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Fort McHenry Military Structures

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Fort McHenry Military Structures

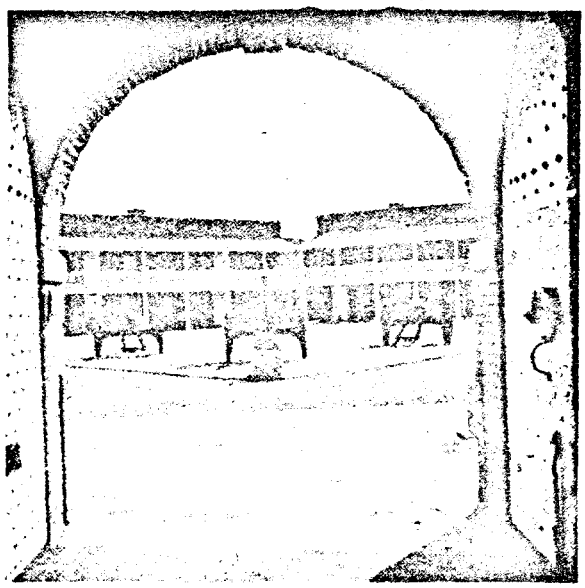
HISTORIC STRUCTURES REPORT PART I

Fort McHenry National Monument and Historic Shrine

BALTIMORE, MARYLAND

Historical Data Section

by George J. Svejda



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HISTORIC STRUCTURES REPORT

FORT McHENRY NATIONAL MONUMENT AND HISTORIC SHRINE

HISTORICAL DATA SECTION

by

DR. GEORGE J. SVEJDA

HISTORIAN

DIVISION OF HISTORY

OFFICE OF ARCHEOLOGY AND HISTORIC PRESERVATION

JUNE 30, 1969

U.S. DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE

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INTRODUCTION

Historic Structures Report, Fort McHenry National Monument and Historic Shrine has been prepared in accordance with the Historical Resource Study Proposal to satisfy the research needs of the Park. The study involves historical data on the following structures:

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III. The Powder Magazine, Part I, FM-H-8

IV. The Junior Officers' Quarters, Part I, FM-H-10

V. Soldiers' Barracks No. 1, Part I, FM-H-12

VI. The Guard House, Part I, FM-H-16

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XI. The Parade Ground, Parts I & II, FM-H-23

XII. Soldiers' Barracks No. 2, Part I, FM-H-24

In preparing this study I received valuable assistance from Superintendent Walter Bruce and his able assistant, Mrs. Hallie D. Crowell.

While I was doing research at Fort McHenry our second daughter, Andrea Frances, was born at the Georgetown University

Hospital. While my thoughts were with my wife and the newly born baby, both Mr. Bruce and Mrs. Crowell tried to make my stay at Fort McHenry as pleasant as possible, and by their cheerful and pleasant attitude helped me to complete this assignment. My thanks and appreciation also go to Mr. Frank B. Sarles, Jr., for proofreading the final draft and to Mrs. Maxine Gresham for typing this study in final form.

George J. Svejda

CHAPTER I

FORT McHENRY NATIONAL MONUMENT AND HISTORIC SHRINE

HISTORICAL DATA

(a) Brief History of Structure: General

Fort McHenry is so situated that it has absolute control of the water approaches to Baltimore. Lying in Baltimore between the Patapsco River and its northwest branch, it had its origin in 1776 with the Whetstone Point shore battery.[1] By 1794 Fort Whetstone, which in the meantime had been abandoned, came under the jurisdiction of the Federal Government upon a recommendation made to the House of Representatives that Baltimore, together with fifteen additional ports and harbors, be fortified, and an appropriation was made for this purpose.[2] The authorization for work on the fortification of ports and harbors came with the Act of March 20, 1794.[3]

John Jacob Ulrick Rivardi was designated by the Secretary of War to examine the fortifications and to prepare plans for

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1. Harold I. Lessem and George C. Mackenzie, *Fort McHenry National Monument and Historic Shrine, Maryland.* National Park Service Historical Handbook Series, No. 5. (Washington, D. C.: Government Printing Office, 1957), pp. 1-2.

2. Cf. Report No. 13 Communicated to the House of Representatives, February 28, 1794, 3rd Congress, 1st Session. *American State Papers.* Class V. Military Affairs. Volume I, pp. 61-64.

3. "An Act to provide for the defence of certain ports and harbors in the United States." *Annals of the Congress of the United States, Third Congress.* Comprising the Period from December 2, 1793, to March 3, 1795. Inclusive, pp. 1423-24.

a permanent defense of Baltimore harbor.[4] Rivardi's plans were approved on April 20, 1794, and Samuel Dodge was selected to supervise the construction.[5]

By May 11, 1797, Fort Whetstone had become known as Fort McHenry, so named in honor of Colonel James McHenry of Maryland, then Secretary of War.[6]

Although the Star Fort was completed some time in the late 1790s, extensive improvements were made between 1803 and the time of the bombardment by the British in 1814. The bombardment by the fleet of sixteen British warships lasted, with two brief intermissions, for twenty-five hours, between 6:00 a.m. of September 13 and 7:00 a.m. of September 14, and according to the estimate of Maj. George Armistead, between fifteen and eighteen hundred shells were directed at the fort. Despite this heavy shelling, only four men lost their lives and twenty-four were wounded.[7]

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4. Secretary of War to Rivardi, March 28, 1794. *American State Papers*. Class V. Military Affairs. Volume I, pp. 87-88.

5. Rivardi to Secretary of War, April 20, 1794. Ibid., p. 89.

6. A letter from Capt. Staats Morris to William Simmonds was datelined "Fort McHenry, May 11, 1797." Letters of Samuel Hodgdon, Box 9, 1797. War Records Section, Office of the Secretary of War. For a complete study of James McHenry's life see Bernard C. Steiner, *The Life and Correspondence of James McHenry, Secretary of War under Washington and Adams*. (Cleveland: The Burrows Brothers Company, 1907), passim.

7. Armistead to Secretary of War, September 24, 1814. *Niles' Weekly Register*, Vol. VII, No. 3 (October 1, 1814), p. 40.

The primary purpose of the bombardment was to create panic among the defenders and thus to cause evacuation of the fort. This did not materialize and it became evident to the British that a direct assault on the fort during daylight could not succeed.[8]

The unsuccessful attempt on the part of British to take over the fort and thus the City of Baltimore eventuated in the withdrawal of the British expeditionary forces and the failure of their expedition. Another result of the war was the creation of the poem "The Star Spangled Banner," by Georgetown attorney Francis Scott Key, who, inspired by the gallant defense of Fort McHenry during the British bombardment on the night of September 13-14, 1814, wrote this poem which later, set to music, was destined to become the National Anthem.[9]

At the time of the British bombardment, Fort McHenry was a pentagonal structure, faced with masonry walls of brick about 12 feet high. A well-defined dry moat, varying in width and about five feet deep, surrounded the fort. The parapets were sodded earth, planted with trees and planned to accommodate cannon

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8. Cochrane to Croker, September 17, 1814. Public Record Office, Admiralty 1, Part 3.

9. The first publication of the poem appeared under the name "The Defence of Fort McHenry" on Tuesday evening, September 20, 1814, in the *Baltimore Patriot & Evening Advertiser*, p. 2.

fired en barbette.[10] Another sloped and sodded earthen bank with an open drainage line separated the terreplein[11] level from the parade ground level. A wooden trestle bridge across the ditch gave access to an opening in the ravelin wall. After passing through the ravelin one approached the wooden protected bridge over the main ditch just before the sally port entrance. The sally port was a roofless passageway cut through the ramparts. After one passed through the sally port one came to the parade ground which was situated on the same level. Around the parade ground, starting just north of the sally port there were distributed the following seven buildings:

The Guard House

The Commanding Officer's Quarters

The Powder Magazine

The Junior Officers' Quarters

Soldiers' Barracks No. 1

The Water Cistern

Soldiers' Barracks No. 2

In front of the buildings there were trees and in the courtyard there was a well.[12]

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10. The term en barbette is "said of guns so mounted or elevated as to fire over a parapet instead of through an embrasure." Cf. for this Max B. Garber, Colonel, U.S. Army, *A Modern Military Dictionary*. (Washington, D.C: Published by Max B. Garber, 1936), p. 110.

11. Col. Garber defines terreplain as "the horizontal surface in [the] rear of the parapet of a fortification, on which guns may be mounted." See Ibid., p. 305.

12. Lee H. Nelson, "An Architectural Study of Fort McHenry." (Philadelphia , National Park Service, 1961), pp. 30-31.

Following the War of 1812, Fort McHenry assumed the existence of a small Army garrison. During 1828-29 the buildings inside the Star Fort were enlarged[13] and on December 4, 1839, after three years of alterations and additions directed by Lt. Henry A. Thompson, a new outer battery was erected together with a new sea wall. Also during this time the Government acquired around Fort McHenry additional property.[14]

Prior to 1836 a substantial portion of the present military reservation was in private ownership. From 1836 to the present time the Federal Government has been the sole owner of the property now identified as the Fort McHenry National Monument and Historic Shrine.

On March 25, 1906, a Baltimore newspaper wrote that "Fort McHenry is practically to be abandoned by the military authorities, only two or three men being left there to care in a general sort of way for the guns and other Government property."[15] This story

13. Ibid., p. 39.

14. For a complete narrative of work done during these years, see "An account of such Repairs to Fort McHenry as appears on the books of the Engineer Department," by Capt. Frederick A. Smith, Engineers, May 5, 1840. R.G. 77, Records of the War Department, Office of the Chief of Engineers, Letters Received, 1838-1866, National Archives. Cf. also a map of Fort McHenry, drawn in May, 1840, by Capt. Frederick A. Smith in the National Archives, Cartographic Section, R.G. 77, Drawer 51, Sheet 14. For some of Lt. Thompson's improvements illustrated on a plan drawn by him in 1837, see "Fort McHenry, Md., 1837," by H.A. Thompson, Superintendent, in the National Archives, Cartographic Section, R.G. 77, Drawer 51, Sheet 9.

15. *The Sun*, March 25, 1906, p. 16.

brought immediate action on the part of the State of Maryland. In a letter to the Secretary of War dated March 30, 1906, the Adjutant General of Maryland, Maj. Gen. Clinton L. Riggs, requested information, in view of the prospective abandonment of Fort McHenry, as to (a) the possible use of the drill ground at that post by various organizations of the Maryland National Guard, and (b) the possible setting aside of a part of the military reservation as a site for a wharf and store-house for the Maryland Naval Brigade.[16]

In answer to his letter General Riggs was informed that, after the withdrawal of the garrison, "it will be practicable for organizations of the Maryland National Guard to use the Fort McHenry drill ground for drill purposes, under such restrictions as are customary with respect to the use of public property." Furthermore, the War Department was willing to grant the authorities of the State of Maryland a revocable license to erect a wharf and store-house on a suitably located parcel of the reservation at Fort McHenry.[17]

Under date of May 24, 1906, the Governor of Maryland, Edwin Warfield, referring to the above actions, requested that the following property at Fort McHenry be set aside for the use of the Naval Brigade, Maryland National Guard:

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16. Riggs to Secretary of War, March 30, 1906. R.G. 94. A.G. 1115778, Box 4442.

17. W.P. Hall, Military Secretary to The Adjutant General, State of Maryland, April 28, 1906. R.G. 94. A.G. 1115778, Box 4442.

1. The wharf for landing purposes,

2. The drill field,

3. One of the barracks building,

4. One store-house,

5. The rifle range.[18]

In answer to his request the Governor was informed that "the power to set aside any portion of a military reservation or any buildings thereon for use other than by the United States is vested exclusively in the Congress." Furthermore, it was pointed out that the letter from the Military Secretary of the Army to the Adjutant General of Maryland dated April 28, 1906, was to the effect that application for a revocable license for the State of Maryland to use the drill ground and to build a wharf and a store-house on a specifically described parcel of the military reservation at Fort McHenry, after the withdrawal of the regular garrison, would be favorably considered by the War Department.[19]

On July 11, 1906, General Riggs, by direction of Governor Warfield, accordingly submitted a letter making application for a lease to the State of Maryland, revocable at any time, and for a nominal consideration, of (1) the wharf for landing purposes, (2) Barracks No. 1, (3) the old Commanding Officer's stable,

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18. Warfield to The Secretary of War, May 24, 1906. Ibid.

19. Assistant Secretary of War to Warfield, June 19, 1906. Ibid.

(4) the coal sheds, (5) the drill ground and (6) the rifle range.[20] Action was taken on this letter according to which "The application of the State of Maryland for a lease, for a period not exceeding five years, revocable at any time, for the use of the wharf, barrack building, old commanding officer's stable, coal sheds, drill ground, and rifle range at Fort McHenry by the Naval Brigade, Maryland National Guard, will be approved when the present garrison at that post is withdrawn."[21]

In a letter of July 27, 1906, the Adjutant General acknowledged receipt of the above letter, and, by direction of the Governor of Maryland, filed an application so that action might be taken on the lease when the post was abandoned, further making request that in the meantime provision be made by which the Maryland Naval Brigade could use the wharf, drill ground, target range and buildings previously specified, if not needed by the garrison then at that post, and all subject to the condition that the Commanding Officer of the U.S. troops stationed there should retain the powers of a Commanding Officer over the reservation and that the privileges granted to the Maryland Naval Brigade should be revocable at any time.[22]

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20. Clinton L. Riggs to The Assistant Secretary of War, July 11, 1906. Ibid.

