

# Fort Scott

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Fort Scott was one of twenty-two forts in Arlington and a part of about sixty-five forts surrounding and comprising the defenses of Washington during the Civil War. Its construction along with other nearby forts and defensive works was brought about largely as a result of the battle of Bull Run. The first major collision of armed forces at Manassas and the defeat of the Union armies there brought the war to the immediate vicinity of Washington in a way the bombardment of Fort Sumter on April 12 and 13, 1861, could not do. One writer has called attention to a newspaper report saying that after the Bull Run defeat "men looked over their shoulders at the horizon to catch the shine of Beauregard's bayonets."<sup>1</sup> To the military the message was far less fanciful, clear and more practical:

When, after the disaster of Bull Run, it became apparent that the war was to be a struggle of long duration, the necessity of the thorough fortifying of Washington ceased to be doubtful. \* \* \* The first exigency was to fortify the position on the heights of Arlington, the most obvious manner of doing which was to connect Forts Corcoran and Albany by intermediate works within musketry or canister range of each other, and thus form, with Fort Runyon, a chain or a 'couronne', covering at the same time the bridges and the heights.<sup>2</sup>

Clearly, Fort Scott and others in the area got construction priority over more northerly defensive projects.

On this side of the Potomac priority was given to fortification of the area around the Long Bridge and stronger works further west such as Forts Barnard, Reynolds, Ward, Worth and Lyon. Later as the larger, outer forts were undertaken a smaller inner line including Fort Scott could be planned as a hedge against the more disagreeable prospect of penetration of the outer lines by the victorious rebels. The refinements were described as "a second interior line of strong detached works . . . extending from Forts Bennett and Corcoran to Forts Albany and Scott."<sup>3</sup>

To understand the entire plan of forts General Barnard's description of the geography determining the locations should be familiar to Arlingtonians:

Commencing nearly opposite Georgetown, and continuing to Alexandria, there is a marginal terrace corresponding to that forming the site of the city of Washington, narrow at first, but soon expanding to considerable width. Receding from the river this terrace is succeeded by an abrupt rise to an elevation of about 200 feet, the crest of which, interrupted by the valley of

<sup>1</sup> Fletcher Pratt, *A Short History of the Civil War*, page 33, Pocket Books, Inc.

<sup>2</sup> Report of Brev. Maj. Gen. J. G. Barnard, *Defenses of Washington*, Gov't. Printing Office, 1871. (Lib. of Cong. Ref. UG 412 W3B2) Page 10. (Herein ref. to as "Barnard").

<sup>3</sup> Barnard, page 42.

Four-Mile Run, follows nearly a meridian line from a point on the Potomac opposite Georgetown, to Hunting Creek.

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Opposite Washington, the elevation which has just been mentioned takes the name of the heights of Arlington. . . Just north of Four-Mile Run a spur detaches itself from the chain of heights and projects across the alluvial bottom, commanding and flanking that portion between it and the Long Bridge.

From the river the country increases in elevation "such as to impart to the topography of a region the features which govern the choice of position, whether for a line of battle or for a chain of defensive works."<sup>4</sup> The entire position was referred to as the "concave line of defensive works from the Chain Bridge to Hunting Creek."<sup>5</sup>

The construction of Fort Scott as a part of this line was likewise dictated by our own local topography, even more familiar to local residents in the Aurora Hills part of Arlington:

The wooded ridge which lies north of, and parallel to the lower course of Four-Mile Run, and which has been before mentioned as a projection from the range of heights, offered a position from which the city, the Long Bridge, and the plateau in advance of it could be overlooked and cannonaded, and from which it was important to exclude the enemy so long as our defensive line was thus limited. Access to it was made difficult by felling the forest with which it was covered (about 200 acres) and the construction upon it of the large lunette (Fort Scott) was commenced as soon as the site could be fixed.<sup>6</sup>

The site eventually fixed was at latitude 38° 50' 48.24" and longitude 77° 03' 17" at the flag-staff. It was 166.3 feet above mean tide and the flag-staff was 3.996 miles from the dome of the Capitol.<sup>7</sup> Fort Scott was built in the summer and fall of 1861.

