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FORT BOWIE

its physical evolution, 1862-1894



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HISTORIC STRUCTURE REPORT
HISTORICAL DATA SECTION
FORT BOWIE: ITS PHYSICAL EVOLUTION, 1862-1894
FORT BOWIE NATIONAL HISTORIC SITE,
ARIZONA

by
Jerome A. Greene

DENVER SERVICE CENTER
BRANCH OF HISTORIC PRESERVATION
PACIFIC NORTHWEST/WESTERN TEAM
NATIONAL PARK SERVICE
UNITED STATES DEPARTMENT OF THE INTERIOR
DENVER, COLORADO

FORT BOWIE: ITS PHYSICAL EVOLUTION, 1862-1894

ADDENDA

- p. 37, footnote 44. General Order No. 44, Department of California, dated November 15, 1866, directed the change from "fort" to "camp."
- p. 45. The garrison flag in Bell's photograph of Fort Bowie was at half staff because of the death of First Lieutenant John C. Carroll, the post commander, in an Apache attack occurring November 5, 1867.

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Jerome A. Greene
May, 1980

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PART 1: A BRIEF PHYSICAL HISTORY OF FORT BOWIE,
1862-1894.

A. Introduction

Fort Bowie National Historic Site is located in Cochise County, Arizona, in the southeastern corner of the state. It commemorates the old military post of Fort Bowie that stood for more than three decades (1862-94) in Apache Pass, scene of some of the bloodiest confrontations between white men and Indians in the American Southwest during the last half of the nineteenth century. Established during the Civil War by Union forces sent from California to check possible Confederate incursions, the fort later became an important guidepost for emigrants, as well as a command center for military activities focussing on the subjection of the hostile Chiricahua Apaches during the 1870s and 1880s.

Actually, Fort Bowie consisted of two distinct posts, the first of which lasted from 1862 until 1869 when it was succeeded by a new and larger fort built a few hundred yards away from the earlier site. Both posts, and especially the first, were erected at commanding positions about three miles east of the summit of Apache Pass in the northern part of the Chiricahua Mountains. Knowledge of the pass extended back before the period of Spanish exploration in the sixteenth century. Aboriginal occupants of the area utilized the springs located there, while the Spaniards called the pass "Puerto del Dado," perhaps signifying the opportune relationship of the springs to life needs in the otherwise harsh, desert environment.

Little is known of human associations with Apache Pass prior to 1848, when an American party from New Orleans allegedly traversed it. In the following year the California gold rush brought more attention to the region as travelers considered new routes to the far West. After the Gadsden Purchase of 1853, and the American acquisition of the territory below the Gila River in present Arizona, railroad interests viewed Apache Pass as a potential course

west, although another route slightly north was eventually favored. Apache Pass nevertheless witnessed increased emigration and by 1856 the trail through it had become an important military artery running west from New Mexico through Tucson to Fort Yuma on the lower Colorado River.

Despite its growing notoriety as a place of Indian ambush, plunder and murder, Apache Pass with its bountiful springs continued to be a landmark for travelers. In 1857 a mail route from San Antonio to San Diego was traced through the pass and a year later the Butterfield Overland Mail Company selected it for the location of one of its stations. John Butterfield and his associates won a government contract to carry mail between Missouri and California, and from El Paso, Texas, to Fort Yuma the company established stations to service its coaches and horses and to provide food, water, and supplies, and a place to rest for its drivers. The Overland Mail Station erected in Apache Pass marked the first continuing occupation represented at that point. Increased contact with the Chiricahua Apaches was one result, and while relations were initially peaceful, they turned openly hostile early in 1861 when a young army first lieutenant named George N. Bascom recklessly instigated a bloody dispute with the Chiricahua leader, Cochise, that brought sporadic warfare to the area lasting over the next decade.

When the outbreak of the Civil War forced closure of the Butterfield route, the mail station in Apache Pass was abandoned. But the location assumed strategic importance during the ensuing years, and in July, 1862, volunteer troops from California fought a desperate battle with Cochise's warriors for control of the central spring in the pass. So important did Brigadier General James H. Carleton consider this watering place on his supply line between Tucson and El Paso that he ordered the erection of a permanently

garrisoned facility to insure its continued accessibility for his command. Thus began the turbulent history of Fort Bowie, guardian of Apache Pass over the next thirty years.¹

1. This background data is drawn from Richard Y. Murray, "The History of Fort Bowie" (unpublished M.A. thesis, dated 1951, University of Arizona). Copy in the library of Fort Bowie National Historic Site (FBNHS), pp. 18-27; and Robert M. Utley, A Clash of Cultures: Fort Bowie and the Chiricahua Apaches (Washington: National Park Service, 1977), pp. 21-23, 26-27. For some references to early use of the springs in Apache Pass, see "Diary of Captain Vildosola from Nutrias into southern Arizona and New Mexico and Return, 1780," in Alfred Barnaby Thomas (ed.), Forgotten Frontiers (Norman: University of Oklahoma Press, 1932), p. 208; and John Russell Bartlett, Personal Narrative of Explorations and Incidents in Texas, New Mexico, California, Sonora and Chihuahua, 1850-1853 (2 vols. Reprint, Chicago: Rio Grande Press, Inc., 1965), I, 372-73.

B. Fort Building in the Southwest

1. Regulations

Ideally, the construction of such military posts as Fort Bowie during the nineteenth century followed formalized procedures prescribed by the Office of the Quartermaster General, U.S. Army. Designed to secure the uniform arrangement of post buildings, the strictures also regulated the size and number of rooms as well as the materials to be used in the erection of individual structures. While such constraints varied with the proposed size and purpose of each post, on the frontier many of them were expediently modified or ignored altogether. Aside from the most fundamental rules governing the utility of different post buildings, only in the case of the second Fort Bowie (1869-1894) were the principals acknowledged at all.¹

According to the regulations, the construction of post buildings was to be a carefully monitored process involving all echelons of military authority from the post commander to the Secretary of War. Each officer involved was charged with acquainting himself "with the established plans and estimates, in order that the necessary orders may be given advisedly and the work executed properly and with due economy."² Estimates for

1. A distinction was made between "permanent fortifications," such as the large stone or masonry coastal posts, and "interior posts, or cantonments," considered to be of a more temporary nature. In the case of the former, the Engineer Department would take charge of planning and building the post, which "when occupied by troops, will be turned over to the Quartermaster's Department. . . ." The construction of interior posts remained entirely within the province of the Quartermaster Department. Regulations concerning Barracks and Quarters of the Army of the United States, 1860 (Washington: George W. Bowman, Printer, 1861), p.1.

2. Ibid., p. 5.

buildings were to be forwarded through channels for approval, but they were usually revised by an officer delegated to make final decisions in such matters.³ This officer could decide on the size and capacity of a structure. He might determine what particulars of a building plan were to be omitted, what building materials were to be used, and what means of labor--contracted civilian or extra duty military--would be employed.⁴ Consequently, there was likelihood that a building plan submitted by a post commander would undergo substantial alteration before winning final approval.

Specifications and designs were furnished for most requisite permanent fort structures, including field officers' quarters, subalterns' quarters, company quarters (barracks), laundresses' quarters, guard house, chapel, staff offices, storehouses, and stables.⁵ Updated specification drawings were published in 1872, to include bakeries and other post buildings.⁶ The regulations did permit certain flexibility based on the immediate needs of the garrison, so that independent portions of a structure might be erected when exigency dictated:

The designs and estimates cover all the objects for which allowance is to be made under the most favorable circumstances; and, at the same time, they provide for a

3. Ibid.

4. Ibid., p. 6.

5. Ibid., passim.

6. These were reprinted in Specifications for Means of Transportation, Paulins, Stoves and Ranges, and Lamps and Fixtures for Use in the United States Army (Washington: Government Printing Office, 1882).

reduction, both in accomodation and finish, to the simplest purposes of shelter, when want of time or means renders such reduction necessary. To facilitate this adaptation of the designs and estimates to circumstances, the several parts, as main and back building, front and rear veranda, &c., are separated, and the items for the different styles of finish and methods of construction classified. A part or finish which from necessity has been omitted at first, may subsequently be added. . . .⁷

2. Location

Locality for a military post was an important consideration, both from the standpoint of economy and healthfulness. Officers charged with the construction of buildings were to ascertain what locally available resources both in material and labor, might be economically utilized.⁸ Accessibility to raw materials like timber and stone was especially important during the years preceding the entrance of railroads into the West. Labor was normally to be furnished by the troops at hand, although provision was made for the employment of "head mechanics" such as carpenters if they were available.⁹ Much specific advice was given in regard to the climatic and topographical situations of prospective army posts:

Pains should be taken to select healthy localities for military posts. Situations on the north side of marshy

7. Regulations concerning Barracks and Quarters, 1860, p. 6.

8. Ibid.

9. Ibid., p. 5.

ground, of however limited extent, or even on the north bank of a stream, especially in hot latitudes, should be avoided. Ventilation and drainage are also to be carefully considered. For the latter, ground which slopes gently to both sides from a parade ground as nearly level as possible, will be the best; and for the former, a position which is well exposed to the prevailing summer breeze is to be devised. . . . Densely shaded positions, particularly in hot latitudes, are not usually as healthy as open ones; but a certain amount of shade contributes both to the comfort and beauty of a post. . . . When the situation is destitute of trees, they should be set out in suitable places about the garrison, particularly on both sides of the parade ground. . . .¹⁰

Within the post plan, the positioning of structures generally followed centuries-old precepts. Regulations stipulated that the parade ground should run east to west with the officers' quarters, officers' mess, and chaplain's quarters all located along the south side.¹¹ A classic example of this traditional formality in the Southwest was Fort Union, New Mexico.¹²

3. Adobe Construction

The construction of military posts in different sections of the country reflected both geographical diversity and availability of resources, and nowhere was this more apparent than in the arid

10. Ibid., p. 8.

11. Ibid., pp. 7,8.

12. Willard B. Robinson, American Forts: Architectural Form and Function (Urbana: University of Illinois Press, 1977), p. 154.

Southwest. An article on military topography in the Army and Navy Journal described the country of southern Arizona as "literally a desert region, consisting either of sandy plains or rough barren mountains."¹³ Most military outposts situated in such hostile environments were necessarily located near springs or wells where water could be easily obtained.¹⁴ The most economical building material in the Southwest was adobe, the sun-dried mud brick used for centuries by Spaniards and Mexicans. During the 1850s, 1860s, and 1870s nearly all army posts built in the region utilized adobe construction techniques, although guardhouses and other buildings whose security was vital were often made of stone.¹⁵ Adobe bricks were manufactured according to conventional recipe. A large pit was excavated. The dry dirt removed from it was sifted to remove all impurities, then moistened to reach a clayey consistency when it was mixed with bits of straw to attain cohesiveness. The wet clay was next placed in wooden frames to dry for approximately three weeks, forming bricks which were then used in constructing buildings.¹⁶ The size of the adobe bricks was determined by the size of the frames in which they were formed. Apparently, brick dimensions were not standardized. An inspecting officer at Camp Goodwin, Arizona, in 1868 reported that the adobes used there were 16 inches by 8 inches by 3 inches thick. "Allowing the minimum thickness of joint of one inch, the space taken up by

13. April 16, 1864.

14. Robinson, American Forts, p. 149.

15. Ibid., pp. 153, 154. Examples of adobe use in forts of the Southwest include Fort Yuma, Arizona (1850), Fort Union, New Mexico (1851), Fort Craig, New Mexico (1854), Fort Lowell, Arizona (1862), Fort McDowell, Arizona (1865), the second Fort Davis, Texas (1867), and Fort Thomas, Arizona (1876). Ibid., pp. 153, 154-60.

16. J.H. Toulouse, "Military Forts in 1869," Arizona Historical Review, VI (July, 1935), p. 81.

one Adobe would be one third of a cubic foot, or more strictly a wall 2' thick and 10' high would contain 6 Adobes per running foot."¹⁷ One of the best contemporary descriptions of adobe manufacture on an Arizona military post was that given by Lieutenant Colonel Eugene A. Carr, who was stationed at Camp Lowell (Tucson) in 1874. Carr said that the adobe bricks he saw being made measured 20 inches by 10 inches by 5 inches.

The adobes were made by first mixing up mud with refuse straw to about the consistency of mortar, & then putting it into frames or moulds. . . . The mould is then taken up leaving the three adobes on the ground to dry: & put in another place refilled & so on. The adobes are left two or more days according to the weather, & as soon as dry enough are turned on their edges & left till dry enough to handle: where they are at once used for building, or piled in stacks for future use. Of course, when green & lying flat on the ground, a very little rain will dissolve them. When turned on their sides it will take more rain to spoil them, but still not a great deal: & if frozen while wet they will fall to pieces when thawed.¹⁸

Other contemporary references to the size of adobe bricks suggest considerable variety as to their length, width, and thickness. Major Robert said that those at Camp Wallen, Arizona,

17. Major Henry Martyn Robert to Lieutenant Colonel Frederick Townsend, February 5, 1868. Copy in the Henry Martyn Robert Collection. Arizona Historical Foundation, Arizona State University Library, Tempe.

18. Carr to father, January 23, 1874. E.A. Carr Papers. Box 1. United States Army Military History Institute, Carlisle, Pennsylvania.

measured 18 inches by 9 inches by 4 inches,¹⁹ while yet another source gave a standard size of 16 inches by 12 inches by 4 inches.²⁰ The cost of making adobe bricks differed according to the manufacturer. A contractor described by Carr received \$30.00 per thousand bricks, manufactured and laid in the wall.²¹ Major Robert gave precise figures for their manufacture by Mexican laborers:

The Natives will make Adobes @ \$15 per M & build up the wall @ \$6 per M; total \$20 per M, the hauling of water & material being done for them. Forty thousand adobes will build quarters for the officers & men; also kitchens, guard house & hospital including all necessary buildings--making the cost 40 X \$20. = \$800.²²

4. Problems with Roofs

The walls of a building were raised with adobe bricks. Generally, they stood 10 to 12 feet high, with one slightly higher than that opposite it to allow moisture to run off the roof easily. Proper construction of the roof was very important in order to prevent leaking. It was flat and covered with dirt, sloping ridge roofs being avoided because of their tendency to leak at the ridge. Also, too much slope allowed the rain to erode away the mud covering. The flat roof consisted of cottonwood timbers laid across the walls and projecting beyond them. The timbers were then covered with thick grass or straw. Atop this was laid a thick coat

19. Henry Martyn Robert, *Field Notes*, Jan. 10-Feb. 6, 1868. Typescript in Robert Collection, Arizona Historical Foundation.

20. Toulouse, "Military Forts in 1869," p. 81.

21. Carr to father, January 23, 1874.

22. *Field Notes*.

of adobe mud, followed by successive coatings of the mud topped off with a sand or lime mixture. When finished, the roof should have projected far enough beyond the walls to permit runoff water to be carried free of the structure so that its drizzle would not erode the adobe fabric. The interval formed by the timbers between the roof and the wall allowed for ventilation of the structure and usually measured about 6 to 8 inches in width along both sides. Occasionally the opening was sealed.²³

Despite all precautions, the flat roofs of most post buildings leaked badly. One common deficiency lay in the roof timbers which tended to curve upwards at the ends after a period of time, thereby creating a shallow depression in which rainwater might collect and eventually seep down into the interior of the building, causing a muddy quagmire. Sometimes the leaking was brought on by poor construction of the roof, and sometimes an inferior consistency in the clay of the mud covering was at fault.²⁴ "At one post during a continued rain," said one report, "such men as could procure shelter tents pitched them over their bunks in order to keep themselves dry. . . ." ²⁵ Lacking sufficient ventilation and sunlight, the damp floors of the interiors of buildings with leaky roofs posed a problem of disease control. At the fort described above "the sick list was crowded with bronchial attacks and rheumatic affections, attributable to the condition of the quarters."²⁶ Sometimes the soldiers covered the roofs with

23. Toulouse, "Military Forts in 1869," pp. 81-82; Carr to father, January 23, 1874.

24. Toulouse, "Military Forts in 1869," p. 82.

25. Ibid.

26. Ibid., p. 83.

tarpaulins and tent flies, but this was no guarantee they would stay dry.

A variation of this projecting style of flat dirt roof was seen by Major Robert at Camp Wallen. He described the roofs there as being

like the buildings in Tucson[,] nearly flat with the wall projecting above [the] roof & pipes made of fruit cans to lead away the water. These work best. Hay was used under the earth on the roof, but it is found bad on acct. of mice. After every rain a man is sent around to repair every roof. When the roof was first put on of Adobe mud it was allowed to dry in the sun & the cracks were filled with Ashes which was [sic] strewn over the whole roof for lack of any fine earth. Then dry earth was laid on say three inches & sprinkled.²⁷

5. Some Other Problems

Problems with leaky flat roofs eventually resulted in their replacement with the shingled, hipped variety. Another difficulty with adobe buildings was their lack of sufficient lighting. Windows built into the walls were small and few because of the fear of weakening the structure with too many openings.²⁸ Door and window frames, moreover, often warped after installation, especially when cottonwood was so employed. Pine was preferred. Because refined lumber and hardware were so remote from the average Arizona army post and, even if obtainable, had to be hauled over long distances at a considerable expense, most stations tried to get by with

27. Field Notes.

28. Toulouse, "Military Forts in 1869," p. 82.

supplies locally available.²⁹ Wrote an officer: "With shingled roofs, ample air space, and sufficient lighting and ventilation, the adobe house can be made a most comfortable resting place for the soldier after the exposure and fatigues he is frequently called upon to endure on service in this Territory."³⁰

29. Ibid., Robinson, American Forts, p. 154.

30. Toulouse, "Military Forts in 1869," p. 83.

C. The First Fort Bowie, 1862-1869

1. The Battle of Apache Pass

The erection of the first Fort Bowie in Apache Pass scarcely subscribed to the precepts governing construction of frontier military posts. Its creation stemmed from emergency needs following the Battle of Apache Pass, July 15 and 16, 1862. The battle occurred during an attempt by Brigadier General James H. Carleton of the California Volunteers to solidify Union territorial gains in Arizona, New Mexico, and Texas after the expulsion of Confederate forces from the area. Carleton's line of supply to the Rio Grande lay along the abandoned Butterfield mail route, and at the spring near the old Apache Pass mail station the Chiricahua Apaches had made a practice of ambushing travelers and soldiers who stopped to get water.

On June 21 Lieutenant Colonel Edward E. Eyre left Tucson with a small command to reconnoiter the country from Tucson to the Rio Grande ahead of Carleton's main column. While stopped at Apache Pass three of Eyre's soldiers were killed by Indians in a provocative incident that made Eyre urge that troops be stationed there permanently to guard the water supply.¹ But before that recommendation could be fulfilled the Battle of Apache Pass occurred, underscoring the virtual necessity of garrisoning that point on the military road. The troops involved consisted of a detachment of 125 California Volunteers under the command of Captain Thomas L. Roberts who were escorting an army supply train and a herd of cattle through the pass. They were attacked

1. Eyre to First Lieutenant Benjamin C. Cutler, July 6, 1862, in The War of the Rebellion: A Compilation of the Official Records of the Union and Confederate Armies (73 Vols., 128 parts; Washington: Government Printing Office, 1880-1901), Series I, L, Part I, pp. 121-22; Eyre to Cutler, July 8, 1862, in ibid., p. 125.

as they approached the old mail station, and again as they tried to obtain water from the spring. The Apaches occupied the heights overlooking the spring on both sides, and had built stone breastworks to protect them from the musketry of the soldiers. But Roberts had two mountain howitzers with him and under severe shelling from these guns the Indians gradually withdrew, allowing the command access to the spring. After obtaining water for his command, Roberts withdrew fifteen miles west where he joined Captain John C. Cremony and his command of the Second California Cavalry which had been following on Roberts's trail. The next morning, July 15, the enlarged force once more entered Apache Pass only to find the Chiricahuas again in possession of the hills surrounding the spring. Another encounter ensued, and the soldiers succeeded finally in driving the tribesmen away. Roberts lost two men killed and two wounded in the fighting. The Indians' loss was placed at ten killed.²

2. Establishment of Fort Bowie

In his official report of the encounter, Captain Roberts recommended the posting of a guard detail in Apache Pass. "I deem it highly important," he wrote, "that a force sufficient to hold the water and pass should be stationed there, otherwise every command will have to fight for the water. . . ."³ Within a week and a half of the Battle of Apache Pass, General Carleton stood on

2. Report of Captain Thomas L. Roberts, July 19, 1862, in War of the Rebellion, Series I, Vol. L, Part I, pp. 131, 132; Report of Captain John C. Cremony, July 16, 1862, in ibid., pp. 132-33; John C. Cremony, Life Among the Apaches (San Francisco: A. Roman and Company, Publishers, 1868. Reprint, Tucson: Arizona Silhouettes, 1951), p. 163.

3. Report of Captain Roberts, July 19, 1862, in War of the Rebellion, Series I, Vol. L, Part I, p. 128.

the site while enroute to New Mexico. The reasoning behind the recommendations of Eyre and Roberts became clear as he surveyed the ground around Apache Spring and viewed the graves of the recent dead. Two miles beyond the pass Carlton saw the remains of a party of nine miners who had been murdered by Apaches as they passed through on their way to California.⁴ On July 27 he issued orders establishing a military station in the strategic pass:

GENERAL ORDERS, HDQRS. COLUMN FROM CALIFORNIA,
Apache Pass, Overland Mail Station,
No. 12. July 27, 1862

I. A post will be established in this pass, which will be known as Fort Bowie.

II. This post will be garrisoned by Company G, Fifth Infantry, increased to 100 men by a detachment from Company A, Fifth Infantry California Volunteers. Maj. T. A. Coult, Fifth Infantry California Volunteers, until further orders, is assigned to the command of Fort Bowie. Surg. David Wooster, Fifth Infantry California Volunteers, is also assigned to duty at that post.

III. Col. Joseph R. West, First Infantry California Volunteers, as he passes Fort Bowie on his way to the Rio Grande, will furnish for the infantry portion of the garrison 120 rounds of ammunition per man. Lieutenant-Colonel Rigg, First Infantry California Volunteers, will see that the command is furnished with twenty days' rations of subsistence and a sufficient number of tents, including one hospital tent. Should

4. Carleton to Lieutenant Colonel R.C. Drum, September 20, 1862, in *ibid.*, p. 100.

Colonel Rigg not have an adequate number, they will be furnished from the supply train under command of Capt. William McCleave, First Cavalry California Volunteers, which will leave Tucson, Ariz. Ter., on the 2d proximo. From this train the commander of Fort Bowie will draw 10,000 rounds of musket ammunition and sixty days' rations of subsistence. Passing detachments will keep the command at Fort Bowie supplied with fresh beef until the arrival of the beef contractor, who will make arrangements to leave at that post sixty days' rations of fresh beef on the hoof, with two first-rate men to herd them.

IV. The commanding officer at Fort Bowie will establish that post at the best point in the Apache Pass for the protection of travelers and passing trains. If this point, from the nature of the ground, cannot be found near the spring, a small redoubt on the most commanding position will be at once erected near that spring, and be occupied night and day by a picket guard strong enough to hold it.

V. The commander at Fort Bowie will cause the Apache Indians to be attacked whenever and wherever he may find them near his post, unless they bear flags of truce. For this purpose he is at liberty to send out from time to time detachments from his post of such strength and to such points as the good of the service may require. He will, whenever necessary, cause all trains and expressmen to be escorted through the pass and well out into the open country on either hand. To effect all this a great deal is necessarily left to his judgement, caution, vigilance, and energy.

VI. A detachment of cavalry will be added to the garrison of the post, and will come from the east with the first return train.

By command of Brigadier-General Carleton:

BEN. C. CUTLER, First
Lieut., First Infty., California Vols., Actg.
Asst. Adjt. Gen.⁵

The new post was to be named in honor of Carleton's friend, Colonel George Washington Bowie, of the Fifth Infantry California Volunteers, who commanded the District of Southern California and was stationed at Fort Yuma.⁶ The next day, July 28, as Major West's column reached Apache Pass, the first troops directed to erect Fort Bowie were assigned, consisting of Company G, Fifth Infantry California Volunteers, under Captain Hugh L. Hinds. Major Theodore A. Coult, also of the Fifth, was placed in charge of building the post, while the only shelter for the men was provided by thirteen tents left by General Carleton before he proceeded

5. War of the Rebellion, Series I, Vol. L, Part III, pp. 4041.

6. Colonel Bowie was a native of Maryland, born January 25, 1824, in Montgomery County. After distinguished service in the Mexican War he came to California and was admitted to the bar in Sacramento. Bowie rose in political prominence, but was defeated in his race for governor in 1857. At the beginning of the Civil War he was appointed Colonel of the Fifth California Infantry, served in California, Arizona, and Texas, and was discharged late in 1864. Bowie was employed by the U.S. Customs Service in San Francisco in 1868 and later practiced law. He died August 11, 1901 in Martinez, California, at the age of seventy-seven. Bowie's only personal association with the post bearing his name occurred in March, 1863, when he came through Apache Pass on his way to El Paso to assume command of the Military District of Arizona. Carl Hayden, Sketch of the life of Colonel George Washington Bowie. Copy in the files of FBNHS. See also Francis B. Heitman (comp.), Historical Register and Dictionary of the United States Army, from its Organization, September 29, 1789, to March 2, 1903 (2 vols.; Washington: Governmental Printing Office, 1903), 1, 234.

east.⁷ Carleton also issued instructions for food and supplies to reach the garrison in Apache Pass from stockpiles at the crossing of the San Pedro River and from his supply depot at Tucson. He obviously considered the post to be vital to the security of his command: "Fort Bowie is included within the District of Eastern Arizona, and will doubtless be occupied by troops for many years, as it is one of the most important points for a military post in the Territory."⁸

3. Erecting Defenses

On July 29 Coult and his officers inspected the terrain in the vicinity of the spring and decided upon erecting the post atop a high hill that overlooked the spring from the south and was adjacent to the road through Apache Pass. With but forty men present, the Major was forced to divide their time between work on the post and guard duty, for the threat of attack by the Chiricahuas was ever present.⁹

With few foals, the men contented themselves during the first week with raising breastworks of stone to guard approaches to the hill from all directions. No concentrated Indian attacks took place, although in one instance a soldier was wounded by Apaches some 600 yards from camp as he pursued a cow that had run off.¹⁰

7. Carleton to Brigadier General E.R.S. Canby, August 8, 1862, in War of the Rebellion, Series I, Vol. L, Part III, p. 107.

8. Carleton to Major David Ferguson, August 3, 1862, in War of the Rebellion, Series I, Vol. L, Part III, pp. 47-48.

9. Major Thomas A. Coult to First Lieutenant Benjamin C. Cutler, August 9, 1862, in War of the Rebellion, Series I, Vol. L, Part II, p. 135.

10. Ibid., pp. 134-35.

Under these conditions Coult proceeded with the task at hand. On August 9 he reported on his progress:

I am building, as defenses, out-works on four faces of the hill, but sufficiently near that either of them being attacked can be readily and safely re-enforced from the others. My breast-works are four feet and a half high and built of large stone, three feet wide on the bottom and from eighteen inches to two feet on top. They are very substantial and will afford ample protection against all kinds of small-arms. I have one already completed eighty feet in length, covering the rear of my position, and another, over 100 feet long, nearly done. The latter protects my most exposed flank.¹¹

In the same letter Major Coult requested that lumber be sent from Mesilla, New Mexico, "for the construction of the necessary office furniture," and asked that carpenter's tools, a grindstone, a forge, and horse and mule shoeing supplies be sent to the new post.¹²

During his second week at Apache Pass Major Coult's work quickened after the arrival of ten more men of Company G, twenty-five members of Company A, Fifth Infantry, with their lieutenant, and thirteen soldiers of Company A, First Cavalry California Volunteers. By August 17 Coult could report that

on Thursday, the 14th instant, I completed the defensive works about my camp. They are four in number, and may be described as follows: Alcatraz (I give the names applied to them by the men who built them, and to whom,

11. Ibid., p. 135.

12. Ibid.

as they worked well and faithfully, I allowed that privilege) is on the left flank of the camp, 150 feet in length, and commands every point within musket-range, in the canon toward the road and camping ground of trains. Fort Point, on a slight elevation, covers the rear of the camp and the wagon road up the hill. It is ninety-five feet in length. Bule Battery overlooks the country and the approaches to the hill on the southeast, or right flank, of the camp. It is ninety-seven feet long, and effectually covers and protects the cattle corral and picket rope of the cavalry detachment. Spring Garden (guarding) overlooks the spring and commands the ravine in which it is situated and every point within musket-range around the spring. This wall is seventy feet long. The total length of the wall around the post is 412 feet, the height 4 to 4 1/2 feet, and thickness from 2 1/2 to 3 feet at bottom, tapering to 18 inches to 2 feet at top, and built of stones weighing from 25 to 500 pounds. The works are not of any regular form, my only object being to build defenses which could be speedily completed, and at the same time possess the requisites of sheltering their defenders, commanding every approach to the hill, and protecting each other by flank fires along their faces. I now consider the camp pretty safe from any attack of Indians, unless they should come in overwhelming force and desperately storm the hill. . . . In addition to the wall defenses I have also built the walls of a guard-house on one end of the front wall, and will have it roofed in in a few days.¹³

13. Coult to Cutler, August 17, 1862, in *ibid.*, pp. 73-74.

4. The Hilltop Fortifications

From Coult's description of his defenses, it appears that the earliest structures at Fort Bowie were stone breastworks thrown up at key positions on top of the hill overlooking Apache Spring. They were irregular, or asymmetrical, and certainly not as refined as formal fortifications would be. They were probably arranged tightly together and seemingly they occupied only the northern end of a long, gradually narrowing ridge above and adjacent to a defile and swale on the east where many of the post buildings were eventually built. The four breastworks apparently took the rough form of redans, or simple parapets displaying a salient towards the front. The salient would have had to have been present if the breastworks were mutually supportable by flanking fire, as specified by Major Coult. In clockwise order, the structures were Spring Garden, occupying the northernmost point of the hill on its most abruptly rising face; Bule Battery, on the east side of the hilltop overlooking the broad mouth of the aforementioned swale; Fort Point, the southernmost structure which guarded approaches from the south and southeast; and Alcatraz, which consisted of the longest wall bordering the entire western length of the enclosure. (These last two structures were named after the two most important forts then protecting San Francisco Bay, from which vicinity many of Coult's men had been enlisted.) Perhaps the thirteen tents left by Carleton to shelter the Fort Bowie garrison were placed inside the enclosed area, although it seems more likely that they were set up on lower ground at a point below Bule Battery so that the fierce, driving winds that swept through the pass from the west would not ruin them.

5. A Permanent Station

For the first several months after the erection of the stone fortifications the troops had no other shelter than the tents. By early October concerns grew among the command over the

possibility of their remaining at Apache Pass through the winter without adequate protection. Fearful that the soldiers might not receive supplies, Coult wrote his headquarters:

I would respectfully recommend . . . that the garrison be withdrawn during the winter months. The locality is decidedly unhealthy, and I am informed by reliable persons that during the winter season the snow falls there from three to five feet in depth. During the period of my stay at Fort Bowie I do not think a single man escaped having an attack of fever, and some came very near dying. The garrison there have no protection save tents. . . . The place can be dismantled, and, if necessary, reoccupied in the spring.¹⁴

Within a few days the weather situation worsened. "It is a daily occurrence now for the wind to blow a perfect hurricane," complained Captain Hugh L. Hinds, now commanding Fort Bowie. "The tents are whipping to pieces very fast and it will be . . . an impossibility to winter here without building quarters of some kind."¹⁵ Yet General Carleton had no intention of closing the new post and directed that six months' worth of provisions be on hand at Apache Pass at all times. "The troops at Fort Bowie," said Carleton, "are to fight the Apache Indians in that vicinity whenever found, and are to help people, by escorts, through the pass whenever necessary."¹⁶ His intent as to the continued maintenance

14. Coult to Lieutenant W. A. Thompson, October 2, 1862, in ibid., pp. 145-46.

15. Hinds to Coult, October 7, 1862. Miscellaneous Collection of Records. Arizona Historical Society, Tucson.

16. Carleton to Colonel Joseph R. West, October 3, 1862, in War of the Rebellion, Series I, Vol. L, Part II, p. 147.

of the post was expressed clearly and succinctly: "Under no circumstances is the garrison at Fort Bowie to be withdrawn."¹⁷

6. Building Quarters

Documentary evidence relating to the construction of quarters at Fort Bowie during the late autumn of 1862 has not been located. Presumably the garrison at this time began the excavation of pits or holes in the sides of the swale southeast of the hill. Large rocks were used to build crude walls, and the roofs of the partially subterranean dwellings doubtless consisted of branches, rocks, and mud, perhaps covered with canvas tenting material. The first description of Fort Bowie after the erection of quarters was that provided almost a year later by Captain Thomas T. Tidball, then commanding the post. Tidball deplored the living conditions to which his men were subjected and complained openly to his superiors:

The present site of the post is exceedingly inconvenient for a garrison and seems to have been constructed more with a view to command the spring than from any other advantage it presented. A great amount of badly applied labor has been applied here, and the place is probably not as well adapted for defense as when it was first occupied. The quarters, if it is not an abuse of language to call them such, have been constructed without system, regard to health, defense, or convenience. Those occupied by the men are mere hovels, mostly excavations in the side hill, damp, illy ventilated, and covered with the decomposed granite taken from the excavation, through which the rain passes

17. Carleton to West, October 21, 1862, in ibid., p. 189.

very much as it would through a sieve. By the removal of a few tents, the place would present more the appearance of a California Digger Indian rancheria than a military post.¹⁸

Tidball's letter was the first that suggested the need for relocating as well as rebuilding Fort Bowie. He correctly assessed the early need for defending the spring, but obviously the erection of the crude shelters beyond the original hilltop perimeter indicated to him that, defensively at least, the fort no longer was sufficient.

7. A New Site

Tidball's recommendation apparently impressed General Carleton, although little was done to alleviate conditions of the garrison until July, 1864, probably because of supply-related difficulties. In that month, however, more troops were sent to Fort Bowie which must have had the effect of overcrowding the tiny quarters there. With the increased labor force, Captain Tidball was directed to begin work on a new fort at a location previously selected by Lieutenant Colonel Nelson H. Davis, inspector general

18. Tidball to District Headquarters, October 27, 1863. Quoted in Lieutenant Colonel Clarence E. Bennett to Colonel John C. McFerran, February 11, 1865, in *ibid.*, p. 1135. An historical account of the post prepared early in 1871 described the habitations thusly: "The quarters of the men consisted of a series of small dwellings built on both sides of an arroya [*sic*] running in a south westerly direction. These dwellings were built with rough stone walls and roofed with earth; they were warm and apparently comfortable, but, being dug more or less into the banks on both sides of the arroya--but poorly ventilated; from two to four men were quartered in each of them." "Descriptive Commentaries from the Medical Histories of Posts." Fort Bowie, vol. 125 (1871), National Archives Microfilm Publications, Roll M903, vol. 1. (Hereafter cited as "Descriptive Commentaries.")

in Carleton's district.¹⁹ Although the records offer no indication just where the new post was to be erected, later references to the ground 300 yards east of the first Fort Bowie strongly suggest that the site had been considered for some time. Wherever its location, Captain Tidball only had time enough to stake off the designated tract and clear it of some cacti before he and his infantrymen were withdrawn from Fort Bowie and mustered out of the service.²⁰ Apparently, the remaining company was expected to continue building the post, but little was done.²¹ Consequently, Carleton ordered Lieutenant Colonel Clarence E. Bennett of the First Cavalry California Volunteers to go to Fort Bowie and take immediate charge of construction of the new post.

Bennett arrived at Fort Bowie early in 1865 and was clearly appalled by the conditions he witnessed. Other than for the preliminary measures completed by Captain Tidball, he wrote, "I can see nothing to indicate work on the post."²²

These same huts [as earlier described by Tidball] are still used as quarters, and they are worse now than then. We have just had a long, terrific mountain storm. These huts presented truly a most wretched appearance. Those used by the officers were no better than those occupied by the men, so far as leaking was concerned.

19. Bennett to McFerran, February 11, 1865, in War of the Rebellion, Series I, Vol. L, Part II, p. 1134.

20. Murray, "History of Fort Bowie," pp. 92-93.

21. As late as October, 1864, Carleton believed that work was proceeding on the new post. Carleton to McFerran, October 6, 1864, in War of the Rebellion, Series I, Vol. XLI, Part III, p. 676.

22. Bennett to McFerran, February 11, 1865, in War of the Rebellion, Series I, Vol. L, Part II, p. 1134.

Repairing these quarters is out of the question, therefore new ones should be constructed as speedily as possible for the quartermaster's animals and beef-cattle, quartermaster's stores, ordnance and subsistence stores, quartermaster's stables, commissary corral.²³

Bennett called attention to the fact that the small Fort Bowie garrison of forty men, preoccupied with routine tasks like hauling water, serving as escorts, and guarding the post, scarcely had time to undertake any serious building program. He did report that he had sent some men out after timber, both pine and hardwood, but that after observing conditions at Fort Bowie, "I consider it absolutely necessary that another company be sent here to enable me to properly carry on this work."²⁴ He also requested the services of four masons and one carpenter, and opined that the new post should be built of limestone which was abundant in the vicinity.²⁵

8. Impediments to Progress

Despite Bennett's forecast for resuming the work, a reorganization of the military bureaucracy in the southwest once again dashed construction plans at Fort Bowie. In January, 1865, Arizona was reassigned to the Military Department of the Pacific, although it took several months before the actual transfer of authority occurred. By the reorganization, General Carleton was henceforth removed from matters pertaining to Fort Bowie. The

23. Ibid., p. 1135.

24. Ibid.

25. Ibid.

change coincided with an upsurge in Apache hostility which further stymied efforts to build a new fort in Apache Pass.²⁶

Too few men and increasingly bad weather added to the problems of renewing work on the post during the early months of 1865, and it was not until mid-year that the project was continued.²⁷ In June, the District Commander, Brigadier General John S. Mason came to Fort Bowie, saw that "the men are living in hovels," and ordered an immediate resumption.²⁸ Mason's instructions were interesting in the detail he provided as to his expectations. Wrote his adjutant, Captain John Green to Captain John L. Merriam, then commanding Fort Bowie:

The General Commanding directs that you at once begin building the new post on the site selected, and in accordance with the plan as approved. The walls of the buildings will be constructed of earth moistened with lime water, and moulded at once into the walls, [using the procedure] known as the "Pis" [pisé] building.²⁹

26. Murray, "History of Fort Bowie," pp. 93-95.

27. Bennett to McFerran, February 15, 1865. National Archives, Record Group 393, Records of the United States Army Commands, District of Arizona, Letters Received, 1869 to 1870. (Hereafter cited as NA, RG 393.) Copy in the files of FBNHS.

28. Mason to Colonel R.C. Drum, July 16, 1865, in War of the Rebellion, Series I, Vol. L, Part II, p. 1281.

29. Green to Merriam, June 25, 1865. NA, RG 393, District of Arizona, Letters Sent (LS). Copy in the files of FBNHS. Pisé was a building process utilizing "beaten and rammed earth," and was much in vogue in southern Europe at the time. Several buildings erected at Camp Verde, Arizona, in the 1870s used the pisé method. "The walls appear to be very solid, and when covered with an exterior coat of lime, or of hydraulic cement, answer perfectly their purpose." Report of the Secretary of War, 1874 (Washington: Government Printing Office, 1874), p. 117.

Mason had chosen another site for the post a short distance above that selected by Lieutenant Colonel Davis a few months earlier.³⁰ The "approved plan" had not been located, but must have included provision for the following:

The Guard house will be built two stories, the lower story of stone laid in lime, the upper [of pisé]. . . . The cells will be arranged in the lower story. The Quartermaster and Commissary store houses must be erected first, then the Hospital and soldiers quarters, next after these, the Officers quarters. The Laundress quarters and work shops will follow as rapidly as possible.³¹

Captain Merriam accordingly began the work with the resources at his disposal. He directed timber cutting to begin at Ojo del Carrizo, some twenty miles from the post, and started burning lime to be used in the construction.³² Renewed Indian disturbances caused him to recall the troops sent to saw lumber, however, "it being absolutely necessary to strengthen the different detachments, leaving this Post."³³ Merriam had yet to receive formal plans for the new Fort Bowie, so his delay was somewhat

30. Mason to Drum, July 16, 1865, in War of the Rebellion, Series I, Vol. L, Part II, p. 1281.

31. Green to Merriam, June 25, 1865. NA, RG 393, District of Arizona, LS. Copy in the files of FBNHS.

32. Special Orders No. 29, Fort Bowie, July 11, 1865. Miscellaneous Post Orders in May, June, and July, 1865, in the files of FBNHS; Merriam to Green, July 31, 1865, in NA, RG 393, District of Arizona, LS, Copy in the files of FBNHS.

33. Merriam to Green, July 31, 1865. NA, RG 393, District of Arizona, LS. Copy in the files of FBNHS.

justified.³⁴ By September, after Major James Gorman of the First Cavalry California Volunteers, had succeeded Merriam in command, there was still no plan available:

On assuming com.^d I placed the whole garrison on daily duty getting out lumber, stone, burning lime &c. There being no plan of the Post here, I have only commenced the storehouse which is partially completed. Over twenty thousand feet of lumber has been got out, during the last month [August, 1865], but owing to the scarcity of transportation at the Post, only a portion of it has been hauled. Will you please send me a plan of the Post as soon as convenient[?]³⁵

The quartermaster and subsistence storehouse that Major Gorman started building was located about 400 yards north and a bit east of the post. It later formed part of the northwest corner of the second Fort Bowie. At the end of September Gorman reported his soldiers busily engaged in "sawing and hewing out Lumber, splitting shake for roofing[,] burning Lime &c &c. The work on the Q.M. and Sub. building goes on slowly from lack of Transportation, though I hope to have it completed next month."³⁶

But the building was not completed, and just as before construction on the new post came to a halt during the winter of

34. Ibid.

35. Gorman to Green, September 1, 1865. NA, RG 393, District of Arizona, LS. Copy in the files of FBNHS.

36. Gorman to Green, September 30, 1865. NA, RG 393, District of Arizona, LS. Copy in the files of FBNHS. See also "Map of the Military Reservation at Camp Bowie, Arizona, Surveyed February, 1869." Cartographic Archives Division, National Archives.

1865-66. In February, 1866, Lieutenant Colonel Charles A. Whittier inspected the fort for the Military Division of the Pacific. "These officers have been sent to the command of Fort Bowie with instructions to build quarters here," complained Whittier. "None have yet done it."

