A Survey of the City of Philadelphia and its environs shewing the several works constructed by His Majesty's troops, under the command of Sir William Howe, since their possession of that city 26th. September 1777, comprehending likewise the attacks against Fort Mifflin on Mud Island, and until it's reduction, 16th November 1777. John Montresor, Chief Engineer." [detail and full view] Collection: Library of Congress





"Index to the General Orders Issued by The Right Honorable General Sir William Howe in North America in the Years 1777 and 1778. N.B. The Index is prefixed to the Orders of each year." John Montrésor, Chief Engineer.

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John Montrésor "Esq. Engineer Extraordinaire and Captain Lieutenant of Foot" (1736-1799) was made "Chief Engineer of America" on December 18, 1775, by King "George the Third."

In 1992, the surviving papers of James and John Montrésor, held by the family, were microfilmed. Also surviving at the National Archives in Kew, England is the "Declaration of the account of John Montresor, received from the Paymaster General of His Majesty's Forces, with detailed costings in relation to the repair and building of forts, barracks, magazines and public works, between October 1768 and 30 September 1778. Total expenditure, £48,306."¹

John Montrésor, as "Chief Engineer" of the British Army, directed the building of all the defenses around Philadelphia during the winter of 1777-78, including the ten redoubts to the north of the City. In late 1778, Montrésor returned to England and retired from the Army.

Years earlier, Montrésor had designed Fort Mifflin. In 1992-93, Harold Finigan, the Founding Executive Director of Fort Mifflin, travelled to England to search for information on the life and military career of John Montrésor.

"I was searching for specific info on Fort Mifflin & Montresor; and found the Public Record Office in Kew contained much more information.

"The Montrésor Papers: When I found them, they were in several boxes & trunks in the attic of a Montresor relative's house in London. The family was elderly, not long for this world. The children seemed ignorant of the historical importance of the papers - they just saw dollar signs after they took one diary book to Sothebys and got 10x what they thought they would. I convinced the mother that this material was of the highest historical importance AS A COLLECTION and got permission to organize, index and microfilm it before it was broken up.

"I moved to England for several months to complete the project. I hired a microfilm company to assist - and we microfilmed every page of every diary, manuscript, document, etc. The drawings - some, like the detailed map of troop deployments for the Battle of Bunker Hill - or the three full color watercolor plans JM drew of design options for the Fort on Mud Island (Ft. Mifflin) made my feel so priviledged to be able to see these treasures after centuries.

"My remembrance is that Montresor died in Maidstone Jail, awaiting trial for alleged embezzlement of the Kings Funds here in America. Although he was dead, his son pushed to have the case heard to clear his father's name. It eventually was, and he was exonerated.

"I researched and found that the court records still survived (that was circa 1992); and were at the Public Records Office at Kew Gardens. Montrésor (the son) had submitted his father's notes & receipts as evidence in the case. What I remember finding was notes & receipts for works supervised by JM; acting in his capacity as chief Engineer of the British Army in North America. Basically he acted as Architect, Engineer & Clerk of the Works; so he had detailed knowledge of the design & construction. I would think that you might check here for more information on the construction of the redoubts."

¹ Catalogue reference AO 1/2531/663. <u>http://yourarchives.nationalarchives.gov.uk/index.php?</u> <u>title=Montresor%2C_John_%281736-%3F_1788%29_Major_Royal_Engineers</u>

"Return of the Number and Nature of Ordnance in the severall Redoubts, Philadelphia, 1 Dec. 1777. John Montresor."