The Fort had five sides of irregular lengths. Four sides were parapets and the fifth was the open gorge at the back, a characteristic of lunettes. It measured 270 ft. 9 in. across between the parallel flanks. The longest of the two flanks was 206 ft. 3 in. and the opposite one was 139 ft. 3 in. The two faces meeting in a salient angle, another characteristic of a lunette, were 181 ft. and 145 ft. 5 in. In the opening at the back were two 194 ft. 5 in. long and 18 ft. wide block houses, also called barracks in another trace. Between the two barracks was a 12 ft. 3 in. wide sally port.

The trace shows a banquette  $3\frac{1}{2}$  ft. above ground on the inside of the parapet and connecting the seven barbettes for artillery pieces. Soldiers were supposed to stand on the banquette when firing rifles over the merlons.

<sup>4</sup> Barnard, pages 3-5.

<sup>5</sup> Barnard, page 5.

<sup>6</sup> Barnard, page 11.

<sup>7</sup> Barnard, Appendix E, page 147, Determinations made by C. A. Schott of the United States Coast Survey. For map showing location see *Arlington Historical Magazine* 1(4): 16, 1960.



The Fort was surrounded by a fosse with a counterscarp from 8 ft. 8 in. to 9 ft. 8 in. high, a bottom width ranging from 8 to 14 ft., a top width from 12 ft. 10 in. to 18 ft. 3 in. and a scarp from 9 ft. 7 in. to 11 ft. 6 in. high. In the enclosed area the trace shows two 20 ft. long magazines and a well. Another trace shows a structure labeled officers' quarters and a flag-staff and the well is covered by a guard and well-house. The five sides were surrounded by an abatis laid out on the glacis with the top branches pointing out.

The dirt from which the Fort was made was described as a "stiff red clay", by First Lt. Abbot of the "Top. Engineers in charge," a notation to which all Arlington gardeners in the area will feelingly attest.

The strategic importance of Fort Scott was somewhat diminished by the later construction of forts down to Hunting Creek, south of Alexandria.

"The subsequent extension of the line to embrace Alexandria threw this work and Fort Albany into the rear, but it retained, nevertheless, a considerable importance, since taken in connection with Forts Richardson, Craig, and others, it completed a defensive line for Washington independent of the extension to Alexandria."<sup>8</sup>

There are two traces for Fort Scott. One shows barbettes, but no embrasures, for nine artillery pieces listed under "Armament":

- "3 24 pdr. Siege
- 2 24 pdr. Barb.
- 2 32 pdr. S. C.
- 1 4½" Rodman
- 1 8" S. C. How.
- 1 10" Siege Mortar
- 1 6 pdr. Jas. Rifle"

A second trace shows barbettes and embrasures for only seven artillery pieces: "4 24 pdr. B., 1 30 pdr. Parrott and 1 32 pdr. S." The last two listed on the first trace are not in positions around the Fort, but there is a notation on the second trace that "there is outside the fort a two gun battery commanding the valley of the Four-Mile Run." It is possible that the first trace shows only what was supposed to be constructed and the second was made later to show what was actually built.

Construction of Fort Scott completed with appropriate artillery in place, attention turns to its manning, armament and operation.

The manning of Fort Scott began October 10, 1861, when Captain S. G. Hemingway, Company A, 4th Regiment, 1st Connecticut Volunteers, Heavy Artillery, with a detail of 40 men took charge of Fort Scott by "having charge of the fatigue parties detailed to work on the fortifications."<sup>9</sup> Later, on October 29,

<sup>8</sup> Barnard, page 11.

<sup>9</sup> National Archives, RG-94, Boxes 85, 88, and 89; Conn. Order Books Co's A B C D E, 1st Heavy Artillery; and Morning Reports. Returns of Company A and Regimental Returns for the months of August, September, and October 1861.