21. Military Secretary to The Adjutant General, State of Maryland, July 18, 1906. In Ibid.

22. Riggs to Military Secretary, July 27, 1906. Ibid.

The Commanding Officer, Fort McHenry, in a letter of July 23, 1906, replying to a letter from the Military Secretary of July 18, 1906, reported that the wharf in question was not large enough for the work then required, and could not be used by the Maryland Naval Brigade without material and great detriment to the military service; that barracks No. 1 was then being used as a storehouse for quartermaster's supplies, and that the building designated as "Commanding Officers Stable" was being used as a fire apparatus house.[23]

Despite these objections the Acting Inspector General, who had gone to Fort McHenry on August 5, 1906, to evaluate the situation, recommended favorable action on the request of the Adjutant General.[24] On the basis of his recommendation the Military Secretary on August 25, 1906, informed the State authorities of Maryland that their application had been granted.[25]

Similarly, the Secretary of Agriculture had requested in a letter of July 27, 1906, that the War Department give permission to the Department of Agriculture to use parts of Fort McHenry for an animal quarantine station; however, the Acting Secretary of

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23. See letter dated July 18, 1906, from The Military Secretary, W.P. Hall, to The Commanding Officer, Fort McHenry, through Headquarters, Department of the East, and letter of July 23, 1906, from The Commanding Officer, Fort McHenry, to The Military Secretary, Governors Island, N.Y. Ibid.

24. Acting Inspector General to The Military Secretary, U.S. Army, War Department, August 6, 1906. Ibid.

25. The Military Secretary to The Adjutant General, State of Maryland, August 25, 1906. Ibid.

War, in his reply of August 26, 1906, indicated the intention of the War Department to lease the Fort to the State of Maryland after it was vacated by the troops. The Acting Secretary of War also suggested that certain activities in Fort McHenry could be located so that they would not interfere with the use of the military reservation by the State of Maryland, and stressed that the use of the land would be impractical until the garrison was abolished. To this the Secretary of Agriculture replied on September 13, 1906, that, after surveying the ground of Fort McHenry, he believed that enough space was available without any interference with the planned use of the buildings by the Maryland Naval Brigade.[26]

On November 30, 1906, the Assistant Secretary of War signed a lease of the Military Reservation of Fort McHenry to the State of Maryland, excepting several buildings which were to be in the custody of the Secretary of War. The lease, which was revocable, was for the period of five years, to begin on April 1, 1907, or thereafter, as soon as the Fort was vacated by the military. Furthermore, by this agreement the State of Maryland received permission to use the wharf, barrack building No. 3, old C.O. stable, drill ground and rifle range for the Naval Brigade of

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26. See 1st Indorsement, Chief of Coast Artillery, December 7, 1908. Ibid.

the Maryland National Guard prior to the time that the lease would become operative. On March 7, 1907, the Proceedings of a Board of Officers to select buildings at Fort McHenry which were to be retained by the United States were sent to the Military Secretary.[27]

In the meantime, on October 4, 1906, the War Department had decided that the 39th Company at Fort McHenry was to be transferred to Fort DeSoto, effective on or about March 31, 1907, and Fort McHenry turned over to the Engineering Department;[28] however, by February 26, 1907, the above decision was temporarily suspended.[29]

In accordance with the terms of the agreement of November 30, 1906, the annual rental fee for certain rights at Fort McHenry to the State of Maryland was one dollar. The first annual payment was sent by Clinton L. Riggs, Maryland Adjutant General, to the Secretary of War, on March 22, 1907.[30]

Subsequently, the lease and license executed on November 30, 1906, were revoked and a new lease, also revocable at the will of the Secretary of War, was signed on June 12, 1907, by the Acting Secretary of War and the Adjutant General of Maryland, by which

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27. See 3d Indorsement, War Department, Office of the Quartermaster General, April 22, 1907. Ibid.

28. General Orders, No. 169, War Department, October 4, 1906, pp. 1-2.

29. General Orders, No. 39, War Department, February 26, 1907, p. 1.

30. Cf. letter of acknowledgment for this payment of March 29, 1907, from Robert Shaw Oliver, Acting Secretary of War, to Gen. Clinton L. Riggs. R.G. 94. A.G. 1115778, Box 4442.

the post of Fort McHenry, except for certain buildings, was leased to the State of Maryland for a period of five years beginning on the first day of April, 1907, or as soon thereafter as the post of Fort McHenry was vacated by the troops.[31]

Thus the lease had already been accomplished in fact, but could not come into official effect until the troops left. This uncertainty caused Commander H. M. Cohen, S.B.M. Young Camp, No. 1, United Spanish War Veterans in Baltimore, on April 12, 1907, to write to the War Department for information as to the disposition to be made of the Post of Fort McHenry by the military authorities.[32] According to the Adjutant General, Henry P. McCain, it was believed that Fort McHenry was to be retained as a military reservation by the U.S. Government for some time, and the question of the disposition was conditioned until the artillery was moved out of the Fort.[33]

In November of 1907 a proposal for the turning over of the reservation of Fort McHenry to the City of Baltimore as a park was suggested in the Baltimore press.[34] This was nothing new; such a proposal had been discussed many times in previous years.

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31. See 1st Indorsement, Chief of Coast of Artillery, December 7, 1908. Ibid.

32. Cohen to Adjutant General's Office, War Department, April 12, 1907. Ibid.

33. McCain to Cohen, April 23, 1907. Ibid.

34. *The Sun* (Baltimore, Md.,), November 9, 1907, p. 7, and November 20, 1907, p. 9.

But this time there was an additional problem, since, according to the terms of the agreement of November 30, 1906, and June 12, 1907, the State of Maryland was to use the Fort for State purposes only and had no right to sublet it to any third party. Although the matter at this stage was only newspaper comment and represented no official movement on the part of the State of Maryland, it aroused the Commanding Officer at Fort McHenry, Maj. E. W. Hubbard, on November 24, 1907, to request clarification of the uncertain status of the Fort.[35] It was believed that the subletting of the Fort to the City of Baltimore would complicate matters by introducing a second authority, and it was stressed that the lease had been granted for the benefit of the Maryland National Guard and the Maryland Naval Brigade, and therefore that its utilization as a park for the City of Baltimore, would be improper. As the lease was revocable at will at any time by the Secretary of War, the Commanding Officer of Fort McHenry was advised that any improper action on the part of the State of Maryland should be reported by him to the Secretary of War.[36]

On June 20, 1908, The General Society of the War of 1812, at its biennial meeting held in Baltimore, passed a Resolution

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35. Hubbard to The Adjutant General, U.S. Army, through Hdqrs. Artillery District of Baltimore, November 24, 1907. R.G. 94. A.G. 1115778, Box 4442.

36. See Memorandum for the Assistant Secretary of War, from Assistant to the Chief of Staff, Maj. Gen. W. P. Duvall, December 28, 1907, approved by Robert Shaw Oliver, Acting Secretary of War, December 30, 1907. Ibid.

for the continuance of Fort McHenry as a permanent garrisoned post of the United States,[37] as a result of which, on September 11, 1908, the Secretary General of the Society, Calvin Lord, sent from his Boston home letters to the President of the United States and to the Secretary of War informing them of the Resolution and asking them for their best consideration.[38] Though it was believed that the retention of a permanent garrison at Fort McHenry was unfeasible, as the Fort no longer formed a part of the modern coastal defenses of the United States,[39] the Adjutant General, acknowledging both the letters to the President and the Secretary of War on November 2, 1908, informed Mr. Lord that the Resolution passed by the Society would receive due consideration.[40]

A similar Resolution for the permanent maintenance of Fort McHenry as a garrison post was adopted at the November 1908 meeting of the Board of Managers of the Massachusetts Society of

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37. See "Preamble and Resolutions Passed By The General Society of the War of 1812 in the United States At Its Meeting in the City of Baltimore, June the 20th, 1908." Ibid.

38. Lord to the President, September 11, 1908, and Lord to the Secretary of War, September 11, 1908. Ibid.

39. See 2d Indorsement, Chief of Coast Artillery, War Department, Office of Chief of Coast Artillery, Washington, October 29, 1908. Ibid.

40. McCain to Lord, November 2, 1908. Ibid.

the Sons of the American Revolution, and a letter to this effect from the President of the Society, Edward Clarence Battis, was sent to the Secretary of War.[41] Both of these Resolutions were based on the assumption that with the discontinuance of Fort McHenry as a garrison post, the flag would no longer be displayed at the Fort. In the words of the concluding Resolution of the Massachusetts Society of the Sons of the American Revolution:

> it is the earnest desire of this Society that Fort McHenry should be permanently maintained as a garrisoned post of the United States Army, to the end that the national ensign shall be daily displayed from its historic bastion.[42]

On October 29, 1908, the Commandant of the Marine Corps, Brig. Gen. G. F. Elliott, sent a memorandum to the Secretary of War requesting that Fort McHenry be turned over to the Navy Department for the use of the Marine Corps when the Coast Artillery companies were withdrawn.[43] Approval of this request was recommended by the Chief of Coast Artillery.[44] However, the action of the Secretary of War upon this request was negative, the decision being made that upon the discontinuance of Fort McHenry as a garrison for Coast Artillery, the Fort was to be

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41. Battis to the Secretary of War, November 27, 1908. Ibid.

42. Ibid.

43. Elliott to the Secretary of War, October 29, 1908. Ibid.

44. See 1st Indorsement, Chief of Coast Artillery, December 7, 1908. Ibid.

turned over to the Army Quartermaster's Department for use as a reserve supply depot.[45]

Another request came on July 19, 1909, when the Secretary of Commerce and Labor requested from the War Department that a tract of land of about two acres be transferred from Fort McHenry to the Department of Commerce and Labor to be used by the Light-House Board as a site for a depot. On July 22, 1909, his request was referred for report to the Commanding General, Department of the East.[46] The decision came on October 30, 1909, when Acting Secretary of War Robert Shaw Oliver informed the Secretary of Commerce and Labor that his request was denied, as the entire reservation of Fort McHenry was needed for military purposes.[47]

On July 5, 1911, Senator Rayner of Maryland introduced in the Senate a joint Resolution "Providing for the appointment of three engineers to make plans for a national park at the site known as Fort McHenry, and for other purposes."[48] The Resolution was not passed.

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45. Adjutant General to the Commandant, U.S. Marine Corps, January 8, 1909. Ibid.

46. Assistant Secretary of War to the Secretary of Commerce and Labor, July 22, 1909. Ibid.

47. Shaw to the Secretary of Commerce and Labor, October 30, 1909. Ibid.

48. U.S., Congress, Senate, *Providing for the Appointment of Three Engineers to Make Plans for a National Park at the Site Known as Fort McHenry, and for Other Purposes*, 62d Cong., 1st Sess., 1911, S.J.R. 40, p. 1.

Shortly after his designation by the Governor of Maryland as Chairman of the Fort McHenry National Park Committee, Gen. Clinton L. Riggs, who had previously served as the Adjutant General of Maryland, before calling his Committee together or taking any action in the matter, requested on September 20, 1911, that he be informed of the intention of the War Department with regard to the preservation of Fort McHenry.[49]

In his reply to General Riggs, Acting Secretary of War Oliver wrote that one company of Coast Artillery then stationed at Fort McHenry was eventually to be transferred elsewhere; but that it was the intention of the War Department to retain the Fort permanently, because of its value for military purposes.[50]

On April 15, 1912, Senator Rayner introduced in the Senate a Bill providing for the preservation of Fort McHenry and the government grounds therewith for military purposes and for its use as a military museum.[51] This Bill was reported on July 13, 1912, by the House Committee on Military Affairs, with a recommendation for its passage.[52]

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49. Riggs to Oliver, September 20, 1911. R.G. 94. A.G. 1115778, Box 4442.

50. Oliver to Riggs, September 29, 1911. Ibid.

51. U.S., Congress, Senate, *To Perpetuate and Preserve Fort McHenry and the Grounds Connected Therewith as a Government Reservation Under the Control of the Secretary of War and to Authorize its Partial Use as a Museum of Historic Relics*, 62d Cong., 2d Sess., 1912, S. 6354, pp. 1-2.

52. U.S.,Congress, House, Committee on Military Affairs, *Report No. 995 To Preserve Fort McHenry* [To Accompany S. 6354], 62d Cong., 2d Session, 1912, House Calendar No. 285, p. 1.

On August 14, 1912, Carmi A. Thompson, Secretary to the President, by direction of the President, sent the Bill to Secretary of War Henry L. Stimson, asking him if he knew of any objections to the Bill's approval.[53] The Secretary of War had no objection to approval of the Act.[54]

By July 10, 1912, the Secretary of War had decided that the 141st Company, Coast Artillery Corps, should be relieved from duty at Fort McHenry and ordered to be transferred on or about July 20, 1912, to Fort Strong, Mass. With the departure of the 141st Company, the post was to be turned over to a caretaker provided by the Quartermaster's Department.[55]

By Section 29 of the Public Building Act, approved on March 4, 1913, certain land embraced within Fort McHenry was set aside and designated as a site for an immigration station to be constructed at Baltimore.[56]

On April 3, 1913, the Assistant Secretary of the Treasury requested that the War Department take the necessary action to

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53. Thompson to Stimson, August 14, 1912. R.G. 94. A.G. 1115778, Box 4442.

54. Stimson to the President, August 15, 1912. Ibid.

55. See Memorandum from Leonard Wood, Major General, Chief of Staff to The Adjutant General, July 10, 1912. R.G. 94. A.G. 1115778, Box 4442. On the transfer of the 141st Company see also Special Orders, No. 165, War Department, July 15, 1912.