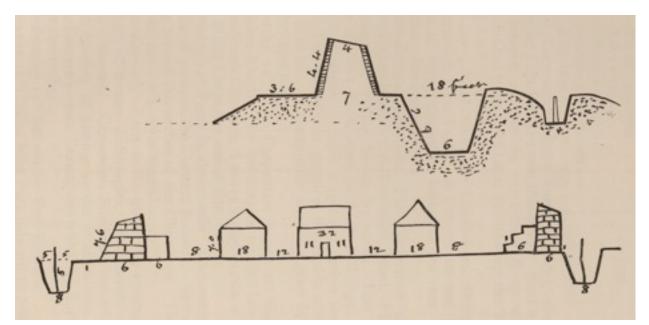
-Collection: Montresor Family Archives on Microfilm (1993), Harold Finigan.

um of the Number and Nature of Philadel townal Redoub 60 Brals 22 \mathcal{Z} 2 6 NB. Shere are Sur Light 12 0. Costed neare the Bridge Whom the Schulkill on hedout h? "

The left column identifies the Redoubts (1 - 10) with subsequent columns listing "18 P[ounde]rs Iron," "12 Prs Medium," 12 Prs Iron," 8 Prs Iron," "6 Prs Brass," 4 Prs Brass" and "How[itzer] 5-1/2 Iron." Redoubt No. 1 returned two each of the 18 lb Iron, 4 lb Brass and 5-1/2 lb Howtizer.

Construction details from the Journals of Col. James Montrésor (1757-1759).

John Montrésor's father, Col. James Montrésor, provides exacting specifications for building Redoubts and Barracks. This scheme might have been followed by John Montrésor when he designed Redoubt No. 1.²



From the inside of Still water.	
the parapet to the Banquette	6 feet
Between do & Barrack	8 "
Barrack	18 "
Between both Barracks	26 "
Barrack	18
Between D° & Banquette	8
Banquette	6
	-how Min
I a superior participation of the second s	20

Many of John Montrésor's manuscript maps of the Redoubts survive but research has yet to reveal the exact widths and depths of the moat in his hand. Military historians suggest that the British Army had a basic pattern which was well known, not needing careful delineation. The locations of the well, privy, kitchen and other necessaries within Redoubt No. 1 are not yet known. The British Army used stacked barrels for privies and wells in the Caribbean in the late-seventeenth century. Large timbers were in short supply and records show that Montrésor employed hundreds of local masons (possibly for the Barracks, wells and privies).

² G. D. Scull, Editor, The Montresor Journals (New York: New-York Historical Society, 1881), p. 45 & plate.

Historical evidence and archaeological potential for British Redoubt No. 1 (1777-78) on the site of the proposed SugarHouse casino, 941-1025 North Delaware Avenue, Philadelphia, PA. — Torben Jenk, Ken Milano & Rich Remer (4/4/2008). page 11 Map of defenses of Philadelphia, 1778, John Montresor [detail view of Redoubts 1 - 4].

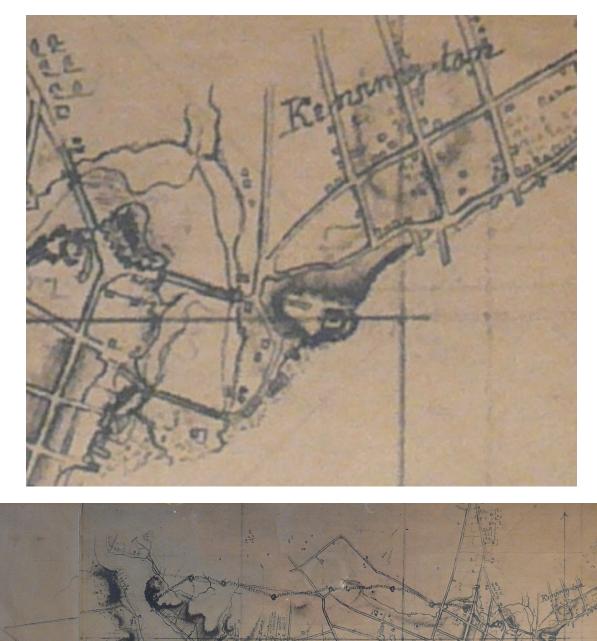


"To his Excellency Sir HENRY CLINTON K.B. General and Commander in Chief of his Majesty's Forces within the Colonies laying on the Atlantic Ocean, from Nova Scotia to West Florida inclusive, &c. &c. John Montresor, Chief Engineer."