By Order No. 6 January 12, 1862 the designation of the Regiment was changed to:

1861, on orders of Col. Tyler, Company A and Captain Hemingway took command of Fort Scott.

Hemingway became a major in November and was succeeded in December by Captain Thos. S. Gilbert in charge of Fort Scott with 1st Lt. Geo. Ager and 2d Lt. John H. Burton.<sup>10</sup>

Fort Scott in March 1862 was the source of returns and reports also of Companies B, Captain Oliver Burke and C, Captain Roland S. Burbank, according to reports dated April 1, but thereafter only Company A reports are from Fort Scott. In April B reported from Camp Ingalls, Cornwallis Plains, Conn. and C reported from Camp Winfield Scott, "before Yorktown" May 1, 1862. The less crowded Fort Scott, however, retained sufficient status to be a captain's headquarters during the rest of the war.

In April 1862 Company A marched to Alexandria and embarked for Fort Monroe to participate in the summer campaign up the peninsula between the James and the York Rivers toward Richmond.<sup>11</sup>

In October 1862 Company A returned to camp at Fort Blenker and Reynolds. Company I "Sam'l P. Hatfield 1st Lt. in charge" is now signing reports for August from Fort Scott.<sup>12</sup> Company I left Hampton Roads August 19, unloaded at Alexandria the 29th and occupied forts including Fort Scott where the Captain's headquarters were maintained. During the entire war Fort Scott had the distinction of being a captain's headquarters. The October return showed Captain Edw. P. Allen in charge.

Captain Allen's reports, as with earlier ones and as might be expected from an area so far from combat, dealt with humdrum personnel matters such as privates detached for recruiting or hospital duties. His orders dealt with personnel actions and with dress, such as: "When knapsacks are to be worn or inspected every man will be required to have his overcoat as well rolled and in the same manner as the sample in the hands of Sgt. Harford."<sup>13</sup> One notation

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"1st Conn. Artillery" subject to approval of the Governor of Connecticut, by order of Col. Tyler. (Order Books).

Company A's Returns first appear in the records as being written from Hagerstown, Maryland. The Company left there August 17, 1861 and that night encamped at Frederick City. On the 24th A moved 3 miles. On September 7, A left Camp Kennedy to go to near Dranestown "to join Banks Division" after being "brigaded" under General Hamilton, September 16. October 2, 1861 Company A left camp and "moved towards Washington" and camped near Rockville. On October 3, 1861, A camped near Tennytown. On October 9, 1861, A encamped on "Arlington Heights". (Box 88)

The Captain's Return refers to taking "command" on October 10, but the official command was assigned October 29.

<sup>10</sup> Returns, Company A, October, November, December 1861, and January and February 1862. (Box 88)

Gilbert was promoted to Major, (Order No. 44, Order Books, Co.'s A-E), resigned and was honorably discharged November 19, 1862. (Conn. Order Books)

Regimental Returns for December 1861. (Box 89)

<sup>11</sup> Returns, Company A, April 1862. (Box 88)

<sup>12</sup> Returns, Company A, February-October 1862, and Returns Company I, August 1862, Regimental Returns (now First Regiment) August 1862. (Box 88)

<sup>13</sup> Returns, Company I, October 1862. (Box 89)

reported month-after-month that Lyman Leach was not at Fort Scott because he was assigned to play the cymbals in the headquarters band. Leach's detachment was officially noted higher up and an explanation called for. In correspondence on February 8, 1863 Allen, after telling what the private was doing away from Fort Scott and where and why wrote that he would like to have his man back.<sup>14</sup> Another communication in May 1863 asks that private Berner be arrested. Private Sperry was shown first as a. w. o. l. and then as captured by the enemy.<sup>15</sup>

The Return for August 1863 from Fort Scott is signed by 1st Lt. Knox, Commanding, and the September Return is subscribed by a new Captain with a familiar name: John H. Burton, appointed September 5, 1863.<sup>16</sup>

A broken leg was about the biggest thing that happened at Fort Scott during the War. The January 1864 Return reported the Captain as being "sick in consequence of fractured leg." The Lieutenant signing the February Return in place of the injured Captain supplemented the January "sick" report with the statement that it occurred "while on duty December 30, 1863."<sup>17</sup>

Action elsewhere in the Civil War compares with continued calm at Fort Scott and February 16, 1864 men were engaged only in such routine pursuits as "cutting wood beyond the lines."