56. See Public, No. 432, 62d Cong., 3d Session in U.S., *Statutes at Large*, XXXVII, Part I, Chap. 147, Sec. 29, pp. 888-89.

transfer this property to the custody of the Treasury Department, and that the transfer papers be accompanied by a map of plat showing the location, dimensions, boundaries and surroundings of the land in question.[57]

The erection of the immigration station at Baltimore in the portion of Fort McHenry set aside for that purpose was entrusted to the Treasury Department, and it soon became evident that a period of one year would be necessary to erect the buildings and prepare them for occupancy. While this project was being undertaken the Immigration Service, then under the Department of Labor, was facing serious difficulties in the conduct of immigrant examinations at the Port of Baltimore. Those newly arrived immigrants who were required to be detained were sheltered and provided for by the steamship companies in a building at Locust Point, where healthy and sick were put together, causing deplorable conditions in housing as well as sanitation. The Commissioner of Immigration in Baltimore, Bertram N. Stump, called these inadequate facilities to the attention of Gen. Clinton L. Riggs, Chairman of the Fort McHenry National Park Commission, who heartily favored and supported the conversion of the hospital building at Fort McHenry to temporary use by the Immigration Service, until the new immigration

57. Assistant Secretary, Treasury Department, to The Secretary of War, April 3, 1913. R.G. 94. A.G. 1115778, Box 4442.

station could be completed.[58] To find a temporary relief for this situation Secretary of Labor W. B. Wilson, on December 20, 1913, requested from the Secretary of War permission to use the hospital building at Fort McHenry "for the purpose of accommodating sick immigrants, until such time as the Treasury Department officials can complete the immigration station at Baltimore in accordance with existing legislation."[59]

The seriousness of the situation required early action, and therefore on January 14, 1914, Secretary Wilson requested from the Secretary of War immediate action on his request.[60]

On January 16, 1914, Secretary of War Lindley M. Garrison informed the Secretary of Labor that his request for temporary use of the hospital building at Fort McHenry was granted but with the understanding that the period of use was to be about one year.[61]

On February 2, 1914, Congressman Linthicum introduced in the House of Representatives a Bill to authorize and direct the Secretary of War to grant permission to the City of Baltimore to occupy and use Fort McHenry as a public park, subject to the provisions of Section 3 of the proposed Bill, setting aside a sixty-foot wide strip

58. Riggs to The Secretary of War, December 17, 1913. Ibid.
59. Wilson to The Secretary of War, December 20, 1913. Ibid.
60. Wilson to The Secretary of War, January 14, 1914. Ibid.
61. Garrison to Wilson, January 16, 1914. Ibid.

of land at the Fort as a site for an immigration station.[62] On May 26, 1914, a law was passed granting the use of the Fort McHenry Reservation to the City of Baltimore[63] and turning over Fort McHenry to the City for park purposes. This event was celebrated in a public ceremony at Fort McHenry on June 27, 1914.[64]

As previously stated, the clearing of the immigration site at Fort McHenry was to be done expeditiously,[65] but the removal of the buildings from the portion set aside by Congress was actually very slow, and it was evident from a letter of January 25, 1915, from the Superintendent of Public Parks of the City of Baltimore, William S. Manning, that the Board of Park Commissioners planned to do nothing on this matter until the spring of 1915.[66]

On April 26, 1915, the Secretary of the Park Board, J. V. Kelly, reported that a decision on the removal of the buildings might come at a meeting of the Board on May 4, 1915.[67]

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62. U.S., Congress, House, *Authorizing the Secretary of War to Grant the Use of the Fort McHenry Military Reservation, in the State of Maryland, to the Mayor and City Council of Baltimore, Making Certain Provisions in Connection Therewith, Providing Access to and From the Site of the New Immigration Station Heretofore Set Aside, and Appropriating Certain Money,* 63d Cong., 2d Sess., 1914, H.R. 12806, pp. 1-4.

63. See Public Law No. 108, in U.S., Statutes at Large, XXXVIII, Part I, Chap. 100, pp. 382-83.

64. *Baltimore American,* June 28, 1914, pp. A 6-7.

65. See Reference letter from Assistant Secretary of the Treasury to the Secretary of War, January 13, 1915. G.R. 94. A.G. 1115778, Box 4442.

66. Manning to 2nd Lt. E.P. Silkman, Ft. Howard, Md., January 25, 1915. Ibid.

67. Kelly to Stump, April 26, 1915. Ibid.

The impression which Commissioner of Immigration Stump had was that there was a serious dispute between the Mayor's office and the Park Board regarding the removal of the old Canteen building on the grounds of the Fort, and that according to the Mayor's indication nothing could be done about this for at least half a year. Consequently Commissioner Stump recommended that the Government remove the building if it stood as an obstacle to the improvement of the site.[68]

On May 3, 1915, Assistant Secretary of the Treasury B. R. Newton, by direction of the Secretary, requested that the War Department demand early action on the removal of the old canteen building from Fort McHenry.[69] The War Department complied with this demand on May 21, 1915,[70] and Mayor James H. Preston promised that the building would be removed during the month of June.[71]

On September 9, 1915, the Secretary of Labor approached the Secretary of War on the subject of a request by the Baltimore Dry Docks & Ship Building Company for consideration of a proposition to change the location of the immigration station to

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68. Stump to Assistant Secretary, Treasury Department, April 27, 1915. Ibid.

69. Newton to the Secretary of War, May 3, 1915. Ibid.

70. Assistant Secretary of War to The Mayor, City of Baltimore, May 21, 1915. Ibid.

71. Preston to Breckinridge, May 22, 1915. Ibid.

another part of Fort McHenry, so that the present site might be transferred to them (subject to Congressional action authorizing such a change), requesting the views of the War Department in this matter.[72] However, according to a report of September 25, 1915, prepared by the Chief of Staff and approved on September 28, 1915, by the Secretary of War, the War Department was not willing to approve such a change.[73]

A protest against the change in location and the consequent delay in the construction of the immigration station at Locust Point appeared in the Baltimore *Sun*[74] and was the subject of an inquiry by Congressman Linthicum on September 11, 1915.[75]

Neither the proposed transfer of a part of the reservation of Fort McHenry to the Department of Agriculture, nor the proposition to establish a detention center at the Fort, nor the placing of a tract of land at the disposal of the Light-House depot were ever realized.

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72. See letter of Secretary of War of September 14, 1915, to the Secretary of Labor, acknowledging his letter of September 9, 1915. Ibid.

73. See Memorandum for the Secretary of War of September 25, 1915, prepared by the Chief of Staff and approved by the Secretary of War on September 28, 1915; see also letter from John C. Scofield, Assistant and Chief Clerk, War Department, to the Secretary of Labor, September 28, 1915; John C. Scofield to Congressman Linthicum, September 28, 1915. Ibid.

74. *The Sun*, September 8, 1915, p. 14.

75. See letter of September 28, 1915, from John C. Scofield to J. Chas. Linthicum. R.G. 94. A.G. 1115778, Box 4442.

Consequently, on December 16, 1915, Congressman Linthicum introduced in Congress a Joint Resolution by which the Government would be authorized to cede to the State of Maryland temporary jurisdiction over certain lands of the Fort McHenry Military Reservation.[76] A Resolution of similar nature was introduced in the Senate on March 3, 1916, by Senator Lee of Maryland.[77]

The Chairman of the House Committee on Military Affairs, the Hon. James Hay, and the Chairman of the Senate Committee on Military Affairs, the Hon. George E. Chamberlain, sent their respective Resolutions to the War Department, requesting its views on the proposed legislation. On February 11, 1916, the War Department reported favorably on the proposed measures, H.J. Res 68[78] and S.J. Res. 109.[79] The Resolution in question was finally passed by a joint session of Congress on April 3, 1916.[80]

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76. U.S. Congress, House, *To Cede to the State of Maryland Temporary Jurisdiction Over Certain Lands in the Fort McHenry Military Reservation*, 64th Cong., 1st Sess., 1916, pp. 1-3.

77. U.S. Congress, Senate, *To Cede to the State of Maryland Temporary Jurisdiction Over Certain Lands in the Fort McHenry Military Reservation*, 64th Cong., 1st Sess., 1916, pp. 1-3.

78. H.L. Scott, Major General, Chief of Staff, Acting Secretary of War, to James Hay, Chairman, Committee on Military Affairs, House of Representatives, February 11, 1916. R.G. 94. A.G. 1115778, Box 4442. This was also reported in House Report No. 211, 64th Cong., 1st Session.

79. Secretary of War to the Chairman, Committee on Military Affairs, U.S. Senate, March 9, 1916. Ibid.

80. See Public Resolution, No. 12, 64th Congress, 1st Session, in U.S., *Statutes at Large*, XXXIX, Part 1, Chap. 57, p. 46.

Following World War I, public interest in the future of Fort McHenry was reawakened. On June 19, 1922, President Warren G. Harding dedicated a memorial to Francis Scott Key and the Defenders of Baltimore, which was erected on the grounds of the Fort. Finally on March 3, 1925, Congress passed an Act establishing Fort McHenry as a National Monument (43 Stat. 1109). This Act also authorized the Secretary of War to restore Fort McHenry "to such a condition as would make it suitable for preservation permanently as a national park and perpetual national memorial shrine as the birthplace of the immortal 'Star Spangled Banner.'"[81] The Act also stipulated that the Secretary could use the area for military purposes in case of a national emergency.

In the meantime steps were being taken in the Congress to introduce legislation which would recognize the Star Spangled Banner as the national anthem of the land. Indeed, between 1910 and 1931, the year in which the Star Spangled Banner finally received Congressional recognition as the national anthem, several Bills and Resolutions had been introduced in the Congress by public demand. They all failed, until finally, after several unsuccessful attempts, Rep. J. Charles Linthicum introduced a Bill on April 15, 1929,[82] which was passed in the House on

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81. U.S. *Congressional Record*, 68th Cong., 2nd Sess., pp. 3861, 3863, 3929, 4629, 4797, 4863, 4871, 5073, 5530.

82. U.S. Congress, House *To Make The Star-Spangled Banner the National Anthem of the United States of America*, 71st Cong., 1st Sess., 1929, H.R. 14, p. 1

April 21, 1930. On March 3, 1931, this Bill to make the Star Spangled Banner the national anthem was adopted by the Senate and went to the President to be signed.[83] The credit for this accomplishment goes to Congressman Linthicum, and also to Mrs. Reuben Ross Holloway, President of the Maryland Society, United States Daughters of 1812, as both, through united and enthusiastic effort, rendered complete Maryland's gift to the nation.

By executive Orders 6166 and 6228 of June 10 and July 28, 1933, Fort McHenry was transferred from the jurisdiction of the War Department to that of the U.S. Department of the Interior, National Park Service, effective August 10, 1933. On August 11, 1939, Fort McHenry was redesignated a National Monument and Historic Shrine.

(b) Name of Builder:

John Jacob Ulrick Rivardi, French artillerist and military engineer, is generally credited with the architecture of Fort McHenry, but this is not quite accurate. It is true that Rivardi was designated by the Secretary of War to examine the fortifications and to prepare plans for permanent defense of

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83. U.S. Congress, *An Act To Make The Star Spangled Banner The National Anthem of the United States of America*, Public Law No. 823, 71st Cong., 3d Sess., p. 1.

Baltimore harbor. Rivardi's plans were approved on April 20, 1794, but it was actually Samuel Dodge and Alexis De Leyritz who were responsible for the execution of Rivardi's design. It was in 1798 that the French artillerist and military engineer, Maj. Louis Tousard, was commissioned to design a fort that could provide defense against a land attack from the rear.[84] Despite the fact that by September 21, 1798, Tousard's design was approved by the Naval Committee, no work on it was begun.[85] It was only with the appointment of another French artillery officer and military engineer, John (or Jean) Foncin, on March 28, 1799, that Tousard's plan was carried into reality.[86] With the exception of the later addition of a ravelin - which perhaps might also have been in his original design - and the changes in the embrasures, Foncin's design of Fort McHenry and all its inner buildings remained the same until after the British attack on the Fort.

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84. Cf. Louis De Tousard, *American Artillerist's Companion, or Elements of Artillery.* Treating of all Kinds of Firearms in Detail, and of the Formation, Object and Service of the Flying or Horse Artillery, Preceded by An Introductory Dissertation on Cannon. In Two Volumes. Volume I. (Philadelphia: Published by C. and A. Conrad and Co. and by Conrad, Lucas and Co. Baltimore; Somerwell and Conrad, Petersburg; and Bonsal, Conrad and Co. Norfolk, 1809), particularly pages 402-79.

85. Robert Gilmore et al to McHenry, September 21, 1798. McHenry Papers, Library of Congress.

86. Regarding Foncin's appointment, see McHenry to Gilmore and McHenry to Foncin, March 28, 1799. McHenry Papers, Library of Congress.

James McHenry thought very highly of this "French Gentleman" and saw in him a person "worthy of trust, competent to what he has undertaken, upright and unassuming in his conduct."[87] Foncin, writing to James McHenry from Philadelphia on September 13, 1814, recalled the two years, 1799-1800, which he devoted to laying out and directing the construction of Fort McHenry and thanked McHenry for his kindness to him in these words:

> The gratitude which I constantly preserve of your Kindness towards me, permit [sic] me not to go to France, without letting you Know my feelings on this account. You not only have supported me while you was [sic] secretary of war; but your satisfaction towards my conduct, has been a great encouragement for the exerting of all my faculties in the service of the United States; and I still keep alive the flattering remembrance of the Satisfaction of the citizens of Baltimore, while I was building fort McHenry. I always have done all that was in my power to show my zeal; and in this very moment notwithstanding my displeasure of not being employed since many years, I am happy to answer the desire of the Citizens of Philadelphia, who have applyed to me, in order to help them in the projecting and erecting [of] some fortifications for the defence of their city. I do it with great pleasure, being extremely thankful for the protection I have enjoyed there during many years. But our French Government being returned to our old beloved sovereigns, it is my duty to go back to my country; and I request from you Sir, the favor of an answer, which might be

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87. James McHenry to Samuel Dexter, Secretary of War, May 29, 1800. McHenry Papers, Library of Congress.

> wundered [rendered?] as an evidence of the approbation of the U.S. for my services, while you was [sic] secretary of war. Your letter will be a record which may be some day useful to my son; and I must not neglect to procure him such an honorable title. Besides I wish to retire from the United States in the most convenient manner. I shall be very thankful for your kindness, and beg your pardon for any trouble I give you.

As a P.S. to his letter Foncin added:

> It is a painful idea to me, that the beautiful city of Baltimore be exposed to the disasters of War; but my mind will be a little solaced, if Fort McHenry does answer the purpose for which it was established, and affords me the Satisfaction of having contributed to your defence.[88]

And indeed Fort McHenry did withstand the British attack and did answer the purpose for which it was established, thanks to Foncin.

(c) Name of Owner in Historic Period:

United States War Department.