The men live in excavations in the hill side, which are dark, confining and at some seasons very damp. The place is naturally so very healthy from its elevated position that no great amount of sickness has existed at the post at any time, but they are not the kind of quarters which should be given men to live in. . . . The quarters are clean and as comfortable as quarters can be which resemble an Indian rancheria or dog-holes rather than the habitation of civilized beings.³⁷

Whittier cited Major Gorman's lack of equipment, particularly tire iron, spokes, and felloes for repairing nine broken wagons, as the prime reason for the delay. He also allowed that confusion existed over whether the post was to accommodate two companies of infantry, as directed by General Mason, or one company plus a small cavalry detachment, as specified by Colonel Davis. Whittier recommended "that quarters for one company of Infantry . . . be at once constructed," and that the district quartermaster "see that everything necessary to the construction of quarters, similar to those of the commanding officer (of rocks, earth & wood cut in the vicinity) be furnished. . . ."³⁸ Already a temporary structure had been erected to shelter supplies: "The stores in both

37. Whittier to Major R.N. Scott, March 1, 1866. Fort Bowie Inspection Report. NA, RG 159. Records of the Inspector General's Office. Copy in the Arizona Historical Society.

38. Ibid.

[Quartermaster and Commissary] Departments are kept in a store house, small, of stone & earth and under canvas, and are in very good condition."³⁹

9. Arrival of the Regulars

In early May, 1866, the California Volunteers garrisoning Fort Bowie were withdrawn for mustering out more than a year after the Civil War had ended. Company E, Fourteenth U.S. Infantry replaced the troops at the post and inherited the task of erecting the new fort. One of the newly arrived soldiers described the existing quarters as "comfortable huts constructed . . . of stones, boards, cactus sticks, mesquite branches, etc., and more or less fancifully furnished [by the volunteers] with articles of their own handicraft."⁴⁰ The quarters were in a generally decrepit state when the regulars arrived, with both officers' quarters and quartermaster and commissary storerooms "in a leaking and otherwise unsatisfactory condition." A party of infantrymen with mule teams was sent after pine timbers with which to make repairs.⁴¹

10. A New Barracks at the Old Post

It is apparent that much of the work effort during the rest of 1866 was directed towards improving the existing quarters rather than building new ones. In accordance with Colonel Whittier's earlier advice, a barracks for one company was erected at the old post, probably just below the southeastern crest of the hill

39. Ibid.

40. Clipping from an unidentified newspaper in scrapbook in the John A. Spring file, Arizona Historical Society.

41. Ibid.

where the officers' quarters were located. Some of the features of this building were described as follows:

The walls were built with adobes and roofed with earth; This building consisted of one squadroom, kitchen and office; there was no mess room, each man receiving his meals at the Kitchen and disposing [eating] of them in the kitchen or at a table outside, put up for that purpose The building being situated at a high point, and the breeze having from all sides access to it, the ventilation was considered good.⁴²

During the spring of 1867 Assistant Inspector General Major Roger Jones visited Fort Bowie. "It is difficult to give a correct idea of the buildings or huts used as store houses & quarters," he reported.

The hilly nature of the ground prevented any regularity in arranging the buildings. No plan as to arrangement or style was followed--the several little huts are scattered around against the hills, here, there, & everywhere, as suited the fancy of the builder. Some are of stone, & some of adobes. The Men's quarters will not accommodate more than the present strength of the company [forty-three men of the Thirty-second Infantry], & as for officer's [sic] it is difficult to find separate rooms for more than two or three. As for store houses there are none deserving the name, but as they are better than canvas both for protection from the weather & security, the clothing and Subsistence stores are kept in the only

42. "Descriptive Commentaries." Fort Bowie, Vol. 125, (1871).

building applied or given up to purposes of this kind. Most of the Qr Master's Stores are under canvas, & consequently very insecure.⁴³

At the time of Jones's inspection only one officer, First Lieutenant John C. Carroll, was present. Possibly the additional officer quarters were used by enlisted men. In an indorsement to Jones's report, Major Charles McCormick, Medical Director of the Department of California, described "the Hospital accommodations at Camp Bowie . . . [as] one log house containing three beds and one wall tent with two beds."⁴⁴

Major Jones urged the resumption of work on the new post only if Fort Bowie was to be a permanent facility in Apache Pass. His remarks indicated that little more had been done on the

43. Jones to Brigadier General James B. Fry, May 22, 1867. NA, RG 159. Records of the Inspector General's Office. Copy in the Arizona Historical Society.

44. McCormick's indorsement of June 28, 1867, in *ibid.* Throughout its occupation by the California troops it appears that the post was consistently called Fort Bowie. See, for example, the various company returns and muster rolls for Company K, Fifth Infantry California Volunteers, in the California State Archives, Sacramento. In January, 1867, the official correspondence began referring to Camp Bowie, perhaps denoting a more temporary station than the word "fort" conveyed. In any event, in October, 1878, Headquarters, Department of Arizona, recommended that all permanent posts in the department be designated as "forts" instead of "camps." See Colonel Orlando B. Willcox to the Adjutant General, October 10, 1878. NA, RG 133. Department of Arizona, Communications Sent (CS), August 24, 1871, to December 31, 1886. Copies in the files of FBNHS. Consequently, on April 5, 1879, General Orders No. 2, Military Division of the Pacific, changed the post's name back to Fort Bowie. NA, RG 94. Records of the Adjutant General's Office. Reservation File. Cited in Murray, "History of Fort Bowie," pp. 111n, 179n. For the purpose of continuity, the term "Fort Bowie" is used throughout this report.

storehouse since the volunteers had departed over a year previous. "When the volunteers were here," wrote Jones, "the foundation walls of a fine ware house were laid on an adjoining hill, which is even & not broken as the ground is, on which camp is located."⁴⁵ Brigadier General Irvin McDowell, commanding the Department of California which included Arizona Territory, concluded that Fort Bowie was indeed to be continued in service, and in August he ordered that work on the new post be recommenced.⁴⁶

11. Improvements at the First Fort

Very little is known of the structures comprising the first Fort Bowie, other than that they were minimally suitable shelters thrown up in a routine manner beginning in late 1862. Instead of the recommendations for repairs and requisitions for materials so frequently encountered with regard to structures composing the second fort, there is meager descriptive data concerning those that made up the first post. Some detail was provided by the Post Surgeon, J.P. Widney, who arrived at Fort Bowie early in 1867. Noting that "the Fort is on an abrupt hill with cannon commanding the road in both directions," Widney wrote that "I have a log house all to myself, a regular Batchelor's den."⁴⁷ Later Widney wrote, "I intend to have . . . my new chimney white-washed and then I am ready to receive calls."⁴⁸ This statement suggests that substantial

45. Jones to Fry, May 22, 1867.

46. McDowell's remarks of August 5, 1867, appended to Jones to Fry, May 22, 1867.

47. Widney to Mary Bannister, July 21, 1867. Copy in the Gustave Schneider Collection, Arizona Historical Society. The cannon consisted of two 12-pounder mountain howitzers. According to Major Jones the ammunition on hand consisted of "67 Shells, 14 rounds of canister shot, & 25 spherical case shot." Jones to Fry, May 22, 1867.

48. Widney to Miss Bell Widney, December 12, 1867. Copy in Schneider Collection, Arizona Historical Society.

improvements continued to be made at the old post. Further details of the surgeon's quarters were described by Mrs. Orsemus B. Boyd, who tarried at "the strange little fort" with her officer-husband who was enroute to a new assignment:

The post surgeon vacated his room in our honor; for which we were very grateful, especially when one of those terrible mountain blizzards came on, in which clouds of dust so thick are formed that objects cannot be distinguished at a distance of ten feet. The room we occupied was built of logs, and dust blew through the crevices until it seemed as if we were a part of the universal grit. . . . Officers have the habit of beautifying their quarters as circumstances permit; and our friend the doctor, who had incommoded himself for us, was no exception to the general rule. The rough mud ceiling of his room had been covered with unbleached cotton; and shelves, mostly laden with books, were suspended from rafters by means of the same material torn into strips. One hanging over the open fireplace was crowded with bottles of all sizes and descriptions, which contained every form of vermin and reptile life to be found in that region. . . . The collection embraced centipeds, scorpions, tarantulas in their hideous blackness, and snakes of all kinds--at least those small enough to be bottled. They were not elegant mantel ornaments, but having been long accustomed to such sights I did not mind them. It was, however, altogether another matter to be brought in actual contact with the monstrosities, as happened on the second night of the storm.

We were thoroughly worn out combating the omnipresent dust, and had retired early, when a

tremendous crash suddenly awakened us from sound sleep. At first we thought the end of the world had come; but soon discovered that the shelf containing bottled tenants had fallen. . . . No description can do justice to the scene. Everything upon the shelf, ornamental as well as useful, formed a conglomerate mass, over which the liberated monstrosities were scattered in every direction. The doctor apologized for the accident, but we were none the worse. . . .⁴⁹

12. The Bell and Robert Visits

In November, 1867, a party surveying the route for a railroad along the 32nd parallel camped in San Simon Valley, north of Fort Bowie.⁵⁰ William A. Bell, an Englishman employed as photographer with the expedition, took the occasion to visit the post. "It consists of a small collection of adobe houses," remembered Bell, "built on the summit of a hill, which rises as a natural look-out station in the centre of the defile, and commands the road both ways for two or three miles of its length."⁵¹ Bell

49. Mrs. Orsemus B. Boyd, Cavalry Life in Tent and Field (New York: J. Selwin Tait and Sons, 1894), pp. 163-65.

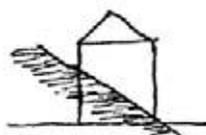
50. L.H. Eicholtz Diaries, 1867-1869. Colorado State Historical Society, Denver.

51. William A. Bell, New Tracks in North America. A Journal of Travel and Adventure whilst Engaged in the Survey for a Southern Railroad to the Pacific Ocean during 1867-8 (2 vol.; London: Chapman and Hall, 1869), II, 44-45. Also in William A. Bell, "Ten Days' Journey in Southern Arizona," in Wonderful Adventures. A series of Narratives of Personal Experiences Among the Native Tribes of America (Philadelphia: William B. Evans and Company, [1874]), p. 48.

referred to the fort as "a collection of mud huts,"⁵² and during his visit he took a photograph of the place, probably the earliest of Fort Bowie and the only one known today of the first post during its active occupation.⁵³

One of the best descriptions of the first Fort Bowie was given by Major Henry Martyn Robert, who made a survey of Arizona forts and roads in January and February, 1868. Robert, who subsequently authored the well-known Rules of Order, was a trained military engineer and his notes concerning the post are of considerable importance:

Most of the buildings excepting the officers quarters are on the side hill so that one side is partially underground thus.



The buildings are either dry stone or stone with adobe mud for mortar or of Adobe mud (as the Barracks & Comdg. Officer's qrts.) The roofs are all Adobe & leak. The houses are generally damp & especially Com. Store room so that the stores have to be removed to be dried after every rain.⁵⁴

52. New Tracks in North America, II, 45.

53. Ibid. See discussion of the Bell photograph below.

54. Field Notes, Jan. 10-Feb. 6, 1868. Typescript in the Henry Martyn Robert Collection, Arizona Historical Foundation, Arizona State University, Tempe.

Robert reiterated the need for rebuilding the fort at a more suitable location:

I should recommend the removal of the post to the site selected by Col. Bennet [sic] heretofore, three hundred yard[s] from its present site, where a fine large building (150' x 30') . . . was begun by him with stone foundation and concrete walls raised several feet high. To attempt to repair the existing buildings and build new ones where they sink into the hill side so far as to keep them damp would in my judgment cost more in the end than the building of a new post on a far better site for building, where there has already been done a great deal of work.⁵⁵

Major Robert's report seems to have finally provided the impetus for pushing ahead with work on the new post, for in 1868 progress on the buildings resumed.⁵⁶ The troops still occupied their quarters at the old fort, however, and the transition of men and supplies was gradual until facilities at the new site were in readiness to receive them. The hospital at the first Fort Bowie was in use as late as April, 1869, and consisted of four beds arranged in "a cellar[-]like room."⁵⁷ By February, however, several

55. Robert to Brigadier General James B. Fry, April 9, 1868, transmitting "Report upon the roads & condition of the Buildings at Military Posts in Arizona." Copy in the Henry Martyn Robert Collection, Arizona Historical Foundation.

56. Office of the Surgeon General. Circular No. 4. "Report on Barracks and Hospitals with Descriptions of Military Posts," by John A. Billings, Assistant Surgeon, U.S. Army, 1870 (Reprint, New York: Sol Lewis, 1974), p. 471.

57. Lieutenant Colonel Roger Jones to Brigadier General James B. Fry, April 28, 1869. NA, RG 159. Records of the Inspector General's Office. Copy in the Arizona Historical Society.

structures had been erected at the new site, all of which suggested an increased pace of activity since Major Robert's visit.⁵⁸

13. Layout of the Old Post

Some idea of the arrangement of the first Fort Bowie can be gained from the few known contemporary depictions of the post. Apparently, only two of these were made prior to 1868, during the fort's active existence. The earliest portrayal is a painting probably accomplished by a soldier stationed at Fort Bowie. While of a primitive art form, the relative positions of the buildings seem to be correct when compared to the later photographs.⁵⁹ Most important, the artist's vantage is from a high hill directly north of the post, thereby insuring a superb overall view of the entire fort and its structures. Twenty-nine structures, including a corral, are evident in the picture. The flagpole is located towards the north end of the summit of the hill. Evidently, the hilltop served as the parade ground, for the space is enclosed on the west, south, and southeast by buildings. Those small structures on the north and west, according to verbal descriptions, were officers' quarters, and probably numbered only three or four buildings. They were built either of logs chinked with adobe mud or of adobe brick. The commanding officer's house was of the latter type, while the post surgeon lived in one of the small buildings situated on the western

58. See "Map of the Military Reservation at Camp Bowie . . . 1869."

59. The identity of the artist is unknown. The illustration was first published opposite p. 26 in Ben Jaastad, Man of the West: Reminiscences of George Washington Oakes, 1840-1917. Ed. and annotated by Arthur Woodward (Tucson: Arizona Pioneers' Historical Society, 1956). The original purportedly reposes in the Los Angeles County Museum, although efforts by the writer to substantiate this have been unsuccessful.

brow of the hill.⁶⁰ At the extreme north end of the hilltop position, northeast of the flagpole, stood a small structure that most likely was the first guardhouse erected by Major Coult in 1862 as he prepared the early breastwork defenses. The building does not appear in subsequent photographs of the first Fort Bowie, supporting the assumption that this painting is indeed the earliest known graphic representation of the post.

The hill or ridge on which the officers' quarters were built continues south and loops east. Probably the large structure built of logs and located near the corral was the post hospital, as was suggested in the verbal descriptions--a log house, and a cellar-like room containing three or four beds. East of the corral, which undoubtedly was used by the post quartermaster to contain cattle and sheep, stood the post trader's store, operated in the late 1860s by Mr. John Anderson who also ran a quartz mill near the spring.⁶¹ In the hollow below the post trader's residence were located the "hovels" of the enlisted men, clearly shown in the painting as being excavated into the sides of the draw. There were seven of these structures visible. West of the enlisted mens' quarters and part way up the hill towards the parade ground were three buildings and what appears to be a stone ruin, perhaps part of the early defensive perimeter established by Major Coult. (This ruin appears in later photographs of the site and seemingly never shows alteration, so that it is probably safe to discount it as a structure in process of building.) The largest of these buildings faces southeast, and quite likely was the barracks built in 1866.

60. Surgeon Joseph P. Widney later identified his quarters on a stereoptican card view of the post taken about 1874 by Photographer D.P. Flanders of Tucson. Arizona Historical Society.

61. "Map of the Military Reservation at Camp Bowie . . . 1869."

One or both buildings behind possibly served as quartermaster and commissary storehouses. Below, along the approach road, was a stable, obviously built of wood, with adjacent haystacks. Nearby was a structure that in later years was variously known as the "old mail station," the "old mess house," and the laundresses' quarters.

Probably the only photograph of the first Fort Bowie as an active military installation garrisoned by United States regulars was that taken by William A. Bell, who accompanied the railroad survey in 1867. Bell's photo confirms nearly all of the features of the painting discussed above. Most obvious are the wooden stable, post trader's store, enlisted men's quarters, corral, storehouse, and, barely discernible over the crest of the hill, the officers' quarters. Although the Bell photo shows the garrison flag positioned at half staff, there is no official reason for this; the photograph was likely taken at the moment the flag was being raised, for shadows suggest that the exposure was made sometime in the early morning.⁶²

All other known photographs of the first Fort Bowie were taken after the site had been largely abandoned by the army and the garrison removed to the new fort. Some of the buildings continued to be used by civilian employees until the army abandoned Fort Bowie in 1894. Informally known as Camp Merijilda,

62. The American Annual Cyclopaedia and Register of Important Events of the Year 1867 (New York: D. Appleton and Company, 1868) disclosed no obituaries for cabinet or other ranking officers, or former officers, which would have justified such a display of the flag.

after Merijilda Grijalba, post guide at Fort Bowie,⁶³ the first fort gradually deteriorated away. In about 1874 Photographer D.P. Flanders of Tucson made several stereoptican views of the old post. Most of the buildings appear to have changed little, although by then the wooden stable and the corral had disappeared altogether. A photograph of the site taken in December, 1875, or January, 1876, by H. Buehman indicates little change, although a few citizen employees can be seen standing in front of the old mail station at the foot of the hill. The area between the station (HS 030) and the neighboring structure appears to be fenced and it looks like some repairs have been completed on the latter building. In all of these pictures the former enlisted men's quarters are beyond view.

One other view of the first Fort Bowie in which yet-occupied buildings were present was that photograph taken in 1893 or 1894 by the novelist Owen Wister. Significant changes are recorded in this picture, including structural additions to the mail station and to the 1866 barracks. Both buildings had by then received new roofs, the barracks displaying the hipped style that was adopted in the early 1880s for the structures at the second Fort Bowie. Some of the structures on the hill above the barracks were still evident, but some had faded away. Perhaps material from these structures was later incorporated into building projects at the other site.

63. Arizona Citizen, April 8, 1871, cited in Murray, "History of Fort Bowie," pp. 124-25; "Report of Interments at Fort Bowie, A.T., March 22, 1883. Recorded in Cemeterial Book, QMGO, p. 92." Miscellaneous records of the Quartermaster General's Office relating to Fort Bowie, Arizona, and Fort Union, New Mexico. Microfilm MC 12. Arizona Historical Society. (Hereafter cited as Miscellaneous records. Microfilm MC 12.)

14. The First Fort Superseded

By the early part of 1869 the relocation of the Fort Bowie garrison from the old site to the new one was largely complete. The old post, established on the hill to guard the spring below, had adequately fulfilled its limited function. Established in 1862 for the militarily expedient purpose of insuring an uninterrupted line of communication and supply, Fort Bowie's role had broadened by the war's end to embrace not only the protection of emigrants but the fixing of a locus of federal authority in the heart of hostile Apache country. The mission required a more permanent and extensive facility than the old post could provide, hence its inevitable replacement.

D. The Second Fort Bowie, 1869-1894

1. The New Post and Military Reservation

The new post of Fort Bowie, begun in earnest in 1868, adhered more rigidly to the theoretical precepts governing military post construction than did its predecessor. For one thing, the War Department, and notably the Quartermaster Department, took a more direct hand in the erection of the fort's buildings. In the years ahead supply would not be the problem it was for the early post, and both materials and labor, while not always immediately on hand, were nonetheless usually accessible. The post was laid out according to traditional design, with the roughly square parade ground running more or less in an east-west direction and the officers' quarters located on the south periphery of the square.¹ Many of the fort buildings as erected in 1868, 1869, and 1870, minimally met the standards set down by the War Department, but most were later modified structurally as was authorized by the regulations.²

Throughout 1868 work progressed. The ground was further cleared and more timber was hauled in to build the fort. In the autumn several civilian laborers, including a carpenter and two masons, were employed by the army to assist the troops in erecting new buildings.³ In February, 1869, First Lieutenant George M. Wheeler of the Engineer Corps and his assistants surveyed the property. On the basis of Wheeler's survey, which established boundaries one-half mile from the center of the parade

1. See Regulations Concerning Barracks and Quarters, 1860, pp. 7, 8.

2. Ibid., p. 6.

3. Murray, "History of Fort Bowie," pp. 69n, 140-41, 149-50; Outline Descriptions of Military Posts in the Military Division of the Pacific. Major-General Irwin McDowell, Commanding (San Francisco: Headquarters, Presidio of San Francisco, 1879), p. 7.

ground in each direction, President Grant on March 30, 1870, declared the tract a military reservation, formally ending the mere occupancy on which Fort Bowie had heretofore based its legal existence. Seven years later the reservation tract was enlarged to embrace six square miles.

2. The 1869 Inspection

Some knowledge of the ongoing construction at the new site can be gained from an inspection report of Lieutenant Colonel Roger Jones who visited Fort Bowie in April, 1869. "Since my previous inspection here [in 1867]," wrote Jones, "the troops have been removed from the old camp to the site recommended in my former report, where there are about ten acres of smooth ground, on which some very good adobe buildings have been put up by the troops, assisted by citizen labor."⁴ According to Jones, the adobes used in the construction were made by civilians and purchased at a rate of \$22.50 per one thousand.⁵ At the time of Jones's inspection, the principal structures at the new post consisted of two sets of officers' quarters, a quartermaster storehouse (the building started by Major Gorman in 1865 finally completed), a subsistence storehouse combining a barracks facility, and a combined stable, corral, and granary.⁶ In addition, there was a bakehouse situated behind the combined commissary storehouse and company quarters on the north side of the parade, and each of the officers' quarters had a detached kitchen in the rear. A

4. Jones to Brigadier General James B. Fry, April 28, 1869. NA, RG 159, Records of the Inspector General's Office. Copy in the Arizona Historical Society.

5. Ibid.

6. Ibid.

quartermaster corral was located a short distance north of the parade ground.⁷ Total cost thus far for the construction:⁸

32,500 adobes	731.25
7,000 feet of lumber	1500.00 (estimated)
Civilian wages	<u>2136.87</u>
	4368.12

Besides the civilian workers, the labor force at Fort Bowie consisted of 60 men of Company D, Thirty-second Infantry Commanded by Captain Homer J. Ripley. While most of the timber used in the construction came from New Mexico, Jones reported that "an Extensive Pinery" had been located less than thirty miles away and that a steam sawmill would be placed there that summer.⁹ The post still needed wagons for hauling the lumber, however, because Jones was forced to condemn those at the fort as being "in very bad order." Yet of the stock of eight horses and twenty-three mules, only three mules were deemed "unserviceable".¹⁰ Concluded Jones: "the amount of work performed, & the small amount of money expended in construct[ing] this Post, shows what can be done with limited means, when there is a will. . . ."¹¹

3. A Need for More Buildings

In May the Fort Bowie garrison was augmented with the arrival of Company G, First U.S. Cavalry. Indian disturbances

7. "Map of the Military Reservation at Camp Bowie . . . February 1869."

8. Jones to Fry, April 28, 1869.

9. Ibid.

10. Ibid.

11. Ibid.

had increased, and the cavalrymen had been sent to protect traffic on the overland trail between New Mexico and the San Pedro River, located west of Fort Bowie. While the infantrymen labored on the new post and were evidently quartered in the new barracks, the cavalrymen took station at Camp Merijilda. "The Government Buildings on the site of the old Post will be sufficient for the accommodation of the company until such time as additional quarters may be authorized," read the assigning order.¹² Then, in March, 1870, the infantry unit was replaced by Company K, Third Cavalry, whose presence necessitated the construction of additional corrals as well as other buildings. Married officers and their families took up residence in some of the facilities at the old post while construction proceeded on more officers' quarters.¹³

4. Arrangement of the Structures

Great progress was made on the new post between the time of Lieutenant Colonel Jones's 1869 visit and July of the following year when all the soldiers were quartered there.¹⁴ By then a new set of officers' quarters had been finished on the south end of the east side of the parade. Next to it was a new bakery. The stable-corral-granary complex, also on the east side, had been remodeled into a full-fledged barracks complete with a messroom behind. Along the north side of the square stood another barracks with an attached messroom, behind which was located a meat store or butcher shop. The former combined commissary storehouse-company quarters was now used solely as a barracks with a forage room located in the west end, while the old bakery

12. Special Orders No. 14, Headquarters, District of Arizona, May 9, 1869. NA, RG 393, LR. FBNHS.

13. Murray, "History of Fort Bowie," p. 142.

14. "Descriptive Commentaries." Fort Bowie, Arizona, vol. 125 (1871).

out behind had been converted into a kitchen. Both commissary and quartermaster stores were kept in a new building erected at the corner of the parade ground and adjoining the earlier quartermaster storehouse. This latter building was now used as the post hospital, although ordnance munitions were dangerously kept in a room situated between the hospital ward and the new quartermaster/commissary building. This location for the hospital was deemed temporary, with the permanent facility scheduled to be erected at the southeast corner of the fort. Behind the hospital was the guardhouse, and behind that stood the post trader's store which also served as a post office. Further west, down the slope towards the first fort stood two cavalry stables, while at the north end of the new post was the quartermaster corral and forage shed. An adjacent area was the assigned location for a "proposed cavalry corral."¹⁵

Between August and December, 1870, most effort was directed to finishing off these structures. On a plat dated during the latter month the only additions seem to have comprised sinks, or earth closets, one of which was located behind each of the three officers' quarters. Two of these sinks had chicken coops adjoining them. Another sink was situated across the road in the north-west corner of the fort and was designated for use by inmates of the hospital and guardhouse. Two more sinks were located along this same road northeast of the post near the corrals. The corrals had been substantially changed; two enclosures for cavalry animals had been built adjoining the quartermaster corral, each approximately the same size as the initial enclosure. In addition, a cattle pen had been attached to the north end of the quartermaster corral, while yet another corral was now fixed to the rear of the post trader's

15. Plat of Post dated August, 1870, in "Medical History of Fort Bowie." Copy in the files of FBNHS.

store. The post hospital was described as but a temporary facility, and the former commissary store house-turned-company quarters of the previous August was evidently earmarked to be the "permanent post hospital," a change that was, in fact, never accomplished.¹⁶

5. Finishing the Post

Basic construction on Fort Bowie was finished by the end of 1870, although building activity continued at a slower pace as repairs and additions were made to the existing structures. Most all the early buildings were adobe plastered on the exterior with lime mortar. By early 1873 the lime kiln at the fort had become idle, to such an extent that the departmental commander ordered that they be used for burning lime for construction work at Fort Grant, about eighty miles away.¹⁷ Repairs seem to have occurred constantly, especially after heavy rains during the late winter and spring of 1874 caused the earthen roofs to leak severely. Later that year, at a time when the Apaches were relatively peaceful, the government considered abandoning the post, and in July orders to that end were issued, although they were shortly suspended and eventually rescinded.¹⁸ Nevertheless, contingency plans were laid

16. "Diagram of Camp Bowie, A.T., August, 1870." Copy in the files of FBNHS.

17. Second Lieutenant John G. Bourke to Commanding Officer, Fort Bowie, February 17, 1873. NA, RG 393, Department of Arizona, CS. Copy in the files of FBNHS.

18. Telegram, Colonel Robert Allen to the Quartermaster General, July 18, 1874. NA, RG 49. Records of the General Land Office. Abandoned Military Reservations. Box 22; Captain Azor H. Nickerson to Chief Quartermaster, Department of Arizona, August 3, 1874. NA, RG 393, Department of Arizona, CS. Copy in the files of FBNHS; Report of Secretary of War, 1874, (Washington: Government Printing Office, 1874), p. 119.

to turn over all buildings at Fort Bowie to the Bureau of Indian Affairs for use by the nearby Chiricahua Apache Indian Agency. On September 21, 1874, Secretary of War William W. Belknap notified the Interior Department that "when[ever] the garrison retires . . . the buildings shall be left in charge of the proper agents of the Indian Bureau . . . but subject to re-possession, at any time, by the War Department. . . ." ¹⁹

In 1874 the Departmental Commander found Fort Bowie to be "in excellent condition" and occupied by two companies of the Sixth Cavalry. "The post like all adobe posts," he reported, "requires constant care and attention to protect the buildings and keep the roofs in repair during the heavy rains that fall during the summer months in the mountains." ²⁰ Little more than a year later, the the post buildings were described as in good condition. Timber for building and repairs now came from Pinery Canon, about twenty miles south of Fort Bowie, although late that year some 1500 feet of plank was imported from Fort Grant, eighty miles distant. ²¹ Much timber was used between 1873 and 1876 for flooring for the various post buildings, and for the construction of washrooms for each of the barracks. ²² Much of this material was more easily obtained in

19. Belknap to Secretary of the Interior Columbus Delano, September 21, 1874. NA, RG 49. Abandoned Military Reservations, Box 22. The request for use of the building originated with the Chiricahua agent, Thomas Jeffords. Acting Secretary of the Interior to the Secretary of War, August 31, 1874, in ibid.

20. Colonel August V. Kautz to Headquarters, Military Division of the Pacific, December 20, 1875. NA, RG 393, CS. Copy in the files of FBNHS.

21. Outline Discription, 1871, p. 7; Fort Bowie General Orders No. 157. Copy in the files of FBNHS.

22. Murray, "History of Fort Bowie," p. 159.

the middle 1870s than it had been previously. The mail route had been reopened after the Civil War and in 1875 a regular stage line began operating between the post and Tucson. Two years after that Fort Bowie was connected via telegraph with the other stations in the Department of Arizona.²³ And in 1881 the Southern Pacific Railroad passed within fifteen miles of the post.

6. New Additions

By late 1876 several major structural additions had enlarged the post. An east-west running wing had been built onto the hospital, a new officers' quarters had been erected near the southeast corner of the parade, and an adjutant's office now stood between the bakery and the officers' quarters on the east side of the post. The functions of several of the post buildings had changed. The dual quartermaster-commissary storehouse at the northwest corner of the square was now used solely for sub-sistence stores, while the building to its east, formerly a barracks, was now the quartermaster storehouse. The kitchen (former bakery) behind this structure had become a tailor shop.²⁴

7. A Revision of Roofs

Despite the continued improvements, the adobe buildings with their flat mud roofs required constant attention. Heavy rains often fell in the mountains during the winter and spring and yearly experiences showed that the structures were not meant to withstand such furious and steady precipitation. Early in 1879, when Major James Biddle inspected the post, the garrison had just undergone

23. Ibid., pp. 174-77.

24. "Camp Bowie A.T." Diagram dated January, 1877. Copy in the files of FBNHS.

one of the worst of storms. His recommendations urged immediate structural improvements for all the buildings at Fort Bowie:

I found the men of the command encamped on the parade in tents, having been driven out of their quarters by the recent rains, soaking through the mud roofs and flooding the buildings inside. The officers quarters[,], the mens['] quarters[,], the store houses and offices of the Post are in a terrible condition. They leak badly from the roofs, and a continuation of a severe rain . . . would partially, and I think totally in some cases[,], háve destroyed buildings. The dirt on the roofs has accumulated from patching and repairing, until the weight has become too great for the vegas. The vegas in many instances are old and rotten, prop after prop has been put in to sustain the weight, and there is a great danger in a rain storm, when the saturated earth accumulates great weight, of the roofs falling in and crushing or killing a number of men, and the destruction of a large amount of Qr.Mr and Commissary stores.

The officers quarters all leak or are leaky. A large amount of money must be expended upon this Post at once. It will take some time and the buildings should be thoroughly examined, and the vegas tested and the decayed ones removed. All the roofs should be shingled. The [Post] Qr. Mr. should be directed to make a thorough examination of all buildings, and estimate the cost of a thorough repair--or in a short time the garrison will be obliged to vacate the buildings and occupy tents permanently.25

25. Inspection Report, Fort Bowie, January 19, 1879. NA, RG 159. Entry 15. 398/79.

Major Biddle's inspection report provided the catalyst for major structural alterations in the building roofs at Fort Bowie. Henceforth, instead of merely adding more and more dirt to repair leaky mud roofs, thereby increasing their weight and their likelihood of collapsing, new hipped and shingled roofs would be built on the structures. This work was accomplished in the fall of 1879 by all enlisted men "available for such work" aided by two civilian carpenters.²⁶ Lumber for the endeavor was obtained from the firm of Black and Cosgrove which on contract provided 100,000 board feet plus 350,000 shingles.²⁷ After 1880, when the Southern Pacific Railroad reached southeastern Arizona and Bowie Station was established thirteen miles from the fort in San Simon Valley, lumber was purchased from far distant sources. Other building supplies were hauled over-land from Willcox, the next station west on the railroad.²⁸

8. More Features

A diagram of Fort Bowie made approximately in March, 1883, discloses that considerable construction, in addition to the roofs, had taken place since 1876. Significant changes included a

26. Major James P. Martin to Commanding Officer, Fort Bowie, September 17, 1879. NA, RG 393, Department of Arizona, CS. Copy in the files of FBNHS.

27. Murray, "History of Fort Bowie," pp. 164-65. Another local firm that later did extensive business with the fort was the Chiricahua Saw Mill owned by Morse and Company, which handled "Building Materials of Every Description," including shingles. The firm's post office address was Fort Bowie. Tombstone Daily Epitaph, May 6, 1881.

28. Ibid., p. 164. Fort Bowie General Orders No. 7, January 17, 1881. Copy in the files of FBNHS. At Bowie Station was the firm of Solomon, Wickersham and Company which sold supplies to Fort Bowie. Some lumber could have come from as far west as San Francisco; a schedule of prices of The California Lumber Exchange for 1883 was located among the correspondence of the post quartermaster. Miscellaneous records. Microfilm MC 12.

new adjutant's office located midway along the west side of the parade ground. South of this structure was an infantry barracks with a detached kitchen and mess room. A new granary building stood behind the quartermaster storehouse. Functional changes to existing buildings were slight; the former tailor shop was now a barber shop, and the old adjutant's office had become the post library. The quartermaster's livestock now occupied the center unit of the three corrals, and an area west of the corrals was assigned for use by the mule pack train.²⁹

9. Beaumont Takes Charge

The peak of activity in Fort Bowie's history occurred during the mid-1880s when disturbances involving the Chiricahua Apaches climaxed in the famous Geronimo Campaign of 1885-86. In June, 1884, Major Eugene Beaumont, Fourth Cavalry, assumed command of the post for the next several years. Beaumont was an active, energetic and innovative officer and his tenure witnessed some important changes. During his first month at Fort Bowie Beaumont carefully inspected the post and officially filed a report that recommended numerous structural alterations to the existing buildings, most of which were eventually accomplished. He sought funds for materials to build, among other things, fences for the officers' quarters and hospital ("ten thousand feet of rough boards with the requisite numbers of posts and scantling"), water tanks of 400 gallon capacity for each of the company quarters, porches for the guard house, adjutant's office, library, and infantry barracks, and water closets (toilets) for the officers quarters. Beaumont urged that the exteriors of certain buildings be plastered and that hay mangers be constructed at the stables.³⁰ He complained loudly

29. "Diagram of Post," March, 1883. Copy in the files of FBNHS.

30. Beaumont to Adjutant General (AG), Department of Arizona, June 30, 1884. NA, RG 393. Department of Arizona, LS. Copy in the files of FBNHS.

about the design of the large, Victorian style commanding officer's quarters then being erected, stating that "the large amount of useless and unnecessary ornamentation has been a source of great expense and a waste of time and such a plan should never have been authorized."³¹ Major Beaumont also oversaw completion of Fort Bowie's piped water system. "With the outlay of a few thousand dollars," he concluded, "this can be made as desirable a Post as there is in the Dept."³²

Beaumont persisted in his request for an increased financial allotment to carry on his work. Less than two months after he took command he wrote department headquarters asking for more money to relieve congestion in the four officers' quarters which at that time housed eight officers, including himself. Some were married and had families, and Beaumont complained about the lack of privacy under such conditions.³³ An enterprising man, in November he wrote the Signal Office in Washington, D.C., asking if he might adapt for the use of Fort Bowie a large number of telegraph poles found lying on the ground at Bowie Station. He hoped to use the poles for fencing and studding, and he asked that he be notified promptly so that he might obtain them before they were confiscated by civilians.³⁴

31. Ibid.

32. Ibid.

33. Beaumont to AG, Department of Arizona, August 2, 1884. NA, RG 393. Department of Arizona, LS. Copy in the files of FBNHS.

34. Beaumont to Chief Signal Officer, November 10, 1884. NA, RG 393. Department of Arizona, LS. Copy in the files of FBNHS. At Bowie Station the Army rented space for an office for the quartermaster's agent and for a quartermaster department storeroom. Report of the Secretary of War, 1890, p. 717.

10. Financial Neglect

Under Beaumont there occurred a large amount of construction and repair work, for his command of Fort Bowie coincided with the peak and wane of hostile Indian activity in southeastern Arizona. The occupation of the post by the large numbers of troops sent after Geronimo necessitated constant preparation of their accommodations, and Major Beaumont's requests for materials and funds in behalf of Fort Bowie sometimes approached vociferousness. He complained loudly when soldiers of his command who were skilled in building trades were assigned duties in those capacities at other forts.³⁵ And he became especially vocal when he believed that the annual construction allotment for Fort Bowie had been slighted in favor of those for other posts. At the height of the Geronimo Campaign during the summer of 1885 Beaumont protested bitterly to the Quartermaster General over the inequitable allocation of building funds between Fort Bowie and Fort Grant:

I am in receipt of official information to the effect that upon your recommendation the sum of . . . \$610 has been awarded as the allotment for this post, while our next neighbour Fort Grant I learn has . . . 16,000 [dollars]. This award [of] . . . \$610. . . is a great hardship to the officers and men, as it foreshadows another year of discomfort and . . . exposure. Grant has been the recipient of thousands of dollars and has excellent, numerous, comfortable, and handsomely decorated quarters while Bowie has had trouble to secure a few hundred dollars. . . . No notification has been received

35. See, for example, Beaumont to AG, Department of Arizona, May 5, 1885. NA, RG 393. Department of Arizona, LS. Copy in the files of FBNHS.

of any purpose to abandon Fort Bowie which the recent outbreak has demonstrated is one of the most important strategic points in the territory. . . . This [post] has the reputation of having been one of the hardest worked garrisons in Arizona and has been systematically neglected.³⁶

Department Commander Brigadier General George Crook, headquartered at Fort Bowie during the pursuit of Geronimo, soundly endorsed Beaumont's grievance:

The money asked for Bowie should be furnished at once, as the condition of Barracks and officers' quarters is by odds much less favorable either for health or comfort than at any other post in the Department. Colonel Beaumont 4th Cavalry now in command is an energetic officer with large experience and very considerable ability as an architect and can be trusted to expend any money which can be furnished in the most advantageous manner.³⁷

11. Progress in the Geronimo Years

The pronounced activity at Fort Bowie during 1885 and 1886 pre-cipitated some needed improvements at the post. An inspection officer reported early in 1886 that some of the adobe structures were in process of receiving plaster exterior coatings and that bathing facilities were under construction.³⁸ Major

36. Beaumont to the Quartermaster General, August 24, 1885. NA, RG 393. Department of Arizona, LS. Copy in the files of FBNHS.

37. Crook's Indorsement, August 24, 1885. Ibid.

38. Inspection Report, February 7, 1886. NA, RG 159. Entry 15. 661/86.

Beaumont continued to urge that new barracks be built, noting that the present quarters were "insufficient for the garrison, one company being in tents on the parade, and floors are rapidly wearing out of those occupied."³⁹ The departmental quartermaster was persuaded to recommend one double set of barracks and two double sets of officer quarters be erected at Fort Bowie. Neither was done, however.⁴⁰ In September, Beaumont again registered his strong objections to the meager allotment of \$1600 specified for his post.

In view of the fact that "A" Company 8th Infy is living in tents, and Troop I, 4th Cav. has no stables, that the quarters for officers (14 to be housed) are entirely insufficient, this insignificant sum seems to be intended as a grim pleasantry. To meet the actual necessities of the Post before it was increased [in number of garrisoned troops], \$3800.00 was estimated for; now new barracks, new grain house, new ordnance building, and two new sets of officers quarters, are actually necessary. There is no timber within 30 miles of the post, and what there is at that distance is almost inaccessible, or I would endeavor to build log shelters for troops and horses.⁴¹

39. Inspection Report, September 4, 1886. NA, RG 159. Entry 15. 1036(2)86.

40. Quartermaster, Department of Arizona to the Chief Quartermaster, Division of the Pacific, June 30, 1886. Miscellaneous records. Microfilm MC 12. These buildings were to be built of adobe on stone foundations and to conform to the specifications prepared in 1872. Ibid.

41. Beaumont to Acting Assistant Adjutant General (AAAG), Department of Arizona, September 16, 1886. NA, RG 393. Department of Arizona, LS. Copy in the files of FBNHS.

Besides the essentials Beaumont called for, he envisioned his post fitted up with a library and reading room and, for recreational purposes, a building to be utilized as bowling alley, gymnasium, pistol shooting gallery, and theater.⁴² "These improvements," said the Major, "would . . . tend greatly to reconcile men to a country utterly destitute of attractions."⁴³

Actual changes to Fort Bowie Between 1883 and late 1886 included the completion of the commanding officer's house, a new guardhouse, a bakery, an engine and ice house, a non-commissioned staff quarters and a civilian employees' quarters. The old mail station (laundresses' quarters) now housed the hospital steward, and what had been the library building (former adjutant's office) was of necessity transformed into another officers' quarters. The post library occupied the old guardhouse. The new granary building was converted to house various quartermaster goods, while the old building was used to hold forage. A new washhouse stood behind the cavalry barracks at the northeast corner of the fort, and the barber shop building was re-designated the oil house. The old bake house along the east side of the parade ground now functioned as the tailor shop.⁴⁴

Under Beaumont's stewardship, during the Geronimo years the obscure little fort drew national attention as the focal point of General Crook's operations. Stated an article in the popular Frank Leslie's Illustrated Newspaper:

42. Inspection Report, September 4, 1886. NA, RG 159. Entry 15. 1036(2)86.

43. Inspection Report, August 14, 1887. NA, RG 159. Entry 15. 959(3)87.

44. "Diagram of Post. Fort Bowie [circa 1886]." National Archives. Reproduced in Murray, "History of Fort Bowie," p. 169.