By March Burton was back signing his own Returns again from Fort Scott and by May should have had things in shape for two significant events that month: An inspection and the company's departure for the stormy finale of the War at the siege of Petersburg and Richmond. The exact date of either is not shown.

Two men were killed in action according to the June Return from Bermuda Hundred and many other losses are shown in later Returns from Battery Morton "Before Petersburg."<sup>18</sup> In December Captain Burton was mustered out with an honorable discharge. The May 1865 Return is from Drury's Bluff and G. P. Mason is the Captain. On return to Arlington Company I went to Fort Ellsworth and Battery Rodgers, Alexandria, where it reported from for the month of August 1865.<sup>19</sup> After Company I left Fort Scott there are no further available reports from the Fort to continue the story of its manning.

The inspection in May 1864 showed that affairs at Fort Scott were open to some criticism. General A. P. Howe, Inspector of Artillery made the inspection which he described in a report dated May 17, 1864. His report was preceded appropriately by a description of the scope of his assignment classifying the forts

<sup>14</sup>Miscellaneous Papers, item 323. (Box 85)

<sup>15</sup>Returns, Company I, January 1863 (Archives, Box 89).

<sup>16</sup>Id. August, September 1863 (Archives Box 89) John H. Burton 1st Lt. to be examined for promotion Aug. 6, 1863. P. 141 Regt Letters.

<sup>17</sup>Id. January, February 1864. (Archives Box 89).

<sup>18</sup>Id. May 1864, No ref. to inspection. (Archives Box 89) Killed in action: Wm. U. Quinton and Wm. Rolleston, "near Bda Landing" May 19 and 21.

<sup>19</sup>Returns, Company I, August 1865 (Archives Box 89).

inspected as, "First, those which immediately cover approaches to the city, and are within artillery command of the City . . . Of the first class, which I regard as the most important, are the works extending from Fort C. P. Smith on the right to Forts Richardson and Scott on the left, inclusive."<sup>20</sup>

The General's criticism of Fort Scott was the predictable military complaint of not enough equipment for the assigned mission, and he made recommendations for more as follows: "1 additional 24 pdr S. C. Wanted. Two 24 pdr siege guns removed to exterior battery Fort Barnard." And, "required in case the center line should fall 2 additional 24 pd siege and 2 24 pd howitzers." We must suppose Washington supply centers would be adequate to handle rush orders for two 24 pd. siege guns and howitzers to meet these rather modest underlined requirements for such a disastrous contingency, immediately on a certified determination and report to headquarters, properly endorsed, that the center line had fallen, or on request, a less pressed Fort Barnard might give back the two it took. Fortunately the admonitory hedge against adverse developments was never put to the test, for minor military actions around Fairfax Station and Chantilly were the closest any organized military groups of Confederates ever got to Washington from this side of the Potomac.