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88. Col. John Foncier [sic] to The Honorable James McHenry, Esq., Maryland Historical Society, Vertical File. This letter also appeared in the *Maryland Historical Magazine*, Vol. V, No. 2 (June, 1910), pp. 182-83.

CHAPTER II

COMMANDING OFFICER'S QUARTERS

(a) Brief History of Structure:

The earliest known plan of Fort McHenry, of 1803, shows the Commanding Officer's Quarters to be approximately 53 feet long. Captain Walbach's plan of Fort McHenry of 1806 shows the Commanding Officer's Quarters to be about 52 feet long, while the 1819 plan of the Fort by Capt. William Tell Poussin shows the Commanding Officer's Quarters to be about 48 feet long. The Walbach plan of 1806, as well as Poussin's 1819 plan, show the Guard House structure situated east of the Commanding Officer's Quarters. Both the Commanding Officer's Quarters and the Guard House were subsequently joined together as a single building 18 by 78 feet long, as it is today.[1] Evidence indicates that the two structures were joined together to make one homogeneous building by the action of Lt. James Ripley, who on November 15, 1820, issued orders that the Guard House was to become an Officers' Quarters.[2] The restoration

1. Lee H. Nelson, "Architectural Research and Explorations Conducted as a Part of the Historic American Buildings Survey at Fort McHenry, June-December, 1958," unpublished report, National Park Service, H.A.R.P., 1958, pp. 62-63.

2. Ripley to Capt. I.H. Hook, November 15, 1820. R.G. 92, Records of the War Department, Office of the Quartermaster General, Consolidated Correspondence File, 1794-1915, Fort McHenry, National Archives.

of the Commanding Officer's Quarters and the Guard House to their 1814 status would mean that the both buildings would again be separated, as indicated on the 1819 map.

On June 27, 1813, Capt. George Armistead was ordered to assume command of Fort McHenry until Maj. Lloyd Beall, who suffered from gout, recovered from his ailment. In July of that year Armistead was promoted to Major. With the transfer of Major Beall, Armistead remained permanent Commanding Officer at Fort McHenry.

Even prior to Armistead's arrival, an order came evacuating all wives and dependents from Fort McHenry in preparation for a British attack.[3] During the British attack the Commanding Officer's Quarters served as headquarters for Major Armistead. His wife, whose parents were living in Baltimore, was not present at the Fort, during the bombardment.

The architectural investigation of the Commanding Officer's Quarters conducted in 1958 confirmed that the size of this building was 18 feet by 48 feet. This investigation also revealed the existence of a cellar kitchen, which was situated under the easternmost room of the original building, and also of a fireplace.

3. See Order, Headquarters, 3rd Div., April 14, 1813, and letter from S. Smith to Col. Nichols, May 8, 1813, in Samuel Smith Papers, Library of Congress.

It also revealed that the entrance to the cellar was from an exterior stairwell located along the center of the end wall, and that the structure was built of brick, with possible evidence of the original one and one-half story gable shingle roof.[4]

The present structure reflects the period after 1830.

(b) Name of Builder:

The available evidence shows that it was John Foncin who designed the Commanding Officer's Quarters and all the other inner buildings at the Fort, and that its architectural appearance remained basically unchanged until after the British attack on Fort McHenry in September 13-14, 1814.

(c) Name of Owner in Historic Period:

United States War Department.

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4. Nelson, op. cit., pp. 61-64.

CHAPTER III

THE POWDER MAGAZINE

(a) Brief History of Structure:

The Powder Magazine first appears on the earliest plan of Fort McHenry of November 9, 1803,[1] on exactly the same position which it presently occupies. This plan shows it as a rectangular structure, drawn only in outline, measuring 20' 0" by 31' 6" and with no interior arrangement shown. In the 1806 plan, drawn by Capt. John B. Walbach, the powder magazine is scaled about 20' 0" by 31' 6."[2] The only difference between these two plans is that in the 1806 plan the wall appears to be around the magazine, which might indicate that it either served as a low retaining wall to provide better drainage around the magazine or as a commonly employed military device to isolate the magazine from the garrison.[3] The archeological investigation of this structure conducted in 1958 confirmed the accuracy of these two plans, 1803 and 1806, when it revealed the size of the original building 20 feet, 0 inches by 31 feet, 6 inches.[4]

1. "Fort McHenry, 9th November, 1803." R.G. 77, Records of the War Department, Cartographic Section, Drawer 51, Sheet 1, National Archives. This map is drawn to a scale in toises, a French measure of length. One toise is equivalent to 6 feet.

2. "Plan of Fort McHenry by Captain Walbach of the Artillery for the U.S. Mil: Philo: Soc: No. 1." United States Military Philosophical Papers, New York Historical Society. This plan was also prepared using a scale in toises.

3. Nelson, "Architectural Research and Explorations Conducted as a Part of the Historic American Building Survey at Fort McHenry, June-December, 1958," p. 2.

4. Ibid.

The report of the Secretary of War of February 13, 1806, is the first official mention of the existence of the powder magazine,[5] and an 1809 document refers to the building as a "brick" magazine.[6] The War Department, in an 1811 report on coastal fortifications, stated that Fort McHenry had a "brick magazine that will contain 300 barrels of powder."[7] The conflict with Great Britain had brought about the necessity for many repairs at Fort McHenry, and in March of 1813 Gen. Samuel Smith of the Maryland Militia approached the Secretary of War with a request for "An Engineer to compleat [sic] the fortification,"[8] whereupon J. G. Swift, Colonel of U. S. Engineers, on March 27, 1813, ordered Maj. Lloyd Beall to carry out improvements at Fort McHenry.[9] But nothing was accomplished and indeed there is no evidence that the work of improving the magazine was executed even after the British bompardment.

The bombardment, by a fleet of sixteen British warships, lasted with two brief intermissions for twenty-five hours, from

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5. See Report of the Secretary of War, February 13, 1806. U.S. Congress, *American State Papers*, 1832, Vol. XVI, p. 194.

6. Ibid., p. 246.

7. See Report of the Secretary of War, December 10, 1811, in Ibid., p. 310.

8. S. Smith to Gen. John Armstrong, Secretary of War, March 16, 18, 1813. Samuel Smith Papers, Library of Congress.

9. Swift to Beall, March 27, 1813. J.G. Swift Papers, U.S. Military Academy.

6 a.m. of September 13 to 7 a.m. of September 14, 1814, and according to the estimate of Major Armistead, between fifteen and eighteen hundred shells were directed at the fort. Despite this heavy shelling only two public buildings were materially injured - the others but slightly." Four men lost their lives and and 24 were wounded.[10]

One of the accounts describing the bombing remarked: "When the shell struck it was deemed necessary to roll out the barrels of powder as the magazine was not bomb proof."[11] A Scottish traveller to this country, describing the 1814 bombardment, said that "the magazine was not bomb-proof" and noted that "A shell struck the corner of the magazine in a slanting direction, and shattered the wall; had it penetrated, the capture of the fort would have been inevitable."[12]

When it was realized that there was no bomb-proof building within the Fort, corrective measures were introduced to improve its defensive status. On September 18, 1814, four days after the British attack, Brig. Gen. Winder directed Gen. Samuel Smith's attention to the fact that "There will be required to render

10. Armistead to James Monroe, Secretary of War, September 24, 1814. *Niles' Weekly Register*, Vol. VII, No. 3 (October 1, 1814),p. 40.

11. Aaron Baroway, "The Cohens of Maryland." *Maryland Historical Magazine*, Vol. XVIII, No. 4 (December, 1923), p. 373.

12. John M. Duncan, *Travels Through Part of the United States and Canada in 1818 and 1819*. Vol. I. (New York: W.B. Gilley, New Haven: Howe & Spalding, 1823), p. 225.

the magazine bombproof, 19200 bricks & 40 Brick layers."[13] On September 29, 1814, Samuel Smith reported that "The Bombproof for the magazine at Fort McHenry will be compleat [sic] this day."[14] These alterations consisted of the thickening of the magazine walls to their present dimensions, the building of a massive brick vault over the powder storage room, and the erection of a traverse as a means to protect the entrance in front of the newly reinforced walls. While the excavation conducted in 1958 revealed that the foundation of the traverse corresponded to the directive of March 27, 1813, from J.G. Swift to Maj. Lloyd Beall, these archeological investigations also confirmed that this traverse was added to the newly reinforced and thickened front walls following the British bombardment.[15]

While the powder house now fulfilled its mission more adequately, from the military point of view, one more deficiency remained, and that was the lack of a roof which would protect the exposed brick vault from the elements. The person who was approached to correct this deficiency was a Baltimore architect, Maximilian Godefroy, who was also a Professor of Civil and Military

13. Winder to Smith, September 18, 1814. Baltimore City Archives, Baltimore City Hall, 1814, Box 23, No. 496.

14. Smith to James Monroe, Secretary of War, September 29, 1814. Samuel Smith Papers, Library of Congress.

15. Nelson, op. cit., pp. 5-6.

Architecture at St. Mary's College. His idea was to cover the vault with an earthen and sod roof; in this scheme the earth was to have the function not only of a roof, but also of an additional guarantee against concussion. This idea was proposed by the Commanding Officer of regular artillery at Fort McHenry, Capt. Frederick Evans, who fearing that the earthen roof would prevent the freshly-laid masonry from curing, said:

> Should [covering the magazine with earth] take place, I believe it will not be possible to save our powder, as the arch when put up was done in a rainy time & the absorbent qualities of the brick destroyed. . . . [It] now requires all the air that can be had both within & without to dry the walls.[16]

The plastering of the vault temporarily settled the matter,[17] but an estimate for rafters, planks, nails and shingles in the amount of $592.60, transmitted in November of 1815 to Colonel Bomford, also suggested that the construction of a roof should be expedited, as keeping the ammunition dry during the winter was impossible, and also that "Slates tho' preferable to shingles are not to be procured."[18] However, because the increased

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16. Evans to Gen. S. Smith, October 9, 1814. Samuel Smith Papers, Library of Congress.

17. Despite the fact that one cannot determine when the coat of plaster was applied, there is now a heavy coat of plaster intact on the upper surface of the brick vault.

18. Lieutenant Bache to Lieutenant Colonel Bomford, November 24, 1815. R.G. 156, Records of the War Department, Office of the Chief of Ordnance, Selected Letters Received 1801, 1806 and 1812-20. National Archives.

appropriation called for installation of a slate roof instead of shingles, the slates were located and the repair work even included a few lightning rods.[19]

The 1819 plan of Fort McHenry prepared by Capt. William Tell Poussin accurately pictures the fort in its improved post-War of 1812 condition. The powder magazine as depicted in this plan had reached its present physical size, and the traverse is shown projecting from the front end of the building.

Despite the fact that by 1819 the powder magazine was protected by a brick traverse, a bombproof brick vault and a slate roof to shed rain, perhaps because of the end of hostilities its use was discontinued; an inspection report of September 22, 1822, reports that the "Magazine contains only boxes of fixed ammunition and Cartridges."[20]

The 1829 renovation of Fort McHenry brought with it changes in the powder magazine. These repairs were made under the supervision of Capt. J. W. Ripley, who on July 25, 1829, reported to General Gratiot, Chief Engineer of the Army, that "The Magazine [within the Fort] is entirely useless as such, having two others that are perfectly dry, and in good repair. I request permission

19. Lieutenant Baden to Captain Morton, November 4, 1817. Ibid.

20. See Unsigned Inspection Report, September 22, 1822. R.G. 159, Office of the Inspector General, Selected Pages from Inspection Reports, 1814-1842. National Archives.

to remove a small Traverse from the door . . . in order to admit the light, as I wish to occupy it as an office or Stone Room. The T[raverse] is quite small, but so situated as to exclude the light from the door and a window once in use if necessary could be readily replaced."[21] On July 27, 1829, General Gratiot approved this scheme, but the alterations did not improve the situation and the magazine was not still fit to be a receptacle for powder. Gratiot, who inspected the fort in 1835, noted that "as the present magazine is too damp for the preservation of powder, as well as unsafe from its projecting several feet above the ramparts, a new one is required."[22]

Extensive repairs at Fort McHenry during the second half of the 1830s were carried out under the supervision of Capt. H. A. Thompson. A nephew of General Gratiot, he seems to have had a free hand as to the execution of this work. Under his direction a new floor was laid in the magazine, and a lining was added to the exterior walls.[23] Thompson's primary concern was to remove the dampness in the magazine and to render it dry, so that

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21. Ripley to Gratiot, July 25, 1829. R.G. 107, Office of the Chief of Engineers, Selected Correspondence Relating to Fort McHenry, Maryland, 1811-1837. National Archives.

22. Gratiot to Secretary of War, November 20, 1835. R.G. 77, War Department, Office of the Chief of Engineers, Letters Received 1826-1837. National Archives.

23. Captain Thompson to General Gratiot, January 9, 1836. Ibid.

powder might be stored in it safely. During the 1958 excavations under the magazine floor it was revealed that the magazine had a cellar space for circulation of air under a wooden floor. In addition the interior side foundation walls revealed a ledge suitable for accommodating wooden joists and floor planking. This might indicate that Captain Thompson filled the magazine cellar with earth and laid a brick floor over the fill.[24]

By Special Order No. 70, issued on August 29, 1836, the troops were evacuated from the fort, thus making possible the continuation of repairs on a broader scale. During 1836-1840 not only were the buildings repaired, but also outer works, a boundary wall, a seawall, etc., were erected. Captain Thompson, who served during this time as agent for the Engineer Department, in his report on March 21, 1839, stressed that "The magazine is large, in good order, drier than those I have generally seen, & has a lightning rod, the only one at the Fort. [The Magazine] requires a protection in front of the door."[25] The "protection" to which Captain Thompson refers is a traverse to replace the one that was removed in 1829; however, there are no records concerning the rebuilding of this traverse.

24. Nelson, op. cit., pp. 11-12.

25. Thompson to Captain Smith, March 21, 1839. R.G. 77, War Department, Office of the Chief of Engineers, Letters Received 1838-1866. National Archives.