At one time there was some talk of abandoning the post, but during the last two Indian wars it has been so important that it has been decided to make it one of the permanent posts of the Territory. The person who saw it a couple of years ago would scarcely recognize it as the same post, so many are the improvements that have been made in it by the present commanding officer [Brevet] Colonel E. B. Beaumont. The buildings, some of which are built of adobe and others of wood, have been greatly improved in appearance and point of convenience. Water has been piped in to all the buildings, the premises of the officer's quarters have been inclosed by neat fences, and much other work has been done to improve the general appearance of the post.⁴⁵

12. The Final Years

In the spring of 1887 there occurred an earthquake whose shock was felt throughout southern Arizona Territory. The tremor caused minor structural damage at Fort Bowie, shattering some adobe walls and temporarily disrupting the post's water supply.⁴⁶ Despite the absence of widespread Indian hostilities after 1886, construction at the fort proceeded. Field maneuvers, the escort of government officials, and the pursuit of Apache outlaws occupied the garrison in the late 1880s and early 1890s.⁴⁷ The prevailing belief was that while other Arizona posts were being abandoned or consolidated, Fort Bowie would probably remain operational. In

45. April 3, 1886.

46. Fort Bowie Post Return, May, 1887. Copy in the files of FBNHS.

47. Murray, "History of Fort Bowie," pp. 251-54.

1888 and 1889 \$15,000 was allocated for buildings and repairs at the post which included installation of a new sewage drainage system, improvement of the water supply system, construction of a schoolhouse, and the building of a new, larger hospital southeast of the fort.⁴⁸ Still later changes included erection of a powder magazine, a gun shed, and a new hospital stewards' quarters near the hospital. Fort Bowie requisitioned nine railroad carloads of lumber and contracted for 40,000 adobes for use in the construction.⁴⁹ Although the need for new barracks was frequently noted, none were ever built, and by 1892 the existing dormitories were pronounced "old, dilapidated and in need of repair."⁵⁰ Frequent repairs were made to the barracks, and one set even received an addition, but that was all.⁵¹ After April, 1893, the Fort Bowie garrison consisted of only two companies.⁵² With prospects unlikely for increased troop strength there was little hope that any new quarters would be built. Then in March, 1894, a terrific storm struck the post, ripping through roofs and porches and destroying a great many chimnies and fences in its course.⁵³

48. Ibid., p. 282; Plat, "Fort Bowie, Arizona," dated May 20, 1889. NA, RG 49. Abandoned Military Reservations. Copy in the files of FBNHS.

49. Arizona Weekly Star, November 22, 1888, cited in Murray, "History of Fort Bowie," pp. 282-85.

50. "Medical History, Fort Bowie, 1877-1894." NA, RG 112. Records of the Surgeon General's Office. Copy in the files of FBNHS. (Hereafter cited as Fort Bowie Medical History.)

51. Murray, "History of Fort Bowie," p. 285.

52. Ibid., p. 281.

53. Major Thomas McGregor to Assistant Adjutant General (AAG), Department of Colorado, March 4, 1884. NA, RG 393. LS, Department of Colorado. Copy in the files of FBNHS. See also, Owen Wister, Owen Wister Out West. His Journals and Letters. Ed. by Fanny Kemble Wister (Chicago: University of Chicago Press, 1958), p. 202.

Perhaps foreshadowing the fate of Fort Bowie, most of the funds requested to restore the post were denied.⁵⁴

By November, 1894, the quarter century-old fort had reached the end of its usefulness as a viable military station. With its predecessor facility, Fort Bowie could claim an uninterrupted span of thirty-two years as guardian of the overland trail and as the central fixture in the Chiricahua Indian campaigns. Today the stone foundations and low mounds of crumbling adobe are all that tangibly remain of the buildings that once composed Fort Bowie. "They'll last forever," said aged cavalry trooper Reginald Bradley in 1968 of the structures he used to frequent daily during his service at the post in 1889 and 1890.⁵⁵ He did not know that by then the buildings had already largely eroded away, leaving clues to their history and construction to be gleaned primarily from photographs and documentary sources, all that remained.

54. See McGregor to Post Surgeon, Fort Bowie, March 28, 1894. NA, RG 98. Department of Colorado, LS. Copy in the files of FBNHS.

55. Don Rickey, Jr. Taped interview with Reginald A. Bradley, January 10, 1968. Reginald Bradley Papers, U.S. Army Military History Institute, Carlisle, Pennsylvania.

PART II: THE FORT AND ITS STRUCTURES, 1869-1894

A. Fort Bowie Structures

The numerical references given below correspond with the commonly accepted designations for particular historic structures (HS) at Fort Bowie. Those numbered from 001 to 035 referred to the principal post buildings according to a plat of May 20, 1889. Structures 036-038 were so numbered in Jon B. Montgomery, "Historic Structures Report. Part I. Fort Bowie, Arizona" (unpublished manuscript dated April, 1966, in the files of FBNHS). Structures 039-043 were numbered by Don P. Morris in "Stabilization Report, Fort Bowie National Historic Site" (unpublished manuscript dated 1967 in the library of the National Park Service Western Archeological Center, Tucson). Except for those relating to structural vestiges at the site of the first Fort Bowie, most later numerical references were assigned by Archeologist Robert Herskovitz and Historical Architect John Robbins in 1975 and largely pertain to structures that remain unidentified.

HS 001. Officers' Quarters.

This structure was built in 1868 to front along the south edge of the parade ground.¹ Located slightly west of center, the quarters consisted of two rooms, each 15 feet square, with a hallway running between and a kitchen and mess room attached to the rear of the westernmost room.² A drawing made in November, 1869, by a soldier stationed at Fort Bowie affords the earliest graphic representation of this building. It reveals that these quarters were built of adobe and had a viga-supported roof covered with earth. The front of the building had a door in the center which led into the hallway between the two rooms. There were two windows situated on either side of the door. Each room had a fireplace; another fireplace was located in the rear of the extension, probably in the kitchen.³ Beyond the front door was the hallway that led straight back to a door leading to the outside rear. On either side of the hall was a doorway leading into each of the rooms.⁴ Early in its existence the roof of this structure received a coat of lime cement.⁵

The kitchen extension probably originally consisted of two rooms, the kitchen proper and a mess, or dining, room. One

1. The building appears on Lieutenant Wheeler's "Map of the Military Reservation at Camp Bowie . . . February 1869," thereby signifying its probable construction during the previous year.

2. Jones to Fry, April 28, 1869; "Descriptive Commentaries," Fort Bowie, vol. 125 (1871).

3. The soldier-artist was a comrade of Aaron Abrams who was posted at Fort Bowie in 1869. The original watercolor drawing reposes today in the collection of Fort Bowie National Historic Site. (Hereafter cited as Abrams drawing.)

4. "Diagram of Camp Bowie, A.T.," December, 1870, in "Descriptive Commentaries," Fort Bowie, vol. 125 (1871).

source indicated the presence of a door and four windows on the west side of this extension,⁶ although a plat of 1870 suggested that the kitchen underwent substantial remodeling to possibly include two additional rooms and the placement of three doors on the east side.⁷ Out behind this officers' quarters was built a small, flat-roofed adobe structure, possible initially used as a woodshed. By late 1870 one part of this building was being used as a chicken coop, the other as a sink (outhouse).⁸

Like most buildings at Fort Bowie in the 1870s, this set of quarters periodically endured damage from rainstorms, particularly when the earthen roofs were subjected to prolonged, driving rainfall which resulted in their leaking. A storm in February, 1874, did considerable damage to the post, including all the officers' quarters.⁹ Hoping to prevent recurrence of the damage, Lieutenant Colonel Jones, who inspected the fort soon after this destructive storm, urged that the roofs be shingled or boarded.¹⁰ Jones's recommendation was not immediately acted upon, however, probably because the abandonment of Fort Bowie was under consideration at that time. In 1876, some improvement was added in the way of board floors. Originally, this quarters had a dirt floor

5. Outline Description of U.S. Military Posts and Stations in the Year 1871 (Washington: Government Printing Office, 1872), p. 65; "Descriptive Commentaries," Fort Bowie, vol. 127 (1876).

6. Abrams drawing.

7. "Diagram of Camp Bowie," December, 1870.

8. Abrams drawing; "Diagram of Camp Bowie," December, 1870.

9. Captain Samuel S. Sumner to AAAG, Department of Arizona, February 18, 1874. NA, RG 393, Department of Arizona, LS. Copy in the files of FBNHS.

10. Inspection Report, April 27, 1874. NA, RG 49. Abandoned Military Reservations. Copy in the files of FBNHS.

that turned to quagmire after bad storms made the roof leak, and new flooring partially alleviated the discomfort of living there during the rainy season. In 1879 the condition of the building was described as good. According to an inspection record of that year the structure measured 46 feet by 19 feet, with the wing addition in the rear measuring 40 feet by 18 feet. During 1878 and 1879 cement was used to repair the earthen roof, although preparations were underway to have it shingled.¹¹

For the first decade of its existence, it appears that little was done to improve these quarters and that patchwork and repairs remained the prime alterations. Beginning in the 1880s more funds were expended on the structure to bring it up to the standards most officer personnel expected. The annual building inspection of June, 1881, disclosed that much work was needed on all the officers' quarters, including HS 001. Notably, the inside walls were rough and needed smoothing and the rooms were without ceilings. The quarters were considered to be in "bad condition," and the inspecting officer, Major Abraham K. Arnold, recommended that porches be added to the front of the building to face the parade ground.¹² Arnold's report presaged a general remodeling effort at Fort Bowie, beginning in 1883. HS 001 required a total of \$130.51 for materials and \$64.00 for the employment of one civilian carpenter for sixteen days. Besides the porch, the quarters needed much interior construction including the addition of ceiling joists, base boards, and new windows complete with frames and

11. "Report of an Inspection of Public Buildings made at Fort Bowie," June 30, 1879. Miscellaneous records. Microfilm MC 12.

12. Inspection Report, Fort Bowie, June 17, 1881. NA, RG 159. Entry 15. 724/81.

sashes. A board hip roof was probably placed on the structure at this time, but it apparently was not immediately shingled.¹³

Most of the work was completed in 1885. One of Major Eugene B. Beaumont's chief objectives after he assumed command was to erect fencing around the officers' quarters "to present the ordinary decencies of life. Every sink is exposed to public view, and responses to natural calls [are] advertised to the entire garrison."¹⁴ An estimate for fencing around HS 001 had been prepared two years before which allowed \$91.52 for labor and rough pine boards.¹⁵ Sometime between April, 1885, and the end of the year a fence was built enclosing the back yard, to include the woodshed (former chicken coop) and the sink.¹⁶ Other work urged by Beaumont on the quarters included building a back porch and plastering the rear exterior adobe wall.¹⁷ During the year the roof was finished, with 5000 redwood shingles required to complete the job.¹⁸ Estimates were prepared for a rear porch, and a new

13. "Repairs, Additions and Alterations required." May 8, 1883. Miscellaneous records. Microfilm MC 12; Inspection Report, Fort Bowie, September 10, 1883. NA, RG 159. Entry 15. 865/83.

14. Inspection Report, Fort Bowie, September 2, 1884. NA, RG 159. Entry 15. 1232/84.

15. "Repairs, Additions and Alterations required." May 8, 1883. Miscellaneous records. Microfilm MC 12.

16. Inspection Report, Fort Bowie, April 10, 1885. NA, RG 159. Entry 15. 776/85; Photograph of Fort Bowie taken c. 1885.

17. Beaumont to AAG, Department of Arizona, June 30, 1884. NA, RG 393, Department of Arizona, LS. Copy in the Arizona Historical Society; Inspection Report, Fort Bowie, September 2, 1884. NA, RG 159. Entry 15. 1232/84.

18. "Report of Inspection of Public Buildings at Fort Bowie, A.T., March 31, 1885, with Estimates for Alterations & Repairs." Miscellaneous records. Microfilm MC 12.

fireplace and chimney.¹⁹ Beaumont also called for funds to ceil and plaster the inside of the structure, citing the fact that its present state attracted all sorts of vermin to congregate in the walls and in the logs and dirt beneath the shingled roof.²⁰

Most of the needed work was accomplished in time, although Beaumont and his successors continued to press for newer and larger accommodations. Space for surplus officers became a real concern during the Geronimo Campaign of 1885-86, and Beaumont noted in reference to most of the officers' quarters that they were "small one story adobe buildings, with small rooms, and will not admit a family and bachelor Officer occupying them together."²¹ Despite repeated recommendations that more standard officers' quarters be erected at Fort Bowie, none ever were built.²² During Beaumont's command of the post he described HS 001 in some detail. The adobe quarters had six rooms, the two front ones each measuring 14 feet 6 inches square. The rear four rooms measured, respectfully, 12 feet 6 inches by 11 feet 7 inches, 10 feet by 11 feet 9 inches, 12 feet square, and 12 feet square. There was also a summer kitchen built of wood, probably detached, that measured 12 feet 6 inches by 18 feet, and a bathroom with dimensions of

19. Ibid.

20. Beaumont to the Quartermaster General, August 24, 1885, in ibid.; Letter, First Lieutenant Wilbur E. Wilder, April 15, 1885, accompanying "Report of Inspection of Public Buildings . . . , March 31, 1885," in ibid.

21. Beaumont to the Adjutant General, U.S. Army, August 20, 1887. NA, RG 98. Department of Arizona, LS. Copy in the files of FBNHS.

22. See Major Henry E. Noyes to AAG, Department of Arizona, February 1, 1890; and Noyes to AAG, Department of Arizona, February 3, 1890, in ibid.

10 feet by 11 feet 9 inches.²³ Another source gave the measurements of the hallway running between the two front rooms as 6 feet wide and 15 feet long.²⁴

During the middle and late 1880s water and drain pipes were connected to HS 001 as the post received improved water and sewage disposal facilities. According to a report of 1889, the building was being used to quarter the post surgeon and was described as in fair condition.²⁵ In the early 1890s the fencing around the back lot was removed and relocated closer to the woodshed. And around 1894 a small, gable-roofed building, possibly a woodshed, was erected in the southwest corner of the fenced lot.²⁶

23. Beaumont to AAG, Division of the Pacific, undated (c. 1886). Copy in the files of FBNHS.

24. "Report of Public Buildings at Fort Bowie, Arizona, May 20, 1889." Miscellaneous records. Microfilm MC 12.

25. Ibid.

26. Plat, "Fort Bowie, Arizona," dated May 20, 1889; Photographs taken in 1893 and 1894.

HS 002. Officers' Quarters.

This building was very similar in design, function, and history to HS 001. It, too, was probably erected in 1868, based on its presence on Lieutenant Wheeler's plat of Fort Bowie made in February, 1869.¹ Its earliest pictorial appearance was in the Abrams drawing made the following November. This drawing shows HS 002 situated directly east of HS 001 along the south side of the parade ground. It was a plain adobe structure with an earthen roof supported by vigas. There were four windows located along the front, or north side, of the building. Immediately behind the principal structure stood another building, slightly more than half as long, and also made of adobe.² Behind this and a bit to the west of it was a very small frame building with a gabled roof, probably a sink or a woodshed. There was another identical structure situated to the rear and east of this structure.

The presence of these quarters was noted by Major Jones when he inspected Fort Bowie in April, 1869. Jones stated that the building had two rooms, each 15 feet square, with a hallway running between.³ A description published in 1870 reported that a kitchen and mess room adjoined the two front rooms.⁴ By December, 1870, the building had been modified so that the two rooms in the rear were now attached to the westernmost of the

1. "Map of the Military Reservation of Camp Bowie, . . . February 1869."

2. In the Abrams drawing this smaller building parallels HS 002, that is, it runs in an east-west manner, whereas in the Wheeler plat the outline of the detached building in the rear of HS 002 shows it to be running north-south, or at an angle with the principal building similar to HS 001 and its detached kitchen.

3. Jones to Fry, April 28, 1869.

4. "Report on Barracks and Hospitals," p. 471.

front rooms. The doors of the kitchen and dining room were located on the east side of the building. A person entered the quarters from the front through a door that led into the hallway, on each side of which was a door leading into either of the principal rooms. Another door at the end of the hall led out back. In the rear was a small detached structure, the east part of which functioned as a chicken coop while the other part was used as a sink.⁵

Although the roof of HS 002, like that of its neighbor, was given a coat of lime cement to help retard leaking,⁶ the driving rains of the early 1870s took a toll. When the post was hit by an especially bad storm in February, 1874, the roofs of all the officers' quarters received damage.⁷ This precipitated the above-mentioned call for shingled roofs, although the recommendation went unheeded for several years.⁸ Materials for shingling the roof were finally procured in 1879, and presumably the work was accomplished then.⁹ As one of the earliest-built sets of officers' quarters at Fort Bowie, HS 002 probably did receive board flooring in its rooms by 1873.¹⁰ Other changes frequently proposed concerned further roof repairs

5. "Diagram of Camp Bowie, A.T.," December, 1870.

6. Outline Description of U.S. Military Posts and Stations in the Year 1871, p. 65.

7. Sumner to AAAG, Department of Arizona, February 18, 1874. NA, RG 393. Department of Arizona, LS. Copy in the files of FBNHS.

8. Lieutenant Colonel Roger Jones, Inspection Report, April 27, 1874. NA, RG 49. Abandoned Military Reservations. Copy in the files of FBNHS.

9. "Report of an Inspection," June 30, 1879. Miscellaneous records. Microfilm MC 12.

10. "Descriptive Commentaries." Fort Bowie, vol. 127 (1876).

(completed in 1878 or 1879),¹¹ the addition of a front porch in 1883, and the lathing and plastering of the interior walls.¹² Also in 1883 an estimate for fencing for HS 002 was made, along with materials for an extensive remodeling of the quarters to include the addition of ceilings, back porch flooring, and new window frames and casings.¹³ In 1884 Major Beaumont urged that this work be completed and that the back wall of the quarters be plastered. "This can be done by the troops if Sufficient Extra duty pay will be allowed."¹⁴ Evidently the roof was resingled in 1885 or 1886, for in March, 1885, the post requested funds for several thousand redwood shingles and component materials. Also needed were 200 feet of 8-foot high fencing, brick for a fireplace and chimney, and paint for the quarters.¹⁵ A porch was still required.

Stated one officer:

The erecting of Porches should be granted; the buildings at the Post are nearly all of adobe and very low; The continuous heat of the sun during summer time on the shadeless walls heats the walls in such a way as to make

11. "Report of an Inspection of Public Buildings made at Fort Bowie, A.T. on the 30th day of June 1879." Miscellaneous records. Microfilm MC 12.

12. Inspection Report, Fort Bowie, June 17, 1881. NA, RG 159. Entry 15. 724/81; Inspection Report, Fort Bowie, September 10, 1883. NA, RG 159. Entry 15. 865/83.

13. "Report of Annual Inspection of Public Buildings of Fort Bowie, A.T., March 31st 1883." Miscellaneous records. Microfilm MC 12.

14. Beaumont to AAG, Department of Arizona, June 30, 1884. NA, RG 393. Department of Arizona, LS. Copy in the Arizona Historical Society.

15. "Report of Inspection," March 31, 1885. Miscellaneous records. Microfilm MC 12.

the rooms exceedingly uncomfortable during nights as well as day time. The porches would afford much relief from the burning heat.¹⁶

In August, Major Beaumont directed a message to the Quartermaster General in Washington asking for the funds necessary to improve the comfort of the officers' quarters. "Repeated requisitions have been made for flooring for porches [and for] fencing material without success."¹⁷ This message was accompanied by a note from Brigadier General Crook endorsing Beaumont's request.¹⁸

Some remedial work was accomplished later in 1885, for photographs of Fort Bowie taken in that year show HS 002 to have a new hip roof and a porch added to the front. One chimney was present on the east end of the quarters, while two more were present on the kitchen section. Furthermore, the front of the building appears to have been whitewashed, the adobe woodshed in the rear had acquired a gabled roof, and what looks like a hog pen had been erected on the lower slope behind and south of HS 002. (A photograph taken in 1886 shows what appears to be an enclosure erected around this pen.) A paled fence was finally put up enclosing the backyard. In front, fencing was added joining HS 002 with HS 001 and a gate was located between the buildings.

With most of the major changes to HS 002 completed late in 1885 and during 1886, the structure underwent little further

16. Letter, First Lieutenant Wilbur E. Wilder, accompanying *ibid.*

17. Beaumont to the Quartermaster General, August 24, 1885. Miscellaneous records. Microfilm MC 12

18. August 26, 1885, in *ibid.*

alteration through the remainder of Fort Bowie's existence. According to a report prepared by Major Beaumont, the building consisted of four rooms with dimensions of, respectively, 14 feet 7 inches square, 14 feet 7 inches square, 11 feet 10 inches by 11 feet 6 inches, and 11 feet 10 inches by 11 feet 6 inches. It had a wooden summer kitchen, perhaps detached, that measured 12 feet 6 inches by 15 feet, and a bath 10 feet 5 inches square.¹⁹ In the middle and late 1880s drain and water pipes were connected to the building.²⁰ A photograph dated 1894, just prior to the post's abandonment, reveals that the fence enclosing the back yard of HS 002 had been moved nearer the building, while two small structures (woodsheds?) have been built out beyond the south side of the fence.

19. Beaumont to AAG, Division of the Pacific, undated (c. 1886). Copy in the files of FBNHS.

20. Plat, "Fort Bowie, Arizona," dated May 20, 1889.

HS 003. Officers' Quarters.

This set of officers' quarters was erected in 1873.¹ It was built at a location originally proposed for erection of the post hospital.² According to the earliest photographs in which HS 003 appears, the structure was much like its predecessors, a one-story adobe building with a flat dirt roof supported by vigas. It was L-shaped, with its southward extension built somewhat taller than the front part and probably harboring the kitchen. The building stood edging slightly ahead (north) of HS 001 and HS 002 and, like them, fronted on the south end of the parade ground. There were four windows and a door in front. Out behind was an adobe sink or woodshed.³

This building, like most others at Fort Bowie, was damaged by the severe rains of early 1874, and it was suggested that its earthen roof be replaced by one of boards or shingles.⁴ Repairs continued to be made, however, and in 1878 or the following year cement was used to fix the leaky roof.⁵ Throughout the late 1870s and early 1880s little was done to remedy structural deficiencies in HS 003 as in the other quarters, and recommendations were

1. "Descriptive Commentaries," Fort Bowie, Ariz., vol. 127 (1876).

2. Jones, Inspection Report, April 27, 1874; "Diagram of Camp Bowie, A.T., August, 1870." Copy in the files of FBNHS. An officers' quarters was to be built on the west side of HS 001, but the work was never started. See "Diagram of Camp Bowie," December, 1870.

3. The photos, dated October, 1874, were taken by D.F. Flanders.

4. Jones, Inspection Report, April 27, 1874.

5. "Report of an Inspection of Public Buildings made at Fort Bowie, A.T. on the 30th day of June 1879." Miscellaneous records. Microfilm MC 12.

continually made for the erection of a porch, for a better roof and ceiling, for fencing, and for smoothing and plastering the interior walls.⁶ Porches were built on the front of the building, facing the parade, in the spring or summer of 1883.⁷ Also in 1883 estimates were prepared for extensive repairs to be made to HS 003, to include rough flooring for porches, front and rear, and materials for the construction of window frames. Total estimated cost for supplies and labor: \$86.76.⁸

In 1884 or 1885 a hip roof was built on HS 003. The front of the structure was plastered and whitewashed. A photo taken in 1885 showed that the back yard area had been fenced, no longer exposing the sink behind to public view, thereby eliminating a long-standing grievance of the occupants.⁹ Another fence was built to surround the north side of the adobe sink or woodshed, further shielding this structure or perhaps affording an enclosure for a chicken coop. A new and smaller building with a gable roof, probably a sink, was now standing near the back of the kitchen. The windows on the west side of the building had had shutters

6. Inspection Report, Fort Bowie, June 17, 1881. NA, RG 159. Entry 15. 724/81; Beaumont to AAG, Department of Arizona, June 30, 1884. NA, RG 393. Department of Arizona, LS. Copy in the Arizona Historical Society. Inspection Report, Fort Bowie, April 10, 1885. NA, RG 159. Entry 15. 776/85.

7. Inspection Report, Fort Bowie, September 10, 1883. NA, RG 159. Entry 15. 865/83.

8. "Report of Annual Inspection of Public Buildings at Fort Bowie, A.T., March 31st 1883." Miscellaneous records. Microfilm MC 12.

9. See Inspection Report, Fort Bowie, September 2, 1884. NA, RG 159. Entry 15. 1232/84; and Letter, First Lieutenant Wilbur E. Wilder, April 15, 1885, accompanying "Report of Inspection," March 31, 1885. Miscellaneous records, Microfilm MC 12.

added. An estimate for repairs to HS 003 dated March 31, 1885, specified materials for shingling the roof and building fireplace chimneys at a total expenditure of \$134.97.¹⁰

Dimensions for the rooms in HS 003 were as follows: two front rooms, one measuring 13 feet by 14 feet 6 inches and the other 14 feet 6 inches square. The three rooms composing the rearward extension measured, respectively, 14 feet 6 inches by 14 feet 9 inches, 14 feet 6 inches square, and 11 feet by 14 feet 6 inches. There was also a wooden bathroom that measured 10 feet by 12 feet.¹¹ The hallway running between the two front rooms measured 15 feet by 6 feet. And by 1889 there seems to have been an added kitchen facility measuring 13 feet by 16 feet.¹² Running water, added to the structure in the middle 1880s, probably comprised the last substantive modification to HS 003 before Fort Bowie was abandoned.

10. "Report of Inspection," March 31, 1885. Miscellaneous records. Microfilm MC 12.

11. Beaumont to AAG, Division of the Pacific, undated (c. 1886). Copy in the files of FBNHS.

12. "Report of Public Buildings at Fort Bowie," May 20, 1889. Miscellaneous records. Microfilm MC 12.

HS 004 and 005. Officers' Quarters.

This structure was erected between February and November, 1869, based on its appearance in the Abrams drawing of the last date. It housed two sets of officers' quarters, hence its frequent designation as two separate, individual units. The watercolor drawing shows it to be a long, rectangular adobe building with a flat, earthen roof of viga construction. There were two fireplaces and chimneys, one at each end of the building. On the front four windows and two doors were located. Behind the quarters (east) was a detached kitchen, and behind that a sink.¹ HS 004 was situated on the east side of the parade at the southeast corner. According to an official reference, "it was built in 1869 for a Post Hospital, but was found inadequate for that purpose."² A description penned in 1870 stated that "A new hospital has been built, occupied, and vacated as inadequate, and is now occupied by three bachelor officers. . . ."³ The quarters were constructed similarly to HS 001 and HS 002, except that they had four rooms plus the kitchen and dining room.⁴ The largest room was that located at the south end of the building. Followed then a hallway, the back part of which was possibly used for storage.⁵ Three

1. "Map of the Military Reservation of Camp Bowie . . . February 1869"; Abrams drawing; "Diagram of Camp Bowie, A.T., August, 1870"; "Diagram of Camp Bowie, A.T., December 1870."

2. Descriptive Commentaries," Fort Bowie, Arizona, vol. 125 (1871).

3. "Report on Barracks and Hospitals," p. 472.

4. Ibid. This reference stated that the kitchen and dining room were attached. All graphic portrayals, however, indicate that the kitchen was separate. However, it is apparent that sometime in the early 1870s a short wing was added to the rear of the south end of the building and was perhaps used for kitchen purposes. See "Camp Bowie A.T." Diagram dated January, 1877.

5. "Diagram of Camp Bowie, A.T., December 1870."

rooms of approximately the same size made up the rest of the structure, that on the north end being used as the adjutant's office. Flooring for the building was of earth until 1873, when board flooring was installed.⁶ Lime cement was added to the roof of the structure to help retard leaking,⁷ but it did little good. The storms of early 1874 caused heavy damage, principally to the roof. In succeeding years, despite small-scale repairs, the quarters gradually deteriorated, a victim of the whipping winds and grueling winter rains. Supplies with which to complete the necessary repairs were not easily forthcoming, despite repeated requests from successive post commanders.⁸ Besides a better roof, the structure required ceilings for its rooms, porches (front and back), and proper fencing "to present the ordinary decencies of life."⁹

The building received two front porches in 1883,¹⁰ although Major Beaumont continued to press for other alterations, such as flooring for a rear porch and plastering for the back exterior of the quarters. He asked for materials with which he might place

6. "Descriptive Commentaries." Fort Bowie, vol. 127 (1876).

7. Outline Description of U.S. Military Posts and Stations in the Year 1871, p. 65.

8. Telegram, Sumner to AAAG, Department of Arizona, February 18, 1874. Copy in the files of FBNHS; Jones, Inspection Report, April 27, 1874.

9. Inspection Report, Fort Bowie, September 2, 1884. NA, RG 159. Entry 15. 1232/84. See also Inspection Report, Fort Bowie, June 17, 1881. NA, RG 159. Entry 15. 724/81; Inspection Report, Fort Bowie, April 10, 1885. NA, RG 159. Entry 15. 776/85; Beaumont to AAG, Department of Arizona, June 30, 1884. NA, RG 393. Department of Arizona, LS. Copy in the Arizona Historical Society.

10. Inspection Report, Fort Bowie, September 10, 1883. NA, RG 159. Entry 15. 865/83.

adequate ceilings in the rooms, since the dirt and logs supporting the roof attracted insects and other vermin.¹¹ At Beaumont's repeated prompting, many of the desired repairs and alterations were completed in the early 1880s.¹² Photos taken in 1884 and 1885 reveal that the long-sought shingled hip roof had been added,¹³ and that a chimney and fireplace had been relocated.¹⁴ There were three chimneys in all, one at the south end, one at the north end, and one in the middle towards the south end. By then, a fence had been added between the front north corner of the building and HS 006.¹⁵ A plat of 1889 shows a water pipe to have been connected to the quarters,¹⁶ and a photograph taken in 1894 shows that the chimneys of HS 004 and HS 005 have been plastered.

In 1883 HS 004 was said to contain one room 16 feet square, one 14 feet square, and one 12 feet square. HS 004 contained one

11. Beaumont to AAG, Department of Arizona, June 30, 1884. NA, RG 393. Department of Arizona, LS. Copy in the Arizona Historical Society; Letter, First Lieutenant Wilbur E. Wilder, April 15, 1885, accompanying "Report of Inspection of Public Buildings, March 31, 1885. Miscellaneous records. Microfilm MC 12.

12. An estimate of May 8, 1883, called for supplies for ceiling work, new window and door frames, base boards for the rooms, and addition of a water closet." Report of Annual Inspection of Public Buildings of Fort Bowie, A.T., March 31st 1883." Miscellaneous records. Microfilm MC 12.

13. Ten thousand redwood shingles were needed to cover the roof of HS 004. "Report of Inspection of Public Buildings," March 31, 1885. Miscellaneous records. Microfilm MC 12.

14. See *ibid.* for materials for building fireplaces and chimneys.

15. See "Report of Annual Inspection of Public Buildings at Fort Bowie, A.T., March 31st 1883." Miscellaneous records. Microfilm MC 12.

16. Plat, "Fort Bowie, Arizona," dated May 20, 1889.

room 14 feet by 16 feet, and two rooms 12 feet by 14 feet.¹⁷ Doubtless these dimensions are only approximate. In about 1886 the dimensions of the rooms of the quarters were given as follows: one room, 14 1/2 feet square, one room 12 feet by 12 1/2 feet, a kitchen 10 feet by 12 feet, and two small rooms utilized as a telegraph office, one 14 feet 5 inches by 7 feet 7 1/2 inches, the other 14 feet 7 inches by 9 feet 7 1/2 inches.¹⁸ In 1889 the unoccupied structure was described in less detail as consisting of two rooms 14 feet square, two measuring 10 feet by 14 feet, and a kitchen 12 feet by 14 feet.¹⁹

17. "Report of Annual Inspection of Public Buildings of Fort Bowie, A.T., March 31st 1883." Miscellaneous records. Microfilm MC 12.

18. Beaumont to AAG, Division of the Pacific, undated (c. 1886). Copy in the files of FBNHS.

19. "Report of Public Buildings at Fort Bowie, Arizona, May 20, 1889." Miscellaneous records. Microfilm MC 12.

HS 006. Officers' Quarters

This set of officer's quarters functioned in various capacities during its existence. Erected in the spring of 1874, it was, like the others, a one-story adobe structure with a log-supported earth roof and a mud floor. At that time the building fronted 45 feet along the east side of the parade ground and consisted of two rooms, one measuring 13 feet square, the other 18 feet by 13 feet.¹ Presumably a hallway separated the living quarters, as in the other buildings. While under construction, this structure was badly damaged by rains early in 1874 and soldiers at Fort Bowie spent considerable time making adobe bricks to repair it.² The general destruction caused at the post by winter storms precipitated a call for board or shingle roofs on all the buildings,³ an improvement not completed until nearly a decade later.

Early photographs of Fort Bowie (1874) show HS 006 to have had two doors and three windows in front and two chimneys, one at either end of the building. Structural modifications to this set of officers' quarters were almost identical to those completed on the others. During the early 1880s repeated requests were made for the addition of a porch, for fencing, and for a ceiling for the building, as well as for lathing and plastering of the interior and reshingling of the roof.⁴ There is evidence that substantive

1. "Descriptive Commentaries." Fort Bowie, Ariz., vol. 127 (1876).

2. Jones, Inspection Report, April 27, 1874.

3. Ibid.

4. Beaumont to AAG, Department of Arizona, June 30, 1884. NA, RG 393. Department of Arizona, LS. Copy in the Arizona Historical Society; Inspection Report, Fort Bowie, April 10, 1885. NA, RG 159. Entry 15. 776/85; "Report of Inspection of Public Buildings at Fort Bowie," March 31, 1885. Miscellaneous records. Microfilm MC 12.

changes were made at this time. A photograph taken around 1884 shows that a hip roof was added to the building. Furthermore, the two doors located in front were converted to windows, while the window originally situated between the doors was changed to a door. Although the other officers' quarters had acquired front porches by this time, HS 006 had not. A picture taken in 1885, however, shows that by then a porch had been added. Its dimensions were 8 feet wide by 45 feet long.⁵ Also, by 1885 a large extension had been added to the rear of the building. Possibly of frame construction, it had a gabled roof, a fireplace and chimney, and four windows along its north side. Another, smaller building, probably a sink or woodshed (perhaps both) was erected to the rear (northeast) of the addition. The back yard was fenced with 8-foot-high wooden poles.

Originally built as an officers' quarters, HS 006 had by 1877 become the office of the post adjutant.⁶ In 1881 a new adjutant's office was built on the west side of the parade and the old facility became the post library and school house.⁷ Private Ness of Company C, Sixth Cavalry, served as the first teacher.⁸ In August, 1881, the post commander reported that "there is . . . a building suitable for a chapel, Post Library, Reading and School

5. "Report of Annual Inspection of Public Buildings of Fort Bowie, A.T., March 31st 1883." Miscellaneous records. Microfilm MC 12.

6. "Camp Bowie A.T." Diagram dated January, 1877. Copy in the files of FBNHS.

7. A circular of April 30, 1881, announced that "a Post School will be opened at this post on Monday next at 9.00 A.M. in the Library room." Fort Bowie General Orders. Copy in the files of FNBHS. Evidently there had been a library room at Fort Bowie as early 1876, and a school for child dependents and enlisted men was organized in 1878. Murray, "History of Fort Bowie," pp. 170, 171.

8. Fort Bowie Medical History, May, 1881.

Room. It is in fair order, or requires only such repairs as can be made at the Post."⁹ Apparently the school was reorganized in the following year, for Fort Bowie General Orders No. 25 of March 6, 1882, announced the beginning of classes. "One of the rooms of the Post Library will be used as a School Room," said the edict, "and the Post QrMr [Quartermaster] will fit it up in a suitable manner of the purpose. . . ." Attendance hours were on Mondays, Wednesdays, and Fridays from "30 minutes after Retreat until Tattoo."¹⁰ Because of the night hours, dependent children at the post could not attend the school and only seven "grown persons" comprised the student body. The school room was lighted "by the regulation allowance of lamps and oil."¹¹ In December, 1882, an inspecting officer reported that "at present there is no school . . . owing to the teacher having committed some breach of discipline which rendered it necessary for his trial."¹² Thus, the school operated at an intermittent rate, at best. In 1884 the hours of instruction were changed to be from 9 to 11:30 a.m. Monday through Friday.¹³

In the autumn of 1884 the idea was entertained of reconverting HS 006 into an officers' quarters.¹⁴ This was eventually done in

9. Captain William A. Rafferty to AAG, Department of Arizona, August 8, 1881. NA, RG 133, Department of Arizona, LS. Copy in the files of FBNHS.

10. Fort Bowie General Orders. Copy in the files of FBNHS.

11. Inspection Report, Fort Bowie, March 16, 17, 18, 1882. NA, RG 159. Entry 15. 334/82.

12. Inspection Report, Fort Bowie, December 21, 22, 1882. NA, RG 159. Entry 15. 148/83.

13. Fort Bowie General Orders No. 158, October 27, 1884. Copy in the files of FBNHS.

14. Inspection Report, Fort Bowie, September 2, 1884. NA, RG 159. Entry 15. 1232/84.

time for the Geronimo Campaign which saw an increased number of officers at Fort Bowie.¹⁵ In about 1886 Major Eugene Beaumont gave precise measurements for the six rooms in HS 006, including the rearward addition. The two front rooms measured, respectively, 15 feet 10 inches by 14 feet 9 inches and 15 feet 10 inches by 16 feet. The rooms in the addition measured 15 feet 10 inches by 12 feet 5 inches, 12 feet 7 inches by 14 feet 2 inches, 11 feet 10 inches by 16 feet, and 12 feet 3 inches by 11 feet. A wood bathroom measured 10 feet by 12 feet.¹⁶ In 1885 the quarters received running water.¹⁷ By the spring of 1889, HS 006 was being used to house a civilian employee,¹⁸ a new schoolhouse (HS 032) having been erected on the other side of the post. The dimensions of the rooms of HS 006 were given as follows: "5 Rooms 14 X 14, Kitchen 14 X 14, Hall 6 X 42, Attic 2 rooms 10 X 12."¹⁹

15. See "Fort Bowie. Diagram of Post." c. 1886. in Murray, "History of Fort Bowie," p. 169.

16. Beaumont to AAG, Division of the Pacific, undated (c. 1886). Copy in the files of FBNHS.

17. Plat, "Fort Bowie, Arizona," dated May 20, 1889.

18. "Report of Public Buildings at Fort Bowie, Arizona, May 20, 1889." Miscellaneous records. Microfilm MC 12.

19. Ibid.

HS 007. Tailor Shop (second Post Bakery).

Completed in October, 1869, this structure functioned for seventeen years as the post bakery.¹ As a bakehouse, it replaced one (HS 012) located at the north side of the fort which operated temporarily in 1868 and early 1869. The Abrams drawing of Fort Bowie shows HS 007 to be a small adobe structure with the customary earthen roof supported by vigas situated about midway along the east side of the parade. A chimney and window were located at the north end of the roof, while a door was on the west or front side facing the parade. A rectangular addition, probably housing an oven, was attached to the rear of the building. It is apparent from this drawing that HS 007 was not fully operational in November, 1869; flour barrels standing behind HS 012 indicate that that structure was yet functioning as a bakehouse. The shape of HS 007 and its rear addition can be seen in a plat of Fort Bowie completed late in 1870.² The building measured 17 feet long by 15 feet wide, and consisted of one room plus the oven, which had "a capacity for baking 150 rations."³ A photograph taken in 1874 shows what appears to be a low adobe wall erected to enclose an area on the north end of the building with a doorway facing the parade. Like the other structures, the bakery suffered from a leaky roof. By the late 1870s the room was deemed too small and the condition of the oven was described as "not good".⁴ An inspection in June, 1879, reported the following information:

1. "Report of Buildings established and in process of construction at Camp Bowie, A.T. for the month of Oct. 1869." NA, RG 133. District of Arizona, LR. Copy in the files of FBNHS.

2. "Diagram of Camp Bowie, A.T., December, 1870."

3. "Descriptive Commentaries." Fort Bowie Ariz., vol 127 (1876); Outline Description of Military Posts in the Military Division of the Pacific, p.7.

4. Inspection Report, Fort Bowie, January 19, 1879. NA, RG 159. Entry 15. 398/79.

Condition good. Capacity 27 by 18 feet. No additions have been made [since last inspection?]. The mud roof is to be replaced with one of shingles and an addition 16 by 14 feet is to be made, the material has been procured and the work will be done as rapidly as possible.⁵

In 1880 it was again suggested that "the roof of the bake house . . . be shingled, and a new oven built. There are enough fire brick at the post to build and oven."⁶ Evidently the oven was improved, for an inspection report of 1882 noted its good condition.⁷ Water for mixing bread dough reportedly was obtained from a well probably located behind the building.⁸ An estimate for work to be done on HS 007 in 1883 enumerated materials and labor to be used in erecting a porch (22 feet by 8 feet), putting down board flooring, and constructing a hip roof.⁹ And in 1884 Major Beaumont requested that the outside of the bakery be plastered.¹⁰

5. "Report of an Inspection of Public Buildings made on Fort Bowie, A.T on the 30th day of June 1879." Miscellaneous records. Microfilm MC 12.

6. Inspection Report, Fort Bowie, August 12, 1880. NA, RG 159. Entry 15. 1164/80.

7. Inspection Report, Fort Bowie, December, 21, 22, 1882. NA, RG 159. Entry 15. 148/83.

8. Inspection Report, Fort Bowie, June 17, 1881. NA, RG 159. Entry 15. 724/81. The presence of a well seems most unlikely. Probably water for the bakery came from Apache Spring.

9. "Report of Annual Inspection of Public Buildings of Fort Bowie, A.T., March 31st, 1883." Miscellaneous records. Microfilm MC 12.

10. Beaumont to AG, Department of Arizona, June 30, 1884. NA, RG 393. Department of Arizona, LS. Copy in the Arizona Historical Society.

Much of the work was completed in the early 1880s, and in 1882 the roof was shingled and the floor and door repaired.¹¹ Porches were placed on the front and rear, for a photograph of c. 1884-85 shows them having been added, along with a gabled roof.¹² Yet even with these repairs, the bakery was too small to effectively provide the requisite daily bread ration, especially when garrison strength was increased in response to renewed Apache hostilities. Lieutenant Colonel William F. Drum early in 1886 pronounced it wholly inadequate: "The Bake-house is too small, and should be ceiled, have larger proof rack and better place for keeping bread, after it is baked."¹³ In October of that year a fire erupted in the building destroying a large quantity of bread.¹⁴ Meantime, however, a new bakery (HS 028) had begun construction in the northwest corner of the fort. After it was completed HS 007 served as a tailor shop and a barber shop. Major Beaumont described the old, one-room facility as measuring 15 feet by 13 feet, while another source stated that it measured 15 feet by 12 feet.¹⁵ By

11. "Report of Annual Inspection of Public Buildings of Fort Bowie, A.T. March 31st 1883." Miscellaneous records. Microfilm MC 12.

12. Porches for the fronts of the officers' quarters and barracks were built during the late spring and summer of 1883, and it is likely that the bakery was so provided for at that time. See Inspection Report, Fort Bowie, September 10, 1883. NA, RG 159. Entry 15. 865/83.

13. Inspection Report, Fort Bowie, February 7, 1886. NA, RG 159. Entry 15. 661/86.

14. Fort Bowie General Orders No. 146, October 31, 1886. Copy in the files of FBNHS.

15. Beaumont to AAG, Division of the Pacific, undated (c. 1886). Copy in the files of FBNHS; "Report of Public Buildings at Fort Bowie, Arizona, May 20, 1889." Miscellaneous records. Microfilm MC 12.

1894, when the last known photograph was taken of Fort Bowie before its abandonment, the front porch had been stripped from HS 007 and the structure had been re-roofed, the gable running at right angle to its previous direction.

HS 008. Cavalry Barracks.