Other parts of Howe's report concentrated on the soldiers' department and with the inevitable dissatisfactions of critical inspectors we get this more personal statement and statistic in the General's inspection report:

Fort Scott—Major Trumbull Commanding  
Garrison, one company, First Connecticut Heavy Artillery—4 commissioned officers, 1 ordnance-sergeant, 137 men. Armament, two 12-pounder mountain howitzers, two 6-pounder James (rifled). Magazines, two; dry and in good condition. Ammunition, full supply and serviceable. Implements complete.<sup>21</sup>

Surely, these four guns represented a low point in the number of artillery pieces available at the Fort. The report went on to grade the conduct of the garrison in the discharge of soldierly duties, as follows:

"Drill in artillery, fair  
Drill in infantry, fair  
Discipline, fair  
Garrison sufficient for the work."<sup>22</sup>

The report reveals General Howe as a strict inspector. The Fort Scott garrison, comparatively, should not have felt too downgraded by all the "fair" marks on its report card as no fort examined got better grades. Fort Scott, as a matter of fact, did well by Howe's standards which rated soldiers' conduct at other forts with such denigrating comments as "insufficient" or "very ordinary" at Fort D. F. Smith, "deficient" at Fort Strong, "very deficient" at Fort Corcoran, "indifferent discipline" at Fort Lyon, and "needs improving" at Fort Marcy. Several others did just as badly.

<sup>20</sup> War of the Rebellion, Official Records of the Union and Confederate Army, Series 1, Vol. XXXVI, Part II, page 883 et seq., Government Printing Office 1871.

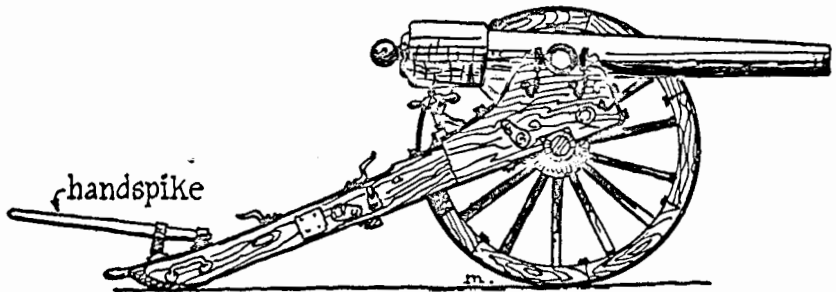
<sup>21</sup> Id. page 888.

<sup>22</sup> Id. page 888.

General Howe noted further that the guards and manning were insufficient at Fort Scott and the works needed strengthening. The weakest feature of the forts, he found, "is their liability to be surprised" and that outpost guards "have been very weak." This conclusion was supported by his observations about the area's features:

The character of the topography of the country for miles outside of the works, with the numerous roads, all favor and invite a sudden and covered dash upon the works.<sup>23</sup>

Under date of May 21, 1864, four days later, this critical report, as with all governmental reports to this day, was sent on its journey up through the hierarchy for review and comments by referral to General Barnard. Barnard thought the "suggestions and remarks" were "excellent" although it did not appear that his comments were based on any visual inspection of his own. The report with Barnard's endorsement then went to Major General C. C. Augur who, on May 31, 1864 ended hopes of perfection at Fort Scott by the notation that the suggestions were "theoretically correct, but with the present force at command here are impracticable." This final crushing shot in the war between theory and practicality also sealed the status of Fort Scott as a minor fortification in the defenses of Washington.



PARROTT 10-POUNDER RIFLE

A statement of the armament of Fort Scott on August 22, 1862 lists a total of nine artillery pieces, as follows:

- 3 24 pounders—Siege
- 2 32 pounders
- 2 24 pounders—S. C.
- 1 30 pounder, Parrott
- 1 8 in. S. C. Howitzer

Fort Scott's artillery complement was figured, according to the War Department's formula, by allowing 5 men to "heavy guns," 3 men to flank guns and three reliefs for around-the-clock details. The garrison was computed to require 2 men per yard of front and 1 man per yard of perimeter. One tabulation shows 313 perimeter yards. The Fort was estimated to need 450 men, and this number at one time may well have been scrambling around this area of Arlington.

<sup>23</sup> Id. page 884.