On June 24, 1839, Thompson sent a plan of the magazine to Capt. F. A. Smith of the Engineer Department. The plan was accompanied by a letter describing the magazine in the following terms:

> The building is of Brick, with a Slate Roof & a lightning Rod. . . . there is no cellar or space under the floor. . . . there is but one Ventilator or window in the rear. . . . two doors which are good & strong . . . a new window shutter will be required. . . . it appears to me that the roof might be lowered considerably, & thus prevent its being so conspicuous an object.[26]

Realizing the shortcomings of his drawings, he admitted his errors in a follow-up letter in which he explained that in order to determine the extent of the space under the roof he sent a "small man" into the space, but because it was "dark and gloomy" nothing could be learned. He then concluded that it "can only be seen with the roof off";[27] Thompson's purpose was evidently to find out if the roof structure could be lowered.

By an order of October 22, 1839, Captain Thompson was instructed to repair the rear window of the powder magazine with a shutter on the outside and a row of iron bars, 7/8 inch in diameter, set in the opening one foot inside the walls, and with an installation of a "wire gauze" screen on the inside.[28]

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26. Thompson to Smith, June 24, 1839. Ibid.
27. Thompson to Smith, June 27, 1839. Ibid.
28. See "An Account of such Repairs to Fort McHenry as appear on the books of the Engineer Department," by Capt. Frederick A. Smith, May 5, 1840. Ibid.

Finally, by Special Order No. 94 of December 4, 1839, the three-year period of extensive additions and alterations of the fort was so nearly complete that the U.S. Engineers could turn the garrison back to the Army.

Even though other small repairs were made as time went on, such as raising the ground level in order to provide better drainage, bricking up the rear window and reworking the doors, no significant structural changes were made in the powder magazine. In the 1880s it served as a coal shed. By and large the powder magazine had never served its original function satisfactorily, primarily because it was rather small, and inconveniently and distantly located from the guns of the fort.

(b) Name of Builder:

The Powder Magazine is one of the several inner buildings at Fort McHenry built during 1799-1803 on the basis of a plan by John Foncin. Some of the improvements at the Fort were carried out following the British attack, from the plans drawn up by the Baltimore architect and Professor of Civil and Military Architecture at St. Mary's College, Maximilian Godefroy.

(c) Name of Owner in Historic Period:

United States War Department.

CHAPTER IV

THE JUNIOR OFFICERS' QUARTERS

(a) Brief History of Structure:

The Junior Officers' Quarters is one of the buildings which were situated around the parade ground in 1814. The first mention of the building appears in the 1803 plan which shows its dimensions as about 16 by 60 feet.[1] The building may also be seen in Captain Walbach's plan of Fort McHenry of 1806, where the dimensions appear as 18 by 61 feet.[2] In Poussin's plan of Fort McHenry the Junior Officers' Quarters are depicted as 18 by 59 feet in size.[3] As the present measurements of the building are 18 by 61 feet, it would seem that it has not undergone any major structural changes. In 1814 the structure was one and one-half stories high, with a small cellar kitchen, and, like other[4]

1. "Fort McHenry, 9th November, 1803." R.G. 77, Records of the War Department, Cartographic Section, Drawer 51, Sheet 1, National Archives.

2. "Plan of Fort McHenry by Captain Walbach of the Artillery for the U.S. Mil: Philo: Soc: No. 1." United States Military Philosophical Papers, New York Historical Society.

3. "Reconnoitring of Chesapeake Bay, State of Maryland, Plan and Profiles of Fort McHenry, 1819," drawn by William Tell Poussin, Captain Topographical Engineers. R.G. 77, Records of the War Department, Cartographical Section, Drawer 51, Sheet 2, National Archives.

4. Nelson, "Architectural Research and Explorations Conducted as a Part of the Historic American Buildings Survey at Fort McHenry, June-December, 1958," p. 65.

buildings within the fort, with a gable roof lighted by dormer windows. In 1814, as at present, there were no porticoes. The present brick flooring was not in existence in 1814.[5] During 1829-30 the building was raised to two stories, with a full-length piazza along its front.[6] The contemporary structure reflects the post-1830 period. The architectural investigation of this building conducted in 1958 revealed the existence of a small cellar kitchen occupying the space under the northernmost room of the structure. The entrance to the cellar was by a stairwell situated along the end wall. Because of the smallness of the cellar only two windows were able to furnish light to the kitchen. Most likely there was a fireplace in the cellar, which probably shared a common chimney with the fireplace on the ground floor.[7] Presently, the building is divided into three rooms on ground level.

(b) Name of Builder:

The Junior Officers' Quarters is one of several inner buildings at Fort McHenry built in 1803 on the basis of the plans drawn up by the French artillerist and military engineer John Foncin.

(c) Name of Owner in Historic Period:

United States War Department.

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5. Walsh, op. cit., pp. 15-16.
6. Nelson, "An Architectural Study of Fort McHenry," p. 39.
7. Nelson, "Architectural Research and Explorations Conducted as a Part of the Historic American Buildings Survey at Fort McHenry, June-December, 1958," pp. 65-66.

CHAPTER V

SOLDIERS' BARRACKS NO. 1

(a) Brief History of Structure:

During the Revolutionary War there were temporary barracks at Whetstone Point which were part of the defensive fortifications for Baltimore, but none of these had survived. Between 1799-1802 several improvements were made at Fort McHenry, based on the plans of the French artillerist and military engineer, John Foncin. Foncin designed a regular brick-enclosed pentagonal fort, within those compound quarters were erected to accommodate the garrison. One of these enlisted men's barracks was Soldiers' Barracks No. 1 (Building D). Although none of the buildings inside the Fort can be accurately dated, this Soldiers' Barracks No. 1 (Building D) must have been built between 1799 and 1802, because following this date it is known that this barracks had been occupied.[1]

The earliest plan of Fort McHenry, dated November 9, 1803, shows Building D as being 22 by 91 feet, approximately the same as today.[2] In Captain Walbach's plan of Fort McHenry of 1806

1. Lt. Samuel T. Dyson to William Linnard, Military Agent, July 23, 1802. R.G. 92, Records of the War Department, Office of the Quartermaster General, Consolidated Correspondence File, 1794-1915, Fort McHenry, National Archives.

2. "Fort McHenry, 9th November, 1803." R.G. 77, Records of the War Department, Cartographic Section, Drawer 51, Sheet 1, National Archives.

the overall dimensions of this barracks seem to be consistent with the dimensions of the 1803 map.[3]

At the time of the British bombardment in September of 1814, the measurements of the building were 22 by 91 feet, divided into three rooms, each 19 feet, 8 inches wide and about 28 feet, 6 inches in length.[4] The building was one and one-half stories high of brick, and floored with heavy pine plank.[5] The architectural study of this building conducted in 1958 established the existence in 1814 of a kitchen cellar.[6] The building most probably had a gable shingle roof. Under the gable roof there were attic rooms called "garrets," which most probably were only rarely occupied by soldiers, because they had poor ventilation and limited head room.[7] It also seems that the

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3. "Plan of Fort McHenry by Captain Walbach of the Artillery for the U.S. Mil: Philo: Soc: No. 1." United States Military Philosophical Papers, New York Historical Society.

4. Col. Jacob Hindman to Col. W.K. Armistead, Engineers, March 17, 1819. R.G. 107, Records of the War Department, Office of the Chief of Engineers, Select Correspondence Relating to Fort McHenry, Maryland, 1811-37, National Archives.

5. Walsh, op. cit., p. 15.

6. Nelson, "Architectural Research and Explorations Conducted as a Part of the Historic American Building Survey at Fort McHenry, June-December, 1958," pp. 32-33.

7. Capt. F. Belton to General Jesup, July 5, 1822, and Col. Jacob Hindman to Col. W. K. Armistead, March 17, 1819. R.G. 107, Records of the War Department, Office of the Chief of Engineers, Select Correspondence Relating to Fort McHenry, Maryland, 1811-37, National Archives.

garrets were not floored, and were unfinished.[8] The 1819 plan of Fort McHenry by Captain William Tell Poussin depicts the Fort already with all its post-1812 War improvements.[9]

A problem of roof replacement in the barracks arose in 1823. Lt. J. M. Porter, 6th Infantry, in his letter of September 16, 1823, to the Secretary of War stated:

> I have long since been of [the] opinion that zinc roofs should never be put upon buildings, firstly from the cost & secondly because they corrode or give way in a few years. If the roof in question is very flat, it of course will have to be covered with a metallic roof. If . . . there is a sufficient pitch to carry off the water it should be covered with slate.[10]

In addition, Lt. Henry W. Fitzhugh's examination of the barracks at Fort McHenry revealed the necessity of floor repairs. On July 8, 1828, he reported that "the floors of all the buildings have sunk in consequence of the decay of the joists, and the floors in many places are litterally [sic] worn out."[11] By the middle of the 1820s Fort McHenry was found to be in such a

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8. Walsh, op. cit., p. 15.

9. "Reconnoitring of Chesapeake Bay, State of Maryland, Plan and Profiles of Fort McHenry, 1819," drawn by William Tell Poussin, Captain Topographical Engineers. R.G. 77, Records of the War Department, Cartographic Section, Drawer 51, Sheet 2, National Archives.

10. Lt. J.M. Porter to Secretary of War, September 16, 1823. R.G. 92, Records of the War Department, Office of the Quartermaster General, Consolidated Correspondence File, 1794-1915, Fort McHenry, National Archives.

11. Lieutenant Fitzhugh to the Quartermaster General, July 8, 1824. Ibid.

"decayed condition" that abandonment was even considered.[12] The fort was retained as an accessory to the coastal defense system; however, in order for it to function as an effective military post, an extensive renovation program was necessary. It was obvious that, to accommodate a large garrison, the barracks needed enlargement and refurnishing. One of the proposals asked only for the widening of the barracks;[13] this was opposed, since the widening was considered an exacerbation of the "unhealthy" living conditions at the Fort, because the widened rooms would be adjacent to the earthen slope below the terreplein.[14] Therefore, the idea of widening the barracks was abolished in favor of raising it to two stories, thus making possible better ventilation. In June 1829 the brick walls of the barracks were examined to determine whether they were able to support the addition of a second story.[15] When this was

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12. *Reise Sr. Hoheit des Herzogs Bernhard zu Sachsen-Weimar-Eisenach durch Nord-America in den Jahren 1825 und 1826.* [Travels Through North America of Karl Bernhard, Duke of Saxe-Weimar-Eisenach During the Years 1825 and 1826]. Herausgegeben von Heinrich Luden. Erster Theil. (Weimar: Bei Wilhelm Hoffman, 1828), p. 253.

13. Maj. T. Cross to General Jesup, April 22, 1829. R.G. 92, Records of the War Department, Office of the Quartermaster General, Consolidated Correspondence File, 1794-1915, Fort McHenry, National Archives.

14. Gen. J.R. Fenwick to General Jesup, May 23, 1829. R.G. 92, Records of the War Department, Office of the Quartermaster General, Selected Pages from Register of Letters Received, 1818-57, National Archives.

15. Maj. M.M. Payne to General Jesup, June 1, 1829. R.G. 92, Records of the War Department, Office of the Quartermaster General, Consolidated Correspondence File, 1794-1915, Fort McHenry, National Archives.

found possible, work on the project immediately commenced. In February of 1829 an estimate of proposed repairs was prepared and submitted to the Quartermaster General in Washington.[16] In regard to Building D the estimate contemplated the removal of the existing roof, elevation of the building to two stories with a shingled hip-roof, and the addition of a two-story porch or piazza along the entire front of the barracks. The proposal also included a 14-foot addition to the northwest end of the building for a kitchen. Although the "probable costs" for the additions and alterations to Building D amounted to $3,102.76, their final cost is not known. It is known, however, that Howell Downing, a Baltimore carpenter who was hired for this work as a chief carpenter, received a remuneration of two dollars per day.[17] The work, which was pushed rapidly forward, seems to have been completed by 1830.

The newly enlarged barracks can be seen by the drawings prepared in November of 1834 by Lt. Thomas J. Lee, 4th Artillery, Acting Assistant Quartermaster at Fort McHenry. These drawings not only show the barracks as being elevated, but also show their

16. Lt. S.B. Dusenbury to General Jesup, February 24, 1829, in Ibid.

17. Lt. S.B. Dusenbury to General Jesup, August 4, 1829, R.G. 92, Records of the War Department, Office of the Quartermaster General, Selected Letters Received Relating to Fort McHenry, Maryland, National Archives. Cf. also Capt. James W. Ripley to Colonel Bomford, October 7, 1829. R.G. 92, Records of the War Department, Office of the Quartermaster General, Consolidated Correspondence File, 1794-1915, Fort McHenry, National Archives.

interior room arrangement. In addition the drawings illustrate these newly heightened brick barracks with a hip-roof.[18]

The earthen and sodded slope behind the barracks was replaced by a stone revetment wall in 1833, whose purpose was to eliminate the water runoff into the barracks.[19]

During the extensive renovations of the Fort during the late 1830s, the barracks floors were removed. Because of ground water the cellar kitchen was abandoned and filled with earth, and a new floor was planned to be laid upon scantling over a grouted brick floor.[20] The possibility of a fire in the barracks finally caused the replacement of the shingle roofs with a zinc covering. On April 5, 1837, Capt. Henry A. Thompson transmitted to Chief Engineer of the Army, General Gratiot, the following estimate: "For covering the four [barracks] buildings at this Post with tin [sic] at $475 each -

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18. "Fort McHenry, Drawn in Obedience to a Circular from the Qr. Master Genls. Office, dated Nov. 13th, 1834, by Thos. J. Lee, Lt., 4th Arty. & Acting A.Q.M." R.G. 77, Records of the War Department, Office of the Chief of Engineers, Map File, National Archives.

19. General Gratiot to Lieutenant Thompson, September 30, 1833. R.G. 77, Records of the War Department, Office of the Chief of Engineers, Miscellaneous Letters Sent, 1812-1872, Vols. 1-25, National Archives.