Built along the east side of the parade at the northeast corner, this structure was evidently begun as a quarters by the California Volunteers before May, 1866. After the regulars arrived at Fort Bowie they converted the unfinished work into a stable and granary of adobe and concrete measuring 150 feet long by 33 feet wide.¹ The plat prepared by Lieutenant George Wheeler in February, 1869, shows this structure as a forage house and stables, as does the Abrams drawing of the following November.² This drawing indicates that the forage house or granary was located on the north end of the structure and had a flat dirt roof of viga style construction and a door on the east side. There was a low-walled corral area adjoining the south end of the forage house, and stables adjoining the south end of this section. Both the corral wall and that of the stables were made of adobe. Four small windows were present along the east side of the stables.

In the summer of 1870 this structure was reconverted into a company quarters³ and was described as being 156 feet long by 30 feet 6 inches wide, and consisting of, north to south, an office (orderly room), a library, two squadrooms, and a storeroom.⁴ Each of the squadrooms measured 50 feet long by 30 feet wide by

1. "Descriptive Commentaries." Fort Bowie Ariz., vol. 125 (1871); Jones to Fry, April 28, 1869.

2. "Map of the Military Reservation at Camp Bowie . . . February 1869."

3. "Diagram of Camp Bowie, A.T., August, 1870"; "Descriptive Commentaries." Fort Bowie, Ariz., vol. 125 (1871).

4. "Descriptive Commentaries." Fort Bowie, Ariz., vol. 125 (1871); "Diagram of Camp Bowie, A.T., December, 1870"; "Report on Barracks and Hospitals," p. 471.

12 feet high. The library, or reading room, was 20 feet by 30 feet. There were doors leading into each of the first four rooms; the storeroom was entered through the squad room adjoining it. Two doors were located on the back (west) side of the squad rooms.⁵ In late 1870 the quarters was occupied by Company G, First Cavalry. According to a sanitary report of December, 1870, there was abundant ventilation and each occupant enjoyed 400 cubic feet of air space. Heating was accomplished by stoves and fire places, and barracks fixtures consisted of rough-board bunks with straw-filled mattresses and blankets, arms racks, and "a few shelves."⁶

Somehow this building was shortened by 11 feet soon after the above measurements were taken. According to one account, the structure in 1871 measured in length only 145 feet, the width remaining unchanged.⁷ However, by 1879 it measured 155 feet by 35 feet, close to its original dimensions.⁸ The disparity, if it really existed, is inexplicable. When the structure was altered from a stables a flat earthen roof supported by logs or vigas was

5. "Diagram of Camp Bowie, A.T., December, 1870."

6. "Descriptive Commentaries." Fort Bowie, Ariz., vol. 125 (1871). Another source indicates that Company G, Third Cavalry, occupied these quarters as of December, 1870. "Diagram of Camp Bowie, A.T., December, 1870."

7. Outline Description of U.S. Military Posts and Stations in the year 1871, p. 65. The same dimensions are given in "Descriptive Commentaries," Fort Bowie, Ariz., vol. 127 (1876); and in Outline Descriptions of Military Posts in the Military Division of the Pacific, p. 6.

8. "Report of an Inspection of Public Buildings made at Fort Bowie, A.T. on the 30th day of June 1879." Miscellaneous records. Microfilm MC 12.

built on it.⁹ Photos taken in 1874 clearly show the roof construction. Chimneys were situated towards the north and south ends of the building, and doubtless they were connected to fireplaces in each of the squadrooms.

As in the case of the other buildings at the post, the earthen roof of HS 008 leaked badly, and in January, 1879, an inspecting officer found the soldiers encamped in tents on the parade, afraid to sleep in the barracks for fear the roofs might collapse.¹⁰ The officer recommended shingling the roof,¹¹ and this was done in the following June and July.¹² Probably a hip roof was placed on the building at this time. Other frequent recommendations called for the erection of bath and wash houses and the addition of porches. A porch was urged for the west side of HS 008 because the roof of the structure did not project far enough beyond the wall to keep rainfall from severely eroding the adobe.¹³ Also, the mud floors of the quarters presented problems. It was advised "that the Company barracks be floored with tongued and grooved lumber with ventilation underneath; the dust that now arises when not 'wet down' in sweeping the mud floors, is disgusting; and the moisture

9. Outline Description of U.S. Military Posts and Stations in the year 1871, p. 65; "Descriptive Commentaries," Fort Bowie, Ariz., vol. 127 (1876).

10. Inspection Report, Fort Bowie, January 19, 1879. NA, RG 159. Entry 15. 398/79.

11. Ibid.

12. "Report of an Inspection of Public Buildings made at Fort Bowie, A.T. on the 30th day of June 1879." Miscellaneous records. Microfilm MC 12.

13. Inspection Report, Fort Bowie, June 17, 1881. NA, RG 159. Entry 15. 724/81; Inspection Report, Fort Bowie, September 5, 1881. NA, RG 159. Entry 15. 1199/81.

occasioned by the application of water to allay the dust, is unhealthy and productive of rheumatic diseases."¹⁴ The quarters were partially floored in the early autumn of 1882. Through some confusion, the lumber order with which to accomplish the work was duplicated, and the excess was used for making other needed repairs and for flooring other buildings.¹⁵ A manta or blanket ceiling was also installed in 1882.¹⁶

Early in 1883 estimates were prepared for building an additional room, 10 feet by 34 feet, plus a storeroom 3 feet by 34 feet, onto HS 008 at a total cost of \$283.90. An extension to the existing porch measuring 8 feet by 50 feet was also called for.¹⁷ The porch or porches for this barracks were completed in the summer of 1883 and gave the troops substantial relief from the Arizona sun.¹⁸ Photographs of the building taken in 1884 and 1885 disclose a major alteration in the south portion whereby the walls were heightened, probably in 1879, in order to compensate for the upward slope of the terrain. Consequently, the hip roofs of the north and south sections were correspondingly staggered, thus giving the structure the appearance of being split-leveled. One

14. Inspection Report, Fort Bowie, March 16, 17, 18, 1882. NA, RG 159. Entry 15. 334/82.

15. Captain William A. Rafferty to AAG, Department of Arizona, October 28, 1882. NA, RG 393. Department of Arizona, LS. Copy in the files of FBNHS.

16. "Report of Annual Inspection of Public Buildings of Fort Bowie, A.T., March 31st 1883," Miscellaneous records. Microfilm MC 12.

17. "Report of Annual Inspection of Public Buildings of Fort Bowie, A.T., March 31st 1883." Miscellaneous records. Microfilm MC 12.

18. Inspection Report, Fort Bowie, September 10, 1883. NA, RG 159. Entry 15. 865/83.

chimney was positioned on the south end of the roof, another on the southern portion, and another north of center on the northernmost roof. The adobe building appears to have been plastered and whitewashed.

In June, 1884, Commanding Officer Beaumont requested lumber for flooring the storeroom of HS 009.¹⁹ He also asked for \$312.00 for general repairs to the quarters.²⁰ And in March, 1885, Fort Bowie requisitioned 30,000 redwood shingles for re-roofing the barracks. At the same time materials were requested with which to paint the quarters, floor a wash house, and build shelving.²¹ During the Geronimo Campaign of 1885-86 more troops were stationed at Fort Bowie than its barracks could accommodate. The men were placed in tents on the parade, but Major Beaumont suggested that the existing quarters "be converted into two story quarters. . . ." ²² This was never done. Beaumont's requests to enlarge the barracks decreased after the surrender of the

19. Beaumont to AAG, Department of Arizona, June 30, 1884. NA, RG 393. Department of Arizona, LS. Copy in the Arizona Historical Society. Lumber for flooring the barracks was almost constantly in demand at Fort Bowie. Wrote Major Beaumont: "The wear and tear on barrack floors . . . [being] excessive on account of the sandy . . . nature of the soil, an unusual quantity of flooring is required to keep good repair." Inspection Report, Fort Bowie, August 14, 1887. NA, RG 159. Entry 15. 959(3)87.

20. Beaumont to AAG, Department of Arizona, November 9, 1884. Fort Bowie, LS. Copy in the files of. FBNHS.

21. "Report of Inspection of Public Buildings at Fort Bowie, A.T., March 31, 1884. "Miscellaneous records. Microfilm MC 12; Letter, First Lieutenant Wilbur E. Wilder, April 15, 1885, accompanying ibid.

22. Inspection Report, Fort Bowie, August 14, 1887. NA, RG 159, Entry 15. 959(3)87.

Chiricahua renegades caused a reduction of the garrison in ensuing years.²³ During the campaign HS 008 was occupied by Troop G, Fourth Cavalry. There is one report that the captured Geronimo was incarcerated in the south end of the quarters before he and his followers were shipped off to exile in Florida.²⁴

At the peak of its utility in the mid- to late 1880s, HS 008 contained but three rooms, suggesting that two partitions were removed so the building might accommodate more men. The rooms consisted of one dormitory measuring 108 feet by 30 feet 5 inches, a storeroom 23 feet by 30 feet 5 inches, and an orderly room of 10 feet by 30 feet 5 inches.²⁵ The structure could comfortably contain fifty-two men and provide each with 800 cubic feet of air space, although this varied. The south half of the barracks had a ceiling 12 feet high from the floor. The other half measured 9 feet 4 inches at the wall, rising to 13 feet 2 inches at the center.²⁶ During the last years of Fort Bowie's occupation HS 008 underwent little or no alteration. There occurred frequent complaints by the post surgeon that the quarters were poorly ventilated and in overall bad condition. The air problem was particularly apparent

23. See Inspection Report, Fort Bowie, August 14, 1887. NA, RG 159. Entry 15. 959(3)87; and Beaumont to AAG, Department of Arizona, October 18, 1888. Fort Bowie, LS. Copy in the Files of FBNHS.

24. Winners of the West, August 28, 1944.

25. Beaumont to AAG, Division of the Pacific, undated (c. 1886). Copy in the files of FBNHS. An inspection report of May 20, 1889 stated that there were five rooms: "1 Room 30 X 100, 1 Room 10 X 30, 1 Room 12 X 30, 2 Rooms 15 X 24." "Report of Public Buildings at Fort Bowie, Arizona." Miscellaneous records. Microfilm MC 12.

26. First Lieutenant Walter M. Dickinson to the Quartermaster General, December 12, 1889. Miscellaneous records. Microfilm MC 12.

"where three or more beds are in the corners with no windows for them."²⁷

Special attention is invited to E Troop Barracks, which are poorly constructed, have no bathing accommodations or urinals, [and] will not contain all the men, some of whom sleep at the stable, others on the porch. At night the air soon becomes noticeably close and foul, on stormy nights when the windows are closed being almost unbearable.²⁸

In the early 1890s two ridge ventilators were built on the roof of HS 008. Each measured 56 inches by 35 inches and each was enclosed with lattice work.²⁹ Among the final recommendations for all the barracks at Fort Bowie was that they be whitewashed and have their windows enlarged to afford better ventilation. "The barracks were whitewashed this season [1891] and will again be whitewashed as soon as the flies are less numerous," said the post commander.³⁰

27. Fort Bowie Medical History, July, 1890. Copy in the files of FBNHS.

28. Fort Bowie Medical History, August, 1890. Copy in the files of FBNHS.

29. Fort Bowie Medical History, July, 1893. Copy in the files of FBNHS.

30. Fort Bowie Medical History, November, 1891. Copy in the files of FBNHS.

HS 009. Kitchen.

This building was situated behind (east) of HS 008 and served as a combination mess room and kitchen for the men of that barracks. Its first known graphic appearance is on a plat of the post made in August, 1870, in which it is termed "Mess Room."¹ Probably its construction dated from the summer of 1870 when the barracks was erected. The adobe kitchen measured 56 feet in length, north to south, and 16 feet in width. It was located about 25 feet from HS 008.² The kitchen occupied the north end of the structure, the dining area the south.³ One door led into the kitchen from the front, or west, side. Another led into the mess room. Another door was located at the rear of the kitchen and yet another led between the two rooms.⁴

Little evident change occurred to this building during its existence. In 1879 it was described as follows:

Condition good, capacity 87 by 19 feet. No additions during the past year. A new roof consisting of cement has been put on during the past year. A shingle roof is to be placed on this building for which all the necessary

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1. "Diagram of Camp Bowie, A.T., August, 1870."
 2. "Descriptive Commentaries," Fort Bowie, Ariz., vol. 125 (1871); "Descriptive Commentaries," Fort Bowie, Ariz., vol. 127 (1876). The building was not present when Major Jones inspected the post in April, 1869. Jones to Fry, April 28, 1869.
 3. "Diagram of Camp Bowie, A.T., December, 1870."
 4. Ibid.

material has been procured. The work will be done as rapidly as possible. No other repairs will be required.⁵

Like other structures at the post, HS 009 had a mud floor that needed covering, a job that was not completed until 1882.⁶ In the early 1880s the flat, dirt roof was replaced with a hip roof, according to photographs taken then. Probably at this time the facility was expanded to provide other necessities; Major Beaumont described it as having four rooms--kitchen 15 feet by 15 feet, mess room 40 feet by 15 feet, bath room (for bathing) 6 feet by 15 feet, and washroom (laundry) 24 feet by 15 feet. Overall length of the structure was in excess of 85 feet.⁷ It was said to be "in very poor condition."⁸ When an earthquake tremor struck in 1887, the building was damaged worse than any other structure at the post, requiring its partial reconstruction.⁹

5. "Report of an Inspection of Public Buildings made at Fort Bowie, A.T. on the 30th day of June 1879." Miscellaneous records. Microfilm MC 12. A report of 1885 gave the dimensions of the dining room as 16 feet by 40 feet and those of the kitchen as 16 feet by 16 feet. "Report of Inspection of Public Buildings at Fort Bowie, A.T., March 31, 1885." Miscellaneous records. Microfilm MC 12.

6. Inspection Report, Fort Bowie, August 12, 1880. NA, RG 159. Entry 15. 1164/80; "Report of Annual Inspection of Public Buildings of Fort Bowie, A.T. March 31st 1883." Miscellaneous records. Microfilm MC 12. The building needed re-flooring by 1885 and probably the work was accomplished then. "Report of Inspection of Public Buildings at Fort Bowie, A.T., March 31, 1885." Miscellaneous records. Microfilm MC 12.

7. Beaumont to AAG, Division of the Pacific, undated (c. 1886). Copy in the files of FBNHS.

8. "Report of the Annual Inspection of Public Buildings at Fort Bowie, A.T." 1886. Copy in the files of FBNHS.

9. Inspection Report, Fort Bowie, August 14, 1887. NA, RG 159. Entry 15. 959(3)87.

During the following year the post commander reported that "the kitchen and mess room [(HS 009)] . . . is falling down and is too small in every way," and urged the erection of a new one.¹⁰ This was shortly done, and early in 1889 a frame mess facility (HS 031) stood at the north end of the barracks.¹¹ The building it replaced was temporarily used as a barracks for infantry troops.¹² Photographs taken in 1893 and 1894, just before Fort Bowie's abandonment, indicate that HS 009, the old kitchen and mess hall, had been torn down.

10. Beaumont to AAG, Department of Arizona, October 18, 1888. Fort Bowie LS. Copy in the files of FBNHS.

11. Plat, "Fort Bowie, Arizona," dated May 20, 1889.

12. "Report of Public Buildings at Fort Bowie, Arizona, May 20, 1889." Miscellaneous records. Microfilm MC 12.

HS 010. Cavalry Barracks.

Located on the north side of the parade near the northeast corner of the post, HS 010 was constructed in the summer of 1870. It was built of adobe with a flat, dirt roof supported by logs, and measured 118 feet long by 24 feet wide. Attached to this structure on its east end was a wing 66 feet by 16 feet that housed a kitchen and messroom. Another much shorter wing was present on the west end which contained a storeroom and an orderly room.¹ The dimensions of the two squad rooms were 40 feet by 24 feet by 12 feet high. Ventilation was termed "abundant," heating was by stoves and fireplaces, and furniture consisted of bunks, shelving and arms racks.² There were doors located in the front and rear of each of the squadrooms. At the west end, the orderly room fronted on the parade, with the storeroom behind. Doors stood at each end of this small wing, and another led between the two rooms. In the east wing the dining room adjoined the rear of the squad room, but no doorway was present between them. Instead, the mess area was entered via a door located on the west side of the room. At the far rear was the kitchen, with doors on both east and west sides plus one leading into the dining room.³

In the earliest known photos of HS 010 can be seen the slight rear-ward extension at the west end, as well as the kitchen/mess

1. "Descriptive Commentaries," Fort Bowie, Ariz., vol. 125 (1871); "Diagram of Camp Bowie, A.T., December, 1870"; "Report on Barracks and Hospitals," p. 471; Outline Description of U.S. Military Post and Stations in the Year 1871, p.65.

2. Descriptive Commentaries, "Fort Bowie, Ariz., vol. 125 (1871)

3. "Diagram of Camp Bowie, A.T., December, 1870." The dimensions of the orderly room and storeroom, as given years later, were 14 feet by 12 feet and 14 feet by 20 feet. "Report of Annual Inspection of Public Buildings of Fort Bowie, A.T., March 31st 1883." Miscellaneous records. Microfilm MC 12.

hall extension. One window was present at the west end of the building; another was present on the north face of the west end extension. The two back doors of the squad rooms can easily be seen, one of them with steps and rails leading to it. Two doors and three windows can be discerned on the west side of the kitchen/mess hall wing. There were two chimneys, one at the west end of the main building, one at the center. Another chimney was located at the north end of the large wing in the area of the kitchen. What appears to be a small, fenced enclosure was present in the corner between the barracks and the kitchen/mess hall wing.

This barracks was likewise subjected to the ravages of wet weather. In 1879 the men were forced to live in tents on the parade because the roof of HS 010 leaked so badly there was concern it might collapse.⁴ An inspection report later that year described the barracks in the following manner:

Condition good. Capacity 128 by 29 feet. No additions have been made during the past year. The alterations and repairs consists [sic] in a new [hip] shingle roof in place of one of mud not yet completed. No repairs will be required during the next fiscal year.

The same report described the wing, of "capacity 69 by 21 feet," in identical terms.⁵

4. Inspection Report, Fort Bowie, January 19, 1879. NA, RG 159. Entry 15. 398/79.

5. "Report of an Inspection of Public Buildings made at Fort Bowie, A.T. on the 30th day of June 1879." Miscellaneous reports. Microfilm MC 12. The discrepancies between measurements of buildings at Fort Bowie is inexplicable, except for the possibility that they represent approximations estimated for by the individual officers concerned.

Work completed on HS 010 in the 1880s was much the same as that accomplished for the other cavalry barracks (HS 008). Flooring was an especially irksome problem. The earthen floors alternated between mud during rainy weather and dust when it was dry. When the structure did get wooden floors, the gravelly nature of the soil at Fort Bowie wore them out and necessitated their replacement.⁶ The quarters needed bathing and laundry facilities, too.⁷ One officer in 1881 recommended that a porch be built on the south face of HS 010 in order to help protect the adobe wall from rain erosion.⁸ This recommendation was repeated the following year,⁹ and in 1883 a porch 16 feet wide was built on the barracks.¹⁰ At about the same time the windows and doors of the

6. Inspection Report, Fort Bowie, August 12, 1880. NA, RG 159. Entry 15. 1164/80; Inspection Report, Fort Bowie, September 5, 1881. NA, RG 159. Entry 15. 1199/81; Inspection Report, Fort Bowie, March 16, 17, 18, 1882. NA, RG 159. Entry 15. 334/82; "Report of Annual Inspection of Public Buildings of Fort Bowie, A.T., March 31st 1883." Miscellaneous records. Microfilm MC 12; "Report of Inspection of Public Buildings at Fort Bowie, A.T., March 31, 1885," in *ibid*; Letter, First Lieutenant Wilbur E. Wilder, April 15, 1885, accompanying *ibid*; Beaumont to AAG, Department of Arizona, June 30, 1884. NA, RG 393. Department of Arizona, LS. Copy in the Arizona Historical Society; Inspection Report, Fort Bowie, August 14, 1887. NA, RG 159. Entry 15. 959(3)87.

7. Inspection Report, Fort Bowie, June 17, 1881. NA, RG 159. Entry 15. 724/81; Inspection Report, Fort Bowie, September 5, 1881. NA, RG 159. Entry 15. 1199/81. However, a washhouse (HS 011) had been erected behind the barracks between December 1870 and 1874, when it first appeared in photographs. "Diagram of Camp Bowie, A.T., December, 1870."

8. Inspection Report, Fort Bowie, September 5, 1881. NA, RG 159. Entry 15. 1199/81.

9. Inspection Report, Fort Bowie, March 16, 17, 18, 1882. NA, RG 159. Entry 15. 334/82.

10. Inspection Report, Fort Bowie, September 10, 1883. NA, RG 159. Entry 15. 865/83; "Report of Annual Inspection of Public Buildings of Fort Bowie, A.T., March 31st 1883. Miscellaneous records. Microfilm MC 12.

structure were framed all around,¹¹ and in 1885 the roof was re-worked with redwood shingles and the rooms were ceiled.¹²

Seemingly, by 1885 the partition between the squad rooms had been removed so that there was but one dormitory measuring 100 feet by 30 feet. The kitchen measured 24 feet by 18 feet, the dining room 48 feet by 18 feet.¹³ The building needed to be enlarged, and in 1887 Major Beaumont suggested that a second story be added to the structure.¹⁴ But the curtailment of activity following the Geronimo Campaign precluded that from happening. One of the soldiers stationed at Fort Bowie during the late 1880s was Private Reginald A. Bradley of Troop C, Fourth Cavalry. In an interview conducted in January, 1968, Bradley recalled some of the details of the interior of HS 010, the quarters in which he resided. The walls of the building, he said, were plastered and there was a ceiling either of canvas or plaster. Furniture consisted of single iron bunks, stoves, and locked, circular gun racks in which the Springfield carbines were stored. In the mess room were bare wooden tables and benches which were cleaned by rubbing them with sand. The orderly room, located at the west end of the

11. "Report of Annual Inspection of Public Buildings of Fort Bowie, A.T., March 31st 1883." Miscellaneous records. Microfilm MC 12; Photos taken in 1884 and 1885.

12. "Report of Inspection of Public Buildings at Fort Bowie, A.T., March 31, 1885." Miscellaneous records. Microfilm MC 12.

13. *Ibid.* Major Beaumont, in a report prepared at about this time, stated that the dormitory measured 102 feet by 24 feet, the orderly room 12 feet 10 inches by 14 feet, the storeroom 17 feet 3 inches by 12 feet 10 inches, the messroom 16 feet by 44 feet 7 inches, and the kitchen 16 feet by 21 feet. Beaumont to AAG, Division of the Pacific, undated (c. 1886). Copy in the files of FBNHS.

14. Inspection Report, Fort Bowie, August 14, 1887. NA, RG 159. Entry 15. 959(3)87.

barracks, "was just a little place, about ten by ten, with a desk, three chairs, and . . . [the first sergeant's] iron bunk. The troop library, about 50 to 60 books, was kept there."¹⁵

With the installation of a piped water system at Fort Bowie in 1885, the kitchen acquired running water and a fire hydrant was located at the southwest corner of the building.¹⁶ Late in its existence HS 010 had an additional room attached, probably a bathing area, that measured 18 feet by 20 feet. In 1889 the dimensions of the other rooms were given as "1 Room 24 x 100, 2 Rooms 16 x 24, 1 Room 14 x 40, Kitchen 14 x 20."¹⁷ The ceiling measured 9 feet 6 inches from the floor at the walls, rising to 13 feet in the center.¹⁸ Throughout the early 1890s there were frequent complaints registered about the poor ventilation in HS 010. To alleviate overcrowding of the barracks, some of the soldiers moved their bunks to the small building behind the quarters (HS 012).¹⁹ In October, 1891, the post surgeon complained of damage to the barracks: "One room occupied by some of K Troop has large openings in the walls exposing the men to continual cold drafts." But the post commander, with neither lumber nor money for repairs, could offer little consolation.²⁰ By early 1893 the post

15. Bradley interview.

16. Plat, "Fort Bowie, Arizona," dated May 20, 1889.

17. "Report of Public Buildings at Fort Bowie, Arizona, May 20, 1889." Miscellaneous records. Microfilm MC 12.

18. First Lieutenant Walter M. Dickinson to the Quartermaster General, December 12, 1889. Miscellaneous records. Microfilm MC 12.

19. Fort Bowie Medical History, July, 1890. Copy in the files of FBNHS.

20. Fort Bowie Medical History, October, 1890. Copy in the files of FBNHS.

surgeon could write that "the quarters are old and dilapidated, and in need of repair." He recommended additional windows for HS 010 to improve both the lighting and ventilation.²¹ New windows, twice the size of those they replaced, were built into the barracks in 1893 and along with two new roof ventilators, each measuring 56 by 35 inches, gave needed comfort to the soldiers.²² To relieve overcrowding and increase the cubic air space per man, the post surgeon in December, 1893, urged the erection of a wing 20 feet long on the building.²³ Less than a year later, however, Fort Bowie was abandoned by the army.

21. Fort Bowie Medical History, January, 1893. Copy in the files of FBNHS.

22. Fort Bowie Medical History, December, 1893. Copy in the files of FBNHS.

23. Ibid.

HS 011. Wash House.

There actually were two structures located on this site behind the cavalry barracks (HS 010) on the north side of the parade. The first, of adobe with viga roof construction, was built in 1873. It had two rooms, one serving as bathing room, the other as a wash house or laundry.¹ In June, 1879, the building was described as measuring 28 feet long by 19 feet wide.² Photographs taken in 1874 reveal that it was a very low structure with three small windows situated on its north side and one on its west end. Apparently little alteration was made to the building during its first years, although in 1882 it was floored and otherwise repaired.³ By 1885, however, it had gained a hip roof and the window on the east end appears to have been converted into a door, according to photos of the time. The structure was still being used as a wash house, for in one picture laundry can be seen hanging at the west end.

In 1886 the adobe wash house was razed and replaced by a larger adobe building that functioned in the same capacity.⁴ This structure had frame partitions⁵ and was erected slightly south of the site of the earlier one. Photos show it to have had three windows on its north side and two on its west side. It seems to

1. "Descriptive Commentaries, "Fort Bowie, Ariz., vol. 127 (1876).

2. "Report of an Inspection of Public Buildings at Fort Bowie, A.T. on the 30th day of June 1879." Miscellaneous records. Microfilm MC 12.

3. Ibid.; "Report of Annual Inspection of Public Buildings of Fort Bowie, A.T. March 31st 1883." Miscellaneous records. Microfilm MC 12.

4. "Report of Public Buildings at Fort Bowie Arizona, May 20, 1889." Miscellaneous records. Microfilm MC 12.

5. Ibid.

have been built upon a very high concrete foundation, and possibly there was a cellar associated with it. A door was located on the north side of the foundation towards the west end of the building. Major Beaumont represented the "Detached bath and washroom" as having dimensions of 24 feet 9 inches by 89 feet.⁶ However, in 1889 it reportedly contained four rooms. One measured 16 feet by 18 feet, one 10 feet by 18 feet, and two 6 feet by 9 feet.⁷ The latter two rooms were possibly used as water closets. The last known change to HS 011 is apparent in a photograph of Fort Bowie taken shortly before the post's abandonment. It shows a chimney having been added to the north slope of the roof of the wash house, indicative of a stove within.

6. Beaumont to AAG, Division of the Pacific, undated (c. 1886). Copy in the files of FBNHS.

7. " Report of Public Buildings at for Bowie Arizona, May 20, 1889." Miscellaneous records. Microfilm MC 12.

HS 012. Oil House (first Post Bakery).

"The Post Bakery, containing one room and two ovens is situated on the north side of the parade ground, and in good condition, the ovens having been lately repaired."¹ Thus was described, in 1870, one of the oldest structures at Fort Bowie. It was built prior to February, 1869,² and according to its pictorial appearance in the Abrams drawing it was made, like the other early structures, of adobe with a flat mud roof mounted on logs. There was a window in the west side of the building and a chimney along the north edge of the roof. Flour barrels were arranged along the north (rear) side. The bakery function of this building was shortlived; by August, 1870, it was termed a "kitchen," ostensibly serving HS 013 which was partially being used to quarter troops.³ By October of that year HS 007 was completed as the new bakehouse, and in December HS 012 was still called a kitchen.⁴ A plat of the latter date shows that it contained one room and had a door located in the front (south) side.⁵

The use of HS 012 changed fairly frequently during Fort Bowie's occupation. From a kitchen it became a tailor shop (1877).⁶

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1. "Descriptive Commentaries," Fort Bowie, Ariz., vol 125 (1871).
 2. "Map of the Military Reservation at Camp Bowie . . . February 1869.
 3. "Diagram of Camp Bowie, A.T., August; 1870."
 4. See above description of HS 007; "Diagram of Camp Bowie, A.T., December, 1870."
 5. "Diagram of Camp Bowie, A.T., December, 1870."
 6. "Camp Bowie A.T." Diagram dated January, 1877. Copy in the files of FBNHS.

As of 1883 it was a barber shop.⁷ After that the structure functioned as a paint shop (1886), oil house (1889), and tailor shop again (1890).⁸ When the garrison became overcrowded briefly in the summer of 1890, the building was used as a temporary barracks.⁹

Beaumont reported the dimensions of this structure as 12 feet by 14 feet. Another account stated that it measured 16 feet square.¹⁰ The building seems to have undergone little additional construction or repair work; however, a photograph taken in 1886 shows a series of buttresses placed along the west wall to support it. And a photograph of 1887-88 shows wooden planking having been placed over the buttresses. In 1889 the condition of HS 012 was pronounced as "poor,"¹¹ and by 1893, as revealed in photos, it had been replaced by a new and larger structure, hip-roofed with a chimney positioned at the center of the roof and a window and door located on the north side.

7. "Diagram of Post." March, 1883. Copy in the files of FBNHS.

8. See Beaumont to AAG, Division of the Pacific, undated (c. 1886). Copy in the files of FBNHS; "Report of Public Buildings at Fort Bowie, Arizona, May 20, 1889." Miscellaneous records. Microfilm MC 12; Fort Bowie Medical History, July, 1890. Copy in the files of FBNHS.

9. Fort Bowie Medical History, July, 1890. Copy in the files of FBNHS.

10. Beaumont to AAG, Division of the Pacific, undated (c. 1886). Copy in the files of FBNHS; "Report of Public Buildings at Fort Bowie, Arizona, May 20, 1889." Miscellaneous records. Microfilm MC 12.

11. "Report of Public Buildings at Fort Bowie, Arizona, May 20, 1889." Miscellaneous Records. Microfilm MC 12.

HS 013. Granary.

One of the first buildings to be erected on the site of the second Fort Bowie, this structure was begun in 1867 evidently as a storeroom, but on completion part of it became used as a barracks.¹ In April, 1869, Major Roger Jones, who inspected the new post, described it as being 120 feet long by 22 feet wide.² The building was apparently erected in two sections, according to a description penned late in 1870:

The building is 110 x 22 feet [sic] and consists of one squadroom and an office; a kitchen [HS 012], 15 x 15 was put up conveniently near and in rear of these quarters; adjoining this building was a large room [40 x 22 feet] erected, intended for, and occupied for a time as a Commissary store room, but used as barracks for a company from the fall of 1869 till the summer of 1870; a temporary shed was attached to the rear of this room, to serve as a Kitchen; as regards the mess room of the two Companies occupying these quarters, . . . there was no mess room.³

On an 1869 plat of Fort Bowie HS 013 is depicted as "Commissary & Co. Quarters."⁴ The building was of adobe, with the customary flat, earthen roof supported by vigas. There were

1. "Descriptive Commentaries," Fort Bowie, Ariz., vol. 125 (1871).

2. Jones to Fry, April 28, 1869.

3. "Descriptive Commentaries," Fort Bowie, Ariz., vol. 125 (1871); Outline Description of U.S. Military Posts and Stations in the Year 1871 p. 65. Jones stated that the commissary storeroom was 40 feet by 18 feet. Jones to Fry, April 28, 1869.

4. "Map of the Military Reservation at Camp Bowie . . . February 1869."

two chimneys present, one at the east end of the building, the other about midway along its roof. On the north side were seven windows. A single door was situated towards the east end of the structure, and a double door was near the west end where stores were probably kept.⁵ The function of the building changed repeatedly, especially during its early existence. By August, 1870, it was termed a barracks with a forage room located in its west end,⁶ and in the following December plans called for it to become the "permanent post hospital."⁷ Eventually it became, for a time, the principal quartermaster storehouse at the post.

Possibly during the early 1870s the earthen roof of HS 013 was raised as proposed "so as to afford more air space to the occupants."⁸ In 1876 the interior consisted of "four rooms used respectively as Quartermaster and Ordnance Store rooms, Quartermaster Office and Commissary Sergeants quarters. . . ." The floor was mud.⁹ It was in this building that a party was held in 1873 after the Fort Bowie baseball team defeated a rival club from Camp Grant:

5. Abrams drawing.

6. "Diagram of Camp Bowie, A.T., August, 1870." See also "Report on Barracks and Hospitals," p. 472.

7. "Diagram of Camp Bowie, A.T., December, 1870."

8. "Descriptive Commentaries, "Fort Bowie, Ariz., vol. 125 (1871).

9. "Descriptive Commentaries," Fort Bowie, Ariz., vol. 127 (1876). The rooms are outlined in "Diagram of Camp Bowie, A.T., December, 1870." During the early part of 1883 the post commissary sergeant and his family were still living in a room in the end of HS 013. The room was divided in two by a board partition. "Report of Annual Inspection of Public Buildings at Fort Bowie, A.T., March 31st 1883." Miscellaneous records. Microfilm MC 12.

Immediately after the game a collection was partaken of, and in the evening the festivities of the day wound up with a ball, which the devotees of Terpsichore kept up until the "wee hours of morn." The officers of the garrison, with their estimable ladies, graced the hall with their presence, and in the course of the evening the noted Cochise, with a couple of his warriors, looked in upon the "boys in blue."¹⁰

The quartermaster storehouse was damaged by storms in February and March, 1874, requiring that the roof be supported by uprights.¹¹ Severe rainstorms in the winter of 1879 nearly ruined the adobe building, prompting an inspecting officer to recommend that the roof be shingled.¹² Some alterations were completed in the following spring,¹³ and probably the ordnance stores were removed to the building from their former place adjoining the hospital. During the summer of 1880 an officer reported the following:

No magazine, one should be built. A fire recently occurred [sic] in the quartermaster's store-house, in which the ordnance is stored. Considerable danger was

10. Army and Navy Journal, December 20, 1873.

11. Telegram, Captain Samuel S. Sumner to AAAG, Department of Arizona, February 18, 1874. Fort Bowie, LS. Copy in the files of FBNHS; Captain Joseph T. Haskell to AAAG, Department of Arizona, April 1, 1874. Fort Bowie, LS. Copy in the files of FBNHS.

12. Inspection Report, Fort Bowie, January 19, 1879. NA, RG 159. Entry 15. 398/79.

13. Fort Bowie Medical History, April, 1879. Copy in the files of FBNHS.

apprehended at the time. Men are timid in approaching a burning building where ordnance is stored. A small amount of money would build a magazine, and it might at some time prevent a great loss of life and property.¹⁴

The mud roof of the storehouse was replaced with a shingled, hipped one early in 1881.¹⁵ Major criticisms of the structure were that it lacked a wooden floor and that the outside needed to be plastered to protect the adobe and prevent its erosion. A forage house, or granary was also required, the room in the storehouse used for grain being wholly inadequate.¹⁶ In December, 1882, the lumber for the new granary had arrived at the post,¹⁷ and the building (HS 022) was shortly erected behind the storehouse.¹⁸ A fence was built to enclose the area between the buildings.¹⁹ Major Beaumont reported that "the Store houses are two in number. One

14. Inspection Report, Fort Bowie, August 12, 1880. NA, RG 159. Entry 15. 1164/80. Ordnance was being stored in the Quartermaster storehouse as late as 1884.

15. Fort Bowie Medical History, March, 1881. Copy in the files of FBNHS.

16. Inspection Report, Fort Bowie, June 17, 1881. NA, RG 159. Entry 15. 724/81; Inspection Report, Fort Bowie, September 5, 1881. NA, RG 159. Entry 15. 199/81; Inspection Report, Fort Bowie, December 21, 22, 1882. NA, RG 159. Entry 15. 48/83. An inspection of 1884 disclosed that the foundation of the storehouse required preventive maintenance: "Some repairing to the foundation of the walls is needed, as the rains may undermine them, but if attended to in time, the damage may be averted." Inspection Report, Fort Bowie, May 12, 1884. NA, RG 159. Entry 15. 584/84.

17. Inspection Report, Fort Bowie, December 21, 22, 1882. NA, RG 159. Entry 15. 148/83.

18. "Diagram of Post," March, 1883.

[HS 022] a grain and clothing store house is in good condition. The other [HS 013 is] for miscellaneous supplies."²⁰ Some time after its construction Major Beaumont decided to utilize the new granary building (HS 022) as his quartermaster storehouse and turn the old structure (HS 013) into a granary.²¹ He described the latter building as an "adobe forage house" measuring 103 feet 9 inches by 17 feet 10 inches, with a small room 9 feet by 17 feet 10 inches and an ordnance room 21 feet 5 inches by 17 feet 10 inches.²² The building was also used as a lumber storage room and library.²³ In August, 1887, possibly in reference to the age and

19. Photograph taken c. 1884-85.

20. Inspection Report, Fort Bowie, September 2, 1884. NA, RG 159. Entry 15. 1232/84.

21. "Fort Bowie Diagram of Post." c. 1886. It is likely, though not certain, that the roof of HS 013 was re-shingled in 1885. See letter, Lieutenant Wilbur E. Wilder, April 15, 1885, accompanying "Report of Inspection of Public Buildings at Fort Bowie, A.T., March 31, 1885. Miscellaneous records. Microfilm MC 12.

22. Beaumont to AAG, Division of the Pacific, undated (c. 1886). Copy in the files of FBNHS. A plan located in the National archives and labled "Annex to Granary" appears to refer to this building. The plan, dated 1887, shows a structure 125 feet long and 24 feet wide with walls 12 feet high. NA, RG 92. Records of the Office of the Quartermaster General. Consolidated correspondence file, 1794-1915.

23. "Report of the the Annual Inspection of Public Buildings at Ft. Bowie, A.T." Copy in the files of FBNHS. In response to a departmental request for information about post libraries, Major Beaumont replied: "A Post Library is maintained at this Post, but . . . there is no suitable room or building at the Post for library purposes. The room used is 18' x 16' and next to the ordnance store room and magazine, consequently no fire can be kept in the library, during the winter months, as it would be unsafe." Beaumont to AAG, Department of Arizona, April 16, 1888. Fort Bowie, LS. Copy in the files of FBNHS. In regard to the ordnance storeroom, Beaumont wrote, "The present one is next [to] the one occupied as a Post Library, is most inconvenient and in case of fire would be in great danger." Inspection Report, Fort Bowie, August 14, 1887. NA, RG 159. Entry 15. 959(3)87.

condition of the structure, Beaumont stated that "a forage house . . . is greatly needed."²⁴ And there is evidence that an annex was constructed the next year.²⁵ Still later, when a possibility arose that the garrison would be increased, Major Henry E. Noyes, who succeeded Beaumont, suggested that the granary be remodeled into a barracks.²⁶ But this was never done before Ft. Bowie was closed. As of May, 1889, HS 013 was being used as a granary, magazine, and paint shop. There were five rooms measuring, respectively, 18 feet by 24 feet, 18 feet by 20 feet, 10 feet by 18 feet, 20 feet by 18 feet, and 18 feet by 75 feet.²⁷

24. Inspection Report, Fort Bowie, August 14, 1887. NA, RG 159. Entry 15. 959(3)87. A new forage house, wrote Beaumont, "is required on account of the limited storage at the Post; paint, oils, lumber, iron, grain, cement, signal property, ordnance stores and ammunition [are] all under one roof." Beaumont to the Adjutant General, U.S. Army, August 20, 1887. Fort Bowie, LS. Copy in the files of FBNHS. The storage of ordnance munitions in this building continued to be a matter of grave concern. One inspecting officer noted that "the room at present used for both magazine and storeroom is in the middle of a building in one wall of which is a chimney." Inspection Report, Fort Bowie, February 7, 1886. NA, RG 159. Entry 15. 661/86.

25. See "Supplementary Estimate for Annex to Granary at Fort Bowie, A.T., for fiscal year ending June 30, 1888." Miscellaneous records. Microfilm MC 12.

26. Noyes to AAG, Department of Arizona, February 3, 1890. Fort Bowie, LS. Copy in the files of FBNHS. Beaumont had earlier advocated such a measure. "A building, now used for an Ordnance Storeroom, forage house and library building, will admit of a second story and could be transformed into an excellent Barrack. . . ." Inspection Report, Fort Bowie, August 14, 1887. NA, RG 159. Entry 15. 959(3)87.

27. "Report of Public Buildings at Fort Bowie, Arizona, May 20, 1889." Miscellaneous Records. Microfilm MC 12.

HS 014. Subsistence (Commissary) Storehouse.

This flat-roofed adobe building was erected between February and November, 1869 immediately adjacent to, and connecting with, HS 015 situated on the northwest corner of the parade.¹ An early account noted that "the Quartermaster and Commissary storerooms and offices, also the Post Adjutants [sic] Office, are at the present time, after many changes, in a building on the north side of the parade ground."² The Abrams drawing of Fort Bowie shows the building to have had two doors and four windows on the north (rear) side. No chimneys were present. Plats of August and December, 1870, designated the east side of the structure as the commissary storehouse (54 feet by 20 feet), and the west side as the quartermaster storehouse (56 feet by 20 feet). An office (10 feet by 20 feet) was located between these rooms. On the south side of the structure were three doors, one leading into each of the rooms.³ "The building is 11 feet high to the roof; capacity for supplies for three companies for six months. The roof is made of

1. The approximate date of construction of HS 007 is inferred from its absence on "Map of the Military Reservation at Camp Bowie . . . February 1869," and its appearance in the Abrams drawing of November, 1869. "Report of Buildings established and in process of construction at Camp Bowie, A.T. for the month of November, 1869. One Building; 110 feet long, 20 feet wide; adobes; Qr. Mr. & Comsy. Store Room." First Lieutenant William H. Winters to Headquarters, District of Arizona. LR. Copy in the files of FBNHS. See also, "Descriptive Commentaries," Fort Bowie, Ariz., vol. 125 (1871). Contrary to their representation on early plats, HS 014 and HS 015 were not one building, i.e., HS 014 did not form a wing or extension to HS 015, which was built first. HS 014 was, in fact, a separate building. See photographs taken in 1874.

2. "Descriptive Commentaries," Fort Bowie, Ariz. vol. 125 (1871). See also "Report on Barracks and Hospitals," p. 472.