Time passed and there are no special records of operations at Fort Scott. There must have been other movements of armaments besides the sacrifice of the two 24 pounders to Fort Barnard for we have an undated report of Fort Scott's armament showing the following to be on hand:

At embrasures:		On barbettes:	
2	24 pdrs on Siege Carriages—sm. bore	1	8" S. C. Howitzer—sm. bore
1	20 pdr. Parrott—rifled	2	24 pdrs on Siege Carr. "
1	10 pdr. Parrott—rifled	1	24 pdr. on Barb. Carr. "
		2	10" Siege Mortars—rifled

And, the remark: "no vacant platform." Counting the siege mortars there were ten pieces at the time the tabulation was made.<sup>25</sup>

As of March 3, 1865 there were still ten guns listed as follows:

- 4 24 Pdr. Siege C.
- 2 10" Siege Howitzers
- 1 20 Pdr. Parrott
- 1 8" S. C. Howitzer B. C.
- 1 6 St. Jas. Rifle Brass
- 1 24 Pdr. B. C.

A vacant platform is noted.<sup>26</sup>

August 1865 finds no one reporting from Fort Scott.

The final order in the Regimental Order Book dated September 21, 1865 signals the end of the active wartime role of Fort Scott. Order No. 82, the last in the book was that the "regt will start from the Depot on Duke street Alexandria, Va. at 9 a. m. tomorrow—it will change cars in Washington. . ." (Regt'l Order Book, Conn. 1st Artl'y, p. 297)

As far as armament is concerned Fort Scott started with eleven items and plans for nine spaces, and wound up near the end of the war with ten and actual spaces for seven having suffered gains and losses in the interim. A little more diversity is shown at the last report with possibly a little less heft, but all things considered Fort Scott seems to have had a rather dull wartime existence. Hopeful evidence of activity has been in the form of corroded belt buckles and ball or shot found in the dirt, but these are more likely the leavings of old-time litter-bugs, for there is no solid evidence of any shots fired in anger around Fort Scott.

The guns are gone, the hazards of attack no longer exist, and Fort Scott is now a playground. The embankments which still remain have been used when snow is on the ground to provide a fine short slope for sliding by the very young in round saucer-shaped and box-type sliders, and in the summer to provide a jumping-off place using long wild-grape vines that hung down from some of the trees. Youngsters no less observant than General Howe, to this day, have been taking full advantage of the Fort's susceptibility to sudden and covered dashes upon the works guarded zealously by their contemporary opponents.

<sup>25</sup> Barnard, Plate 29.

<sup>26</sup> Tables showing Armament of forts South of the Potomac in March 1865, Archives, Drawer 170, Sheet 182.

## ABBREVIATIONS

Barb.—Barbette	Jas.—James
B. C.—Barbette Carriage	S. C.—Siege Carriage
How.—Howitzer	

## GLOSSARY AND SUPPLEMENTAL NOTES

*abatis*—A defense formed by placing felled trees lengthwise, one over another, with the branches toward the enemy's line.

*artillery, heavy*—Heavy artillery embraces all artillery other than light artillery which is formed into batteries and equipped for field evolutions. In the land service there are 3 types of heavy artillery: The gun, the howitzer and the mortar. These are distinguished by their uses as siege, garrison and sea-coast. From: Tidball's Artillery Manual of 1879, p. 1.

For the service of artillery 6 kinds of carriages are necessary: Siege, Barbette, Casemate, Flank Casemate, Columbiad and a bed for mortars. Only the first two were used at Fort Scott and mortar beds.

Siege artillery used in attacks on places follows armies and so is mounted on carriages suitable for movements in the field. Garrison artillery is used in the defense of forts. Barbette carriages are used for moving pieces short distances as within a fort.