20. Lt. Thomas J. Lee to Gen. John Fenwick, January 7, 1836, and Thomas J. Lee to General Jesup, April 12, 1836. R.G. 92, Records of the War Department, Office of the Quartermaster General, Consolidated Correspondence File, 1794-1915, Fort McHenry, National Archives.

$1800.00"[21] On the following day the estimate was approved and the work on reroofing was done immediately.

Although other barracks in the fort were altered to some extent in the post-Civil War period, Building D did not undergo many changes. During the restoration of the Fort in the 1920s by the War Department, it was Building D alone that retained its porches and served as a model for the restoration. At the time of the restoration, the War Department believed that Building D reflected the state of the buildings in 1814, while actually this building represents the period of 1829-30, when the porches and second stories were added, also with other structural changes made after 1830.

(b) Name of Builder:

Soldiers' Barracks No. 2 is one of the several inner buildings at Fort McHenry built between 1800 and 1802, on the basis of a plan by John Foncin. At the present time the building reflects the structural changes of the 1829-30 period.

(c) Name of Owner in Historic Period:

United States War Department.

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21. Capt. Henry A. Thompson to General Gratiot, April 5, 1837. R.G. 107, Records of the War Department, Office of the Chief of Engineers, Select Correspondence Relating to Fort McHenry, Maryland, 1811-37, National Archives.

CHAPTER VI

THE GUARD HOUSE

(a) Brief History of Structure:

The Guard House is not included in the earliest known plan for Fort McHenry of November 9, 1803.[1] Despite the fact that the plan is unsigned and therefore that its authorship cannot be established, this plan was later endorsed and reused by Richard Delafield, Captain of Engineers, and General Gratiot, Chief Engineer of the Army, Philadelphia, on September 27, 1836.[2] The first document that shows the Guard House is another plan of Fort McHenry drawn around 1806 by Captain John B. Walbach for the U.S. Military Philosophical Society.[3] We do not know to what extent this Guard House was used or how useful it was. On July 7, 1813, Maj. George Armistead requested the construction of a "proper guard house."[4] In 1814 a portion of the Commanding Officer's Quarters, which is now furnished as the Officer's Mess

1. "Fort McHenry, 9th November, 1803." R.G. 77, Records of the War Department, Cartographic Section, Drawer 51, Sheet 1, National Archives.

2. National Archives, Cartographic Section, R.G. 77, Drawer 51, Sheet 8, drawn by Richard Delafield, Captain of Engineers, September 27, 1836, endorsed by General Gratiot.

3. "Plan of Fort McHenry by Captain Walbach of the Artillery for the U.S. Mil: Philo: Soc: No. 1." United States Military Philosophical Papers, New York Historical Society.

4. Maj. George Armistead to the Secretary of War, July 7, 1813, R.G. 107, Records of the War Department, Office of the Secretary of War, Selected Pages from Registers of Letters Received, 1813-1821. National Archives.

and Kitchen, was detached and utilized as a Guard House.[5] The Guard House also appears in the 1819 plan of Fort McHenry prepared by the Frenchman William Tell Poussin, Captain of Topographical Engineers, which actually presents the first correct measured drawing of the Fort.[6] Both the 1806 Walbach plan and the 1819 Poussin plan of Fort McHenry show the Guard House structure situated east of the Commanding Officer's Quarters. On November 15, 1820, Lt. James Ripley issued orders to the effect that the Guard House was to become an Officers' Quarters.[7] Thus, the two separate buildings--that is the Guard House and the Commanding Officer's Quarters--were joined together as a single building 18 by 78 feet long, as it appears today. The excavation conducted in 1958 confirmed that the original size of the Commanding Officer's Quarters was 18 by 48 feet. Subtracting this from the present size of the building, 18 by 78 feet, one might assume that the size of the Guard House was

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5. Ripley to Capt. I.H. Hook, November 15, 1820. R.G. 92, Records of the War Department, Office of the Quartermaster General, Consolidated Correspondence File, 1794-1915, Fort McHenry, National Archives.

6. "Reconnoitring of Chesapeake Bay, State of Maryland, Plan and Profiles of Fort McHenry, 1819," drawn by William Tell Poussin, Captain Topographical Engineers. R.G. 77, Records of the War Department, Cartographic Section, Drawer 51, Sheet 2, National Archives.

7. Ripley to Hook, November 15, 1820. R.G. 92, Records of the War Department, Office of the Quartermaster General, Consolidated Correspondence File, 1794-1915, Fort McHenry, National Archives.

about 18 by 30 feet.[8] Apparently the Guard House was brick and with a shingle roof to match the other buildings at the Fort.

In a report of November 19, 1834, to Gen. Thomas S. Jesup, Quartermaster General, Lt. Thomas J. Lee, Artillery, declared the Guard House a "source of great inconvenience" because it was located between the enlisted men's Barracks and behind the well.[9] On July 9, 1835, Lt. Lee presented an estimate concerning the adaption of the vicinity to accommodate a Guard House and prison facilities. In order to achieve this he proposed to build a room, accessible only from the courtyard, on each side of the sally port and over the bomb-proofs. It was a primary concern that the new Guard House should not appear from the exterior of the fort.[10] The work on the two new guard rooms, with a prison in the rear of each, started around August 15, 1835, and was completed that year.[11] On May 21, 1857,

8. Nelson, "Architectural Research and Explorations Conducted as a Part of the Historic American Buildings Survey at Fort McHenry, June-December, 1958," pp. 62-63.

9. Lieutenant Lee to General Jesup, November 19, 1834. R.G. 92, Records of the War Department, Office of the Quartermaster General, Consolidated Correspondence File, 1794-1915, Fort McHenry, National Archives.

10. Lt. Thomas Lee's "Estimate [and Plans] of Materials and Cost of Building a Guard House &c. at Fort McHenry, Md.," July 9, 1835. Ibid.

11. Report on the Condition of Public Quarters at Fort McHenry, by Lt. Thomas Lee, September 30, 1835. Ibid.

a Board of Officers convened at Fort McHenry to discuss the overcrowded prison conditions and to find some remedy for them. The minutes of their meeting revealed that "The prisoners from this post and from other stations are from twelve to thirty men and are so crowded and deprived of proper breathing air or sleeping space as to be detrimental to health." The report also emphasized that "casual" prisoners were forced to be confined with "confirmed deliquents," resulting in a "constant deterioration of morals." Furthermore, the Board of Officers came to the conclusion that the prison rooms were "entirely inadequate to maintaining the discipline of a post exposed as is this to the temptation of a large city."[12] Consequently, new prison facilities were proposed providing that an additional room on each end of the existing guard rooms was to be built. The room to be added to the north would then serve as a guard room, while the southern addition would be divided into a passageway with three small prison cells, "ventilated by iron doors."[13] By October of 1857 these additions were completed,

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12. "Proceedings of a Board of Officers convened at Fort McHenry, Md.," May 21, 1857. R.G. 77, Records of the War Department, Office of the Chief of Engineers, Letters Received, 1838-1866, National Archives.

13. "Estimate of cost of building Guard House at Fort McHenry, Md.," by Maj. I.L. Donaldson, June 13, 1857. Ibid.

and during the Civil War they were used for prisoners.[14] Since 1857 no structural changes in this building have taken place.

(b) Name of Builder:

Very little historical evidence is available on the Guard House. The earliest surviving graphic document to show the Guard House's existence is the plan drawn around 1806 by Captain Walbach. The available evidence shows that it was John Foncin who designed the Fort and all inner buildings, whose architectural appearance remained basically unchanged until after the British attack of Fort McHenry during September 13-14, 1814.

(c) Name of Owner in Historic Period:

United States War Department.

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14. One of the Confederate officers who spent some time there was Henry Hall Brogden. See his "Henry Hall Brogden - An Account of His experiences During the [Civil] War." A copy of his personal narrative is in the Fort McHenry Files.

CHAPTER VII

THE RAVELIN

(a) Brief History of Structure:

The Ravelin,[1] which is presently in front of the Sally Port, has undergone several modifications since 1814. With the completion of the Star Fort there remained several major problems to be solved, one of which was the fact that the road from the town and the water-batteries were unprotected. Another problem was that the gateway to the fort was made of pine wood, and would be unable to resist any major attack. Gen. Samuel Smith, in his letter to Gen. John Armstrong, Secretary of War, dated March 18, 1813, referred to this situation and pointed out that "The gate is of Pine, and I think might be knocked down by a very few strokes of an axe."[2] Shortly afterward, on March 27, 1813, an order for the protection of the gateway by a brick wall was issued, stressing that this brick wall "in front of the Gateway [was] to be 6 feet high."[3] The Commissary General of Ordnance, Col. Decius Wadsworth, firmly convinced of the need to protect the open gateway, suggested on April 13, 1813, the

1. A ravelin is generally defined as "a small outwork with two faces forming a salient angle." Cf. for this Garber, op. cit., p. 251.

2. Smith to Armstrong, March 18, 1813. Samuel Smith Papers, Library of Congress.

3. Col. J.G. Swift to Major Beall, March 27, 1813. J.G. Swift Papers, U.S. Military Academy.

erection of a ravelin, which he also thought to have been a part of the original plan.[4] As the construction of such a protective measure called for the services of a military engineer, Gen. Samuel Smith informed General Armstrong on March 29, 1813, that the construction before the sally port could not begin until an engineer arrived to "lay off the work."[5] Finally on April 26, 1813, the War Department sent Capt. Samuel Babcock of the U.S. Engineers to Fort McHenry.[6] Meanwhile Colonel Wadsworth, following his visit to the Fort, had made his suggestion of a brick-faced ravelin, for the unprotected sally port entrance, whose completion was left completely in the hands of Captain Babcock following his arrival at the Fort in early May.[7] Babcock's orders also included the completion of those

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4. Wadsworth to John Armstrong, April 13, 1813. R.G. 156, Records of the War Department, Office of the Chief of Ordnance, Selected Pages, Letters and Endorsements Sent to the Secretary of War, 1812-1817, National Archives. In studying the original plan of 1803 the present writer finds no indication that a ravelin might have been included in this plan.

5. Smith to Armstrong, March 29, 1813. Samuel Smith Papers, Library of Congress.

6. Wadsworth to Armstrong, April 26, May 3, 1813. R.G. 107, Records of the War Department, Secretary of War, Letters Received, National Archives.

7. Ibid., and Decius Wadsworth to John Armstrong, April 13, 1813, R.G. 156, Office of the Chief of Ordnance, Selected Pages, Letters and Endorsements Sent to the Secretary of War, 1812-1817, National Archives.

undertakings which had begun under the direction of Major Beall.[8] On December 1, 1813, Captain Babcock informed General Armstrong of the completion of his work at Fort McHenry, including not only the mounting of 21 cannon on the fort, but also construction of hot shot furnaces and of a ravelin,[9] a triangular structure copied from the design of the 18th-century French ravelins. It was constructed of earth and brick, in front of the gateway, and was about eight feet high, with walls about 132 feet long on each flank. Because the ravelin blocked the entrance to the sally port bridge, an opening was left in its north wall, and at that point a bridge across the ditch completed the passageway.[10]

Later on the function of the ravelin declined. A German Duke, visiting Fort McHenry around 1825 observed: "The fort itself is very small, and ill-shaped; a pentagon with five little bastions, where at most but three large guns can be mounted; in front of the entrance is a little ravelin which defends nothing."[11]

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8. Col. J.G. Swift to Capt. S. Babcock, May 26, 1813. R.G. 77, Office of the Chief of Engineers, Selected Pages from Letters to Officers of Engineers, July 4, 1812 - February 20, 1869. National Archives.

9. Captain Babcock to Secretary of War, December 1, 1813, R.G. 107, Records of the War Department, Office of the Secretary of War, Selected Pages from Registers of Letters Received, January 1813 - August 1821. National Archives.

10. For access through the side wall of the ravelin see Alfred Procter James and Charles Morse Stotz, *Drums in the Forest: Decision at the Forks*. (Pittsburgh: Historical Society of Western Pennsylvania, 1958), p. 171.

11. *Reise Sr. Hoheit des Herzogs Bernhard zu Sachsen-Weimar-Eisenach durch Nord-Amerika in den Jahren 1825 und 1826*, p. 253.

Maj. M. M. Payne, who was the Commanding Officer at Fort McHenry between 1828-31, reported to General Gratiot on December 17, 1830, that both bridges, that is at the gateway and at the ravelin, needed new flooring, that the gateway doors were in bad repair, and that the work would be done as usual "by artificers of the garrison."[12] Finally, during the extensive additions and alterations at Fort McHenry under the direction of Lt. Henry A. Thompson, he ordered the closing of the gateway through the ravelin and the elimination of the bridges. Thus by October 1839 the entrance to the ravelin and the ditch had been filled in[13] and access to the sally port was obtained by means of a ramp from the ditch, similar to that which one sees now.

(b) Name of Builder:

The ravelin, erected to protect the Sally Port, was planned by Col. Decius Wadsworth, but built by Capt. Samuel Babcock in 1813. The ravelin is still in existence but its appearance has been changed since its erection. This structure was the first major addition to Fort McHenry since the plans of 1803 and 1806.

(c) Name of Owner in Historic Period:

United States War Department.

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12. Payne to Gratiot, December 17, 1830. R.G. 107, Records of the War Department, Office of the Chief of Engineers, Selected Correspondence Relating to Fort McHenry, Maryland, 1811-37, National Archives.

13. Thompson to Colonel Totten, Chief Engineer, October 17, 1839, R.G. 77, Records of the War Department, Office of the Chief of Engineers, Letters Received, 1838-1866, National Archives.