3. "Diagram of Camp Bowie, A.T., August, 1870"; "Diagram of Camp Bowie, A.T., December, 1870;" Outline Description of U.S Military Posts and Stations in the year 1871, p. 65.

logs covered with earth and a coat of lime cement."⁴ Extra storage space was provided by a cellar excavated under half the building.⁵

The commissary and quartermaster storehouses were considered very important to the wellbeing of the garrison and extreme measures were taken to insure the protection and safety of their contents. Evidently, by 1874 the post commissary department occupied most of HS 014, the quartermaster goods having been removed to HS 013. Wrote an officer:

The Commissary Storehouse is dry and well fitted for the purpose, is provided with all available means at hand for protections against fire, consisting of buckets kept filled with water and a Babcock fire extinguisher; no fires are kept in or about the building and it is continually under the eye of a sentinel.⁶

Shortly after the above was written Fort Bowie was struck by a severe storm that damaged among other things the commissary building, necessitating its urgent repair.⁷ Alluding to the damage, Captain Joseph T. Haskell reported in April that the roof of the structure was "now supported by uprights."⁸

4. Outline Description of U.S. Military Posts and Stations in the Year 1871, p. 65.

5. Outline Description of Military Posts in the Military Division of the Pacific, p. 7.

6. Major Eugene W. Crittenden to AAAG, Department of Arizona, January 2, 1874. Fort Bowie, LS. Copy in the files of FBNHS.

7. Telegram, Captain Samuel S. Sumner to AAAG, Department of Arizona, February 18, 1874. Fort Bowie, LS. Copy in the files of FBNHS.

8. Haskell to AAAG, Department of Arizona, April 1, 1874. Fort Bowie, LS. Copy in the files of FBNHS.

The building was restored. In 1877 an inspecting officer wrote that:

The commissary Storehouse is in a very good condition, dry and well arranged for its purpose. The building is kept locked except during issues or sales, and the keys are in the hands of the A.C.S. [Acting Commissary of Subsistence.] The Storehouse is always under the eye of a sentinel. The Storeroom is kept open for sales to enlisted men and laundresses three days in the week, and is closed on the last three days of each month.⁹

But two years later the storehouse again became the victim of heavy rains and was depicted as being in "terrible condition," with the leaky mud roof, supported by rotten vigas, threatening to cave in. It was recommended that the roof be promptly shingled.¹⁰ This work was not completed, however, until July, 1880, when a flat, slightly sloping front-to-back shed roof was built on the structure.¹¹

During the 1880s numerous repairs were made to HS 014, the fabric of which by that time had begun to deteriorate. "Storehouse and sales room entirely inadequate," wrote one officer of its condition.¹² Patching was required on the foundations to keep the

9. Major Curwen B. McLellan to AAG, Department of Arizona, January 1, 1877. Fort Bowie, LS. Copy in the files of FBNHS.

10. Inspection Report, Fort Bowie, January 19, 1879. NA, RG, 159. Entry 15. 398/79.

11. Fort Bowie Medical History, July, 1880. Copy in the files of FBNHS; photographs, 1884, 1885, 1886.

12. Inspection Report, Fort Bowie, September 5, 1881. NA, RG 159. Entry 15. 1199/81.

walls sound, and plastering was recommended for the exterior.¹³ Sometime, evidently in the late 1870s or early 1880s, the roofs of HS 014 and HS 015 (old hospital) were joined together, the west end of the former becoming, in effect, the north end of the latter.¹⁴ Other work involved ceiling the sales room of the storehouse, for which estimates were prepared in March, 1885.¹⁵ One complaint held that "there is no place for an office in the commissary where it can be warmed in winter, and no lumber to partition off a portion of the building."¹⁶

In the mid-1880s HS 014 consisted of an issue room 20 feet by 45 feet 6 inches, sales room 10 feet by 20 feet, and a storeroom 50 feet by 20 feet. The cellar measured 19 feet by 30 feet.¹⁷ Measurements made in 1889 indicate that some remodeling might have been done on the inside of the structure. At that time the dimensions were given as: "1 Room 18 x 60, 1 Room 12 x 18, 1 Room 20 x 50, 1 Room 10 x 12."¹⁸

13. Inspection Report, Fort Bowie, May 12, 1884. NA, RG 159. Entry 15. 584/84; Beaumont to AAG, Department of Arizona, June 30, 1884. NA, RG 393. Department of Arizona, LS. Copy in the Arizona Historical Society.

14. See Photographs c. 1884, 1885. See discussion of HS 015 below.

15. "Report of Inspection of Public Buildings at Fort Bowie, A.T., March 31, 1885." Miscellaneous records. Microfilm MC 12.

16. Inspection Report, Fort Bowie, September 2, 1884. NA, RG 159. Entry 15. 1232/84.

17. Beaumont to AAG, Division of the Pacific, undated (c. 1886). Copy in the files of FBNHS.

18. "Report of Public Buildings at Fort Bowie, Arizona, May 20, 1889." Miscellaneous records. Microfilm MC 12.

HS 015. Old Hospital

The hospital at Fort Bowie for most of the post's existence was in this building, an adobe structure "of one large and two small rooms" with a flat mud roof erected late in 1868 as a quartermaster storehouse.¹ Soon after its construction the building additionally functioned as a guardhouse and adjutant's office.² And there is evidence that the structure temporarily housed Company D, Twenty-first Infantry, early in its existence.³ Measurements given in 1869 were 80 feet by 18 feet. The Building was "divided into 2 Offices & 1 Ordnance & 1 Qr. Mr's. Store room."⁴ On a plat of Fort Bowie dated August, 1870, the structure is described as the "Post Hospital." An ordnance storeroom was located at the north end of the building, adjoining HS 014.⁵ Four months later it was

1. "Map of the Military Reservation at Camp Bowie . . . February 1869"; "Descriptive Commentaries," Fort Bowie, Ariz., vol. 125 (1871). The construction of military hospitals was supposed to adhere to fairly rigid specifications concerning building materials, ventilation, verandas, and toilet facilities. Because the structure that became the hospital at Fort Bowie was not originally intended for that purpose, virtually all of the formal requisites were initially absent, although some of the necessities were doubtless added to the structure as time, money, and circumstances permitted. For regulations governing the erection of post hospitals, see Office of the Surgeon General. Circular No. 4. "Plan for a Post Hospital of Twentyfour Beds," April 27, 1867; and Circular No. 3. "Approved Plan for a Regulation Post Hospital of 24 Beds," November 23, 1870. NA, RG 112. Records of the Surgeon General's Office. Circulars and Orders, 1861-70.

2. "Report on Barracks and Hospitals," p. 472.

3. "Descriptive commentaries," Fort Bowie, Ariz., vol. 125 (1871).

4. Jones to Fry, April 28, 1869. The description contained in "Report on Barracks and Hospitals" (1870) gave dimensions of 88 feet by 22 feet for the building. "The quartermaster's store-house . . . has two rooms for officers [offices?] in one end, and an ordnance store-room in the other." *Ibid.*, p. 471.

5. "Diagram of Camp Bowie, A.T., August, 1870."

described as being "Temporarily used as hospital. To become QM Storeroom."⁶ The rooms, north to south, consisted of a storeroom (10 x 22 feet), a ward room (54 x 22 feet, a combination dispensary, office, and steward's room (12 x 22 feet), and a kitchen (12 x 22 feet). Doors were located on the east side of the building for each room except the ward, which was reached through the dispensary.⁷ Capacity of the ward was eight beds.⁸ Four or five windows were situated along the west, or rear side, and a fireplace and chimney stood at the south end of the structure.⁹ The earthen roof of the hospital was covered with a coat of lime cement.¹⁰

The hospital was damaged by the heavy rains of early 1874 and its condition was deemed "untenable,"¹¹ although repairs were evidently made towards the end of the year. A needed addition was also erected at approximately this time, a wing off the north rear of the structure and at right angles to it.¹² Following this construction the hospital was described as follows:

6. "Diagram of Camp Bowie, A.T., December, 1870."

7. Ibid.; Outline Description of U.S. Military Posts and Stations in the Year 1871, p. 65.

8. This was a later capacity estimate, but most likely held for the earlier period, too. "Report of Public Buildings at Fort Bowie, A.T.," January 15, 1884. Miscellaneous records. Microfilm MC 12.

9. Abrams drawing.

10. Outline Description of U.S. Military Posts and Stations in the Year 1871, p. 65.

11. Sumner to AAAG, Department of Arizona, February 18, 1874. Fort Bowie, LS. Copy in the files of FBNHS.

12. See "Endorsement on Estimate for repairs and additions to Post Hospital," August 6, 1874. Fort Bowie, LS. Copy in the files of FBNHS.

Built of adobe and in good condition. It is 88 by 22 feet; commencing at the southern extremity of the building, it consists of one room for storage purposes, and one for dispensary, each 12 by 22 and dining Room 10 by 22 feet. An addition has recently been constructed off from the northerly side, adjoining the dining room, consisting of three rooms and Water Closets, one as bath and wash room 10 by 17 feet, one as kitchen 14 feet 6 inches by 17 feet divided into two apartments [sic], by single adobe wall. The entrance to one being from the laundry, the other from the outside. The whole is constructed of adobe with lumber, earth and lime cement. All the rooms have board floors except the dispensary.¹³

Every measure was taken to prevent the roof of the hospital from leaking. In 1876 an adobe roof was placed on the new addition.¹⁴ Two years later the post surgeon reported that the roofs of the hospital and outbuildings required repairs. Some were made, but the problem of keeping the interior dry remained.¹⁵ In July, 1878, the surgeon wrote that "if not too great an expense, it is believed

13. "Descriptive Commentaries," Fort Bowie, Ariz., vol. 127 (1876). See also, Outline Descriptions of Military Posts in the Military Division of the Pacific, pp. 6-7. As late as January, 1877, ordnance stores were still being kept in a room (16 feet by 22 feet) at the north end of the hospital. Ibid. p. 7. It was originally planned to incorporate the guardhouse, located behind the south end of HS 015, into the hospital by building an enclosing wall. This was not done, however, and the addition was built on the opposite end of the hospital. Report of Colonel James Hardie, June 28, 1875. Miscellaneous records. Microfilm MC 12.

14. Fort Bowie General Orders No. 51, July 10, 1876. Copy in the files of FBNHS.

15. Fort Bowie Medical History, May and June, 1878. Copies in the files of FBNHS.

that a covering of tarred canvas for the roof, would be advisable."¹⁶ The recommendation was approved by the commanding officer contingent upon the arrival of the requisite materials.¹⁷ Other needed work included washing the interior walls with lime, replacing the oil cloth floor covering in the dispensary with a wooden floor in order to keep dust down, and erecting a hinged, frame partition in the mess room to provide a bathing area for hospital inmates.¹⁸

The roof, despite all attempts at remedy, continued to give trouble. In August, 1878, the post surgeon reported that "the hosp. roof still leaks during every rain and is in need of some permanent protection against the effects of the frequent storms which prevail at this post. . . ."¹⁹ Again, the roof was patched, and at the end of June, 1879, the building was described thusly: "Condition good. Capacity 90 by 22 feet with wing 65 by 21 feet. No additions during the past year. The roof has been repaired with cement. A new shingle roof is required. . . ."²⁰ Finally, in late November, the Post surgeon could write that "the hosp. has undergone repairs during the month, having received a shingle [hipped] roof, the old roof being left on except on the stewards

16. Fort Bowie Medical History, July, 1878. Copy in the files of FBNHS.

17. Lieutenant Wallis O. Clark to Assistant Surgeon J. O. Skinner, July 29, 1878. Fort Bowie, LS. Copy in the files of FBNHS.

18. Fort Bowie Medical History, July, 1878. Copy in the files of FBNHS.

19. Fort Bowie Medical History, August, 1878. Copy in the files of FBNHS.

20. "Report of an Inspection of Public Buildings made at Fort Bowie, A.T. on the 30th day of June 1879." Miscellaneous records. Microfilm MC 12. See also Fort Bowie Medical History, June, 1879. Copy in the files of FBNHS.

room and dispensary. . . ."²¹ Photographs taken in the mid-1870s show the earthen roof of the hospital building to be about 2 feet higher than that of the commissary storehouse (HS 014) which adjoined its north end. When the shingled hip roof was added to HS 015, the walls of the west end of the commissary building were raised and the roof built entirely across that part of the structure. In appearance, therefore, the west end of HS 014 became the north end of HS 015. Other minor work was completed shortly on the dispensary and the steward's room. Probably the building received a whitewashing late in 1879.²²

Even these improvements were regarded as minimally effective, however; what Fort Bowie really needed was a new hospital. "This hospital," wrote an inspector in the summer of 1880, "I consider the poorest in the Department, in regard to adaptability of the building."²³ During the summer of 1881 a wooden floor and ceiling were placed in the ward room and a porch erected around the ward and dispensary on the west side of the building.²⁴ But the kitchen also required flooring, and improved bathing accommodations and

21. Fort Bowie Medical History, November, 1879. Copy in the files of FBNHS.

22. See Fort Bowie Medical History, August, September, October, December, 1879, and January, 1880. Copies in the files of FBNHS.

23. Inspection Report, Fort Bowie, August 12, 1880. NA, RG, 159. Entry 15. 1164/80. Late in 1880 the hospital stores at Camp John A. Rucker, in the southern Chiricahua Mountains, were transferred to Fort Bowie. Tombstone Daily Epitaph, November 11, 1880.

24. Fort Bowie Medical History, July, 1881. Copy in the files of FBNHS. See photos taken in 1884 and 1885.

increased storage space were necessary. Both the kitchen and dining room, moreover, needed to be ceiled and plastered.²⁵ Similar repairs were required over the next several years, and in 1884 it was requested that the building be fenced for more privacy.²⁶ Other expressed concerns were for additional windows to increase ventilation in the structure and for flooring for the recently-added porch.²⁷

During the latter part of 1884 the post commander began to register his belief that the old hospital structure needed replacement. "The Hospital," wrote Major Beaumont, ". . . is a source of danger, but there is neither money or material to build a new one."²⁸ To partly alleviate the situation, Beaumont was awarded \$385.25 to fix the building which he stated was "not fit for the reception of sick men."²⁹ Still later he wrote that the hospital "is located in the worst place in the garrison--close to the commissary and adjutants office, and where all the noise of post is

25. Inspection Report, Fort Bowie, June 17, 1881. NA, RG 159. Entry 15. 724/81; Inspection Report, Fort Bowie, March 16, 17, 18, 1882. NA, RG 159. Entry 15. 334/82.

26. See "Report of Annual Inspection of Public Buildings of Fort Bowie, A.T. March 31st 1883." Miscellaneous records. Microfilm MC 12; Inspection Report, Fort Bowie, September 10, 1883. NA, RG 159. Entry 15. 584/84; Beaumont to AG, Department of Arizona, June 30, 1884. NA, RG 393. Department of Arizona, LS. Copy in the Arizona Historical Society.

27. Inspection Report, Fort Bowie, May 12, 1884. NA, RG 159. Entry 15. 584/84; Beaumont to AAG, Department of Arizona, June 30, 1884. NA, RG 393. Department of Arizona, LS. Copy in the Arizona Historical Society.

28. Inspection Report, Fort Bowie, September 2, 1884. NA, RG 159. Entry 15. 1232/84.

29. Beaumont to AAG, Department of Arizona, November 9, 1884. Fort Bowie, LS. Copy in the files of FBNHS.

most apparent."³⁰ He described the rooms as consisting of the dispensary 11 feet by 17 feet, an office 11 feet by 17 feet, the ward 45 feet by 18 feet, a bathroom (washroom?) 18 feet square, a dining room 17 feet by 14 feet 9 inches, and a kitchen 17 feet by 14 feet 2 inches. An isolation ward had been established in the old adobe guard house (HS 016) that stood just west of the south end of the hospital proper.³¹ In 1885 HS 015 received running water, although drainage was by means of slope runoff as before.³² Sometime between 1886 and 1887, according to photographs, an extension was added to the south end of the wing put on about 1874. This new addition with its hipped roof gave an L-shaped appearance to the wing. By midsummer, 1887, Beaumont's pleas had taken their effect. A new hospital for Fort Bowie was approved and a site selected.³³

Yet the new hospital (HS 033) was not totally assured, for prospects for its actual erection rose and fell with the vacillation of Washington officials over whether or not to close Fort Bowie. Even as the new building was on the verge of construction Beaumont asked if funds might more appropriately be used to repair the ceiling, flooring, porch, and chimneys of HS 015.³⁴ As of May 20, 1889, including the recent addition, the rooms in the old hospital

30. Inspection Report, Fort Bowie, September 4, 1886. NA, RG 159. Entry 15. 1036(2)/86.

31. Beaumont to AAG, Division of the Pacific, undated (c. 1886). Copy in the files of FBNHS.

32. Plat, "Fort Bowie, Arizona," dated May 20, 1889.

33. Inspection Report, Fort Bowie, August 14, 1887. NA, RG 159. Entry 15. 959(3)87.

34. Beaumont to AAG, Department of Arizona, October 18 and 29, 1888. Fort Bowie, LS. Copies in the files of FBNHS.

possessed these dimensions: "Dispensary 12 x 18, Office 12 x 18, Ward 18 x 50, Wash & Bathroom 12 x 18, Dining room 14 x 18, Kitchen 15 x 18, Attendants room 16 x 18, Store rooms 16 x 24 & 16 x 18."³⁵ In July, 1889, the new commander, Major Henry E. Noyes, penned the following to department headquarters:

The question of abandoning this Post having been under consideration, some few months ago, I respectfully request information, as to whether it is now probable that the post will be either reduced or increased in its garrison. This information is very necessary, as the new Hospital is about completed, and when occupied, the old Hospital will be available for other purposes. With but little labor and Material, it could be made a very comfortable barrack for a Company of Infy. But if no more Troops are to be sent here, it is desirable to use the old Hospital for the Commissary store-house &c.³⁶

As an alternate use for the old hospital building, unoccupied as of December, 1889, it was proposed that it be converted into a post canteen, although the prospect of turning it into a barracks should the garrison be increased was not ruled out.³⁷ Eventually, HS 015 served as the canteen until the government purchased the old post

35. "Report of Public Buildings at Fort Bowie, Arizona, May 20, 1889." Miscellaneous records. Microfilm MC 12.

36. Noyes to AAG, Department of Arizona, July 23, 1889. Fort Bowie, LS. Copy in the files of FBNHS.

37. First Lieutenant Walter M. Dickinson to the Quartermaster General, December 12, 1889. Miscellaneous records. Microfilm MC 12; Noyes to AAG, Department of Arizona, January 6, 1890. Fort Bowie, LS. Copy in the files of FBNHS.

trader's store (HS 035), at which time it became the canteen, or post exchange. After that the old hospital building appears to have been used as a supplemental storage building for commissary supplies.³⁸ Towards the end of its functional existence HS 015 was whitewashed and a chimney was built on to the southerly extension.³⁹

38. Major Thomas McGregor to Chief Quartermaster, Department of Arizona, May 4, 1892. Fort Bowie, LS. Copy in the files of FBNHS.

39. See photographs taken in 1893 and 1894.

HS 016. Old Guardhouse.

There were two successive adobe guardhouses at this location. The first was built in 1870, sometime before August of that year.¹ Like the other early buildings, it had a log-supported earthen roof and a mud floor. There were two rooms, one of them a cell providing occupancy for an average of six prisoners. The building was well ventilated and originally lacked fireplaces, so that, said one report, "the prisoners suffer much from cold, being compelled to lie on the ground without bed-sacks or mattresses [sic]."² Later, and before 1871, both rooms were furnished with "open chimneys for warming purposes. . . ."³

The guardhouse was located along the western edge of the post, 12 feet behind, and at right angles to, the south end of HS 015, the old hospital. An early ground plat shows that the cell was situated in the east end of the structure. A doorway led between the rooms and the only entrance into the building was on the south side where a door led into the west room.⁴ An account of the mid-1870s stated that the guardhouse "is to be the Hospital Steward and Matrons Quarters. It consists of two rooms, viz: One [guard room] 12 by 20 feet and the other [prison room] 20 by 20

1. "Descriptive Commentaries," Fort Bowie, Ariz., vol. 125 (1871); "Diagram of Camp Bowie, A.T., August, 1870."

2. "Descriptive Commentaries," Fort Bowie, Ariz., vol. 125 (1871).

3. Ibid. According to early photographs (c. 1874), there was but one chimney located at about the middle of the guardhouse roof. Undoubtedly, there was a double fireplace built below.

4. "Descriptive Commentaries," Fort Bowie, Ariz., vol. 127 (1876); "Diagram of Camp Bowie, A.T., December, 1870."

feet. . . ."⁵ Under this plan an enclosing wall would be built to bring the two rooms of the guardhouse "into the hospital establishment."⁶ It was felt that the existing guardhouse was too small and thus inadequate for its purpose. Moreover, observed one officer, "this post has the Chiricahua Apache Agency close to it and the Indians are liable at times to be subjects of confinement."⁷

Plans for a new guardhouse containing four cells, besides guard room and prison room, were submitted in the autumn of 1875. Projected cost of the structure was \$465.90.⁸ Estimates for funds for adobes, lumber, and 256 feet of "1 inch Round Iron" were filed with the Quartermaster Department.⁹ All indications are that a new and larger guard house was indeed erected. An inspector in 1876 recorded that the building,

now in process of construction, is located on the western terminus of parade. It is to consist of two rooms, Guard and Prison Room each 19 by 20 feet, and three cells each 5 feet 8 inches by 12 feet. All to be of Adobes with log and earth roof and mud floors.¹⁰

5. "Descriptive Commentaries," Fort Bowie, Ariz., vol. 127 (1876); Outline Description of U.S. Military Posts and Stations in the Year 1871, p. 65.

6. Report of Colonel James A. Hardie, June 28, 1875. Miscellaneous records. Microfilm MC 12.

7. Ibid.

8. See "Plan of proposed new Guard House at Camp Bowie, A.T." National Archives. Cartographic Archives Division.

9. "Special Estimate of Funds required for the service of the Quartermaster's Department at Prescott, A.T., . . . in the month of September, 1875." Miscellaneous records. Microfilm MC 12.

10. "Descriptive Commentaries," Fort Bowie, Ariz., vol. 127 (1876).

And in the same year a post directive allowed for "a sufficient quantity of Hay . . . for construction of the . . . [roof] of the new guard house. . . ." ¹¹ Photographs taken of Fort Bowie in the early 1870s suggest that a larger guardhouse replaced the earlier structure and that the new building was nearer to the hospital than its predecessor. ¹²

Numerous modifications were made to HS 016 during its history, few of which visibly affected the structure. During the summer of 1876 a quantity of hay was employed in repairing the flat mud roof, ¹³ and for several years recommendations were proposed for flooring and plastering the building, adding a porch on the front, and providing a platform inside on which the guard might rest when he was off duty. ¹⁴ An inspection of 1879 noted that the structure measured 40 feet by 20 feet and that "material for a shingle roof has been procured." ¹⁵ Flooring was installed in both rooms in 1882. ¹⁶

11. Fort Bowie General Order No. 51, July 10, 1876. Copy in the files of FBNHS.

12. Photographs of the post in the 1880s indicate that this second guardhouse was further enlarged.

13. Fort Bowie General Orders No. 51, July 10, 1876. Copy in the files of FBNHS.

14. Inspection Report, Fort Bowie, August 12, 1880. NA, RG 159. Entry 15. 1164/80; Inspection Report, Fort Bowie, March 16, 17, 18, 1882. NA, RG 159. Entry 15. 334/82; Beaumont to AG, Department of Arizona, June 30, 1884. Copy in the Arizona Historical Society.

15. "Report of an Inspection of Public Buildings made at Fort Bowie, A.T. on the 30th day of June 1879." Miscellaneous records. Microfilm MC 12.

16. "Report of Annual Inspection of Public Buildings of Fort Bowie, A.T. March 31st 1883." Miscellaneous records. Microfilm MC 12.

In March, 1883, estimates were submitted for materials to ceil the prison room with manta and build the front porch,¹⁷ but more than a year later the request for porch lumber was repeated.¹⁸ Photos taken in 1884 and 1885 reveal that a hip roof was built over the mud one by that time. A drain pipe can also be discerned on the southwest corner of the structure, and in a photo of 1885 a ventilator can be seen located near the chimney.

After his arrival at Fort Bowie, Major Eugene B. Beaumont mounted a campaign for a new guardhouse. The old one, he said, "is uncomfortable and should be replaced. . . . Its position is not a good one as it is close to the Hospital."¹⁹ Later, in correspondence to army officials in Washington, Beaumont repeated his request:

A new guardhouse . . . is an absolute necessity, the present one being small, old, badly ventilated, full of bed bugs which can only be destroyed [along] with [the original] adobe build [material]. . . . The present guardhouse is a disgrace to the service and to replace it by a suitable one will require the expenditure of at least

17. "Report of Annual Inspection of Public Buildings of Fort Bowie, A.T., March 31st 1883." Miscellaneous records. Microfilm MC 12.

18. Beaumont to AAG, Department of Arizona, June 30, 1884. NA, RG 393. Department of Arizona, LS. Copy in the Arizona Historical Society.

19. Inspection Report, Fort Bowie, September 2, 1884. NA, RG 159. Entry 15. 1232/84.

one thousand dollars. . . . The guardhouse is close to the Hospital and a reciprocal cause of annoyance.²⁰

The Post Quartermaster, First Lieutenant Wilbur E. Wilder, appended a letter to the Fort Bowie inspection report in which he stated:

The delapidated [sic] condition of the present Guardhouse forced an estimate for a new one; the present contains only two (2) rooms, one 16' x 20' and one 16 x 16'. The whole building is so infested with vermin as to render existence for Guard and Prisoners almost a torture. The building is not worth any repairs, as everything is in an unrepairable condition.²¹

Requested funds for building a new guardhouse were speedily granted, and within seven months Fort Bowie had a modern structure (HS 026) in which to incarcerate wayward soldiers. The old building was first converted into a ward for the treatment of Apache Indian scouts and later into an isolation ward for the hospital.²² Evidently, there is no record of whether the vermin problem was ever resolved. Beaumont described the dimensions of the two rooms of the isolation ward as 16 feet 2 inches by 16 feet,

20. Beaumont to the Quartermaster General, August 24, 1885. Miscellaneous records. Microfilm MC 12.

21. Letter, April 15, 1885, accompanying "Report of Inspection of Public Buildings at Fort Bowie, A.T., March 31, 1885." Miscellaneous records. Microfilm MC 12.

22. Fort Bowie Medical History, November, 1885. Copy in the files of FBNHS; Inspection Report, Fort Bowie, February 7, 1886. NA, RG 159. Entry 15. 661/86.

and 19 feet by 16 feet.²³ The building apparently did not function long in that manner, for a plat of 1886 reveals that the former guard house was being used as a "Library, etc."²⁴ Other documents indicate that HS 016 was employed as offices for the post adjutant and post telegrapher.²⁵

By late 1888, when a reduction in the Fort Bowie garrison was under consideration, Beaumont proposed that the building be converted into a hospital steward's quarters by adding new rooms.²⁶ But this was not done. Instead, a veranda was built along the south side of the structure,²⁷ and it became the post telegraph office until Fort Bowie's abandonment in 1894.²⁸

23. Beaumont to AAG, Division of the Pacific, undated (c. 1886). Copy in the files of FBNHS.

24. "Fort Bowie. Diagram of Post." c. 1886.

25. "Report of the Annual Inspection of Public Buildings at Ft. Bowie, A.T." 1886. Copy in the files of FBNHS.

26. Beaumont to AAG, Department of Arizona, October 18, 1888, and October 29, 1888. Fort Bowie, LS. Copies in the files of FBNHS.

27. Photograph c. 1887-88.

28. Plat, "Fort Bowie, Arizona," dated May 20, 1889. The report accompanying this plat states that the building was occupied by a "Telegraph Office and Library," and that the rooms each measured 16 feet by 18 feet. "Report of Public Buildings at Fort Bowie, Arizona, May 20, 1889." Miscellaneous records. Microfilm MC 12.

HS 017. Adjutant's Office.

This adobe structure, started in July, 1880, and finished the following May, served as the command center for Fort Bowie until 1894.¹ Initially begun as a schoolhouse, and later designated for the adjutant, post quartermaster, and telegrapher, the building contained three rooms, measured 26 feet 6 inches by 17 feet 6 inches, and was located next to the old hospital building (HS 015) on the west side of the parade ground.³ According to photographs taken in the early 1880s, the structure had a shingled, hip roof with chimneys located on the west side near the north end and at the south end. There was a door with steps leading to it located about midway along the west side of the building, and two windows were spaced at either side of the door. Two more windows were on the north end of the structure. Early in 1883 estimates were given for the construction of a porch, 8 feet by 50 feet, on the east side of the building. Similar estimates were repeated in 1885,⁴ and some time in the late 1880s or early 1890s a porch was erected, for one can be seen in a picture of the fort taken in 1894.

1. Fort Bowie Medical History, October, 1880, and May, 1881. Copies in the files of FBNHS; Beaumont to AAG, Division of the Pacific, undated (c. 1886). Copy in the files of FBNHS.

2. Inspection Report, Fort Bowie, September 4, 1880. NA, RG 159. Entry 15. 1168/80; Fort Bowie Medical History, October, 1880. Copy in the files of FBNHS.

3. "Report of Annual Inspection of Public Buildings of Fort Bowie, A.T. March 31st 1883." Miscellaneous records. Microfilm MC 12; Beaumont to AAG, Division of the Pacific, undated (c. 1886). Copy in the files of FBNHS.

4. See "Report of Annual Inspection of Public Buildings of Fort Bowie, A.T., March 31st 1883"; and "Report of Inspection of Public Buildings at Fort Bowie, A.T., March 31, 1885." Miscellaneous records. Microfilm MC 12.

During the 1880s the office was used for various purposes. Wrote Major Beaumont: "Sunday evening services are held in the Adjutant's Office, too small for the purpose and to which place chairs, benches and melodian must be carried."⁵ It also served as an officers' mess.⁶ Private Reginald Bradley enlisted in the building in 1889. "I was inside there lots of times," he said in 1968, "but don't recall anything particular about it. The office of the Sgt. Major Appleby was in there."⁷ At the time of the Geronimo Campaign the adjutant's office was used by the department commander, Brigadier General George Crook. When Brigadier General Nelson A. Miles succeeded Crook in the spring of 1886 the office was used for their discussions. An article in the Los Angeles Times depicted the scene upon Miles's arrival in this fashion:

Gen. Miles crawled out of . . . the ambulance, and shook the kinks out of his legs. Gen. Crook walked up from the [adjutant's] office, and the two veterans shook hands undemonstratively. After dinner with Col. Beaumont, Gen. Miles came down to the office, and passed most of the afternoon in a close conference with Gen. Crook. . . .⁸

5. Beaumont to the Adjutant General, August 20, 1887. Fort Bowie, LS. Copy in the files of FBNHS.

6. "Report of the Annual Inspection of Public Buildings at Ft. Bowie, A.T., made March 31, 1888." Copy in the files of FBNHS.

7. Bradley interview.

8. Quoted in Charles Fletcher Lummis, Dateline Fort Bowie: Charles Fletcher Lummis Reports on an Apache War. Ed. by Dan L. Thrapp (Norman: University of Oklahoma Press, 1979), pp. 66-67.

In 1889 the Adjutant's office consisted of three rooms, one measuring 14 feet by 24 feet and two measuring 12 feet by 14 feet. Changes implemented in the late 1880s, as gauged by photos taken then, involved the erection of a telegraph pole on the northeast corner and later on the west side of the building, and the placement of a paled fence around the west door and the southwest corner of the building. In 1893 or 1894 the structure appears to have been whitewashed.

HS 018. Corrals.

The corrals were built to enclose the quartermaster's animals and the cavalry horses. The earliest enclosure at the site of HS 018 was a circular cattle corral built of pickets, stockade-fashion, located fifty or sixty yards from HS 008, which at the time comprised a stable. A portal-type gate was located on the west side of this corral.¹ After the conversion of HS 008 into a company quarters during the summer of 1870, the cavalry stock was moved to a new, albeit temporary, facility:

The stables for the cavalry horses consist of two large sheds situated about half way between the Old and New Posts; they are in tolerably good condition, but afford but little protection to the animals against the cold winds prevailing during the winter season.²

These stables were built of timber. The "roof on one is partly covered with shingles, partly with earth; the other stable is covered with paulins."³

The quartermaster corral, meantime, was changed from the circular enclosure to a rectangular feature a short distance west of its predecessor:

The Quartermasters [sic] animals are kept in a substantially built corral, covering 175 x 85 feet and

1. Jones to Fry, April 28, 1869; "Map of the Military Reservation at Camp Bowie . . . February 1869"; Abrams drawing.

2. "Descriptive Commentaries," Fort Bowie, Ariz., vol. 125 (1871). The sheds are represented on "Diagram of Camp Bowie, A.T., August, 1870."

3. Outline Description of U.S. Military Posts and Stations in the Year 1871, p. 66.

situated on the north side of the Parade ground and in rear of the Company barracks. The necessary shops and Forage rooms are attached to this corral, which is altogether Kept in excellent condition.⁴

Further details of this structure were contained in the following description:

Quartermaster's corral is built of adobes, new, 175 by 85 feet; wall 8 feet high, having on the west and north side shelter for public animals. To the right and left of the entrance, on the south side, are carpenter's and blacksmith's shops each 20 by 16 feet, and harness and grain room, each 16 by 16 feet. The grain room has a capacity for 60,000 pounds of grain.⁵

The area immediately to the east was reserved for the addition of a cavalry corral.⁶

Actually, two cavalry corrals were built adjoining the east side of that of the quartermaster prior to December, 1870. In that month the structures were described as "newly built of adobe, the Q. M. Stables and 2 Cavy: ea. 100 x 80 [feet] and spacious.

4. "Descriptive Commentaries," Fort Bowie, Ariz., vol. 125 (1871).

5. Outline Description of U.S. Military Posts and Stations in the Year 1871, p. 65. See also, "Report on Barracks and Hospitals," p. 472.

6. Ibid.; "Diagram of Camp Bowie, A.T., August, 1870."

Refuse thrown outside of Post."⁷ On a plat dated late in 1870 the three corrals, as situated west to east, were designated, respectively, for the quartermaster's stock, for the horses of the Third Cavalry, and for the horses of the First Cavalry. An entrance, or gate, was located at the south end of each corral unit. On either side of the gates were rooms constructed of adobe with flat, dirt roofs supported by vegas. Those at the front of the quartermaster corral consisted of a blacksmith shop, a granary, a saddle shop, and a harness room. Those fronting the corral for Third Cavalry mounts consisted of a blacksmith shop, a granary, a farrier's room, and a saddle room. Likewise, the First Cavalry corral was served by a blacksmith shop, a granary, a farrier's room, and a saddle room. Attached to the rear (north end) of the quartermaster corral was a small enclosure for cattle and a gate was located on the west side of this pen.⁸ In photos taken in the early 1870s roofs of matted hay, probably sheltering stables, can be seen along the west sides of the easternmost wall and the two inner separating walls. The shops fronting the corrals had doors and windows, and four chimneys were spaced along the roof. West of the corrals mounds of hay were stacked for the animals to eat.

In 1879 the corral shops and rooms were considered to be in good condition, although the roofs required repairs with cement.⁹

7. "Descriptive Commentaries," Fort Bowie, Ariz., vol. 125 (1871).

8. Diagram of Camp Bowie, A.T., December, 1870." Private Reginald Bradley recalled that "the saddler's shop was just a little cubby-hole. . . . My recollection of it everywhere was about the same--just big enough to work in, with a counter on one side where he could mend a saddle." Bradley interview.

9. "Report of an Inspection of Public Buildings made at Fort Bowie, A.T. on the 30th day of June 1879." Miscellaneous records. Microfilm MC 12.

Two years later the roofs of the stables were shingled.¹⁰ Evidently, hip roofs were added to the front rooms at this time, for they appear in photographs of the fort taken in 1884 and 1885. During the early 1880s the quartermaster corral exchanged positions with the cavalry corral in the center of the enclosure and the rectangular area adjoining the corrals where hay was kept was used to contain pack mules.¹¹ Later, the area seems to have reverted back to a hay corral, although cordwood was also stacked around the perimeter. Early in 1881 fire destroyed all the hay and the greater part of the wood stored there.¹²

More excitement occurred later in the year when cattle thieves broke into the corral. According to an official account of the incident,

on the night of August 21, two men (Cow-Boys) were found in the Quartermasters Corall [sic] at this Post, they having torn off a portion of the back fence of said Corall, making an entry thereat. The sentinel (Pvt. Fox, Co. 1, 12th Infy) on No. 2 Post and over Coralls, hearing a noise, cautiously approached the locality from whence it came, and found these men holding a whispered conversation and approaching the stock, evidently with intention to steal or run off the animals. [The] sentinel hailed them. One made off quickly, the other he ordered to throw up his hands, and in this manner was secured and marched to the Guard House, having in his

10. Fort Bowie Medical History, April, 1881. Copy in the files of FBNHS.

11. "Diagram of Post." March, 1883.

12. Fort Bowie Medical History, March, 1881. Copy in the files of FBNHS.

possession a Government Carbine No. 37267. . . . [The next day] the prisoner was securely ironed and . . . lodged in jail at [the nearby village of] Dos Cabazas [Dos Cabezas].¹³

In 1882 wooden floors were installed in the grain rooms at the front of the corrals.¹⁴ The next year estimates were made for materials and labor with which to floor the other rooms.¹⁵ Probably this work was shortly accomplished, for requests for flooring do not appear in subsequent inspection reports. Many repairs to the corrals came as a result of a severe windstorm that struck Fort Bowie in February, 1884. The commanding officer reported that "the West Side of the Cavalry Shed or Corral, occupied by the Horses of Tr. M, 3d Cav. was unroofed by the high winds. . . ." He stated that "162 feet of the roof . . . is a total wreck, and 70 feet additional badly damaged, but can be repaired by using the lumber from the wrecked portion."¹⁶ Early the following year more wind damage occurred. Again, lumber from the destroyed portions of the stable roofs was utilized to repair those less damaged. But more was required, specifically, "to replace and repair sheds of Troop "G" 4th Cav and Troop "M" 3d Cavly, Corrals, which were blown down and destroyed by the high winds prevailing here lately. This material is needed immediately as there is no shelter for many

13. Captain David J. Craigie to AAG, Department of Arizona, September 6, 1881. Fort Bowie, LS. Copy in the files of FBNHS.

14. "Report of Annual Inspection of Public Buildings of Fort Bowie, A.T., March 31st 1883." Miscellaneous records. Microfilm MC 12.

15. Ibid.

16. Major David Perry to AAG, Department of Arizona, February 20, 1884. Fort Bowie, LS. Copy in the files of FBNHS.

of the Cav horses."¹⁷ Additional lumber was needed for new hay racks, a larger blacksmith shop, new watering troughs and soaking boxes for the grain, gates to the hay yard, and stall partitions.¹⁸ "There are no stalls in the corrals," wrote the post quartermaster, "and the animals are constantly fighting and kicking."¹⁹ Another necessity was a fence 1100 feet long by 5 feet high around the hay corral to keep out loose stock.²⁰

More roof repairs were required in 1886, and Major Beaumont asked for feed troughs made of heavy iron, noting that "the galvanized iron feed troughs are reported as too light and break up."²¹ Fire struck the hay corral again during the fall of 1887. Major Beaumont recounted the event:

Returning to the Post from a drive on that night [October 20] and two miles distance from the post I discovered a bright light and, upon arriving, found a hay stack on

17. First Lieutenant Wilbur E. Wilder to the Chief Quartermaster, Department of Arizona, January 6, 1885. Miscellaneous records. Microfilm MC 12. See also the estimate for redwood shingles in "Report of Inspection of Public Buildings at Fort Bowie, A.T., March 31, 1885." Miscellaneous reports. Microfilm MC 12.

18. Beaumont to AAG, Department of Arizona, June 30, 1884. NA, RG 393. Department of Arizona, LS. Copy in the Arizona Historical Society; Inspection Report, Fort Bowie, September 2, 1884. NA, RG 159. Entry 15. 1232/84; Inspection Report, Fort Bowie, February 7, 1886. NA, RG 159. Entry 15. 661/86.

19. Letter, First Lieutenant Wilbur E. Wilder, April 15, 1885, accompanying "Report of Inspection of Public Buildings at Fort Bowie, A.T., March 31, 1885." Miscellaneous records. Microfilm MC 12.

20. Ibid.

21. Inspection Report, Fort Bowie, February 7, 1886. NA, RG 159. Entry 15. 661/86.

fire in the hay corral. The burning stack was at right angles to three other stacks and not more than 16 feet from the ends of two of them and on the north side. When the fire broke out the wind was from the north, but fortunately it lulled and then blew gently from the south. Water was carried in pails from a long distance and thrown on the South side of the blazing stack, until I had a line of pipe laid from the Guard House to within fifty feet of the blazing stack, when hose was attached and we were able to keep a stream from the inch pipe on the stack. By drenching the south side of the stack the fire was kept on its north face. I ordered large iron rakes made and fitted into water pipes. With these we tore out the hay on the North side, to enable it to burn fast, when the wind was favorable and, after 14 hours of constant labor, during which time I only left the ground twice for a few minutes at a time, we got the fire under control and saved the three large stacks of hay.²²

During the mid-1880s Beaumont described the corrals as measuring 162 feet by 84 feet, and being constructed of "adobe with lean-to roof."²³ A later accounting said that the corrals comprised "Stables for Troops "C" & "H" 4 Cavy and Q.M. animals, Carpenter & saddlers shop, [and] dormitory for teams."²⁴

22. Beaumont to AAG, Department of Arizona. Fort Bowie, LS. Copy in the files of FBNHS.

23. Beaumont to AAG, Division of the Pacific, undated (c. 1886). Fort Bowie, LS. Copy in the files of FBNHS.

24. "Report of Public Buildings at Fort Bowie, Arizona, May 20, 1889." Miscellaneous records. Microfilm MC 12.

Photographs of Fort Bowie taken from the mid-1880s into the 1890s suggest that some major alterations occurred to the corrals during the final years of the post. One of 1886 shows the fence erected at the west end of the corrals. It was of post and rail construction enclosing numerous cavalry horses, and was perhaps temporarily built to accommodate army animals at the height of the Geronimo Campaign. An adobe addition seems to have been built at the rear of the two easternmost corrals, according to both a photograph of 1886 and a plat drawn during the same period.²⁵ Pictures from the early 1890s reveal extensive changes to the rear (north end) of the corrals. By then hip roof buildings had been added, two small ones located towards the northeast corner and a larger, L-shaped structure at the back of the quartermaster corral. One of the former was probably used as a sink, for a privy (HS 024) was located in the same approximate area.²⁶ The latter could have been an office-storage building associated with the administration of the post quartermaster. Yet a fourth building, probably a shed, was erected at the southwest corner of the corrals, facing the road that passed along the front. In the area of the hay corral bales of hay were stacked together with some lumber. The haystacks formerly located there were moved to the hill slopes east of the fort, doubtless as a preventive measure against the recurrence of fire near the corrals. As added protection, a fire hydrant was situated in the hay corral. The water pipe to which it was attached continued back to the rear of the animal enclosures where it apparently connected to the watering troughs.²⁷

25. "Fort Bowie. Diagram of Post." c. 1886.