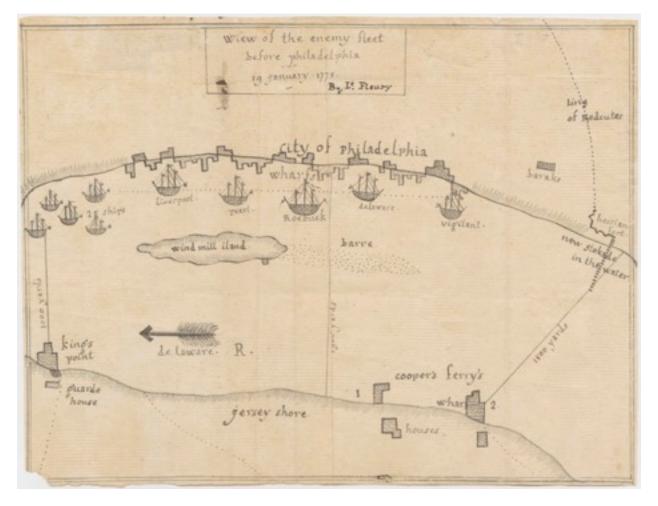
[full view]

Map of Philadelphia (ca. 1777, no author, likely British). Collection: Historical Society of Pennsylvania, call # Of 610 (ca. 1777) b.



Detail views showing Redoubt No. 1 (above) and Redoubts 1 - 10 (below)

"View of the enemy fleet before Philadelphia, 19 January 1778. By Lt. Fleury." Collection: Cornell University.



Lt. Col. François Teissèdre de Fleury was spying upon the British defenses of Philadelphia to plan his attack with "fire boats," a primitive torpedo.

Fluery wrote on Jan. 20, 1778, "They are Rising palissades, from their Redoubte nearest to the River, till the very place where the tide when gone down... they have two Hessian Centrys, close by the water, below the beach."

Note the "1,800 yards" from "wharf 2," north of 'cooper's ferry,' to the western shoreline of the Delaware River, just above where the "new stokade in the water" attaches to the "hessian fort."

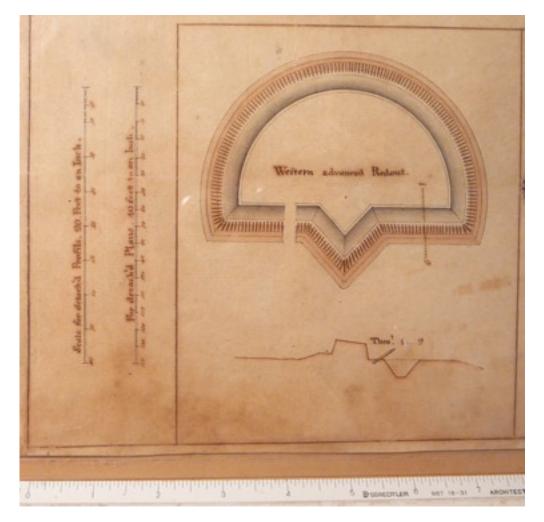
Why does Fleury denote "hessian fort" when other evidence shows Redoubt No. 1 was occupied by Simcoe's Queen's Rangers? Flags were not flown from forts and Simcoe's Military Journals describe the Queen's Rangers frequent trips across the Delaware to Haddonfield and southern New Jersey. Fleury relied upon the "two Hessian Centrys."

For more information on Fleury's "fire boats", see Paul K. Walker, "Engineers of Independence, A Documentary History of the Army Engineers in the American Revolution, 1775-1783" pp. 188-90.