CHAPTER VIII

APPROACH ROAD AND TRESTLE BRIDGE

(a) Brief History of Structures:

A public road connected the City of Baltimore with Fort McHenry. In the earliest surviving plan of the fort, dated November 9, 1803, the approach road is referred to as the "Road to Baltimore," with 23 trees planted on one side of the road and 25 trees on the other side. In addition, this map of 1803 also shows the pathways leading to the various buildings in the fort.[1] Perhaps one of the major drawbacks after the completion of the fort was that this road from the city was unprotected. The road passed through the ravelin and over the wooden trestle bridge erected over the main ditch, and led to the sally port or entrance to the fort.[2] The road was of irregular width.[3]

The Poussin plan of 1819 shows the location of the gateway at the point at which the road from Baltimore entered the fort reservation.[4] It seems probable that this road followed

1. "Fort McHenry, 9th November, 1803." R.G. 77, Records of the War Department, Cartographic Section, Drawer 51, Sheet 1, National Archives.

2. Nelson, "An Architectural Study of Fort McHenry," p. 31.

3. Walsh, op. cit., p. 12.

4. "Reconnoitring of Chesapeake Bay, State of Maryland, Plan and Profiles of Fort McHenry, 1819," drawn by William Tell Poussin, Captain Topographical Engineers. R.G. 77, Records of the War Department, Cartographic Section, Drawer 51, Sheet 2, National Archives.

closely the course of the present entrance road to the main gates, dating from around 1840, or perhaps it is underneath the present entrance road. Subsequently, the trestle bridge was removed.

(b) Name of Builder:

It is possible to presume that John Foncin, the designer of all the inner buildings at the Fort, was also the planner of the Approach Road through the Ravelin and over the Trestle Bridge.

(c) Name of Owner in Historic Period:

United States War Department.

CHAPTER IX

THE WATER CISTERN

(a) Brief History of Structure:

The Water Cistern was one of the seven buildings which were distributed around the parade ground in 1814. The plan of Fort McHenry dated November 9, 1803, shows the cistern marked as building No. 10, located between the two barracks listed as No. 6, which are presently known as Soldiers' Barracks No. 1 and Soldiers' Barracks No. 2.[1] The cistern is also shown in Captain Walbach's plan of 1806[2] and in Poussin's plan of 1819[3] in the very same position. One might therefore assume that the cistern stood in the same position during 1814. In the 1803 plan the cistern is shown with a gabled roof. In 1814 the cistern was a one-story small brick structure, about 17 by 30 feet, with hip roof and small porch[4] which furnished water for the fort. There is no evidence as to when the Water Cistern

1. "Fort McHenry, 9th November, 1803." R.G. 77, Records of the War Department, Cartographic Section, Drawer 51, Sheet 1, National Archives.

2. "Plan of Fort McHenry by Captain Walbach of the Artillery for the U.S. Mil: Philo: Soc: No. 1." United States Military Philosophical Papers, New York Historical Society.

3. "Reconnoitring of Chesapeake Bay, State of Maryland, Plan and Profiles of Fort McHenry, 1819," drawn by William Tell Poussin, Captain Topographical Engineers. R.G. 77, Records of the War Department, Cartographic Section, Drawer 51, Sheet 2, National Archives.

4. Nelson, "An Architectural Study of Fort McHenry," p. 31.

disappeared from Fort McHenry; however, the 1837 plan of the fort shows, instead of the water cistern, a pump house on the same location.[5]

(b) Name of Builder:

The Water Cistern was one of the several inner buildings at Fort McHenry built during 1799-1803 on the basis of a plan prepared by John [illegible].

(c) Name of Owner in Historic Period:

United States War Department.

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5. For this plan of 1837 see R.G. 77, Records of the War Department, Cartographic Section, Drawer 51, Sheet 9, National Archives. See also Walsh, op. cit., p. 21.

CHAPTER X

THE STAR FORT WALLS

(a) Brief History of Structure:

The brick-faced Star Fort was constructed at Fort McHenry between 1794 and 1803 to guard Baltimore's water approach and as a replacement for the earlier earthen fort on Whetstone Point. It was built of stone and brick masonry. For its foundation there were used about 800 perches of stone. Some 2,300 perches of stone were used for the walls of the Rampart and 600 for the counterforts or bastions. Six hundred thousand bricks were used for the walls, and earth equaling 4,140 cubic toises was used for the floors of the banquettes,parapets, and the terreplein.[1]

The earliest surviving plan of Fort McHenry, of November 9, 1803,[2] shows that the exterior sloping walls between the bastions were to be 120 feet in length, the side walls of the bastions 40 feet long and their front or leading edges were to scale 75 feet.[3] By the 1803 map the width of the parapets was established as 6.5 toises, or about 38 feet.[4]

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1. Walsh, op. cit., pp. 7-8.
2. "Fort McHenry, 9th November, 1803." R.G. 77, Records of the War Department, Cartographic Section, Drawer 51, Sheet 1, National Archives.
3. The conversion of these dimensions from toises was done by architect Nelson. For this see his "An Architectural Study of Fort McHenry," p. 24.
4. Walsh, op. cit., p. 8.

At the time of the British bombardment the pentagonal walls were about 12 feet in relief above the bottom of the ditch or dry moat that surrounded the fort. These walls were capped with dressed coping stones and quoining at the salient point.[5]

The parapets were sodded as they are today and constructed mostly of earth. They were planted with trees, which were removed in 1813 to accommodate cannon fired en barbette.[6] The dimensional changes of the fort walls came only during the late 1830s. Following his inspection visit to Fort McHenry in September of 1836, Captain Richard Delafield of the Engineers, in addition to his elaborate plans for improvement of the fort's artillery emplacements,[7] also detailed a breast-high wall of brick to separate the earthen parapets from the terreplein, replacing the short, sloped bank which had formerly served that purpose. Capt. H. A. Thompson built and completed this three-foot-high brick revetment wall by the end of

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5. Nelson, op. cit., p. 30.
6. Ibid., p. 31.
7. For his plan see National Archives, Cartographic Section, R.G. 77, Drawer 51, Sheet 8, drawn by Richard Delafield, Captain of Engineers, September 27, 1836, endorsed by General Gratiot.

October 1837.[8] In his Annual Report submitted on October 17, 1839, Thompson specified that the breast-high wall had been raised 18 inches, covered with zinc and coped with sandstone. He also noted that the scarp wall had been coated with a thick cement wash, a breast-high wall built on the ravelin and traverses laid for seven guns on the latter.[9]

Although neither the 1803[10] nor 1806[11] plans of Fort McHenry show any fence or wall, they nevertheless suggest the military boundary of the fort, and two private tavern buildings immediately adjacent to it, on a privately owned piece of land. There is no available evidence of the existence of a boundary wall during the War of 1812. The earliest year in which one finds a precise documentation on the boundary wall is 1816, when a wall to enclose the public property was needed together with a sea-wall in order to prevent encroachment of the water upon Whetstone Point.[12] Although the work had been ordered

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8. H.A. Thompson, Agent of Fortifications, to General Gratiot, October 24, 1837, R.G. 107, Records of the War Department, Office of the Chief of Engineers, Selected Correspondence Relating to Fort McHenry, Maryland, 1811-37, National Archives.

9. H.A. Thompson to Colonel Totten, Chief Engineer, October 17, 1839, R.G. 77, Records of the War Department, Office of the Chief of Engineers, Letters Received, 1838-1866, National Archives.

10. "Fort McHenry, 9th November, 1803." R.G. 77, Records of the War Department, Cartographic Section, Drawer 51, Sheet 1, National Archives.

11. "Plan of Fort McHenry by Captain Walbach of the Artillery for the U.S. Mil: Philo: Soc: No. 1." United States Military Philosophical Papers, New York Historical Society.

12. T.W. Maurice to W.K. Armistead, November 6, 1816. R.G. 77, Records of the War Department, Office of the Chief of Engineers, Reports, July 1812-October 1823, 1, National Archives.

on the enclosing wall prior to November 6, 1816,[13] it is not known when this work was begun, but it was reported to have been completed in 1817[14] and to have been 1 1/2 bricks thick and nine or ten feet in height.[15]

Poussin's map of 1819 is the earliest plan to show a barrier, presumably of masonry (brickwork), crossing the entire peninsula. It also included a rather elaborate gate with three openings.[16] A German Duke, visiting Fort McHenry around 1825, observed that the fort was then separated from the land, i.e., to the west, by a wall which in his opinion "might rather prove injurious than advantageous."[17] Possibly the wall was subsequently demolished because in the opinion of the authorities it interfered with the security of the post.

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13. Ibid.

14. G. Armistead to J.G. Swift, December 31, 1817, R.G. 107, Records of the War Department, Office of the Chief of Engineers, Selected Correspondence Relating to Fort McHenry, 1811-37, National Archives.

15. T.W. Maurice to W.K. Armistead, November 6, 1816. Records of the War Department, Office of the Chief of Engineers, Reports, July 1812-October 1823, I, National Archives.

16. "Reconnoitring of Chesapeake Bay, State of Maryland, Plan and Profiles of Fort McHenry, 1819," drawn by William Tell Poussin, Captain Topographical Engineers. R.G. 77, Records of the War Department, Cartographic Section, Drawer 51, Sheet 2, National Archives.

17. *Reise Sr. Hoheit des Herzogs Bernhard zu Sachsen-Weimar-Eisenach durch Nord-Amerika in den Jahren 1825 und 1826*, p. 253.

The plan prepared after November 31, 1834, in addition to showing the boundary wall, also identifies the structures then located along its alignment, northeast from the gate, namely a gunhouse and storehouse for provisions, a storehouse for ordnance, a hospital, a stable, a bake house, and a smith shop.[18]

During 1836, at which time additional lands west of the previous boundary were added to the original military reservation, it was suggested that the previously used boundary wall be demolished.[19] This was accomplished in the following year, 1837, when the bricks from the earliest wall were cleaned and re-used in the new wall,[20] still surviving.

(b) Name of Builder:

The available evidence shows that it was John Foncin who designed all the inner buildings of the fort, including the Star Fort walls. As far as the boundary wall is concerned, neither the plans of 1803 nor of 1806 show any fence or wall. The evidence shows that the boundary wall was started in 1816, completed in 1817 and demolished in 1837.

(c) Name of Owner in Historic Period:

United States War Department.

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18. R.G. 77, Records of the War Department, Office of the Chief of Engineers, Drawer 51, Sheet 5, National Archives.

19. H.A. Thompson to C. Gratiot, November 10, 1836. R.G. 77, Records of the War Department, Office of the Chief of Engineers, Letters received, T2766, National Archives.

20. Thompson to [F.A. Smith], March 2, 1840, R.G. 77, Records of the War Department, Office of the Chief of Engineers, Letters Received, S1028, National Archives.

CHAPTER XI

THE PARADE GROUND

(a) Brief History of Structure:

The Parade Ground was used during the early years of the fort as the place where the garrison force was drilled. When the garrison force increased in number and the limited area of this courtyard was found inadequate, a larger area outside the fort was designated as the parade ground. In the earliest known plan of Fort McHenry, dated November 9, 1803, there are 34 trees shown standing a few feet in front of the barracks around the courtyard, 36 trees on the terreplein level and 30 trees on the five bastions. In addition there were two trees on the right side of the Commanding Officer's Quarters and one on each side of the cistern.[1] This extensive planting has been interpreted as being possibly intended for camouflage, or perhaps "as a ready supply of otherwise expensive firewood in the event of a siege."[2] The idea of camouflage might be overemphasized, as the fort, any fort, is built primarily to serve notice on all concerned that it is there, that it stands there, for a defensive purpose. Also the idea of a "a ready supply of otherwise expensive firewood in the event of a siege" does not seem to be logical.

1. "Fort McHenry, 9th November, 1803." R.G. 77, Records of the War Department, Cartographic Section, Drawer 51, Sheet 1, National Archives.

2. Nelson, "An Architectural Study of Fort McHenry," p. 25.

One should remember that the city of Baltimore was not far away from the fort, and that Baltimore at that time was a shipping and supply center. Being far away from home and their supply centers, the British wanted not to destroy and burn Baltimore as they did Washington, but to capture it and preserve it as a supply center. One should also remember that it was difficult to grow anything on the peninsula on which Fort McHenry is situated. For the above reasons it seems that the extensive planting of trees was probably meant simply to provide scenery, to improve the appearance of the grounds and thus to enhance the pleasantness of the immediate surroundings.

According to one source, the 1803 map

> depicts one half of the courtyard in green with pathways shown to the various buildings. Obviously, this was meant to convey some kind of grass landscaping and pathways. The other half of the inside grounds is left clear. Surely some kind of landscaping was present in 1814 and the only kind known is shown in 1803. It should be reasonable to follow this description.[3]

In the 1806 plan of Fort McHenry, drawn by Captain Walbach, although there are trees shown in the same locations as on the earlier 1803 map, although fewer in number, the parade ground

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3. Walsh, op. cit., p. 23.

is not included in his plan.[4] The 1819 plan of Fort McHenry prepared by Captain Poussin shows no details for the parade ground or trees.[5] By 1813, the trees within the bastion had been removed, but the remaining trees within the fort had been left untouched. The removal of the trees within the bastion was done to allow the cannon to be fired en barbette from the platforms built on the bastions.[6]

On November 25, 1835, Lt. Henry A. Thompson, who was directing improvements at the Fort, notified General Gratiot that he had commenced cutting down the trees growing in the fort -- which had been planted there ca. 1800 -- and on the ravelin. Furthermore, he also promised that his military logging operation would be dispatched in short order.[7]

A contemporary watercolor painting of the bombardment of Fort McHenry, which is displayed in the Peale Museum in Baltimore, Md., shows trees on the ramparts, but they are not detailed enough for definite identification. This 1814 painting

4. "Plan of Fort McHenry by Captain Walbach of the Artillery for the U.S. Mil: Philo: Soc: No. 1." United States Military Philosophical Papers, New York Historical Society.

5. "Reconnoitring of Chesapeake Bay, State of Maryland, Plan and Profiles of Fort McHenry, 1819." Drawn by William Tell Poussin, Captain Topographical Engineers. Cartographic Section, Drawer 51, Sheet 2, National Archives.