26. Ibid.

27. Plat, "Fort Bowie, Arizona," dated May 20, 1889.

HS 019. Infantry Barracks.

The increased troop strength of the Fort Bowie garrison in the 1880s required the addition of new quarters for the enlisted men. HS 019, erected to fill that need, was built in March and April, 1883, on the east perimeter of the post on land that years earlier had been set aside for an officers quarters.¹ It was a frame structure built on a high stone foundation with three rooms consisting of a dormitory, orderly room, and storeroom measuring, respectively, 107 feet 7 inches by 24 feet 6 inches, 15 feet 3 inches by 16 feet 3 inches, and 16 feet 3 inches by 8 feet.² Photographs show it to have had a window in its north end, and four windows and two doors with steps located on its west side. The building had a gabled roof on which two chimneys rested, one towards either end.

As in the case of the other quarters at Fort Bowie, porches were needed to provide relief from the sun on hot summer days. In 1883 an estimate for materials and labor was made for a porch and for lining the inside of the new quarters.³ More than a year later the post commander remarked on the need for improving the quarters:

The barracks of Capt. Parker's Company 1st Infantry is not fit for occupation during the winter. It is simply a

1. "Diagram of Camp Bowie, A.T., December, 1870"; "Report of Annual Inspection of Public Buildings of Fort Bowie, A.T. March 31st 1883." Miscellaneous records. Microfilm MC 12.

2. Beaumont to AAG, Division of the Pacific, undated (c. 1886). Fort Bowie, LS. Copy in the files of FBNHS.

3. "Report of Annual Inspection of Public Buildings of Fort Bowie, A.T., March 31st 1883." Miscellaneous records. Microfilm MC 12.

shell, being neither ceiled nor lathed. Many of the men now habitually sleep on the ground on the west side of the building in preference to enduring the intense heat inside and during the winter it is almost impossible to heat the building.⁴

Requests for this work were repeated in subsequent years,⁵ and photographs reveal that a roofed veranda was added to the west side of the barracks in about 1885. The inside still needed ceiling, however, as late as 1888,⁶ and in 1884 a request was filed to have adequate shelving placed in the building.⁷

During the spring of 1888 plans were drawn up for a proposed addition to the infantry quarters, a wing to contain a library, day room, storeroom, and orderly room. This addition was to be

4. Beaumont to AAG, Department of Arizona, July 10, 1884. NA, RG 92. Records of the Office of the Quartermaster General. Consolidated correspondence file, 1794-1915.

5. Beaumont to AAG, Department of Arizona, June 30, 1884. NA, RG 393. Department of Arizona, LS. Copy in the Arizona Historical Society; Inspection Report, Fort Bowie, September 2, 1884. NA, RG 159. Entry 15. 1232/84. The quarters needed ceiling and plastering "to make them comfortable during the winter and keep out the dust." Letter, First Lieutenant Wilbur E. Wilder, April 15, 1885, accompanying "Report of Inspection of Public Buildings at Fort Bowie, A.T., March 31, 1885." Miscellaneous records. Microfilm MC 12.

6. Inspection Report, Fort Bowie, March 27, 1888. NA, RG 159. Entry 15. 736/88.

7. Beaumont to AAG, Department of Arizona, November 9, 1884. Fort Bowie, LS. Copy in the files of FBNHS.

attached at right angles to the south end of HS 019,⁸ but it was not done. Five years after the erection of HS 019 the army again began questioning the feasibility of maintaining Fort Bowie. As garrison strength dropped, there developed less of a need for barracks space and Major Beaumont suggested that the infantry barracks "be converted into a gymnasium, bowling alley and pistol gallery. . . ."⁹ Then, in 1890, when the army again entertained the prospect of increasing Fort Bowie's garrison it was proposed that the infantry quarters be turned into a quartermaster storehouse.¹⁰ Yet troops instead of supplies occupied HS 019, and the structure soon became so overcrowded that some men had to sleep outside on the porch. In May, 1889, the rooms of the structure consisted of the dormitory, 23 feet by 100 feet, and two rooms, 13 feet by 20 feet and 10 feet by 20 feet, used to house married enlisted men.¹¹ As of December, 1889, thirty-five men resided in the dormitory. There still was no ceiling in the structure and the height from floor to the joists measured 11 feet 8 inches.¹² Overcrowding became so acute that in 1891 an addition to HS 019 had to be made. The barracks were whitewashed, too,

8. Drawing, "Proposed Addition to Barracks No. 19, Fort Bowie, A.T., March 31, 1888." NA, RG 92. Records of the Office of the Quartermaster General. Consolidated correspondence file, 1794-1915.

9. Beaumont to AAG, Department of Arizona, October 18, 29, 1888. Fort Bowie, LS. Copies in the files of FBNHS.

10. Major Henry E. Noyes to AAG, Department of Arizona, February 3, 1890. Fort Bowie, LS. Copy in the files of FBNHS.

11. "Report of Public Buildings at Fort Bowie, Arizona, May 20, 1889." Miscellaneous records. Microfilm MC 12.

12. First Lieutenant Walter M. Dickinson to the Quartermaster General, December 12, 1889. Miscellaneous records. Microfilm MC 12.

late that year.¹³ Still, congestion continued to be a problem in the quarters until the post's abandonment.¹⁴

13. Fort Bowie Medical History, November and December, 1891. Copies in the files of FBNHS.

14. Fort Bowie Medical History, December, 1892, and January, 1893. Copies in the files of FBNHS.

HS 020. Kitchen and Messroom.

Following the completion of HS 019 in the spring of 1883, estimates and plans were submitted for the erection of an accompanying kitchen facility. "As a third set of company quarters has just been completed, which is better than any of the quarters here, it is necessary that a building for Kitchen, Dining Room & should be built."¹ Total cost for supplies and labor to erect the building was projected at \$836.55.² The work seems to have been immediately approved and HS 020 was built within a few months of the completion of the infantry quarters. Based on existing plans, the frame structure measured 54 feet by 18 feet and had a rear extension of about 15 feet by 20 feet. The main part of this building consisted of the dining room, with a tailor shop and a bathroom, complete with tubs, located in the south end. The kitchen was in the extension, along with a pantry and a bedroom for the cook situated in the rear. Along the south side of the extension was a wide porch. The front of the building, facing the rear of HS 019, had one door and four windows. On the south end was a door leading into the tailor shop, while on the north end was one window. Along the rear of the structure four windows were located. On the north side of the extension were three windows. Another was on the west (rear) side, together with a door. Two more windows looked out onto the porch, and a doorway led into the kitchen from the porch.³ Photographs of Fort Bowie taken in 1884 and 1885 show that the building had a gabled roof. In the

1. "Report of Annual Inspection of Public Buildings of Fort Bowie, A.T., March 31st 1883." Miscellaneous records. Microfilm MC 12.

2. Ibid.

3. Diagram, May 8, 1883. NA, RG 92. Records of the Office of the Quartermaster General. Consolidated correspondence file, 1794-1915.

mid-1880s the dimensions of the dining room, washroom (evidently a conversion of the tailor shop), and bathroom were given, respectively, as 39 feet by 18 feet 4 inches, 14 feet 8 inches by 9 feet 8 inches, and 14 feet 8 inches by 8 feet.⁴ Like that of the quarters, the stone foundation of HS 020 was raised quite high. A photograph of 1886 shows a partially excavated doorway in the west side of the foundation, and perhaps a cellar storage area was constructed beneath the structure.

The structural modifications to HS 020 simulated those completed for the barracks it served. There were repeated requests for ceiling the kitchen,⁵ and in 1888 it was suggested that the structure be turned into a library and school room.⁶ When the post received running water a pipe was laid to HS 020.⁷ Photographs disclose that sometime in the late 1880s an addition was built onto the north side of the rear extension to HS 020. A tall chimney was located along the north end of the roof. To the right of the chimney was a window, to the left a door.

As of May, 1889, the building with its addition contained two rooms measuring 10 feet square, one measuring 12 feet by 20 feet, one 16 feet by 40 feet, one 12 feet by 81 feet, one 10 feet by 20

4. Beaumont to AAG, Division of the Pacific, undated (c. 1886). Fort Bowie, LS. Copy in the files of FBNHS.

5. Beaumont to AAG, Department of Arizona, June 30, 1884. NA, RG 393. Department of Arizona, LS. Copy in the Arizona Historical Society; Inspection Report, Fort Bowie, March 27, 1888. NA, RG 159. Entry 15. 736/88.

6. Beaumont to AAG, Department of Arizona, October 18, 29, 1888. Fort Bowie, LS. Copies in the files of FBNHS.

7. Plat, "Fort Bowie, Arizona," dated May 20, 1889.

feet, and one measuring 9 feet by 12 feet.⁸ Used for housing civilian employees at that time, by the end of the year it contained a Chinese laundry.⁹ Early in 1890, in an attempt to consolidate and economize, the post commander, Major Henry E. Noyes, suggested that HS 020, "being a frame building can be moved and joined to No. 13 [Granary and old Quartermaster Storeroom] (as an L.) for kitchen and Mess building."¹⁰ But a photograph of the post in 1894 indicates that this was not accomplished.

8. "Report of Public Buildings at Fort Bowie, Arizona, May 20, 1889." Miscellaneous records. Microfilm MC 12.

9. Ibid.; First Lieutenant Walter M. Dickinson to the Quartermaster General, December 12, 1889. Miscellaneous records. Microfilm MC 12.

10. Noyes to AAG, Department of Arizona, February 3, 1890. Fort Bowie, LS. Copy in the files of FBNHS.

HS 021. Butcher Shop.

Two buildings successively occupied this site. Probably both were meat stores or butcher shops. The first was built in the early part of 1870 at the northeast corner of the post beyond the two cavalry barracks.¹ Photographs taken in the early 1870s show that this structure, like others built at about that time, was constructed of adobe with a flat dirt roof supported by vigas. There was a chimney, and two doors were located on the north side. A plat of December, 1870, indicates that the shop contained two rooms, each with a door fronting on the north side.²

Few changes were made to the shop over the next two decades. Photographs in the 1880s show that a wooden gable roof was put on, and that a window was added on the north side. Major Eugene B. Beaumont reported that the structure measured 15 feet square.³ By 1888 the building was used for storing meat.⁴ At approximately that time a small adobe building with a shed roof was erected a bit northeast of the butcher shop.⁵ The old structure was shortly razed, for it does not appear in photos taken in the 1890s. The small building, eventually with a gabled roof added, possibly served as a living quarters until the fort was closed. Records indicate that this building, with a single room 12 feet square, was erected in 1889 and was being utilized by a civilian beef contractor at that time.⁶ (See discussion of HS 038 below.)

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1. "Diagram of Camp Bowie, A.T., August, 1870."
 2. "Diagram of Camp Bowie, A.T., December, 1870."
 3. Beaumont to AAG, Division of the Pacific, undated (c. 1886). Fort Bowie, LS. Copy in the files of FBNHS.
 4. Report of the Annual Inspection of Public Buildings at Ft. Bowie, A.T., made March 31, 1888. Copy in the files of FBNHS.
 5. Photographs c. 1887-88.
 6. "Report of Public Buildings at Fort Bowie, Arizona, May 20, 1889." Miscellaneous records. Microfilm MC 12.

HS 022. Quartermaster Storehouse.

Drawings for this building were prepared in the summer of 1882. By late that year the lumber was available to start construction of a new grain house, a building that was planned as an annex to HS 013.¹ As erected in 1883, the frame structure consisted of a grain room 70 feet by 30 feet, and a "Storeroom for Horse Medicines & Fine Hardware" 30 feet square. Total length of the building was 100 feet, and it was raised on stone and concrete piers, doubtless to protect the stores within from moisture and rodents.²

The roof of the building was gabled. Photographs indicate that there was a sliding door on the north side, while a fence ran from the southeast corner to join the northeast corner of HS 013 and enclose the yard between the two buildings. On completion, HS 022 was used to store forage for the garrison animals and quartermaster-supplied clothing for the soldiers.³ In about 1885 or

1. Inspection Report, Fort Bowie, December 21, 22, 1882. NA, RG 159. Entry 15. 148/83; "Plan and Elevation of Quartermaster Storehouse for Fort Bowie, Arizona." NA, RG 77. Records of the Office of the Chief of Engineers.

2. "Plan and Elevation of Quartermaster Storehouse." Army directives governing the erection of storehouses to hold grain stipulated unique measures to protect the contents from rats: "In granaries resting on foundation posts, these posts should be cased with tin plates so arranged as to prevent rats, mice, and other vermin from climbing into the building. For the same purpose, the steps and platform should be separated from the wall by a space which a rat cannot leap, said space being bridged, when required, by movable gang-planks at each door, which should be invariably removed when not in use. Were rats and mice thus prevented constant access, and water kept out of all granaries, those getting in by any accident would soon be compelled to leave for water." General Orders No. 80, Headquarters of the Army, August 24, 1877, in Report of the Secretary of War, 1879, p. 379.

3. Inspection Report, Fort Bowie, September 2, 1884. NA, RG 159. Entry 15. 1232/84.

1886 the contents of the building were exchanged with those of HS 013. Henceforth, the new structure housed the quartermaster supplies, while the old one became the granary. Even then, however, there was too little storage space, especially when garrison strength grew during operations against the Apaches. "The Store room," lamented one officer referring to HS 022, "is not large enough to keep the property well stored on the ground floor, the only one at present, hence material for an upstairs [is] asked for. Ceiling and siding is much needed as the dust penetrates everywhere, spoiling Clothing and other Stores." An estimate for \$287.88 was filed to complete the recommended work.⁴ Afterwards, Major Beaumont described HS 022 as the "Q.M. Storehouse," containing an issue room of 24 feet 7 inches by 29 feet and a storeroom of 74 feet 6 inches by 29 feet. A loft ran the entire length of the building.⁵

Some changes to HS 022 are revealed in the historical photographs. One of 1886 shows a window having been added to the west end of the structure. Another, c. 1887-88, shows one having been added to the north side, close to the east corner. A chimney was situated at the center of the roof near the east end of the building. In 1889 there were four rooms in the granary measuring, respectively, 30 feet square, 30 feet by 55 feet, 14 feet square, and 24 feet by 30 feet.⁶ When an increase of the garrison was contemplated in 1890, Major Noyes suggested re-converting

4. Letter, First Lieutenant Wilbur E. Wilder, April 15, 1885, accompanying "Report of Inspection of Public Buildings at Fort Bowie, A.T., March 31, 1885." Miscellaneous records. Microfilm MC 12.

5. Beaumont to AAG, Division of the Pacific, undated (c. 1886). Fort Bowie, LS. Copy in the files of FBNHS.

6. "Report of Public Buildings at Fort Bowie, Arizona, May 20, 1889." Miscellaneous records. Microfilm MC 12.

HS 022 back into a granary, but this evidently was not done.⁷ During the last months of its history the granary was painted, with its windows and doors outlined in white or some light color. Other windows were added east and west of the door on the north side of the building, and a ventilator was placed near the gable of the roof at the west end.⁸

7. Noyes to AAG, Department of Arizona, February 3, 1890. Fort Bowie, LS. Copy in the files of FBNHS.

8. Photographs 1893, 1894.

HS 023. Engine and Ice Machine House.

This structure was built in the middle and late 1880s off the northeast corner of Fort Bowie. Erected to house the garrison's ice-making machine and steam engine (which aided in the water distribution system), the adobe building, according to photographs, was approximately 12 to 15 feet square and had a gabled roof with a smokestack rising above it. At least one window was located on the west side of the building.

The history of this structure is rather confusing and suggests that it did not always function in the dual nature its name implied. Moreover, there is evidence that the building was either enlarged or replaced altogether by another structure. For example, a plat of the mid-1880s shows the building to be a much larger, L-shaped structure than previous photographs indicate.¹

1. "Fort Bowie. Diagram of Post." c. 1886. In February, 1886, an inspecting officer reported that there was "no Ice-house" at Fort Bowie. Inspection Report, Fort Bowie, February 7, 1886. NA, RG 159. Entry 15. 661/86. An ice machine was installed at the post in August, 1887. Murray, "History of Fort Bowie," p. 285, citing Post Return, Fort Bowie, August, 1887. Quite possibly the heretofore unidentified HS 070 was associated with the installation of this machine. The structure definitely was not a reservoir as has sometimes been contended, for it is not so indicated on reference plats detailing the layout of the Fort Bowie water system. See, for instance, Plat, "Fort Bowie, Arizona," dated May 20, 1889. Furthermore, the stone remains of the low structure show that it contained one room, that it measured 15 feet by 13 feet, and that it had a door located on the north end. Two metal pipes protruded from the base of the west side. All of this, together with its close proximity to the ice machine, suggests that HS 070 might have been a vegetable cellar in which the produce, refrigerated by the ice, was kept fresh over longer periods than had previously been possible. Probably the building, situated on a sharp decline, was insulated with straw to help retard the melting of the ice, the runoff from which drained from the structure through the two pipes. There is mention of the construction of an ice house at Fort Bowie in fiscal year 1888 at a cost of \$390. Report of the Secretary of War, 1888, p. 459. Adding further credence to this (Continued)

Major Beaumont called the structure a "steam pump house" measuring 14 feet square.² It is known that in October or November, 1886, Fort Bowie sought a surplus steam engine from Fort McDowell for employment in pumping water, making ice, and sawing lumber.³ And a statement assessing the use of steam power in the army in 1888 remarked that an engine at Fort Bowie was being used to pump water, saw wood, and crush grain at a yearly cost of \$3300.⁴ Cost of the plant unit was placed at \$2000.⁵ During the summer of that year Beaumont cited the need for building "an engine-house, for sheltering boiler, steam pump and engine. . . ." ⁶ Photos taken at this approximate time show a large building running in an east-west direction. On the west side were two windows with a doorway in between.⁷ Quite likely this

1. (Continued) tentative identification are two photographs of Fort Bowie, each dated 1887-88 (corresponding to the installation of the ice machine), in which the structure can be discerned on the eastern slope of the fort, across an arroyo near the ice machine and engine house. The pictures show HS 070 with a gabled wooden roof and a doorway located on the north side. Inexplicably, the building does not show up in similar views of the post taken in 1893 and 1894. There is a description of a similar facility, called an "ice-house," in The Encyclopaedia Britannica (Ninth ed., 24 vol.; New York: Charles Scribner's Sons, 1881), XII, 615.

2. Beaumont to AAG, Division of the Pacific, undated (c. 1886). Fort Bowie, LS. Copy in the files of FBNHS.

3. See Beaumont to the Chief Quartermaster, Department of Arizona, October 17, 1886. Fort Bowie, LS. Copy in the files of FBNHS.

4. Report of the Secretary of War, 1888, (Washington: Government Printing Office, 1888), p. 500.

5. Ibid.

6. Inspection Report, Fort Bowie, August 3, 1888. NA, RG 159. Entry 15. 904/88.

7. Photographs c. 1887-88.

structure was used solely for steam engine purposes. An inspection report of 1888 noted that the engine house and the ice house were two different buildings. The former was described as "frame, used for Steam Boiler and Pump, capacity insufficient, in fair condition." The ice house was described as "adobe, used for an Ice Machine, ample capacity, in good condition."⁸ Post correspondence indicates that this structure was built in the summer of 1887 at a cost of around \$450.⁹ The ice machine began production on August 10. Two days later the first ice was received.¹⁰

Indications are that the engine house was still too small to contain the pump and boiler,¹¹ and that by the spring of 1889 an enlargement had been made to accommodate the steam engine, boiler, and the ice machine. The building, termed "Adobe with frame addition," contained two rooms. One was 24 feet square; the other was L-shaped and measured "24 x 24 x 14. . . ."¹² A water line joined the structure from a reservoir adjacent to the north end.¹³

8. "Report of the Annual Inspection of Public Buildings at Ft. Bowie, A.T. made March 31, 1888." Copy in the files of FBNHS. See also, Report of the Secretary of War, 1890, p. 710.

9. Beaumont to unidentified recipient, July 8, 1887. Fort Bowie, LS. Copy in the files of FBNHS.

10. Fort Bowie Post Returns, August, 1887. Copies in the files of FBNHS.

11. "Report of the Annual Inspection of Public Buildings at Ft. Bowie, A.T., made March 31, 1888." Copy in the files of FBNHS.

12. "Report of Public Buildings at Fort Bowie, Arizona, May 20, 1889." Miscellaneous records. Microfilm MC 12. This document states that HS 023 was built in 1887 and 1888, but probably only the frame addition was attached to the 14-foot-square adobe building at that time.

13. Plat, "Fort Bowie, Arizona," dated May 20, 1889.

Judging from photographs of the early 1890s, the various additions amounted to the completion of a complex of rooms housing related kinds of machinery. The small adobe building appears to have been moved into a depression a short distance east of its former location. On a rise immediately west another building was built. It was of frame construction and had a gabled roof complete with ventilator. In configuration with the smaller structure, this building assumed an L-shape.

The steam engine installed at Fort Bowie consisted of two parts, the engine proper and the boiler. The boiler generated heat to the engine. It consisted of a closed cylindrical iron vessel partially filled with water and fueled through a furnace either set in its base or built externally to it. Water was pumped into the boiler and heated until it became pressurized as steam. Through pipes the steam was let into the engine, which functioned on the principle of piston-cylinder action, creating a reciprocal rectilinear force that in turn produced a constant rotary motion. A fly-wheel helped to equalize the momentum of the machine and, when used with a band-pulley, could be made to operate other machinery, such as at Fort Bowie a saw, ice machine, or water pump.¹⁴

Brand-name steam engines popular for army use in the late nineteenth century included the Knowles No. 5 and Knowles No. 6 engines (cost, \$478.00 and \$503.00, respectively), used at Fort Davis, Texas, and Fort Verde, Arizona, in 1884. A Blake steam pump was in use at Fort Apache, Arizona, in the 1880s and early 1890s.¹⁵ Doubtless a similar engine and water pump were operated

14. Johnson's New Universal Cyclopaedia: A Scientific and Popular Treasury of Useful Knowledge (4 vols.; New York: Alvin J. Johnson and Son, 1878), IV, 506, 513, 515; Universal Cyclopaedia and Atlas (12 vols.; New York: D. Appleton and Company, 1901), IX, 110.

15. Note on steam engines in the files of FBNHS.

at Fort Bowie during the same period. In 1888 the boiler at the post failed, thereby stopping the water pump and ice machine. Major Beaumont forwarded an emergency requisition for "an upright twenty five horse power tubular boiler."¹⁶ According to contemporary sources, the upright boiler was similar in design to that used on locomotives and was commonly employed for operating both portable and stationary steam engines.

The simplicity of construction, convenience of access, and small space occupied by these boilers, combined with their evaporative qualities and strength, and combining, as they do, the chimney with natural draught with the upright shell, render them peculiarly adaptable for some conditions of use.¹⁷

A major problem with boilers was their tendency to explode under pressure because of internal and therefore usually undetected defects in workmanship or material.¹⁸ At Fort Bowie an incident occurred in which the boiler previously ordered was proven defective. A post board of survey was convened and its report forwarded to departmental headquarters. Wrote Beaumont:

I send the piece cut from the boiler, from which it appears that it was a deliberate and criminal fraud on the part of the boiler maker and might have resulted in loss of life. I was present when steam was raised and might have been injured by an explosion which was probably

16. Beaumont to Major Amos S. Kimball, March 20, 1888. Fort Bowie, LS. Copy in the files of FBNHS.

17. Johnson's New Universal Cyclopaedia, IV, 509.

18. Ibid., p. 513.

avoided by the low pressure at which the leak discovered itself. The accompanying piece of boiler shows how the fraud was attempted to be concealed. The concave side, where the radiating cracks are, was next to the water and the head of the plug or rivet was discovered by the blacksmith while endeavoring to stop the leak. . . . This boiler when received had not been tapped on top for its steam pipe. The Board has not found anyone responsible for the condition of the boiler, though it is clear to me that those by whom it was sold to the government or the Inspector are responsible. In the meantime the boiler is useless, as the large piece of metal cannot be replaced at the Post, and the fraud could only be discovered by cutting it out. We shall need a new boiler and the parties from whom the defective one was purchased should be made either to repair or replace the defective one.¹⁹

The flawed boiler was shipped to the firm of Parke & Lacy, from whom it had been purchased.²⁰

Powered in part by the steam engine, the ice machine produced artificial ice by virtue of a chemical reaction between anhydrous ammonia and saltwater. The highly volatile ammonia, trapped in a coil, was submerged in the brine from which it absorbed heat, causing it to boil and evaporate and leaving the brine cooled to freezing temperature. Ice eventually formed on

19. Beaumont to AAG, Department of Arizona, June 28, 1888. Fort Bowie, LS. Copy in the files of FBNHS.

20. Beaumont to Lieutenant Colonel Richard N. Batchelder, October 8, 1888. Fort Bowie, LS. Copy in the files of FBNHS.

adjacent cooled surfaces. The steam engine powered a compressor which raised the pressure of the ammonia vapor so that as it passed into a condenser, where heat was withdrawn, it reverted to its liquefied form.²¹ At Fort Bowie the operation and maintenance of the ice machine was the responsibility of the post surgeon. He ordered the anhydrous ammonia used in ice production and disbursed the funds in payment for it.²² Ice was sold to individuals at the post at a price made uniform for both military and civilian government employees.²³

21. Johnson's New Universal Cyclopaedia, II, 1090; Universal Cyclopaedia and Atlas, VI, 142.

22. Telegrams, Captain Gustavus C. Doane to Captain Theodore E. True, Assistant Quartermaster, Department of Arizona, June 12, 1890. Fort Bowie, LS. Copies in the files of FBNHS; Major Thomas McGregor to Captain Daniel D. Wheeler, June 21, 1890. Fort Bowie, LS. Copy in the files of FBNHS.

23. Post Adjutant to Post Surgeon, Fort Bowie, August 9, 1889. Fort Bowie, LS. Copy in the files of FBNHS.

HS 024. Privy.

This large hip-roofed outhouse was erected at the northeast corner of the corrals (HS 018) in about 1886, apparently at the time the back of the enclosures was being altered.¹ Probably built of adobe, the structure served as an earth closet, or sink, until 1889, when a piped drainage system was installed at Fort Bowie. Thereafter it functioned as a water closet for the enlisted men and was "frequently flushed out when water can be spared." During a shortage in the summer of 1893 the toilet was sealed and the men required to use an earth closet again.² The roof of this structure can be seen in a photograph of the fort taken in 1893-94.

1. See "Fort Bowie. Diagram of Post." c. 1886.

2. Fort Bowie Medical History, July, 1893. Copy in the files of FBNHS.

HS 025. Commanding Officer's Quarters.

Easily the most imposing and elaborate building at Fort Bowie, the commanding officer's quarters, located off the southeast corner of the post, exemplified a Victorian architectural ideal that, in the case of the army, at least, was often exceeded by impracticality of purpose. The building was under construction in the summer of 1884 when Major Eugene B. Beaumont, Fourth Cavalry, assumed command of the post. Himself a student of architecture, Beaumont blanched at what he saw:

I found a large double wooden house under construction. . . . The house, being entirely of wood and originally intended for a great amount of useless ornamentation and of an absurd plan, having two rooms in each set of quarters almost devoid of light and ventilation, [still] requires a large amount of carpenter work.¹

To his superiors Beaumont wrote that

the new officers quarters are being erected as rapidly as possible but the large amount of useless & unnecessary ornamentation has been a source of great expense & waste of time and such a plan should never have been authorized.²

Beaumont's strong opinions about the design of the building and the expenses its erection entailed were expressed in a letter to

1. Beaumont to AAG, Department of Arizona, July 10, 1884. NA, RG 92. Records of the Office of the Quartermaster General. Consolidated correspondence file, 1794-1915.

2. Beaumont to AAG, Department of Arizona, June 30, 1884. NA, RG 393. Department of Arizona, LS. Copy in the Arizona Historical Society.

the departmental quartermaster shortly after the Major's arrival. Some difficulty arose when the quartermaster disputed an estimate for materials and labor with which to complete the work on HS 025. "It is not becoming in me," responded Beaumont, "to carry on a wordy controversy. . . ."

The fact remains, that during the months of July and August . . . no less than three carpenters have been working steadily on the new quarters. . . . One side of the building is nearly fit for occupation. The want of lime which is being burned, has delayed the plastering. The inside of one half of this building must be finished with doors, windows, surbases, mantles, stairways, bay-windows, &c, &c. [and] must be lathed and plastered. . . . Not one dollar, nor one stick of lumber has been wasted since I assumed command here. . . .

There is no plan on file here of this structure and I understand it was the design of Mr. Richly now employed at [Fort] Huachuca. The slight change I made has saved money. The plan as explained to me by Mr. Richly had two rooms in each side without windows and one room, upstairs, in each had no communication with the Hall. In the absence of any official plan or orders I would not stulify myself by following a self evident absurdity.³

3. Beaumont to AAG, Department of Arizona, August 20, 1884. Fort Bowie, LS. Copy in the files of FBNHS. Two days later Beaumont stated his belief that the building had been designed "for the express purpose of making work for carpenters and should never have been approved." He vetoed "an elaborate circular staircase" slated for the structure, and wrote that "I have disapproved of this building as unnecessary from the first, but falling heir to it, I have endeavored to push it to completion. I would have been content with a more modest structure." Beaumont to AAG, Department of Arizona, August 22, 1884. Fort Bowie, LS. Copy in the files of FBNHS.

Original plans for the quarters called for an expenditure of \$2645, but the final cost was approximately \$4000--lavish by frugal army standards.⁴ By architectural criteria the Fort Bowie commanding officer's quarters represented more a caricature of a classic French pattern than any real adherence to it. The building actually consisted of two quarters. The plan called for the erection and joining of two units which independently might properly characterize the Second Empire style but when thrown together offered instead a blatant example of its corruption by an expedient army. One quarters mirrored the other in the construction, and the peculiar Victorian symmetry was thereby destroyed. The typical tower, when doubled in extent, tended to dominate the facade and thus impair an otherwise pleasing appearance.

Plans prepared in 1883 were modified substantially during construction of the building. Initially, it was to have two mansard towers topping the box-like front, but they were replaced in the final design by a truncated and less garish version. Likewise, dormers were substituted for planned diamond-shaped windows in the towers of the finished building. Originally, too, the lower windows in the front center of the house were to be circular, complying with Victorian precepts. However, these were changed in the pattern to be conventional windows; and in the construction these windows were exchanged altogether for double-opening glass doors that entered upon a balcony, also not in the initial plans.⁵

The quarters were erected on a high, stone, piered foundation. Each half had a shingle-striped mansard roof complete

4. "Front Elevation; New Building." NA, RG 77. Records of the Office of the Chief of Engineers.

5. Compare "Front Elevation; New Building" with a photograph of the completed structure taken in 1886.

with skylight on top and a parapet along the upper rim. A chimney stood atop each side of the building. Each half of the roof contained one dormer on the front (north), one on the back (south), and two on each side. On the ground level each quarters had a door and two windows in front, plus a bay window and two smaller windows on its side. The bay windows had fish-scale shingling on their roofs. A wide porch with roof was attached to the rear of the building in the plan, but this was apparently modified during construction. The building was covered with horizontally-placed v-cut tongue and groove siding.⁶ The exterior, according to photographs, was painted a dark color, probably a deep red or green. Trim was perhaps a buff or off-white.

The interior of HS 025 was divided equally down the middle into two separate apartments. In fact, Major Beaumont, who lived with his family in the west quarters, described the structure in terms of A and B. No. 25A, said Beaumont, occupied two stories. The first floor had a hall 26 feet 6 inches by 12 feet 6 inches, a parlor 15 feet 8 inches by 15 feet 10 inches, a bedroom 12 feet by 15 feet 10 inches, and a dining room 14 feet 4 inches by 15 feet 10 inches. Upstairs were four attic rooms, 10 feet by 9 feet 6 inches, 15 feet 9 inches by 16 feet, 15 feet 9 inches by 12 feet 6 inches, and 15 feet 8 inches by 12 feet 7 inches. There was also a hallway 15 feet 8 inches by 12 feet 6 inches. Attached to the rear of the house (and not shown in the building plans) were a kitchen, 16 feet 4 inches by 12 feet 2 inches, a pantry 11 feet by 6 feet, and a servant's quarters 10 feet by 1 feet. No. 25B, also an officers'

6. See "Side Elevation; New Building." NA, RG 77. Records of the Office of the Chief of Engineers; Photograph, 1886. Reference to the striped roof of HS 025 is in Andre A. Beaumont to William W. Neifert, September 2, 1942. Mrs. William L. Lance Collection. Arizona Historical Society, Tucson.

quarters, had rooms of identical dimensions. Staircases were located along the dividing wall between the quarters.⁷ According to the building plan, a double fireplace was downstairs in each quarters, situated between the parlor and the hallway.⁸ During construction of the house, or shortly afterwards, water and drain pipes were connected to it.⁹

Photographs made soon after the building's erection show that it was completed without front porches but that these were shortly added. Furthermore, a large, two-story gable roof building, probably adobe, was present immediately behind (south) the officers' quarters.¹⁰ Behind this structure stood yet another, smaller, building, perhaps a privy or a stable. A picture taken in 1885 shows HS 025 complete with verandas on the front and paled fencing around the east and west sides of the dwelling.¹¹ On the west end of the large structure in the rear were three large windows and a door, besides two small windows on the upper level

7. These dimensions are from Beaumont to AAG, Division of the Pacific, undated (c. 1886). Fort Bowie, LS. Copy in the files of FBNHS. See also those given in "First Floor, New Building," and "Second Floor, New Building." NA, RG 77. Records of the Office of the Chief of Engineers.

8. "First Floor, New Building."

9. Plat, "Fort Bowie, Arizona," dated May 20, 1889.

10. See also "Fort Bowie. Diagram of Post." c. 1886. There exists an estimate for labor and supplies, including 12,000 adobes, for "one set of quarters for use of Commanding Officer," possibly in reference to the structure directly behind HS 025. The list of materials is extensive. See "Estimate for Materials and Labor required for Fort Bowie, Arizona, during the fiscal Year ending June 30, 1885 [1886?]." Miscellaneous records. Microfilm MC 12.

11. An estimate for fencing 400 feet long and 8 feet high is in "Report of Inspection of Public Buildings at Fort Bowie, A.T., March 31, 1885." Miscellaneous records. Microfilm MC 12.

near the angle of the roof. Another gabled structure, probably a hay barn, was erected behind (and adjoining?) the stable, and what appears to be a fenced corral was nearby. Block and tackle equipment hoisting a load of baled hay can be discerned near the northwest corner of the barn in this particular photograph. In a photo of 1886, however, the barn-like structure is missing, and perhaps was burned or torn down.

Compared to the other officers' quarters, the newly-built HS 025 required less in time and money for maintenance. Major Beaumont, who lived in the structure, complained that it was hot in the summer because of its construction of wood rather than adobe. It was, he remarked, "entirely unsuited to the climate."¹² In April, 1885, Beaumont's daughter, Natalie, wed Lieutenant Colonel George A. Forsyth in the house, and in December, 1886, his other daughter, Hortense, married Second Lieutenant Charles P. Elliott, probably in the parlor.¹³ The other side of the building was occupied by various company officers until the fort was abandoned.¹⁴ At one time it was contemplated remodeling the inside and making it into a single quarters for the commander, but this, seemingly, was never accomplished.¹⁵

12. Inspection Report, Fort Bowie, September 4, 1886. NA, RG 159. Entry 15. 1036(2)86.

13. "Precisely at 7.45 yesterday evening [December 21] the bride was escorted by her father to the room set apart for the ceremony and in an alcove beneath a floral bell made entirely of Arizona flowers and of huge proportions, presented by the men of the regiment quartered in the post." Army and Navy Journal, January 8, 1887.

14. "Report of the Annual Inspection of Public Buildings at Fort Bowie, A.T., made March 31, 1888." Copy in the files of FBNHS; "Report of Public Buildings at Fort Bowie, Arizona, May 20, 1889." Miscellaneous records. Microfilm MC 12.

15. Plan labeled "Commanding Officer's Quarters," dated June 18, 1887. Copy in the files of FBNHS.

The only substantive change to HS 025 affected the servant's quarters; a report of May, 1889, indicates that this room was converted into a bathroom.¹⁶ In February, 1892, the structure caught fire, but the damage was minimal. A defective chimney was blamed, and it was soon replaced.¹⁷ Finally, the house was painted a light color, probably white, sometime in the early 1890s, judging from photographs made at the time. After Fort Bowie's abandonment in 1894, local residents carted off most of the lumber from these and other quarters. The dormers now present on a house near Bear Spring, a mile from the site of Fort Bowie, may have been taken from HS 025.

16. "Report of Public Buildings at Fort Bowie, Arizona, May 20, 1889." Miscellaneous records. Microfilm MC 12.

17. Major Thomas McGregor to AAG, Department of Arizona, February 1, 1892. Fort Bowie, LS. Copy in the files of FBNHS.

HS 026. New Guardhouse.

This adobe structure was erected in 1885 and 1886 on the north side of Fort Bowie behind the subsistence storehouse. It was built to replace HS 016 along the west side of the post. In March, 1885, plans and estimates for this building were submitted to the Quartermaster Department. Supplies required consisted of lumber, adobes, bricks, shingles, and paint (venetian red).¹ The structure was mostly finished by February, 1886, and had a capacity of "Twenty prisoners and Guard of 15 men."²

The first photographic appearance of HS 026 is in a picture probably made in the winter of 1885-86 by Baker and Johnston.³ Evidently, the guardhouse was not completed when this view was taken. Erected on a stone foundation, the building was an L-shaped structure, with the top arm of the "L" projecting west. It had a hip roof, and a chimney was positioned in the center of the westward extension. Ventilator flues were located on both sections of the roof, and there was one small window present on the west end. Two similar windows were located near the west end of the north side, next to a larger window near the center of that side. The space between the projecting extensions of the "L" was enclosed by a palèd fence, complete with posts and stringers. A roofed porch was attached along the east side of the building. On the south side of the guardhouse in this picture two field tents had been erected and they appear to have had low, adobe walls built

1. "Report of Inspection of Public Buildings at Fort Bowie, A.T., March 31, 1885." Miscellaneous records. Microfilm MC 12.

2. Inspection Report, Fort Bowie, February 7, 1886. NA, RG 159. Entry 15. 661/86.

3. An engraving of this photograph accompanied an article in Frank Leslie's Illustrated Newspaper, April 3, 1886.

around them. Perhaps these walled tents served as a temporary guardhouse until the new building was finished.

The new guardhouse underwent few alterations during its existence. Major Beaumont described it as containing a guard room 20 feet by 20 feet 8 inches, a "garrison prison room" 20 feet by 23 feet, a bathroom 5 feet by 8 feet, a washroom 8 feet by 10 feet, a tool room 8 feet by 5 feet, and a cell room 7 feet by 20 feet.⁴ In 1889 the guard house reportedly contained "1 Room 16 x 32, with cells 4 x 9 in center, 1 Room 16 x 20."⁵ Reginald Bradley, who served at Fort Bowie, recollected that the guard house "contained a table and a few chairs, and iron bunks, with bare springs, for the off-duty guard[s] to rest on--fully clothed, and with their carbines."⁶ A water line was connected to the building sometime in the late 1880s. And in the early 1890s the adobe exterior was whitewashed.⁷

4. Beaumont to AAG, Department of Arizona, undated (c. 1886). Fort Bowie, LS. Copy in the files of FBNHS.

5. "Report of Public Buildings at Fort Bowie, Arizona, May 20, 1889." Miscellaneous records. Microfilm MC 12.

6. Bradley Interview, 1968.

7. Plat, "Fort Bowie, Arizona," dated May 20, 1889; Photograph, 1893.

HS 027. Non-Commissioned Staff Quarters.

In the early 1880s it was determined that quarters needed to be built for the non-commissioned staff officers at Fort Bowie. These men were not assigned to the line. They were senior enlisted representatives of the various army staff departments, notably the Commissary, Quartermaster, and Ordnance departments--men responsible in large measure for supply and maintenance of the garrison of Fort Bowie. In March, 1883, a requisition was made for materials and labor to erect "3 sets of quarters under one roof" for the use of the post ordnance sergeant, commissary sergeant, and hospital steward and their families. Kitchens, too, were to be built behind their respective quarters.¹ Alluding to the need for these quarters, the post quartermaster noted that the non-commissioned staff

are [presently] quartered around in temporary quarters in buildings intended for other purposes--for instance the commissary sergt (a married man with his family with him) has one room in the end of the Q.M. Store House--the room not a large one being divided into two by a board partition.²

The NCO staff quarters were, by and large, erected in 1883, although much interior work remained unfinished for some time after

1. "Report of Annual Inspection of Public Buildings of Fort Bowie, A.T., March 31st 1883." Miscellaneous records. Microfilm MC 12. Originally it was decided that the hospital steward, rather than the quartermaster sergeant, would occupy one of these quarters, but the hospital steward eventually got a separate quarters of his own. Ibid.

2. "Report of Annual Inspection of Public Buildings of Fort Bowie, A.T. March 31st 1883." Miscellaneous records. Microfilm MC 12.

the apartments were occupied. Major Beaumont gave the following dimensions of the structure: "Hosp. Stewards quarters, 3 rooms, 13'2 x 12'4--13' 2 x 12--11'6 x 10' 6. Ordnance Sergeants [sic] quarters, 3 rooms, 12 x 15'6--12 x 15'6--10' x 11'5. Commissary Sergeants quarters, 3 rooms, 13 x 12'4--13 x 12--11'4 x 11'4."³

The frame building was erected upon a tall stone foundation. In historical photographs of Fort Bowie HS 027 is rarely seen because the structure was situated about 150 yards west of the parade ground at the north end of the post. Three views taken in 1886 show the building to have a gabled roof with two chimneys present (the two easternmost apartments shared one fireplace). A covered veranda was attached to the front (south) side, while on the back were three kitchens. Each kitchen had a door, window, and steps leading to the entrance. On the west side of the building were two windows. The building measured 30 feet by 44 feet and had a skylight located in the center of the roof, according to official drawings.⁴ A running water pipe was connected to the quarters.⁵

The incomplete status of HS 027 prompted further requisitions from Fort Bowie in 1885. Wrote the post quartermaster, First Lieutenant Wilbur E. Wilder:

The quarters for the Non-Commissioned Staff Officers are in an unfinished condition, the different quarters are

3. Beaumont to AAG, Division of the Pacific, undated (c. 1886). Fort Bowie, LS. Copy in the files of FBNHS.

4. Drawing, Non-commissioned Staff Quarters, Fort Bowie, dated May 8, 1883. NA, Cartographic Archives Division. This plan shows measurements of 14 feet square for all the rooms, save kitchens, in the structure. Two of the kitchens measured 12 feet by 14 feet, one 14 feet square. Ibid.