Heavy artillery pieces used in the land service were classified as follows:

	}	Siege and Garrison	{	12 pdr.	}
Guns		Sea-coast	{	18 pdr.	
			24 pdr.		
			32 pdr.		
			42 pdr.		
	}	Siege and Garrison	{	8 in.	
Howitzers		Sea-coast	{	24 pdr.	
			8 in.		
			10 in.		
			8 in.		
Columbiads			10 in.		
			8 in.		
	}	Siege	{	8 in.	
Mortars		Sea-coast	{	10 in.	
			10 in.		
			13 in.		
			16 in.		
		Coehorn	{	24 pdr.	
				8 in.	}
				10 in.	
				10 in.	
				13 in.	
				16 in.	
				24 pdr.	}

From: Tidball's, p. 2. Also: "Instruction for Heavy Artillery Prepared by Board of Officers, for the Use of the Army of the United States" Washington 1851, p. 2.

*banquette*—A raised step along the inside of a parapet or bottom of a trench, upon which soldiers stand and fire at the enemy.

*barbette*—A mound of earth thrown up against an interior slope of a parapet to enable a piece to be fired over the parapet. The upper surface is level and 2 ft. 9 in. below the crest for light field pieces and from 4 to 6 ft. for heavy guns. To ascend the barbette a ramp is made of earth connecting the top with the terre pleine. The ramp is 10 ft. wide on the top and its slope is 6 base to one perpendicular. Tidball, p. 384, item 632.

- berm**—A narrow flat space between the foot of the parapet and the crest of the scarp.
- embrasure**—An opening in a parapet to permit the firing of a gun.
- fosse**—A ditch surrounding a fort.
- glacis**—The sloping approach to the parapet or to a fosse.
- gorge**—An entrance into a bastion or similar part of a fortification; hence the rear of a redan.
- howitzer**—A short cannon intermediate between the gun and mortar.
- James**—A smoothbore gun converted to a rifled gun by reboring to fire rifle projectiles under the James patent, involving the use of a copper rotating band on the projectile. From: *Artillery Through the Ages*, p. 16, U. S. Gov't Printing Office.
- lunette**—The lunette is classified among detached military defensive works. A detached work is one which has to rely on its own strength and resources for its security. It is in a sub-classification called "second class" works which are for defending larger areas than narrow defiles where the flanks are secure against being turned (first class), but not large enough to be used as inclosed works which are assailable on all sides and present a complete line throughout to any assault (third class). The lunette is an enlargement of a redan which has only two faces coming together in a point, the salient toward the enemy. A flank is added to each face to protect against flanking approaches. The open gorge is toward the protected side. Artillery is placed in position at the salients, in each of which is a pan-coupee. From: Tidball, p. 366, 367.
- merlon**—The part of a parapet between two embrasures.
- mortar**—A very short cannon used for high or curved trajectory firing.
- parapet**—A mass of earth in a fortification constructed so as to afford the assailed a view and fire over the assailant's line of approach, and to shelter the assailed from the view and fire of the assailant.
- When constructed only to screen or cover from enemy fire the earthwork is termed an *epaulement*. When the earthwork is used to cover troops or guns from an enfilading fire on the flank or the rear it is a *traverse*. Tidball, p. 376, par. 618. The earth level on the inside of the works is the *terre pleine or parade*.
- Parrott**—A gun developed by Robert P. Parrott. The guns are distinguished by a heavy wrought-iron jacket reinforcing the breech. The jacket was made by coiling a bar over the mandrel in a spiral then hammering the coils into a welded cylinder. The cylinder was bored and shrunk on the gun. *Artillery Through the Ages*, p. 16.
- revetment**—The facing on the parapet, which may be sod, timbers or stones.
- Rodman**—A gun manufactured by a method perfected by Capt. T. J. Rodman which involved casting the gun around a water-cooled core. The inner walls of the gun thus solidified first, were compressed by the contraction of the outer metal as it cooled down more slowly and had much greater strength to resist explosion of the charge. These were smoothbore guns. *Artillery Through the Ages*, p. 17.
- sally port**—An opening in a fortification for the passage of troops.
- siege gun**—A cannon mounted on a two wheeled carriage that could be moved about in field terrain. The purpose of the siege cannon was to destroy a fort. The siege carriage resembles the field gun carriage, but is much more massive.
- trace**—A ground plan of a work or fort.