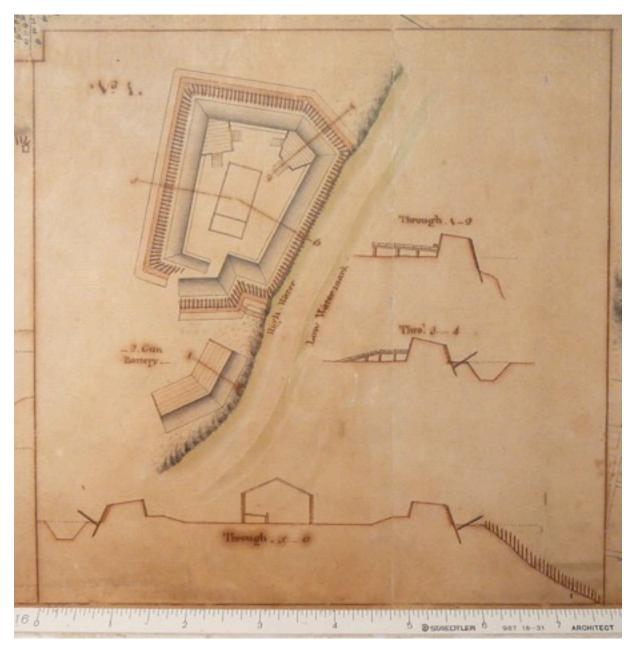
"Plan of the English Lines Near Philadelphia 1777" by Lewis Nicola. Collection: Historical Society of Pennsylvania, call # Of 932* 1778 p.3 (from Am. 602).



"Scale for Principal Plan 100 fathoms per inch."



"Scale for Detach'd Plans 40 feet to an inch." "Scale for Detach'd Profils 20 feet to an inch." "Western advanced Redoubt."



-Scale for Detach'd Plans 40 feet to an inch. Scale for Detach'd Profils 20 feet to an inch.

Set on the bank of the Delaware River, Redoubt No. 1 included a moat which seemingly flooded before high tide—see "High Water " and "Low Water mark." This plan shows 153 *fraises* surrounding the fort within the moat. Ramps for artillery are placed at the northwest and northeast corners. Only Redoubt No. 1 had a barracks within, shown here in the middle with gable roof and bed frame, measuring approx. 20 by 40 feet, possibly built of brick or stone. The sluice or ditch between "High" and the *fraises* might have been part of the waste system (Chief Engineer John Montresor drained waste to the moat when he designed Fort Mifflin). A separate "Gun Battery" protected the southeastern side and the entrance to the Redoubt (the southwestern side was protected by the dammed Cohocksink Creek). Note also the stockade running into the Delaware River, seemingly extending below low tide, surely as a further defense, either from infantry at low tide or possibly floating vessels at high tide.

Rochambeau's March to Yorktown (1781-1782) and the "ancienne ligne Anglaise."

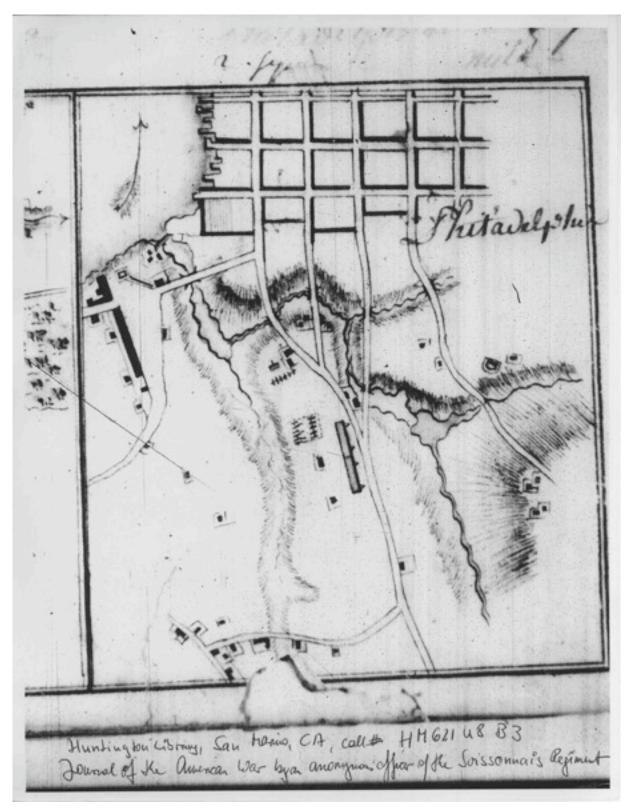


—Detail from "Read's Lion tavern à Philadelphie" [March from Red Lion Tavern to Philadelphia], MS, 22 x 33 cm, Princeton University Library, Bethier Papers, No. 16-4, reproduced in Howard C. Rice Jr., & Anne S. K. Brown (translators and editors), "The American Campaigns of Rochambeau's Army, 1780, 1781, 1782, 1783", (Princeton University Press, 1972).