5. Plat, "Fort Bowie, Arizona," dated May 20, 1889.

without ceilings; the sides should be plastered: at present the quarters are only separated by wooden partitions, so that every word spoken can be heard, affording no privacy to families living in this building.⁶

A list for materials needed to finish the interior included redwood tongue-in-groove ceiling strips, plaster of paris, and plastering hair. The estimate gave the following dimensions for the component apartment units in the structure:

Commissary Sergeant's Quarters --

Rooms 12' x 12' x 11', 12' x 13' x 11', 8' x 10' x 11'.

Quartermaster Sergeant's Quarters --

Rooms 14' x 13' x 11', 14' x 13' x 11', 12' x 8' x 11'.

Ordnance Sergeant's Quarters --

Rooms 12' x 12' x 11', 12' x 13' x 11', 8' x 10' x 11'.⁷

The completion of the interior, however, failed to alleviate a growing need for more quarters for the non-commissioned staff at Fort Bowie. In 1887 plans were drawn for another double set of quarters,⁸ and in the following year the original N.C.S. quarters,

6. Letter, April 15, 1885, accompanying "Report of Inspection of Public Buildings at Fort Bowie, A.T., March 31, 1885." Miscellaneous records. Microfilm MC 12.

7. "Report of Inspection of Public Buildings at Fort Bowie, A.T., March 31, 1885." Miscellaneous records. Microfilm MC 12.

8. Plan labeled "Non Com Staff Quarters," dated 1887. NA, RG 92. Consolidated correspondence file, 1794-1915. The drawing shows a building measuring 40 feet long by 30 feet wide divided into two equal units each consisting of a sitting room, bedroom, and kitchen. See also "Estimate of Material and Labor required at Fort Bowie, Arizona, during the Fiscal Year ending June 30, 1888," for erection of "New Set of Quarters for Non-Commissioned Staff Officers." Miscellaneous records. Microfilm MC 12.

less than five years old, were termed as being of insufficient capacity.⁹ In March, 1888, an inspecting officer urged that another set of quarters be erected,¹⁰ but such plans never materialized. As of May, 1889, the old quarters were occupied by the post commissary, quartermaster, and ordnance sergeants.¹¹

9. "Report of the Annual Inspection of Public Buildings at Fort Bowie, A.T., made March 31, 1888." Copy in the files of FBNHS.

10. Inspection Report, Fort Bowie, March 27, 1888. NA, RG 159. Entry 15. 736/88.

11. "Report of Public Buildings at Fort Bowie, Arizona, May 20, 1889." Miscellaneous records. Microfilm MC 12. This report gave approximate dimensions for the three quarters: "Each set contains 2 rooms 12 x 13, kitchen 10 x 12." *Ibid.* In 1890 the army purchased the Post Trader's Store and for awhile considered turning it into quarters for non-commissioned staff officers. "Proceedings of a board of officers convened at Fort Bowie, A.T. by virtue of the following orders:" S.O. #28, Headquarters, Division of the Pacific, April 28, 1890. Miscellaneous records. Microfilm MC 12.

HS 028. New Bakery.

This new bakery was built during 1886 to replace the old HS 007. Erected on the west side of the new guard house (HS 026) at the north end of Fort Bowie, this structure functioned as the bakehouse until the post was abandoned in 1894. A photograph taken in 1886 shows the oven, chimney, and foundation of HS 028 under construction. A later picture shows the finished building, a square, adobe hip-roofed structure atop a high, stone foundation. There was a door near the north corner of the west side with four or five steps leading to it. One window was located along the north side towards the east end. The inside consisted of one large room 30 feet square in which the oven was situated.¹ Evidently, the oven was larger than that in the old bakery, and in October, 1886, it was ready for use.² Minor changes were made to HS 028 during Fort Bowie's active status, notably a shed addition on the west end completed in the late 1880s or early 1890s. A water pipe was attached to the structure, probably shortly after construction was finished.³ A photo taken in the early 1890s shows that a ventilator flue had been added to the roof and that a shed had been built onto the west side. A window was located on the west side of the addition. No further changes were made to HS 028.

1. "Report of Public Buildings at Fort Bowie, Arizona, May 20, 1889." Miscellaneous records. Microfilm MC 12.

2. Fort Bowie Medical History, October, 1886. Copy in the files of FBNHS.

3. Plat, "Fort Bowie, Arizona," dated May 20, 1889.

HS 029. Civilian Employees' Quarters.

This structure was probably erected during the mid-1880s, judging from its appearance on a ground plat of that approximate time.¹ It was built of adobe and contained five rooms. Three of the rooms measured 14 feet by 15 feet, one was 15 feet by 20 feet, and one was 14 feet by 16 feet.² Diagrams of Fort Bowie indicate that the structure was T-shaped and that a water line was attached to it.³ An inspection report of 1888 termed the structure's capacity "ample".⁴ In 1889 the structure was being used as the residence of the post blacksmith. There was also an officers' mess room available.⁵ A photograph of the Laundresses' Quarters (HS 030) taken in 1890 shows the Civilian Employees Quarters in the background. It appears to have had a gabled roof with a chimney positioned in the middle. A roofed veranda was attached along the west end and south side of the structure, and a small window was located near the gable at the west end. Two sinks were situated behind the quarters.

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1. "Fort Bowie. Diagram of Post," c. 1886.
 2. "Report of Public Buildings at Fort Bowie, Arizona, May 20, 1889." Miscellaneous records. Microfilm MC 12.
 3. Plat, "Fort Bowie, Arizona," dated May 20, 1889.
 4. "Report of the Annual Inspection of Public Buildings at Fort Bowie, A.T., made March 31, 1888." Copy in the files of FBNHS.
 5. "Report of Public Buildings at Fort Bowie, Arizona, May 20, 1889." Miscellaneous records. Microfilm MC 12.

HS 030. Laundresses' Quarters.

This structure, originally associated with the first Fort Bowie, was also known as the old mail station and the old mess house. It was erected in the 1860s while the old fort yet flourished, and in photographs taken of the first post in the 1870s civilian employees can be seen standing in front of HS 030. There was an adobe building (stable?) next to the old station, and one view shows this dilapidated structure, the mud and stick roof having collapsed. In 1877 five laundresses were living in the building.¹ Twelve years later, however, it housed the post hospital steward and "one married man."² Inside were "3 rooms 12 x 20, 2 rooms 10 x 18, 2 Rooms 10 x 10, Kitchen 10 x 12 (frame)."³ Apparently through most of its history ownership of this building remained in private hands, and in 1890 it was owned by the same firm that owned the post trader's store.⁴

There exists one photograph of the quarters taken in 1890 by the board of officers sent to appraise the structure while contemplating its remodeling for military purposes. The photograph shows the weathered old adobe structure with a recently added shed roof. The report of the board described the structure thusly:

1. Outline Descriptions of Military Posts in the Military Division of the Pacific, p. 7.

2. "Report of Public Buildings at Fort Bowie, Arizona, May 20, 1889." Miscellaneous records. Microfilm MC 12.

3. Ibid.

4. "Proceedings of a board of officers . . . ," July 8, 1890. Miscellaneous records. Microfilm MC 12.

The . . . building, formerly used as a mess for officers and employees [by the Post Trader], now occupied by the post engineer, is an adobe building, one story, built upon natural surface of ground, walls plastered and whitewashed inside; flat mud roof covers entire building; over the two "chambers" or bed rooms mud roof covered with tin; over "kitchen and parlor" mud roof covered with shed shingle roof; plain mud roof over "pantry" ceiling in "parlor" matched pined lumber, 10'3" high; in all other rooms, muslin or canvas 9'9" high; floors in two bed rooms matched pine lumber, old and worn; in other rooms of same material, new and in good condition; windows in former single sash, six lights 8" x 10", in latter twelve lights 8" x 10", old panel doors in poor condition; door and window casings in poor condition.⁵

The board suggested that perhaps the old building could be used for additional quarters for non-commissioned staff officers.⁶ According to the plan of the old mess house enclosed with the report, the rooms measured as follows: parlor, 15 feet by 13 feet; dining room, 15 feet 2 inches by 14 feet; pantry, 14 feet 2 inches by 11 feet; chamber, 13 feet by 15 feet 10 inches; and chamber, 14 feet by 16 feet 2 inches.⁷ The quarters were last photographed in 1893 or 1894 by the novelist, Owen Wister. The structure by then had received a new roof, and a small building had been erected a few yards south of the adobe building near the quarters.⁸

5. Ibid.

6. Ibid.

7. Ibid.

8. See above discussion of HS 030 in regard to the first Fort Bowie, pp.

HS 031. Mess Hall.

In 1888 the adobe mess room and kitchen (HS 009) to the barracks of Troop G, Fourth Cavalry (HS 008) was described as being in "very poor" condition.¹ The inspecting officer, Lieutenant Colonel William F. Drum, recommended that a new facility be erected,² and by March of the following year a new building housing a mess hall and kitchen had been built immediately north of the barracks.³ When completed, the structure contained four rooms respectively measuring 24 feet by 20 feet, 16 feet by 25 feet, 10 feet by 12 feet, and 10 feet by 12 feet. A fifth room, 12 feet by 24 feet, was divided into three bathrooms, each measuring 4 feet by 9 feet.⁴

Photographs of HS 031 taken in 1893 and 1894 show it to have been a rather large frame building with a hip roof and stone foundation. It was painted a dark color, perhaps deep red or green, with trim in white or some light color. Two or three chimneys were situated along the top of the roof, and there were two windows present at the north end. The building was slightly taller than the neighboring barracks.

1. "Report of the Annual Inspection of Public Buildings at Ft. Bowie, A.T., made March 31, 1888." Copy in the files of FBNHS.

2. Inspection Report, Fort Bowie, March 27, 1888. NA, RG 159. Entry 15. 736/88.

3. Lieutenant Colonel George D. Ruggles to Commanding General, Division of the Pacific, March 23, 1889. NA, RG 49. Records of the General Land Office. Abandoned Military Reservations, Box No. 22. See also Major Henry E. Noyes to AAG, Department of Arizona, April 14, 1889. Fort Bowie, LS. Copy in the files of FBNHS. On a plat of Fort Bowie dated May 20, 1889, the new building is designated "Mess-hall, etc., to no. 8."

4. "Report of Public Buildings at Fort Bowie, Arizona, May 20, 1889." Miscellaneous records. Microfilm MC 12.

HS 032 Schoolhouse.

Maintenance of school facilities at all permanent army stations was made mandatory by law in 1866 and was reemphasized in the revised army regulations of 1881.¹ Nonetheless, educational opportunities at most western posts were limited and depended as much on the availability of space as on the intellectual desires of the soldiers.

Various structures served at one time or other as school and library at Fort Bowie. In October, 1879, plans were approved by the Secretary of War to build a formal school at the post, but limited available funds in the Division of the Pacific prevented the construction from proceeding.² In 1887, Major Eugene B. Beaumont noted that "there is no school room at the Post, no children for pupils and, unless enlisted men are compelled to attend, a school is useless."³ However, in the following year an inspecting officer urged that a "library and recreation building" be erected at the post, reflecting the army's embracing of a philosophy of instruction as a means of bettering its men and itself.⁴

1. Don Rickey, Jr., Forty Miles a Day on Beans and Hay: The Enlisted Soldier Fighting the Indian Wars (Norman: University of Oklahoma Press, 1963), p. 194.

2. See Post Quartermaster, Fort Bowie, to Chief Quartermaster, Department of Arizona, August 27, 1879, and successive endorsements, particularly that to the Chief Quartermaster, Division of the Pacific, November 6, 1879. Copy in the files of FBNHS. The 1879 plan envisioned an adobe building 82 feet long by 20 feet wide divided into library, school room, teacher's room, bedroom, and ante room. A double privy was to be located behind the structure. Total cost was projected at \$977.75. Plan of School building and privy (1879). NA, Cartographic Archives Division. See also Report of the Secretary of War, 1880 (Washington: Government Printing Office, 1881), p. 316.

3. Inspection Report, Fort Bowie, March 27, 1888. NA, RG 159. Entry 15. 736/88.

4. Inspection Report, Fort Bowie, March 27, 1888. NA, RG 159. Entry 15. 736/88. Between 1880 and 1885 the holdings of the Fort (Continued)

Plans for a "Proposed Chapel, Court-Martial Room, & School room etc" were prepared early in 1888.⁵ Estimated materials for the 25 by 50 by 10-foot structure included red pine lumber, portland cement, and redwood shingles, besides doors, windows, and their necessary framework.⁶ Projected cost for the frame structure was \$523.30, and these funds were readily granted. Construction began early in 1889 and by the middle of April the building was largely completed.⁷ In May all it needed was painting.⁸

4. (Continued) Bowie library collection variously included the following newspapers and periodicals: New York Herald, San Francisco Chronicle, Arizona Citizen, Toledo Blade, New Orleans Picayune, Washington Sunday Herald, Boston Saturday Gazette, Detroit Free Press, Chicago Sunday Times, Louisville Courier Journal, Baltimore Sun, Chicago Evening News, Philadelphia Times, Arizona Statr, Boston Globe, New York Dispatch, St. Louis Globe-Democrat, London Fun, Scribner's Monthly, Harper's Weekly, Frank Leslie's Illustrated Newspaper, Uber Land und Meer, Army and Navy Journal, Harper's Monthly, the Century, Forest and Stream, Army and Navy Register, Puck, Scientific American, Waverly Magazine. "Newspapers and Periodicals at Ft. Bowie," in the files of FBNHS.

5. See plan dated March 31, 1888. NA, Cartographic Archives Division.

6. "Estimate of Material and Labor required at Fort Bowie, Arizona, during the fiscal year ending June 30, 1888." Miscellaneous records. Microfilm MC 12. Plan labeled "Library Building &c," dated 1887. NA, RG 92. Consolidated correspondence file, 1794-1915.

7. Memo, April 17, 1889. NA, RG 49. Records of the General Land Office. Abandoned Military Reservations. Copy in the files of FBNHS; Lieutenant Colonel George D. Ruggles to Commanding General, Division of the Pacific, March 23, 1889. NA, RG 49. Records of the General Land Office. Abandoned Military Reservations, Box No. 22; Major Henry E. Noyes to AAG, Department of Arizona, April 14, 1889. Fort Bowie, LS. Copy in the files of FBNHS.

8. "Report of Public Buildings at Fort Bowie, Arizona, May 20, 1889." Miscellaneous Records. Microfilm MC 12.

HS 032 stood on the west side of the parade next to the south end of the old hospital (HS 015). It was erected on a tall, piers foundation of limestone and mortar. Building plans show that the structure was hip-roofed, with a chimney at the north end and that it had four windows on the west side.⁹ The interior consisted of one large room measuring 24 feet by 49 feet.¹⁰ A photograph of the post, circa 1893-94, reveals that HS 032 was at some time joined to the old hospital structure (HS 015) by another, smaller building with a chimney located near the northwest corner of its roof. The purpose of this small connecting building is unknown.

9. Plan, "Proposed Chapel, Court-Martial Room, & School room etc," dated March 31, 1888. NA, Cartographic Archives Division.

10. "Report of Public Buildings at Fort Bowie, Arizona, May 20, 1889," Miscellaneous records. Microfilm MC 12.

HS 033. New Hospital.

In May, 1887, drawings and estimates for a new hospital building to replace HS 015 were prepared and submitted for approval to the War Department. The design called for a large, one-story adobe structure measuring approximately 124 feet long by 76 feet wide with rooms 16 feet high. The building was to be U-shaped, with a wing on either end, and with a veranda built entirely around it.¹ The estimate of required materials included lumber for rafters, flooring joists, and studding, and also for 16,000 adobe bricks "4 x 16 @ \$23.00 per M [thousand], made and laid in wall." The work was to take four carpenters ninety days to accomplish, and total cost for the hospital was estimated at \$4416.98.²

In August the work won approval and the requested funds were granted. Major Beaumont, desiring to begin construction immediately, wrote division headquarters: "As this is the season for manufacturing adobes, and time must elapse before the necessary lumber can reach Bowie, it is important that the money should be available at the earliest moment. . . ."³ But the money did not arrive as soon as Beaumont had hoped it would. Instead, a revised estimate requesting \$2533.90 additional funding for the hospital was disapproved. "There is not a sufficient balance [of construction monies] remaining on hand," responded the Surgeon General, ". . . to meet this additional estimate for the completion

1. Plan of hospital, dated May, 1887. NA, RG 92. Consolidated correspondence file, 1794-1915.

2. "Estimate for Material and Labor required for the construction of a new Hospital at Fort Bowie, A.T.," dated May 1, 1887. Miscellaneous records. Microfilm MC 12.

3. Beaumont to AAG, Division of the Pacific, September 17, 1887. Fort Bowie, LS. Copy in the files of FBNHS.

of the hospital at Fort Bowie. It is accordingly recommended that the original allotment of \$4416.98 be recalled and the amount turned into the Treasury for use at other places."⁴

Apparently, however, Fort Bowie was re-granted funds for the hospital, this time amounting to \$6500. Yet prospects of a reduced garrison, coupled with tentative government proposals to abandon the post altogether forced plans for a new hospital to be suspended once again in the autumn of 1888.⁵ Construction on the new building actually got underway in late 1888 or early 1889. The site selected for it was on a rise of ground off the southeast corner of the post and away from potential garrison noises. Thirty thousand adobe bricks were furnished under contract by laborers employed by the post trader at Fort Bowie, Sidney R. DeLong.⁶ Towards the end of March, 1889, an officer reported that "a foundation for a new hospital has been laid and the adobes and wood work for the building are nearly ready."⁷

But progress was again thwarted by renewed government sentiment for closing Fort Bowie. In April the new commander,

4. "Estimate for Materials and Labor required for the construction of a Hospital at Fort Bowie, A.T.," dated late 1887. Miscellaneous records. Microfilm MC 12. See, especially, endorsements contained in ibid.

5. Beaumont to AAG, Department of Arizona, October 29, 1888. Fort Bowie, LS. Copy in the files of FBNHS.

6. Beaumont to AAG, Department of Arizona, October 6, 1888. Fort Bowie, LS. Copy in the files of FBNHS. Some of the adobes were undoubtedly for use in construction of the hospital steward's quarters, then ongoing adjacent to the hospital.

7. Lieutenant Colonel George D. Ruggles to Commanding General, Division of the Pacific, March 23, 1889. NA, RG 49. Records of the General Land Office. Abandoned Military Reservations, Box No. 22.

Major Henry E. Noyes, wrote to Headquarters, Department of Arizona, concerning the matter:

If such is the intention, it seems advisable to suspend the building of the new hospital, which is now under contract, and the walls of which will be completed in a few days--there is a large amount of lumber, and other valuable material which will be used within a month, if the work continues, which might be saved for other purposes, if the post is to be abandoned. . . . All the material for the Hospital is on the ground, or ready for delivery by the contractors.⁸

Apparently, Noyes never received direct word to stop construction of the hospital, and it proceeded amid prevailing uncertainty over Fort Bowie's future.⁹ In May the building was described as being nearly finished plastering and painting,¹⁰ and by July it was almost ready for occupancy.¹¹

8. Noyes to AAG, Department of Arizona, April 14, 1889. Fort Bowie, LS. Copy in the files of FBNHS.

9. To add to the confusion, funding of \$6500 was approved for the work by the Quartermaster General's Office. Fort Bowie was notified of this by a memorandum of April 17, 1889. NA, RG 49. Records of the General Land Office. Abandoned Military Reservations. Copy in the files of FBNHS.

10. "Report of Public Buildings at Fort Bowie, Arizona, May 20, 1889." Miscellaneous records. Microfilm MC 12.

11. Noyes to AAG, Department of Arizona, July 23, 1889. Fort Bowie, LS. Copy in the files of FBNHS. Noyes took an active interest in the construction and monitored its progress carefully. As an example, in May, 1889 he enjoined the post quartermaster to "have the supports of the roof of the Hospital porch properly anchored to the flooring joists, as already directed[,] without further delay. And that you have unseasoned lumber, now lying exposed to the sun, collected in one place (each kind in a separate pile) and covered by paulins." Post Adjutant to Post Quartermaster, Fort Bowie, May 21, 1889. Fort Bowie, LS. Copy in the files of FBNHS.

When finished, the new structure proved to be a great improvement over the former hospital (HS 015). Built of adobe to provide a cooler atmosphere for inmates than a frame building could furnish, the shingle-roofed hospital was not to see extensive service before Fort Bowie's abandonment five years later. According to official drawings and measurements, HS 033 featured the following components:

West wing: Surgeon's Office, Isolation Ward, Steward's Room, each 12 feet by 14 feet; hallway, 6 feet by 44 feet; Dispensary, 10 feet by 12 feet; hallway, 6 feet by 12 feet.

Center section: Ward, 24 feet by 50 feet.

East wing: Attendant's Room, Bathroom, each 10 feet by 12 feet; hallway, 6 feet by 24 feet; Dining Room, 16 feet by 24 feet; Kitchen, 16 feet by 24 feet; Pantry, Cook's Room, each 10 feet by 12 feet.¹²

Atop the hip roof stood two ventilating shafts each measuring 32 inches by 20 inches and surrounded with lattice work.¹³ Little maintenance work was needed on the hospital during the few years of its existence, and in 1892 total construction funds expended on HS 033 amounted to \$187.26.¹⁴ The few known photos of the

12. "Ground Plan of Post Hospital at Fort Bowie, A.T." NA, Cartographic Archives Division; "Report of Public Buildings at Fort Bowie, Arizona, May 20, 1889." Miscellaneous records. Microfilm MC 12.

13. Fort Bowie Medical History, July, 1893. Copy in the files of FBNHS.

14. Report of the Secretary of War, 1892 (Washington: Government Printing Office, 1892), p. 410.

building clearly show the porch surrounding it and the high foundation indicative of a cellar or storage space beneath. Wide stairs approached the veranda on the west side, and there were stairs located near the surgeon's office at the northwest corner of the building.¹⁵ A diagram of 1889 shows a drainpipe, but as yet no water pipe, connected to the structure.¹⁶

15. Photographs, 1893 and 1894.

16. Plat, "Fort Bowie, Arizona," dated May 20, 1889.

HS 034. Hospital Steward's Quarters.

Housing for the post hospital steward was long needed at Fort Bowie. In the early 1880s, as plans were formulated for building quarters for non-commissioned staff officers at the post (HS 027), it was decided that the steward would share these facilities.¹ Instead, the apartment was turned over to the post quartermaster sergeant. In 1889 the steward was residing in HS 030, the laundresses' quarters.² Clearly, a suitable home was needed in which the steward could reside.

On September 22, 1888, Congress authorized and provided funds specifically for the construction of hospital stewards' quarters at the various posts.³ Funds of \$800 were apportioned to Fort Bowie for this purpose, and in the spring of 1889 preparations were started for the erection of a three-room adobe structure.⁴ "Quarters for the Hospital Steward are particularly necessary," observed Major Noyes, "his present quarters being too far from his place of duty in case of sickness at night."⁵

1. "Report of Annual Inspection of Public Buildings of Fort Bowie, A.T., March 31st 1883." Miscellaneous records. Microfilm MC 12.

2. "Report of Public Buildings at Fort Bowie, Arizona, May 20, 1889." Miscellaneous records. Microfilm MC 12.

3. Report of the Secretary of War, 1888, p. 345.

4. Lieutenant Colonel George D. Ruggles to Commanding General, Division of the Pacific, March 23, 1889. NA, RG 49. Records of the General Land Office. Abandoned Military Reservations, Box No. 22; Memorandum of April 17, 1889. NA, RG 49. Records of the General Land Office. Abandoned Military Reservations. Copy in the files of FBNHS.

5. Noyes to AAG, Department of Arizona, April 14, 1889. Fort Bowie, LS. Copy in the files of FBNHS.

In May, 1889, HS 034 was in course of construction on a rise of ground just west of the new hospital, also under construction at that time. The steward's quarters, when finished, consisted of an L-shaped structure with three rooms each measuring 14 feet by 15 feet.⁶ Photos of the building show it to have had a shingled hip roof.⁷ It served as the residence for the post hospital steward until Fort Bowie was closed by the Army in 1894.

6. "Report of Public Buildings at Fort Bowie, Arizona, May 20, 1889." Miscellaneous records. Microfilm MC 12.

7. Photographs, 1893 and 1894.

HS 035. Post Trader's Store.

Post traders were civilian businessmen who operated retail establishments on the various military reservations through fiat of the Secretary of War. At his establishment the trader purveyed, besides liquor, all sorts of non-quartermaster issue articles and items of clothing desired mainly by officers but also by enlisted men living at remote stations. Prices for the trader's goods were closely monitored by a board of officers at the post appointed specifically for that purpose.

Because the post trader's building at Fort Bowie was not a government-owned facility, the structure was seldom mentioned in army correspondence. Documentation of structural changes to the building over the years is thus largely unavailable. At Fort Bowie the post trader occupied an adobe building about 60 yards west of the parade ground and behind the old hospital (HS 015) and the old guard house (HS 016). Erected early in 1870, the structure measured 65 feet wide in front and approximately 100 feet long.¹ Because the building was raised on sloping ground west of the post, the levels of the rooms correspondingly varied. In 1870 the rooms, all located in the front half of the structure, consisted of an office, salesroom, storeroom, sleeping room, officers' clubroom, billiard room, and kitchen area, plus an open courtyard. Behind the rooms was a large corral that comprised the other half of the structure. A gate was located on the north side of the corral, and

1. "Diagram of Camp Bowie, A.T., August, 1870." The building was also used as a post office and the first postmaster was George Hand. The post office station was called "Apache Pass" until 1880, when the name was changed to Fort Bowie. In May, 1870, Post Trader Sidney R. DeLong assumed the duties of postmaster at Apache Pass. Murray, "History of Fort Bowie," p. 110n.

a sink was attached to the southwest corner.² It is apparent that the corral was built onto the rear of the store between August and December, 1870.³

The first post trader at the new Fort Bowie seems to have been a man named Zechendorf.⁴ He was succeeded by Sidney R. DeLong, who operated the establishment for the Tucson firm of Tully, Ochoa and Company until 1891, when the army purchased the store and turned it into a canteen. An honest, hard-working, and experienced merchant, DeLong enjoyed considerable respect among the officers and enlisted men he served. As one of the California Volunteers who had founded the first Fort Bowie, DeLong had acquired much familiarity with the country around both the old and the new forts and he was frequently sought out for advice on a variety of matters. In his youth DeLong had received some formal engineering training, and in 1877, when the Fort Bowie Military Reservation boundary was redrawn, DeLong was asked to conduct the survey. With the regular transfer of officers and men to and from Fort Bowie, Sidney R. DeLong from 1870 to 1891 was surely the most constant inhabitant of the post.⁵

Under DeLong's management the post trader's store prospered. Visitors to Fort Bowie, a few months after DeLong's arrival,

2. "Diagram of Camp Bowie, A.T., December, 1870."

3. See "Diagram of Camp Bowie, A.T., August, 1870" and "Diagram of Camp Bowie, A.T., December, 1870."

4. Weekly Arizonian, October 2, 1869, cited in Murray, "History of Fort Bowie," p. 153.

5. For a biographical sketch of DeLong, see Randy Kane, "An Honorable and Upright Man.' Sidney R. DeLong as Post Trader at Fort Bowie," The Journal of Arizona History (Autumn, 1978), pp. 297-314.

commented that "the building--a large adobe--was scrupulously clean, and well filled with everything used by soldiers and citizens. In one room, was as fine a billiard table as any in the Territory, which had been brought all the way from St. Louis at considerable cost."⁶ Occasional visitors to the store included Apache Indians. In the early 1870s when the tribesmen were at peace, the Chiricahua leader, Cochise, accompanied by several of his followers, would come into the store for liquor.⁷ Once, the post trader invited the Chief for a meal:

Mr. DeLong . . . was anxious to get Cochise into dinner without the other Indians; but when he started, most of the others followed, and it was a sight. . . . Four of them got seats at the table, the others stood behind the chairs and helped themselves, one with a spoon, another with a fork, another with a knife, some using their own hunting knives, while those who could do no better either borrowed or used their fingers. Sometimes three were dipping their spoons into the same plate of soup; again, one was using the potato spoon, eating directly from the main supply. Another was helping himself to a whole beefsteak with his fingers, and so it went.⁸

Various structural modifications were made to the post trader's store over the course of the two decades following its construction. One was the addition of a buttressed stone storage house, built on

6. J.H. Marion, Notes of Travel through the Territory of Arizona. Being an Account of the trip made by General George Stoneman and others in the Autumn of 1870. Ed. by Donald M. Powell (Tucson: University of Arizona Press, 1965), p. 33.

7. Kane, "Sidney R. DeLong," pp. 307-08.

8. Army and Navy Journal, April 26, 1873.

the back of the corral evidently between January, 1877, and July, 1879.⁹ Another major change was the extension of the front of the store with a high tier of rooms running the entire width of the building. The new rooms consisted of a long salesroom and an office; the old salesroom and office were converted into a bar and a ware room. This occurred prior to 1884, according to photographs taken at about that time. The photos suggest that, in fact, HS 035 consisted of a conglomerate of several irregular buildings compressed into a single whole structure. All had flat, dirt roofs supported by vigas, and there were at least three chimneys present. The large, low section situated on the north and west sides seems to have had two windows and one door on the north and two windows on the west, facing the corral. On the west end of the taller south section there was one window. Gates were located in the north and south corral walls, while the storage house at the rear had a flat roof. The west wall of the latter addition was bolstered by the presence of four buttresses.¹⁰ In photographs taken in 1887-1888 large beams can be seen spaced along the flat roof of the front addition to the store, suggesting that perhaps a new roof was in process of being installed.

Early in 1889 the army authorized the replacement of post trader stores with post canteens, the army-operated non-profit forerunners to the post exchanges of a later era.¹¹ The immediate reaction of the commanding officer at Fort Bowie was to protest the closing of the trader's store at his post:

9. "Camp Bowie A.T." Diagram dated January, 1877; "Fort Bowie, Arizona." Diagram dated July, 1879. Copy in the files of FBNHS.

10. See photos of 1884, 1885, and 1886.

11. Report of the Secretary of War, 1890, (Washington: Government Printing Office, 1890), p. 684; Rickey, Forty Miles a Day, pp. 202-03.

While I am in favor of the establishment of canteens at Military Posts, and desire to have one here, I think it will not be expedient to discontinue the trading establishment here. . . . While there is no doubt that such articles could be purchased much cheaper at a canteen than at a Post Traders [sic] if kept in stock, there is no probability that a canteen at a small post like this could keep any such a stock on hand as is kept by the trading establishment here (which is the best I have seen in this Territory). . . . [Furthermore,] the post trader here counts largely upon the civilians settled in the vicinity for regular trade, which enable[s] him to keep a large and more varied stock than he would if dependent on the trade of the garrison alone. . . . The trader here is also Postmaster. . . . If the license as trader is revoked, the Post office would be discontinued. . . .¹²

Later, when the possibility developed that the trader's store would be closed before a canteen could be established, Major Noyes complained loudly to his superiors:

[This] would bring a colony of whiskey ranches, with their usual complement of prostitutes, gamblers, etc. to the borders of the reserve, exposing the enlisted men to a temptation too strong for many of them to resist, with the usual results; as well as to venereal disease, etc.¹³

12. Noyes to AAG, Department of Arizona, February 24, 1889. Fort Bowie, LS. Copy in the files of FBNHS.

13. Noyes to AAG, Department of Colorado, January 6, 1890. Fort Bowie, LS. Copy in the files of FBNHS.

As a result of the new army policy, and in accordance with official stipulations, the post trader's store at Fort Bowie was to be examined by a board of officers appointed for the purpose of determining the feasibility of purchasing it and adopting it for other military uses.¹⁴ In July, 1890, the board examined HS 035 and prepared an extensive statement about its structural condition:

The store building is a very old adobe structure, one story, built upon natural surface of ground, which is almost a solid stone formation; different buildings and rooms have been added to the original structure from time to time, with walls of varying thickness, and being built upon a side hill the floors of nearly all the rooms are on different levels, and the ceilings of different heights; all walls are plastered and white-washed throughout inside, having surface of adobes outside exposed to the weather: all rooms covered with flat mud roof which is protected by a covering of tin. The roofs are in fair condition; all rooms with exception of large ware room ceiled with unbleached muslin or old canvas, the latter is not ceiled; flooring in "Traders office," "Officers club and billiard rooms," pine, matched and dressed; in other rooms, except large ware room, rough pine, in latter dirt floor, ceilings in officers' billiard room 13' 4", club room 11' 10", in all other rooms about 9' 6"; about half the doors are pannelled [sic], the remainder battened; windows glazed, twelve lights, 8" x 10".

All floors are considerably worn, the wood work throughout is in poor condition and the buildings [sic] generally delapidated [sic].

14. Report of the Secretary of War, 1890, p. 684.

The "old stone store house" at lower side of corral is an old ruin of unknown age; lower wall strengthened by counterposts as represented in plan; this building is partially covered with flat mud roof in bad condition.¹⁵

The board also photographed the building and prepared a detailed ground plan. Its rooms, front to rear, measured as follows:

Post trader's office	17'3" x 15' 9"
Sales room	17'3" x 49'3"
Officers' club room	19'7" x 16'8"
Chamber (bedroom)	14' x 10'6"
Ware room	14' x 17'
Ware room	14'11" x 13'11"
Officers' billiard room	15'7" x 26'
Court yard	no dimensions given
Bar room	14'11" x 29'9"
Kitchen	13'1" x 9'6"
Dining room	13'10" x 14'10"

The corral measured 55 feet 9 inches by 69 feet 5 inches. The stone storehouse behind the corral was 54 feet long by 17 feet wide, while the water closet (water was connected to the store in the mid-1880s), measured 8 feet by 11 feet.¹⁶

15. "Proceedings of a board of officers. . .," July 8, 1890. Miscellaneous records. Microfilm MC 12.

16. Ibid.; Plat, "Fort Bowie, Arizona," dated May 20, 1889.

The board appraised the structure at \$500 and in the summer of 1891 the army purchased it for \$420.¹⁷ For a time officials considered using the old store for a blacksmith shop. Its use for storing supplies was ruled out by the board by virtue of its removed location and because "the difficulty of excluding mice and other vermin [meant that] it could not be easily adapted to the storage of grain."¹⁸ Instead, the building eventually became the post canteen. In October, 1893, the canteen caught fire. Judging from a remarkable series of photographs taken at the time by the novelist, Owen Wister, the blaze originated in, and was restricted to, the dining room and bar room sections of the building. One photo shows soldiers in the court yard directing a hose through the entrance to the dining room while other soldiers appear to be working in the adjacent bar room. In an 1894 photograph of the post the gutted bar room portion of HS 035 can be seen clearly. The roof of this section had been completely removed and the interior of the building was visibly charred. It is unknown what use was made of the structure after the fire and until the abandonment of Fort Bowie a year later.

17. It is unclear whether the army bought the store (and the old laundresses' quarters) from DeLong or from the San Francisco concern of Shrouff & McGrum, which evidently owned the former business of Tully, Ochoa & Company. DeLong was, nonetheless, a full partner in the operation and must have received a percentage of the money. See "Proceedings of a board of officers. . .," July 8, 1890. Miscellaneous records. Microfilm MC 12; Item in NA, RG 49. Records of the General Land Office. Abandoned Military Reservations, Box No. 22; Kane, "Sidney R. DeLong," pp. 299, 310.

18. "Proceedings of a board of officers. . .," July 8, 1890. Miscellaneous records. Microfilm MC 12. See also Major Thomas McGregor to First Lieutenant Robert S. Read, July 9, 1890. Fort Bowie, LS. Copy in the files of FBNHS.

HS 036. Magazine.

Fort Bowie lasted through most of its existence without an adequate munitions storage building. For most of the years between 1867 and 1890 ordnance materiel was stored in the old hospital building (HS 015) or in the old quartermaster building (HS 013). The dangerous potentialities of such a situation were readily apparent to most observers. In 1886 an inspector urged that

an adobe magazine be built apart from all other buildings and that material be furnished for flooring, ceiling and shelving [the ordnance] store-room. The room at present used for both magazine and store-room is in the middle of a building [HS 013] in one wall of which is a chimney.¹

Later that year an estimate was submitted covering the erection of a magazine, but funding was probably not forthcoming.² Almost two years later recommendations were forwarded for building "an artillery shed, ordnance store room and magazine" at Fort Bowie.³ Formal drawings were prepared at the post on March 31, 1889, and the plan won approval by the Secretary of War in the following July.⁴ Construction seemingly started late that year, and it is likely that the magazine was completed early in 1890.⁵ The

1. Inspection Report, Fort Bowie, February 7, 1886. NA, RG 159. Entry 15. 661/86.

2. Inspection Report, Fort Bowie, September 4, 1886. NA, RG 159. Entry 15. 1036(2)86.

3. Inspection Report, Fort Bowie, March 27, 1888. NA, RG 159. Entry 15. 736/88.

4. Drawing, "Proposed Magazine at Fort Bowie, A.T." NA, Cartographic Archives Division.

5. See Report of the Secretary of War, 1890, p. 710. Private Reginald Bradley, recalled the presence of the magazine during his service at Fort Bowie in 1890. Bradley interview.

structure was erected on sloping ground approximately 90 yards west of the corrals (HS 018), and off the northwest corner of the post. Built of locally-obtained limestone rock and cemented with lime mortar, the magazine measured 16 feet square and had an entrance in the east side. The roof was hipped and shingled with a ventilator at the top. Additional ventilation was provided by apertures located in the thick stone walls beneath the overhang of the roof on the north side.⁶ The finished building protected supplies of gunpowder and ammunition until Fort Bowie was permanently closed. The walls of HS 036 remain today.

6. "Proposed Magazine at Fort Bowie, A.T." See also photograph of the magazine, c. 1902.

HS 037. Gun Shed.

The need for a separate place to store ammunition corresponded with the need for a room to house the heavy ordnance at the post, particularly the artillery pieces. Like the munitions, these articles were first stored in a room adjoining the old hospital (HS 015) and later were removed to the quartermaster storehouse/granary (HS 013). In 1886 the garrison contained three 12-pounder mountain howitzers, one Gatling gun, and one Hotchkiss gun, all of which were stored in the then forage house.¹ Construction of a building to shelter these pieces was advised in March, 1888,² and in August the commanding officer repeated the recommendation, noting that the artillery guns were covered only by canvas.³ Less than a year later plans were submitted, and in July, 1889, they were approved.⁴

However, the approved design for the gun shed was not followed in the actual construction at Fort Bowie. According to the building plan, the structure was to measure about 20 feet by 16 feet and was to have a double-door entrance in front, large enough for the artillery carriages to pass through.⁵ The gun shed erected at Fort Bowie was built of adobe, measured only 9 feet by 11 feet,

1. Inspection Report, Fort Bowie, February 7, 1886. NA, RG 159. Entry 51. 661/86; Inspection Report, Fort Bowie, September 4, 1886. NA, RG 159. Entry 15. 1036(2)86.

2. Inspection Report, Fort Bowie, March 27, 1888. NA, RG 159. Entry 15. 736/88.

3. Inspection Report, Fort Bowie, August 3, 1888. NA, RG 159. Entry 15. 904/88.

4. Drawing, "Proposed Gun-Shed at Fort Bowie, A.T." NA, Cartographic Archives Division.

5. Ibid.

and was smaller than the powder magazine located some 20 yards to the east. Moreover, the roof of the building was a shed type rather than the gable roof shown in the plan.⁶ Most probably the gun shed was erected at the same time as the powder magazine and, like that building, was completed early in 1890.⁷

6. Ibid., photographs of Fort Bowie, 1893-94.

7. Report of the Secretary of War, 1890, p. 710.

HS 038. Unidentified Structure.

This large building was erected at the southeast corner of the corrals (HS 018) sometime in the early 1890s. There seems to be little documentation pertaining to the structure other than photographs taken in 1893 and 1894. It was an L-shaped building, probably adobe, with a hip roof with a chimney located on its north side. It likely was not a sawmill as has been suggested, for it is recorded that lumber was cut by a steam-driven saw at the engine house (HS 023) across a deep arroyo to the east.¹ Quite possibly this building was used for handling meat in place of the old butcher shop (HS 021). Its proximity both to the old shop and to the corrals suggests as much, but there is another feature that strongly supports such conjecture. That is the existence close by of a long concrete trough (HS 073) that obviously provided drainage for some type of operation. The location of this trough on the west edge of a deep arroyo, plus its relative position in regard to both the old butcher shop and the new building, suggest the presence of a meat processing complex in which contractor-supplied beef cattle might have been slaughtered in the large structure and the carcasses hung to bleed over the trough out behind. Furthermore, the location of both trough and slaughterhouse away from the post and near the corrals indicates that a purposeful effort had been made to concentrate in one area what might have been mutually odiferous processes.

1. Report of the Secretary of War, 1888, p. 500. Reginald Bradley did not recall a sawmill at the post during his service there in 1889-90. Bradley interview.

HS 043. Lime Kiln.

The lime kiln was of major importance to the construction effort at Fort Bowie. Built into the east side of a hill approximately 100 yards north of the northeast corner of the corrals (HS 018), the kiln yielded a product from which mortar and plaster was derived for use in the erection of buildings and walls at the fort. A single-chambered structure made of uncoursed limestone rock and mortar, the kiln, most of which yet stands, measured roughly 13 feet square at the base and 12 feet in height. At the lower front (east side) was a brick-edged aperture about 2 feet high and 3 feet wide through which the chamber was fueled, the draft flow regulated, and the burned contents of the kiln removed. Possibly during the years of its functioning, a truncated, conical adobe chimney stood atop the kiln to help control the heating process within.

The product of the lime kiln operation was quicklime, the oxide resulting from the burning of limestone, which when slaked (treated with water) formed a powder used in the preparation of mortar and plaster.¹ At Fort Bowie the lime kiln was of the intermittent variety, one of the most primitive designs necessitating the recurrence of a lengthy burning procedure for every batch of limestone to be converted into quicklime. Such kilns were erected on hillsides so that they could be conveniently charged through the top opening. Large pieces of uncracked limestone were thereby carefully introduced and placed to form a crude arch, or dome, over the hearth, located at the bottom of the tapered, rounded chamber. Increasingly smaller pieces of rock were then laid into

1. Russell Sturgis, A Dictionary of Architecture and Buildings (3 vols.; New York: The MacMillan Company, 1902), II, 771; The Illustrated Encyclopedia of Modern Science (New York: H.S. Stuttman Company, Inc., 1958), p. 905.

the chamber until it was filled. The kiln was fueled by placing wood through the opening at the base onto the hearth and beneath the dome formed of limestone. When ignited, the resulting fire, aided by regulated drafts, produced a gradually mounting heat that eventually caused the charge to become incandescent, assuming a veritable red glow as the carbonic acid in the limestone dissipated. More fuel was added regularly to maintain the required degree of combustion.