6. Col. J.G. Swift to Maj. Lloyd Beall, March 27, 1813. J.G. Swift Papers, U.S. Military Academy.

7. Lt. Henry A. Thompson to General Gratiot, November 25, 1835. R.G. 77, Records of the War Department, Office of the Chief of Engineers, Letters Received, 1826-1837, National Archives.

also suggests heavy foliage.[8] All evidence indicates that the trees planted at the fort were Lombardy poplars, which were widely planted in America and which are known for their heavy absorption of ground water, indeed a desirable element in the sodded and earthen fort.[9]

In the years following 1814 the Star Fort, including the parade ground, changed its aspect. As the garrison assumed a more peaceful role, an inspection report of September 22, 1822, commented:

> One half the Parade [ground is] taken up in a flower garden. A considerable number of shot instead of being piled, form the borders of walk.[10]

Assuming that the term "parade ground" means the entire courtyard, as is usually the case, the above statement might then support the assumption that the 1803 design survived long after the Battle of Baltimore.

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8. This painting was first brought to the attention of the National Park Service by Historian George C. Mackenzie, then stationed at Fort McHenry National Monument and Historic Shrine, who in 1958 was engaged in historical research on the Star Spangled Banner. Subsequently the painting was restored by National Park Service personnel in Philadelphia, Pa., for the Peale Museum, Baltimore, Md., where it is presently on display. It is considered one of the most valuable contemporary renditions of the bombardment of Fort McHenry.

9. Nelson, "An Architectural Study of Fort McHenry," p. 25.

10. See Unsigned Inspection Report of Fort McHenry, September 22, 1822. R.G. 159, Records of the War Department, Office of the Inspector General, Selected Pages from Inspection Reports, 1814-1842, National Archives.

The presently existing pathways within the fort correspond to those of Lt. Thomas J. Lee's drawing of November 13, 1834;[11] however, it is not known for certain whether these pathways were bricked at that time. They probably were not. Evidence has been found which indicates that the brick walks in front of the buildings within the Star Fort date from the 1850s.[12]

It should be pointed out that the highest area within the Star Fort lies in the vicinity of the wooden pump in the center of the courtyard, which was reconstructed by the War Department during the restoration of Fort McHenry in the 1920s. The runoff from the courtyard and the terreplein drains towards the revetment wall and out the conduit behind Soldiers' Barracks No. 2. As of now, no specific attempts have been made to determine the original courtyard elevation; however, excavations conducted in 1958 for other purposes revealed undisturbed gray clay at from 1 to 2 feet below the existing surface grade. It would seem that the fill was brought in order to elevate the courtyard and thus to facilitate better drainage.

(b) Name of Builder:

Although several engineers have been identified with Fort McHenry, the historical evidence shows that it was John Foncin

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11. "Fort McHenry, Drawn in Obedience to a Circular from the Qr. Master Genls. Office, dated Nov. 13th, 1834, by Thos. J. Lee, Lt. 4th Arty. and Acting A.Q.M." R.G. 77, Records of the War Department, Office of the Chief of Engineers, Map File, National Archives.

12. Walsh, op. cit., p. 23.

who was the architect of this fortification. In order to restore the Parade Ground to its appearance at the time of the British attack on Fort McHenry, it would be necessary to remove the wooden pump as well as the accompanying well shaft presently situated at the center of the fort, to obliterate the existing paths and walks across the yard, and to lower the surface grade by about two feet. The resulting change in landscaping thus would re-establish the historic paths.

(c) Name of Owner in Historic Period:

United States War Department.

CHAPTER XII

SOLDIERS' BARRACKS NO. 2

(a) Brief History of Structure:

Soldiers' Barracks No. 2 (Building E) is the second of the Enlisted Men's Barracks within the Fort, built between 1800 and 1802. This building first appeared on the earliest plan of Fort McHenry, of November 9, 1803, with dimensions of 22 feet width and 88 feet length.[1] On the 1806 plan of the Fort, prepared by Captain Walbach, Soldiers' Barracks No. 2 appears to have dimensions of 22 feet by 95 feet,[2] which are quite close to its present dimensions of 22 feet by 98 feet, 5 inches. Like Soldiers' Barracks No. 1, this one-and-one-half story structure was divided on the ground floor into three equal sections about 18 feet, 8 inches wide and 31 feet, 8 inches long, with each room having a fireplace.[3] The height of the ground floor from floor to ceiling was a little over eight feet. The exterior brick walls were about 14 inches thick. Beneath room 3 on the northern end

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1. "Fort McHenry, 9th November, 1803." R.G. 77, Records of the War Department, Cartographic Section, Drawer 51, Sheet 1, National Archives.

2. "Plan of Fort McHenry by Captain Walbach of the Artillery for the U.S. Mil: Philo: Soc: No. 1." United States Military Philosophical Papers, New York Historical Society.

3. Col. Jacob Hindman to Col. W.K. Armistead, March 17, 1819. R.G. 107, Records of the War Department, Office of the Chief of Engineers, Selected Correspondence Relating to Fort McHenry, Maryland, 1811-37, National Archives.

there was a subterranean cellar, probably used as a kitchen; this cellar was filled with earth around 1837.[4]

There is very little evidence as to how Fort McHenry appeared during the British bombardment of September 13-14, 1814. Only one watercolor painting depicting the bombardment shows one of the buildings, corresponding to the present location of Soldiers' Barracks No. 2, as having a gable shingle roof with dormer windows.[5]

The main brick walls extended above the ceiling joists two feet. This height was determined in September of 1958 by architect Nelson, who opened the plastered side walls just above the second floor line and revealed the top of the old brick-walls.[6] With the raising of the building to two stories, an eight-inch brick wall was added to the existing walls. The identification of this architectural detail can also be supported from an inspection report on the building prepared by Maj. M. M. Payne, dated June 1, 1829, stating: "The present walls of the buildings are fourteen inches thick, and they run

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4. Nelson, "Architectural Research and Explorations Conducted as a Part of the Historic American Building Survey at Fort McHenry, June-December, 1958," pp. 48 and 69-74.

5. This watercolor painting of the bombardment of Fort McHenry is displayed in the Peale Museum, Baltimore, Md. The artist of this painting is unknown, but he is considered by authorities to have been an eyewitness.

6. Nelson, op. cit., p. 50.

up two feet above the upper floor, consiquently [sic] a wall nine inches thick and seven feet high would give the upper rooms a sufficient pitch to render them airry [sic] and comfortable."[7]

Under the gable shingle roof there were small attic rooms called "garrets." Col. Jacob Hindman on March 17, 1819, reported that "The Garret rooms can not be occupied in summer on account of the intense heat."[8]

The 1819 plan of Fort McHenry drawn by Capt. William Tell Poussin shows the Fort already with its post-1812 War improvements. Soldiers' Barracks No. 2 is shown with dimensions of 22 by 127 feet, but this increased length most probably also included the guard house, which was attached at the west end of the barracks with only a passageway between them.[9]

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7. Maj. M. M. Payne to General Jesup, June 1, 1829. R.G. 92, Records of the War Department, Office of the Quartermaster General, Consolidated Correspondence File, 1794-1915, Fort McHenry, National Archives.

8. Hindman to Col. W.K. Armistead, March 17, 1819. R.G. 107, Records of the War Department, Office of the Chief of Engineers, Selected Correspondence Relating to Fort McHenry, Maryland, 1811-37, National Archives.

9. "Reconnoitring of Chesapeake Bay, State of Maryland, Plan and Profiles of Fort McHenry, 1819," drawn by William Tell Poussin, Captain Topographical Engineers. R.G. 77, Records of the War Department, Cartographic Section, Drawer 51, Sheet 2, National Archives.

A need for roof replacement in the barracks arose in 1823. Lt. J. M. Porter, in a letter to the Secretary of War of September 16, 1823, discussed the relative merits of zinc and slate roofs,[10] but because of other more urgent defects such as decayed floor joists and worn floors, the repair of the roofs was postponed.[11] The neglect of the necessary repairs to the barracks resulted in Fort McHenry finding itself in the 1820s in a very dilapidated condition, so that a renovation program was absolutely necessary if it were to function as an effective military post. On February 24, 1829, Lt. S. B. Dusenbury submitted to General Thomas S. Jesup, Quartermaster General in Washington, an estimate concerning the proposed repairs. In regard to Soldiers' Barracks No. 2 the estimate proposed the removal of the existing roof, elevation of the building to two stories with a shingled hip-roof, and the addition of a two-story porch or piazza along the entire front of the barracks. The estimated costs for this renovation program amounted to $2,590.45.[12]

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10. Porter to Secretary of War, September 16, 1823. R.G. 92, Records of the War Department, Office of the Quartermaster General, Consolidated Correspondence File, 1794-1915, Fort McHenry, National Archives. Cf. also *Supra*, p. 47.

11. Lt. Henry W. Fitzhugh to Gen. Thomas S. Jesup, July 8, 1824. R.G. 92, Records of the War Department, Office of the Quartermaster General, Consolidated Correspondence File, 1794-1915, Fort McHenry, National Archives.

12. Lt. S.B. Dusenbury to Gen. Thomas S. Jesup, February 24, 1829, in Ibid.

Other proposals were presented, one of which called only for the widening of the barracks rather than their elevation to two stories.[13] This proposition was opposed on the grounds that the widening was considered a potential exacerbation of the "unhealthy" living conditions at Fort McHenry, since the widened rooms would be adjacent to the earthen slope below the terreplein.[14] Therefore, the idea of widening the barracks was scrapped in favor of raising them to two stories, thus making possible better ventilation. In June 1829 the brick walls of the barracks were examined to see if they could support the addition to a second story.[15] When this was found feasible, the project was immediately commenced.[16] The work, which was rapidly pushed forward, seems to have been completed by early 1830.

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13. Maj. T. Cross to General Jesup, April 22, 1829. R.G. 92, Records of the War Department, Office of the Quartermaster General, Consolidated Correspondence File, 1794-1915, Fort McHenry, National Archives.

14. Gen. J.R. Fenwick to General Jesup, May 23, 1829. R.G. 92, Records of the War Department, Office of the Quartermaster General, Selected Pages from Registers of Letters Received, 1818-57, National Archives.

15. Maj. M.M. Payne to General Jesup, June 1, 1829. R.G. 92, Records of the War Department, Office of the Quartermaster General, Consolidated Correspondence File, 1794-1915, Fort McHenry, National Archives.

16. Lt. S.B. Dusenbury to Gen. T.S. Jesup, August 4, 1829. R.G. 92, Records of the War Department, Office of the Quartermaster General, Selected Letters Received Relating to Fort McHenry, Maryland, National Archives.

The newly enlarged barracks are shown for the first time on the drawing prepared in November of 1834 by Lt. Thomas J. Lee, 4th Artillery, Acting Assistant Quartermaster at Fort McHenry. These drawings depict the barracks not only as being raised, but also show their interior room arrangement. Furthermore the drawings show these newly heightened brick barracks with hip-roof.[17]

The earthen and sodded slope behind the barracks was replaced by a stone revetment wall in 1833, whose purpose was to eliminate the water runoff into the barracks.[18]

During the renovation of the fort in the late 1830s, the barracks floor and roof were rebuilt, and because of ground water the cellar kitchen was abandoned, filled with earth, and a new floor was planned to be laid upon scantling over a grouted brick floor.[19] The hazard of a fire in the barracks finally

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17. "Fort McHenry, Drawn in Obedience to a Circular from the Qr. Master Genls. Office, dated Nov. 13th, 1834, by Thos. J. Lee, Lt. 4th Arty. and Acting A.Q.M." R.G. 77, Records of the War Department, Office of the Chief Engineers, Map File, National Archives.

18. General Gratiot to Lieutenant Thompson, September 30, 1833. R.G. 77, Records of the War Department, Office of the Chief of Engineers, Miscellaneous Letters Sent, Volumes 1-25, 1812-1872, National Archives.

19. Lt. Thomas J. Lee to Gen. John Fenwick, January 7, 1836, and Lt. Thomas J. Lee to General Jesup, April 12, 1836. R.G. 92, Records of the War Department, Office of the Quartermaster General, Consolidated Correspondence File, 1794-1915, Fort McHenry, National Archives.

resulted in the replacement of the shingle roofs with a zinc covering on April 5, 1837. On that date Capt. Henry A. Thompson transmitted to the Chief Engineer of the Army, General Gratiot, an estimate for this work which stated: "For covering the four buildings [barracks] at this Post with tin at $475 each, $1800.00."[sic].[20] On the following day the estimate was approved and the work on reroofing was begun immediately. By May of 1840, after three years of extensive additions and alterations the soldiers' barracks were described as being in "excellent condition."[21] Some time during the post-Civil War period and prior to World War I, in an attempt to update Soldiers' Barracks No. 2, the two-story porch was removed from this building and the window and floor openings were altered. During the restoration of the Fort in the 1920s by the War Department under the direction of Col. L. M. Leisenring, only Soldiers' Barracks No. 1 (Building D) retained its porches. It served Colonel Leisenring as a model for the restoration, because the War Department believed that Building D reflected the state of the buildings in 1814, whereas

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20. Capt. Henry A. Thompson to General Gratiot, April 5, 1837. R.G. 77, Office of the Chief of Engineers, Letters Received, 1826-1837, National Archives.

21. Work done during those years is described in a narrative "An account of such Repairs to Fort McHenry as appears on the book of the Engineer Department," by Capt. Frederick A. Smith, Engineers, May 5, 1840. R.G. 77, Office of the Chief of Engineers, Letters Received, 1838-1866, National Archives.

it actually represents the period of 1829-30, when the porches and the second stories were added and other post-1830 structural changes made. It was the archeological and historical investigation conducted in 1958 at Fort McHenry which proved that the restored buildings represent the 1814 period only on the ground level, and that everything above, including the second floor, porches, etc., reflect the structural changes of 1829-30.

(b) Name of Builder:

Soldiers' Barracks No. 2 is one of the several inner buildings at Fort McHenry built between 1800 and 1802, on the basis of a plan by John Foncin. At the present time the building reflects the structural changes of the 1829-30 period.

(c) Name of Owner in Historic Period:

United States War Department.