3-4 September 1781. "The road bears right a bit but nevertheless comes closer to the river. On either side of the road you find woods, county houses, and ruins that are monuments to the wrath of the English. Half a mile from the city you see remains of General Howe's lines. Soon you cross one of the works that the English had built for the defense of the town. The road turns left, you cross a brook called Cohocksink Creek, pass through the suburb of Kensington, and reach Philadelphia."—The American Campaigns of Rochambeau's Army, Vol II, p. 75.

Redoubt No. 1 could be either of the dark ovals below the arrow in the Delaware River . The cartographer, Louise-Alexandre Berthier, drew these watercolor maps in France about fifteen years after the Revolution, from field notes, which might explain the eccentricity of detail in "Kensington."

As part of their 625-mile march from Newport, RI, to Yorktown, VA, in 1781, over 5,000 troops under Rochambeau, plus over a thousand animals on hoof and a similar number of wagons, marched along this route. Just days behind Washington and the Continental Army, Rochambeau's troops camped (shown by the yellow boxes) on the banks of the Schuylkill River, about where 23rd Street is today, between Race and Locust Streets. The 225th anniversary of this event was commemorated by re-enactors



Journal of the American War by an anonymous officer of the Soissonais Regiment (ca. 1782). Collection: Huntington Library, San marino CA. Call # HM621 U8 B3

"Philadelphia" by Charles P. Varlé (1802).

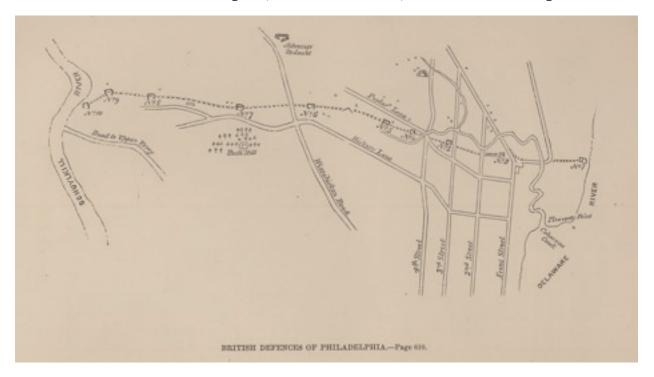
-Collection: David Rumsey



Details showing the "Entrenchment of the English in the Late War" (dotted line) and four fortifications (an open square with four dark squares at the corners) between the Schuylkill River at Fairmount [Fort No. 10 at the Art Museum] and where the Cohocksink Creek meets the



Delaware River (Reboubt No. 1 in Kensington). Close-up of Redoubt No. 1 below "Hall."



"British Defences of Philadelphia," John F. Watson, Annals of Philadelphia.

British Defences at Philadelphia in the Life of General John Lamb pp. one hundred and ninetyone, are described—to wit: Because of the increase of Washington's army at White Marsh, in November '77—they began to fear some attack from him; Richard Platts letter to General Lamb, says: "They have thrown up very strong lines across—from River to river, besides these, ten or twelve very strong redoubts, ditched, friezed, picketed and abbatised; every one of which cross fire and flank their lines." "Judge then, if any attacks will be made by our army this winter"—[I suppose, these were made so strong after the Battle of Germantown, fourth of October '77. A picture of the same is here given.] (Philadelphia: Stoddart & Co. 1881), pp. 610 and plate opposite.

"The British redoubts remained til lately—one on the Delaware bank in a line with the stonebridge street—then no houses were near it; now it is all built up, and streets are run where none were seen." (Philadelphia: Carey & Hart, 1830), p. 418.