Depending upon the effectiveness of the particular fire, control of the draft, and wind direction, among other concerns, the lime-burning normally lasted from three to five days. By this time the charge had settled several inches in the chamber. Its readiness for removal could be determined by driving an iron rod through the load from the top of the kiln. If it met resistance, the calcination was incomplete; if it passed through easily, the charge was ready for removal. After the fire had been extinguished this was accomplished by poking the burned limestone down onto the hearth, then withdrawing it through the opening at the base of the kiln. Only about 50% of the initial charge of limestone could be considered acceptable quicklime, the remainder either overburned or underburned.²

2. This data on intermittent lime kiln operation is compiled from the following sources: Illustrated Encyclopedia, p. 855; Johnson's New Universal Cyclopaedia, II, 1547; George R. Burnell, Rudimentary Treatise on Limes, Cements, Mortars, Concretes, Mastics, Plastering, Etc. (London: Crosby, Lockwood and Company, 1878), pp. 30, 31-32; F.J. North, Limestones: Their Origins, Distribution and Uses (London and New York: Thomas Murby and Company; D. Van Nostrand Company, 1930), p. 394; Robert S. Boynton, Chemistry and Technology of Lime and Limestone (New York: John Wiley and Sons, 1966), pp. 204-05.

Once the quicklime was removed from the kiln it was most likely placed in a pit adjacent to ongoing construction work. It was then slaked by adding water (about 9 parts water to 28 of quicklime). This prompted a chemical reaction that caused the substance to heat greatly, expand, and sometimes throw off steam, while reducing the quicklime to a powdery material known as slaked lime. Water added to slaked lime produced lime putty which could be used either immediately or, left covered by a film of water, several weeks later. Mortar was made by combining lime putty with two or three times as much sand. Employed in construction as a binding adhesive for rocks and adobe bricks, the mortar hardened by the moistened lime, or calcium oxide, absorbing carbon dioxide to reform limestone or calcium carbonate, a virtual reversal of the burning process in the kiln, except that now the limestone was mixed with sand as a binding material. Plaster for covering the surfaces of walls was made by mixing the putty with plaster of paris, sand and sometimes the hair of horses or cattle.³

The number of buildings erected at the second Fort Bowie between 1869 and 1894 indicates that the lime kiln operated on a fairly constant basis. After the fort was abandoned the kiln survived the ravages of settlers, weather, and time better than most of the other structures. In 1911, when the government sold the Fort Bowie lands, the kiln was valued at \$200.⁴

3. North, Limestones, pp. 396-97; Sturgis, Dictionary of Architecture and Building, II, 771, III, 156-57; Illustrated Encyclopedia, p. 1020.

4. Frank H. Parker to Commissioner, General Land Office, June 22, 1911. NA, RG 49. Records of the General Land Office. Abandoned Military Reservations. Copy in the files of FBNHS.

IV. Comments on Some Miscellaneous Structures

HS 029. The structure identified as HS 029, Civilian Employees' Quarters was actually located a slight distance northeast of the point indicated on recently prepared architectural/archeological diagrams of Fort Bowie. Probably the point represents the location of the cavalry sheds standing in the area in the early 1870s. See "Diagram of Camp Bowie, A.T., August, 1870."

HS 050. This was probably the site of an earth closet to HS 030, Laundresses' Quarters.

HS 051. According to photographs taken in 1893 and 1894, this structure was a small, gabled-roof building with a door on the north side and a window on the west side. Situated behind officers' quarters HS 001, it was probably used as a woodshed or earth closet.

HS 053. This small frame outbuilding with gable roof, located south of the new hospital (HS 033), can be seen in photographs taken in 1893 and 1894.

HS 055. This structure was an earth closet or woodshed located behind officers' quarters HS 005. It appears on "Diagram of Camp Bowie, A.T., December, 1870," and can be seen in an 1885 photograph.

HS 056. This structure was also an earth closet or woodshed located behind officers' quarters HS 006, and can be seen in a photograph of the post taken in 1885.

HS 057, HS 058, HS 059. These were stone retaining walls built to help compensate for the upward slope of the ground at the south

end of the parade. HS 057 was approximately 13 feet long and was located near the reservoir behind the commanding officer's house (HS 025). HS 058 and HS 059, built c. 1886, were situated along the east and west sides of HS 025. The former ran about 135 feet in length, the latter about 47 feet. Part of HS 059 can be seen in photographs of the commanding officer's residence taken in about 1888.

HS 060, HS 061, HS 062, HS 063, HS 064, HS 065. These terraced walls were placed along the east side of the parade in order to compensate for the north-to-south upward slope of the terrain at that point. They appear in numerous historic photographs of Fort Bowie, most clearly in those taken at the time of Geronimo's surrender in 1886.

HS 070. As previously suggested, this likely was a root cellar, ice house, or similar storage facility for perishable foods with drain pipes for moisture runoff. It possibly was used in conjunction with the nearby ice machine for the refrigeration of vegetables. The gabled roof and low doorway in the structure are apparent in photographs of Fort Bowie taken in 1887-88.

HS 074. This small rectangular building with shed roof can be seen in a view of the post taken in 1894. It may have been a woodshed or earth closet associated with the Non-Commissioned Staff Officers' Quarters (HS 027).

In addition to the structures described above, there were a few that have not been assigned reference numbers but that can be readily seen in contemporary photographs of Fort Bowie. Most of these were privies, and they are discussed in the following section. In photographs of the mid-1880s a small building can be discerned on the hillside above and southeast of the commanding officer's

quarters (HS 025). Its function is unknown, although it might have served as a sentinal post during the Apache troubles. The structure is not present in photographs taken in the 1870s or 1890s. And sometime in the early 1890s a tennis court was built at the south end of the parade for the use of officers. It is present in photos of the post taken in 1893 and 1894. In many views of the fort taken from the northwest, a branding chute can be seen in the area west of the corrals. This was used in branding cavalry horses. A "US" branding iron is in the artifact collection at Fort Bowie National Historic Site, and this was undoubtedly used in conjunction with the branding chute. There were also several hog pens erected at Fort Bowie in the late 1870s and early 1880s, and one of them can be seen behind the officers' quarters in photographs of the post. Prior to August, 1879, most of the hogs ran loose and were considered by many of the garrison to be a general nuisance, so much so that on the 5th of the month the post commander decreed that

All hogs owned either by the Companies of this Command, or private parties, found running at large in this post or on this Reservation, after the 9th inst. will be immediately shot. And any person wishing to keep these animals will at once construct Pens, at reasonable distances from this Garrison, and will keep the same in pens, on and after the above mentioned date.¹

Several buildings were planned for Fort Bowie which were never built. Besides the school complex designed in 1879 but not erected,² there was at least one set of officers' quarters for which

1. Fort Bowie Circular No. 4, August 5, 1879. Fort Bowie General Orders. Copy in the files of FBNHS.

2. Plan of School building and privy (1879). NA, Cartographic Archives Division.

drawings were prepared in 1881 but construction was never begun. The proposed adobe quarters were to have a parlor, bedroom, dining room, kitchen, sitting room, spare room, and hall, and were probably intended to serve as the residence of the commanding officer, judged from the overall luxury indicated in the design. Projected cost for the quarters was put at \$1800.³ A deadhouse (morgue), designed in 1889-90 by Private Reginald Bradley, was approved and authorized by the War Department in 1893. Estimated cost of the structure was \$217.25. But it, too, was never built.⁴

Fort Bowie received telegraph service in 1877. Ten years later Major Eugene B. Beaumont initiated efforts to have a telephone line installed between the post and Bowie Station on the Southern Pacific Railroad. Early in 1887 Beaumont wrote the chief signal officer of the department requesting "thirteen miles of wire" and asking his help in determining "how many poles to the mile will be required."⁵ Later he asked for 300 insulators. When the line was finished, one operator was located in the adjutant's office (HS 017) and another at Bowie Station.⁶ Telegraph and telephone poles can be seen near the adjutant's office in numerous photos of the post taken in the mid-1880s and early 1890s.

3. "Plan of proposed officers' quarters, Fort Bowie, A.T." NA, Cartographic Archives Division.

4. Bradley interview. "Plan of Deadhouse, to be Erected at Fort Bowie, A.T." NA, Cartographic Archives Division.

5. Beaumont to Chief Signal Officer, Department of Arizona, undated (c. March, 1887). Fort Bowie, LS. Copy in the files of FBNHS.

6. Beaumont to Chief Signal Officer, Department of Arizona, April 23, 1887. Fort Bowie, LS. Copy in the files of FBNHS; Beaumont to Chief Quartermaster, Department of Arizona, April 29, 1887. Fort Bowie, LS. Copy in the files of FBNHS. A telephone line was installed between the fort and Willcox, Arizona, in 1890. Murray, "History of Fort Bowie," p. 289.

Proper lighting was another concern of the post commander at Fort Bowie. In the early days of the post lighting of quarters was accomplished by use of candles.⁷ By the early 1880s, however, oil lamps had been employed for some time in the barracks, although use of the kerosene fuel was not very economical. In August, 1882, Captain William A. Rafferty urged that more lamps and less fuel be authorized.⁸ The post also acquired exterior lighting in the form of oil lanterns arranged on lampposts and situated at various points near the quarters. Probably outside lighting was obtained around 1885 or 1886, according to photographs taken at the time. The oil lamps each had four glass sides and a reservoir at their base. There were at least four of them placed around the parade ground. In 1892 Major Thomas McGregor reported on the need for lanterns as follows: "In front of Officers' quarters, 4; In front of Barracks, 3; In front of Storehouses, 2; In front of Post Hospital, 1; In front of offices, 1; Total, 11."⁹

Finally, there were probably several different flagstaves that successively stood on the Fort Bowie parade during the post's existence. The one present in 1886 (as seen in contemporary photographs) consisted of a two-piece pole measuring about 68 feet in total length, with the bottom 6 or 8 feet firmly sunk into the earth. The base was further secured by a heavy square platform on which were located four timber braces fastened with bolts to it

7. Murray, "History of Fort Bowie," p. 160.

8. Rafferty to Acting Assistant Inspector General, Department of Arizona, August 31, 1882. Fort Bowie, LS. Copy in the files of FBNHS.

9. McGregor to AAG, Department of Arizona, February 12, 1892. Fort Bowie, LS. Copy in the files of FBNHS. Reginald Bradley recalled kerosene lamps in use at Fort Bowie during his service there in 1889-90. Bradley interview.

and to the square base of the pole some four feet above the platform. For another three feet the pole gently tapered upward, then shot up about 30 feet where, at the cross-piece, it joined another segment measuring more than 20 feet in length. The flag was raised to and lowered from the top of the staff by a rope and pulley arrangement. In 1890 a new flag pole was raised at the fort, the design of First Lieutenant Francis G. Irwin, Jr., of the Second Cavalry.¹⁰

10. Army and Navy Journal, November 29, 1890.

B. Toilets, Bathing Facilities, and Drainage

The good health and well-being of the military garrison at Fort Bowie contributed to the army's success in fulfilling its mission at the post. Sanitation was a prime concern of the post surgeon, and his monthly reports reflected a constant interest in conditions affecting problems of drainage and waste disposal. In no other area was more attention paid to cleanliness than in matters of drainage, bathing, and toilet facilities, for the proper maintenance of all of these helped to insure the overall good health of the entire command.

The earliest toilet facilities at Fort Bowie consisted of sinks or earth closets, pits dug in the ground and surrounded by adobe walls. Human waste deposits were either absorbed by the soil, evaporated, or periodically covered with a layer of dirt. Most such outhouses at Fort Bowie were situated at the edges of deep ravines where rainwater would carry away the waste. All of the personnel quarters at Fort Bowie had at least one sink located out behind. In addition, there were two sinks located east of the corrals along the roadway, and one large sink, serving both the old hospital and old guardhouse (HS 015; HS 016), stood along a ravine approximately 85 yards west of the corrals.¹ In late 1870 the sinks were described as being "newly built in appropriate places over [the edges of] small ravines outside of Post."²

1. "Diagram of Camp Bowie, A.T., August, 1870"; "Camp Bowie A.T." Diagram dated January, 1877. These latter sinks can be seen in photographs of Fort Bowie taken in 1874. The outline of that serving the guardhouse and hospital can be seen in aerial photographs. Evidently this sink was replaced in the mid-1880s with two hip-roofed earth closets which were built on the edge of a draw running behind HS 014. They can be seen in photographs of the post taken between 1884 and 1894, although by the latter date the westernmost structure had been razed.

2. "Descriptive Commentaries." Fort Bowie, Ariz., vol. 125 (1871).

Often new sinks were necessarily erected when the old ones were filled. In December, 1884, new sinks for the use of inmates of the guardhouse and the hospital were built, complete with shingled roofs.³ Sometimes the location of the sinks caused problems, as occurred in January, 1885:

The privy pit connected with the set of quarters occupied by "Saddler" Lindenberg, Tr. M, 3 Cav. is in so bad condition, almost full, and should be closed; it is within a few feet of a gulch down which water runs in the rainy season. This stream runs into the water supply for animals at this post, and close to the supply for men. Were the privy pit replaced by one on the other side of the small hill, on which it is located, it would drain into a gulch, not connected with the water for the post.⁴

The disinfection of the sinks was another concern addressed by the post surgeon. He urged that the pits be regularly treated with chloride of lime or dry earth in addition to the bi-monthly treatments with Rousseau's disinfecting fluid, a concoction supplied by the Quartermaster Department.⁵ And in September, 1866, he recommended that "the privy-pit used by Troops C and G, 4 Cav., and Co. A, 8 Infy have six cart loads of dry earth spread as evenly as possible over it."⁶

3. Beaumont to AAG, Department of Arizona, December 21, 1884. Fort Bowie, LS. Copy in the files of FBNHS.

4. Fort Bowie Medical History, January, 1885. Copy in the files of FBNHS.

5. Fort Bowie Medical History, August, 1886. Copy in the files of FBNHS.

6. Fort Bowie Medical History, September, 1886. Copy in the files of FBNHS.

Some of the sanitation concerns surrounding the use of sinks were alleviated when, in the mid-1880s, Fort Bowie acquired water closets (flush toilets) in the officer quarters. This technological advantage was an outgrowth of the laying of water pipes throughout the post and the installation of a pump and gravity distribution system in 1885. The need for proper drainage for the toilets continued to be a problem until the spring of 1889 when drain pipes were connected to the closets, affording them improved means of disposal.⁷ Initially, the troop quarters lacked both water closets and urinals, but by the early 1890s these had been installed.⁸ Water availability, however, affected the use of these conveniences, and at least once, in the spring of 1893, the closets in the barracks were closed because of water scarcity. The men were "required to use an earth closet some distance from the squad rooms."⁹

Some idea of the nature of the water closets at Fort Bowie is contained in the following statement:

All of the officers quarters and the Hospital have the overhead flush system. Traps are placed under each seat and are ventilated through the roofs. Soil pipes are also ventilated. Ventilating pipes are 2 inches in diameter. Soil pipes in all sewered quarters except Hospital are 3 inches in diameter. They are uniformly of iron. Hospital

7. See Beaumont to AAG, Department of Arizona, June 30, 1884. NA, RG 393. Department of Arizona, LS. Copy in the Arizona Historical Society; Fort Bowie Medical History, April, 1889. Copy in the files of FBNHS.

8. Fort Bowie Medical History, August, 1890. Copy in the files of FBNHS.

9. Fort Bowie Medical History, May, 1893. Copy in the files of FBNHS.

soil pipe is 4 inches in diameter. The traps in use are of the ordinary S type. . . . The only closet [presently?] connected with the barracks has no overhead flush system, but merely a kind of trough which is connected with a 6 inch pipe. The Hospital Steward's quarters have pipes for carrying off refuse water, etc. only.¹⁰

A few months before Fort Bowie was abandoned some difficulties arose with regard to toilets in the officer's quarters. The post surgeon blamed them in part for the proliferation of sickness-causing sewer gas, especially since "the present [style] closet is not emptied at every discharge of the overhead tank."¹¹ He recommended that the "obsolete and defective" closet be replaced with the "Improved Siphon," or something similar.¹² Accordingly, an estimate for "more perfect fixtures and traps to be put in six sets of Officers Quarters" was prepared.¹³ Probably the fort was abandoned before new toilets could be installed, however.

Personal cleanliness through bathing was a related sanitation concern at Fort Bowie. All of the barracks had wash rooms and/or bath houses in which the men were expected to cleanse themselves

10. Fort Bowie Medical History, July, 1893. Copy in the files of FBNHS.

11. Fort Bowie Medical History, April and May, 1894. Copy in the files of FBNHS.

12. "The ['Improved Siphon'] closet is of the washout type having [a] horizontal shallow bowl which is flushed by a stream of water into a shallow and nearly invisible trap underneath." *Ibid.* Another approved toilet system that saw limited use at Fort Bowie was the "Mollyer Closet." *Ibid.*

13. Captain William C. Rawolle to Post Surgeon, Fort Bowie, June 1, 1894. Fort Bowie, LS. Copy in the files of FBNHS.

frequently. But the availability of water fluctuated with its flow from Apache and Bear Springs and often the soldiers lacked bathing conveniences for this reason.¹⁴ "General bathing has been prohibited during the entire month of June," wrote the post surgeon in 1893, "and while the temperature was frequently close to 100 only sponge baths could be had."¹⁵ Sometimes, too, there was opposition to the whole concept of bathing, especially on the part of the Apache scouts who were occasionally stationed at the post. To insure against his participation in the unaccustomed practice one of the Indians simply drove his hatchet through the bottom of the tub.¹⁶

In July, 1893, the post surgeon described the bathing accommodations at Fort Bowie:

Each organization has its own bathing facilities as follows: One bath tub at hospital, used by patients and members of hospital corps, one in the Hospital Steward's quarters; three in each of the occupied barracks, for the use of the men; two in a vacant set of barracks; and there is one in the post quartermaster sergeants [sic] house.

All officers['] quarters are supplied with one tub each. All of these are connected with the hot water boilers in the kitchens. So far as the post surgeon's knowledge extends, there are usually no regulations in

14. Fort Bowie Medical History, July, 1878. Copy in the files of FBNHS; Inspection Report, Fort Bowie, September 4, 1880. NA, RG 159. Entry 15. 1168/80.

15. Fort Bowie Medical History, July, 1893. Copy in the files of FBNHS.

16. Fort Bowie Medical History, January, 1893. Copy in the files of FBNHS.

regard to bathing, and of their own accord the men bathe frequently and keep themselves neat and clean. During the last month and a half, however, the men have been prohibited from taking a general bath, except rarely, owing to the very limited amount of water available.¹⁷

Directly associated with the conveniences of water closets and bath tubs at Fort Bowie was the need for a functional drainage system. The ground on which the fort was situated sloped gradually downward from south to north and east to west in a diagonal running from the commanding officers quarters (HS 025) roughly northwest past the west edge of the corrals (HS 018). In the early years of the post drainage was accomplished by virtue of gravity, the washes and arroyos surrounding the garrison, and the frequent heavy rainfalls that arrived each winter season. The deep arroyo bordering the east side of the post became a common receptacle for garbage from the cavalry kitchens and mess rooms, so much so that the post surgeon complained about the "sanitary error" of placing waste there. "It is . . . recommended that the kitchen refuse be collected in barrels and its removal be made, as remote from the post proper, as practicable."¹⁸ A dump for all rubbish, garbage, and manure was established north of the corrals below the slaughter pen.¹⁹ All such refuse was collected in a dump cart each morning and removed to "the dump pile . . . in a cañon

17. Fort Bowie Medical History, July, 1893. Copy in the files of FBNHS.

18. Fort Bowie Medical History, July, 1878. Copy in the files of FBNHS.

19. Circular Letter, January 4, 1881. Fort Bowie, LS. Copy in the files of FBNHS.

about one half mile north of the post and some 200 feet lower. . . ."²⁰ Because of dryness and high winds, apparently little burning took place at the dump.²¹

Yet surface drainage continued to be a health concern. In the summer of 1887, after the installation of a piped water system, the surgeon remarked on the advisability of introducing some new means of drainage:

I would respectfully recommend that a system of drainage be carried out at this post, other than the present system of surface drainage. There are several of the drains at present in use at this post which at times during the hot weather are very offensive. The drains from officers [sic] quarters, No. 3 [HS 003], lead on to the parade ground and at times has been very offensive and has been a cause of complaint by the officers who live near it. These drains will still become more offensive as the ground becomes further saturated with refuse that is carried off from the kitchen and bath rooms. The incline of the post is such that a system of underground drainage could be carried out, which would take away all the liquid refuse, from the officers and mens [sic] quarters well outside the post.²²

20. Fort Bowie Medical History, July, 1893. Copy in the files of FBNHS.

21. *Ibid.* See also, however, Beaumont to AAG, Department of Arizona, April 7, 1890, which states that burning did occur. Fort Bowie, LS. Copy in the files of FBNHS.

22. Fort Bowie Medical History, August, 1887. Copy in the files of FBNHS.

The post commander disagreed. "The slopes of the drains at Bowie are so steep," responded Major Beaumont, "that the water runs off rapidly, and the evaporation is so great that the slight odors are not . . . as dangerous as those which would be generated by a closed under-drain."²³ Nevertheless, Beaumont directed the post quartermaster to estimate for such amount of pipe as would be needed to establish a subsurface system at Fort Bowie.²⁴ And in September, 1888, he journeyed to Forts Huachuca and Grant to inspect their drainage systems.²⁵

Underground sewer pipes were installed at Fort Bowie beginning in March, 1889.²⁶ Designed to carry off water and waste from the water closets in the personnel quarters,²⁷ the system consisted of a main line, a 6-inch cast iron pipe, running from a point opposite the southwest corner of the cavalry barracks (HS 008), 1000 feet north and beyond the northeast corner of the corrals (HS 018) where it apparently emptied into a cesspool. From the end of HS 008 three lines of 4-inch iron stove pipe radiated out to the buildings situated on the south and east sides of the parade, including all the officers' quarters, one cavalry barracks (HS 010), and the new hospital (HS 033). "Straps and ventilating stand pipes

23. Ibid.

24. Ibid.

25. Beaumont to AAG, Department of Arizona, August 27, 1888. Fort Bowie, LS. Copy in the files of FBNHS.

26. Fort Bowie Medical History, March, 1889. Copy in the files of FBNHS.

27. Fort Bowie Medical History, April, 1889. Copy in the files of FBNHS.

will be used as protection against sewer gas." Total cost of the project was estimated at \$1100.²⁸

Most of the quarters included in the underground drainage plan were located in areas of the post not readily served by the slope of the terrain. The buildings located on the west and north (most of which were not personnel quarters) were, in fact, so served by a gradual downward slope so that surface drainage remained a constant feature at the post until its closure. Towards the end of Fort Bowie's active existence the water supply diminished severely, causing concern because of the consequent inability to flush out the drain pipes as often as was needed.²⁹ "Should the supply of water remain as it is now," wrote the post surgeon, "this may prove a fruitful source of disease, and may necessitate the closing of all openings into the sewer."³⁰ The matter constituted at least one factor in the decision ultimately to abandon the fort.

28. First Lieutenant William Black to the Quartermaster General, May 20, 1889. Fort Bowie, LS. Copy in the files of FBNHS. See also Fort Bowie Medical History, July, 1893. Copy in the files of FBNHS.

29. Fort Bowie Medical History, May, 1893. Copy in the files of FBNHS.

30. Ibid.

C. The Water System.

Fort Bowie was established for the purpose of guarding the water at Apache Spring and thus keeping open a communication and supply line between Tucson on the west and the Rio Grande on the east. Maintenance of a reliable water supply was the basis for building the first post; the ready availability of water throughout the thirty-two years of military occupation of the site supported the continued presence of Fort Bowie.

Actually, there were a number of springs in the vicinity of the fort besides Apache Spring, located in a draw a quarter of a mile west of the second post. There was one about a mile southwest of the post, another one and one-half miles to the northwest (Goodwin Spring), and yet another about two and one-half miles west of Fort Bowie (Pass Tank). Additionally, there was a spring located a quarter of a mile northeast of the post and one situated on a rise three-quarters of a mile to the east, called Bear Spring.¹

The first fort was served solely by Apache Spring, located immediately below it. Through much of its existence, the second post continued to rely on Apache Spring. In 1867 inspecting officer Major Roger Jones stated that "the supply of water, without being very great, is adequate for the wants of the Post & passing [wagon] trains."² Two years later Jones simply noted that the water supply "is ample & unfailling."³ The needs of the garrison

1. See sketch map of Fort Bowie and surrounding country dated 1877. NA, RG 49. Records of the General Land Office. Abandoned Military Reservations file.

2. Jones to Brigadier General James B. Fry, May 22, 1867. Copy in the Arizona Historical Society.

3. Jones to Fry, April 28, 1869.

were met by hauling the water in a specially-built tank-type wagon pulled by eight mules up the grade to the new post.⁴ Watering troughs for livestock were placed near Apache Spring, although another spring several hundred yards northeast of the post was used exclusively for the animals.⁵ Early in 1874 an attempt was made to establish a hydraulic ram which would pump water uphill from the spring to the post. The experiment failed, possibly because of the incapacity of the ram to surmount the sharp inclination of the terrain between Apache Spring and the fort.⁶ So the water wagon remained in use for some time.

With the continued use of Apache Spring, its sanitation became a source of concern to the post surgeon, who was largely responsible for the health of the garrison. In July, 1878, Assistant Surgeon John O. Skinner reported on conditions at the spring:

The platform over the spring . . . is in a dilapidated condition, and a part of the filth which accumulates from

4. Outline Description of U.S. Military Posts and Stations in the Year 1871, p. 66. A letter of 1884 described the operation in some detail: "This Spring is walled up and the water is pumped by hand into the water wagon. It keeps two men at work about 8 hours daily to keep the command supplied with water by means of the wagon." First Lieutenant George K. Hunter to Chief Quartermaster, Department of Arizona, March 11, 1884. Fort Bowie, LS. Copy in the files of FBNHS.

5. Hunter to Chief Quartermaster, Department of Arizona, March 11, 1884. Fort Bowie, LS. Copy in the files of FBNHS. See also "Map of the Military Reservation at Camp Bowie . . . February 1869," which shows the location of a watering trough at Apache Spring.

6. See Major Eugene W. Crittenden to AAG, Department of Arizona, February 5, 1874, with endorsements; and Captain Joseph T. Haskell to AAG, Department of Arizona, March 11, 1874, with endorsement of March 12, 1874. Fort Bowie, LS. Copies in the files of FBNHS.

time to time on its surface, necessarily finds its way through the open seams into the body of the water beneath; as the spring is the only reservoir from which water is distributed to the post, and consequently has no filter attached[,] the necessity of preventing ingress of all foreign matter, particularly that of an organic nature, will I trust be readily appreciated. It is respectfully recommended that the old platform be replaced by one of a higher pitch and closer seams.⁷

But lack of material prevented the construction of a new cover for the spring. Instead, the spring was cleaned, and "quite an accumulation of tin cans, pieces of blankets, raw hide, etc.," was removed from the bottom.⁸

Besides its use for drinking, cooking, and washing purposes, the spring also had to be considered as a source of water for extinguishing fires. This was not so much of a concern as long as the structures at Fort Bowie had earthen roofs, but after most of the buildings received roofs covered with wooden shingles, the threat of fire became extreme, so much so that an inspecting officer in 1882 advised that a reservoir be built to facilitate both accessibility and ready distribution of water should a fire occur.⁹ At the time the sole means of extinguishing blazes was with water

7. Fort Bowie Medical History, July, 1878. Copy in the files of FBNHS.

8. Ibid.

9. Inspection Report, Fort Bowie, March 16, 17, 18, 1882. NA, RG 159. Entry 15. 334/82.

stored in barrels at each of the barracks and officers' quarters.¹⁰ In July, 1883, the post commander, Captain William A. Rafferty announced his desire to establish a "system of water works," to include such a reservoir.

For years past an eight-mule water wagon has been used to supply the Post with water--requiring the services of a teamster on Extra duty and two other men to pump and distribute it--and this at a cost easily estimated and which for two years will exceed the cost of putting in water works in all probability. The reservoir, laying of pipe and generally all work connected with the matter can be done by troops.¹¹

Yet it remained for Rafferty's successor, Major Eugene B. Beaumont, to implement a water system at Fort Bowie. At the end of June, 1884, Beaumont advised his superiors that "the water supply of the Post has been in imminent danger of being ruined by the deposition of filth and refuse in the ravines and hill sides above the source of the Springs."¹² He announced his intention to survey the ground for the installation of a pipe line running into the post from Bear Spring, three-quarters of a mile to the east. Such a design, said Beaumont, "will avoid the expenditure of labor and secure an abundant supply of excellent spring water."¹³

10. "Fort Bowie, A.T. Office Brief as to Water Supply." NA, RG 92. Records of the Office of the Quartermaster General. Consolidated correspondence file, 1794-1915.

11. Rafferty to Chief Quartermaster, Department of Arizona, July 5, 1883. Fort Bowie, LS. Copy in the files of FBNHS.

12. Beaumont to AAG, Department of Arizona, June 30, 1884. Fort Bowie, LS. Copy in the files of FBNHS.

13. Ibid.

In September the post quartermaster, First Lieutenant Wilbur E. Wilder, requisitioned 7000 feet of iron pipe and one hydraulic ram.¹⁴ "The single No 6. Ram of Gould's Manufacturing Company, Seneca Falls, N.Y. costs but \$40.00," wrote Wilder. "Their double hydraulic ram No. 6 of greater capacity \$100.00. The former it is believed will answer, but of course the latter is the best."¹⁵ In December the War Department authorized the expenditure of \$2173.89 for materials and labor to complete the work.¹⁶

Plans for installing the pipe line, reservoir, and ram were carefully drawn. Bear Spring, it was reported, could deliver three to four times the amount of water as Apache Spring, and actual measurement of the supply showed that the spring produced more than 879 gallons of water per hour, or 21,103 gallons per day. The level of Bear Spring was between four and five feet of that of the buildings bordering the east side of the post and to provide added leverage for gravity to force the water down to the fort an earthen dam was built raising the spring another twenty inches. Water from the spring would travel generally downward some 3600 feet to reach a reservoir blasted out of the rocks on a hillside on the east side of Fort Bowie. From the reservoir the water would be distributed among the cavalry barracks (HS 008, HS 010), the old hospital (015), and the watering troughs at the corrals (HS 018). Below the reservoir, part way down an arroyo 22 feet deep, would be placed the hydraulic ram. Water piped from the reservoir down the steep decline to the ram would in turn be conveyed by that

14. "Fort Bowie, A.T. Office Brief as to Water Supply."

15. Wilder to the Chief Quartermaster, Department of Arizona, September 13, 1884. NA, RG 92. Records of the Office of the Quartermaster General. Consolidated correspondence file, 1794-1915.

16. "Fort Bowie, A.T. Office Brief as to Water Supply."

device through a line to another reservoir (capacity 20,000 gallons) erected on the hill behind the commanding officer's quarters (HS 025). All of the officers' quarters would then be served by water carried by gravity flow from the upper receptacle. As specified by Lieutenant Wilder,

Four thousand one hundred (4100) feet of two and a half (2 1/2) inch pipe (Two inch interior diameter) will lead the water into the Post and supply drive pipe for ram, Eight hundred feet (800) of one and a half (1 1/2) inch discharge pipe for upper reservoir is required, and two thousand (2000) feet of one (1) inch for distributing water to hydrants, bath-tubs, &c, throughout Post.¹⁷

The hydraulic ram intended to pump water to the upper reservoir operated on a unique principal. It was to be installed some 12 feet below the lower reservoir. The force of water from that source sent downhill through a drive pipe to the ram created a mounting pressure that ultimately closed a discharge valve on the ram. Momentum from the onrushing liquid simultaneously forced it into an air chamber; the air, compressed by the force of the water,

17. Wilder to the Chief Quartermaster, Department of Arizona, September 13, 1884. NA, RG 92. Records of the Office of the Quartermaster General. Consolidated correspondence file, 1794-1915. For placement of the pipeline, see "Ground Plan of Fort Bowie, A.T. and Pipe Line to Bear Springs: showing position of Hydraulic Ram and a complete model of water works for Post." Dated 1884; and "Profile of Pipe Line from Fort Bowie, A.T. to Bear Springs." Dated 1884. NA, RG 92. Records of the Office of Quartermaster General. Consolidated correspondence file, 1794-1915. Distribution of water to the different buildings at Fort Bowie can be seen in an 1889 plat labeled "Fort Bowie A.T." NA, RG 92. Records of the Office of the Quartermaster General. Consolidated correspondence file, 1794-1915.

rebounded to automatically close off the valve governing the incoming flow. This action had the effect of pushing the trapped water through a delivery pipe to a higher level, in this case the upper reservoir. Meantime, when the check valve closed it also caused the water in the drive pipe to recoil, thereby creating a partial vacuum that permitted the discharge valve to reopen. The cycle was repeated again and again.¹⁸

The work to fulfill these plans began in earnest early in March, 1885. Major Beaumont, while temporarily absent from the post, nonetheless directed the operation:

The first thing to be done is to take out all the rough rocks between the first big ravine and the spring. There are four of these rocks. Tomorrow this work will be commenced[,] also the reservoir will be started by Miner Phillipps. As soon as the pipe line is relaid the larger sized pipe must be tried on the ram. Details of men must be furnished if the prisoners are not sufficient in number to take out the rock from the reservoir. The miner is simply required to blast and losen [sic] rock. A trench must be dug to lay the ram pipe [in] and great care must be exercised to get this as straight and even as possible. Pvt. Wendt[,] Carpenter[,] must be sent with sufficient detail to erect props or supports for the pipe when it crosses the deep arroyos.¹⁹

18. Johnson's New Universal Cyclopaedia, pp. 1047-48. For a more detailed explanation of the working of the hydraulic ram, see Appendix B.

19. Beaumont to Captain William A. Thompson, March 9, 1885. Fort Bowie, LS. Copy in the files of FBNHS. The lower reservoir was planned to contain two tanks so that one could be emptied for (Continued)

By late autumn the system had been installed and was functioning well. "The water supply is abundant for every purpose, and is of good quality," reported the post surgeon. He noted, however, that the tank at Bear Spring was becoming full of dead leaves and urged that it be cleaned out and covered, which was done.²⁰ Later, the surgeon advised that the reservoir at Bear Spring "be covered by a permanent wooden roof, the rafters to be laid on the outside of the stonework to give free ventilation." This, too, was accomplished.²¹

The completion of the water system at Fort Bowie meant that a constant supply of water was easily available. The water wagon was no longer required to haul water from Apache Spring daily, although it was doubtless maintained as part of the garrison's fire fighting apparatus.²² In addition, a tank of 300 gallons capacity

19. (Continued) cleaning without disrupting the water supply. Wilder to the Chief Quartermaster, Department of Arizona, September 13, 1884. NA, RG 92. Records of the Office of the Quartermaster General. Consolidated correspondence file, 1794-1915. The inside walls of the tanks were lined with portland cement. "Estimate of Quartermaster's Stores," September 13, 1884. Miscellaneous records. Microfilm MC 12.

20. Fort Bowie Medical History, November, 1885. Copy in the files of FBNHS.

21. Fort Bowie Medical History, August, 1886. Copy in the files of FBNHS. At Bear Spring stands a small adobe building possibly associated with the army's development of that water source. It is a one-room structure with wooden gabled roof measuring approximately 14 feet wide in front and rear, 15 feet long at the sides, and 7 feet high. A window on the north side is 35 inches high by 29 inches wide, while one on the south side is 32 inches high by 23 inches wide. The old adobe bricks of this so-called "guardhouse" have been recently re-grouted with cement. The adobe adjoining the south side of the door in front, as well as the interior of the building, is covered with cement.

22. Post return, May, 1886. Copy in the files of FBNHS. See also the Wister photos of the burning of the post canteen in October, 1893.

was kept filled, along with the water barrels stationed at the different quarters.²³ During 1886 adjustments had to be made in the pipe line in order to improve the water flow,²⁴ and in the fall the fort requested a steam engine for the first time, a surplus item from Fort McDowell that Beaumont hoped to use "for sawing lumber, pumping water and for the production of ice if possible."²⁵ Presumably the introduction of the pump at this time obviated the need for retaining the hydraulic ram. All later references indicate that the water at the post was being pumped by steam engine power.

Throughout 1886 and 1887 the water supply from Bear Spring remained abundant and of good quality. In the former year Beaumont planted cottonwood branches around the parade.²⁶ As photographs reveal, they had attained a considerable growth by the time the fort was closed. During 1887 an earthquake tremor shook the post damaging the pipeline and causing fears that the water flow might somehow be affected. Instead, the spring's output was increased considerably.²⁷ In March, 1888, the boiler supplying power to the steam pump and ice machine gave out. The consequent failure of the pump threatened the garrison water

23. Inspection Report, Fort Bowie, February 7, 1886. NA, RG 159. Entry 15. 661/86.

24. Beaumont to the Chief Engineer, Department of Arizona, October 15, 1886. Fort Bowie, LS. Copy in the files of FBNHS.

25. Beaumont to the Chief Quartermaster, Department of Arizona, October 17, 1886. Fort Bowie, LS. Copy in the files of FBNHS.

26. Inspection Report, Fort Bowie, February 7, 1886. NA, RG 159. Entry 15. 661/86.

27. Fort Bowie Medical History, January, 1887. Copy in the files of FBNHS; Inspection Report, Fort Bowie, August 14, 1887. NA, RG 159. Entry 15. 959(3)87.

supply, and Beaumont shot off an urgent request for "an upright twenty five horse power tubular boiler."²⁸ The pump was soon back in operation.

In 1888 Major Beaumont began efforts to replace the length of pipeline from Bear Spring with pipe of a larger diameter. Increased water flow was necessary because of improved bathing facilities at Fort Bowie and because of the number of trees Beaumont had cultivated at the post. Moreover, Beaumont hoped to diminish the fire danger by excavating a second reservoir high up on the hillside behind his quarters (HS 025).²⁹ The new tank, lined with concrete, and with a capacity of 25,000 gallons, was situated roughly 80 yards south of that immediately above the double residence. Henceforth, water would be pumped into this tank from the reservoir and allowed to flow through a pipe into the tank directly behind the commander's residence.³⁰ Despite its obvious purpose, the new reservoir was not always kept full of water, and in April, 1889, that oversight elicited a protest from the commander to the post quartermaster:

[Concerning] the lack of water in the upper reservoir for use in case of fire at quarters No. 25. This reservoir was build [sic] expressly for use in case of fire there,

28. Beaumont to Major Amos S. Kimball, March 20, 1888. Fort Bowie, LS. Copy in the files of FBNHS. Apparently the new boiler also failed because of manufacturing defects, as previously noted. See Beaumont to AAG, Department of Arizona, June 28, 1888. Fort Bowie, LS. Copy in the files of FBNHS.

29. Inspection Report, Fort Bowie, August 3, 1888. NA, RG 159. Entry 15. 904/88. The new reservoir had been excavated by August, 1888. Ibid.

30. Fort Bowie Medical History, July, 1893. Copy in the files of FBNHS.

the building being entirely of wood, is particularly liable to burn down, if it gets a start, and with every facility, might not be saved. Lacking such facilities, which had been once properly provided, . . . such a loss would be inexcusable. You will please take immediate steps to have the reservoir filled and kept full. . . .³¹

In May the project of replacing the pipes with ones of larger size was underway,³² and towards the end of the month the entire water system at Fort Bowie was succinctly depicted as follows:

The water supply is obtained from Bear Springs, about one mile from the Post, a pipe line of 4" wrought iron pipe is being laid at present under contract (cost about \$2600.00), the old 2" and 3" pipe having proved inadequate. The pipe empties into a reservoir near the Engine house; from thence it is pumped by steam power to the reservoir south of Commanding Officer's Quarters,

31. Post Adjutant to Post Quartermaster, April 21, 1889. Fort Bowie, LS. Copy in the files of FBNHS. Actually, the lower reservoir had an overflow tank of 20,000 gallon capacity located next to it. "When water is plentiful it is kept filled, to be used in case of fire, and to supply the stables. Should the necessity arise, the water from the upper reservoir can readily be emptied into the [overflow] tank." Fort Bowie Medical History, July, 1893. Copy in the files of FBNHS. In addition, there were, by 1889, seven fire hydrants strategically positioned throughout the post and connected by pipes to the upper reservoir. Plat, "Fort Bowie, Arizona," dated May 20, 1889.

32. Major Henry Noyes to AAG, Department of Arizona, May 7, 1889. Fort Bowie, LS. Copy in the files of FBNHS; Noyes to AAG, Department of Arizona, May 17, 1889. Fort Bwoie, LS. Copy in the files of FBNHS.

and from there distributed to the different buildings at the post. . . . The [new] Hospital will be connected with the upper reservoir as soon as pipe is received for the purpose.³³

Problems with the water pipes developed late in 1889 when cold weather burst the main line even though it had been insulated with a mound of earth. Apparently the post quartermaster, Lieutenant William Black, was responsible for neglecting to adequately protect the line, and the matter greatly angered Major Noyes, the commander.³⁴

While this difficulty could be remedied, a potentially more serious matter arose in the summer of 1890 when the water flow from Bear Spring diminished.³⁵ From then on, the flow fluctuated and ultimately contributed to the decision to close the post. In February, 1891, there was water sufficient "for all purposes except irrigation."³⁶ But by July of that year water had to be hauled by wagon from Apache Spring west of Fort Bowie.³⁷ These varying conditions lasted into 1892. Late that year all water for the

33. First Lieutenant William Black to the Quartermaster General, May 20, 1889. Miscellaneous records. Microfilm MC 12. See also accompanying plat, "Fort Bowie, Arizona," dated May 20, 1889.

34. Noyes to AAG, Department of Arizona, November 7, 1889. Fort Bowie, LS. Copy in the files of FBNHS.

35. Fort Bowie Medical History, June, July, October, 1890. Copies in the files of FBNHS.

36. Fort Bowie Medical History, February, 1891. Copy in the files of FBNHS.

37. Fort Bowie Medical History, July, 1891. Copy in the files of FBNHS.

garrison's needs was being drawn from Apache Spring, and it was suggested that a pump be placed there to aid the water delivery from that source.³⁸ In an effort to conserve water, bathing was limited and all water closets in the barracks were closed and the men were required to use a nearby earth closet. Drinking water taken from Apache Spring was to be boiled before use.³⁹ The condition of Bear Spring was viewed as particularly unpromising.

A short time ago it became so low that it furnished no water at all to the post. Improvements have been made in it, hoping to increase the volume of water, and a system of syphons has been put in, to convey the water from the spring to the pipe some distance from the spring, but it all proved of no avail. The pipe leading from the spring was opened [at] a number of places,

38. Fort Bowie Medical History, December, 1892, and January, 1893. Copies in the files of FBNHS.

39. Fort Bowie Medical History, May, June, 1893. Copies in the files of FBNHS. In July the post surgeon remarked that the water "from the spring west of the post upon which we are almost wholly dependent at the present time is much more liable to contamination, and to my mind the propriety of its use is very questionable; the spring is in a canon about one fourth of a mile from the post, and on a much lower level. This canon extends up into the lower border of the post, and receives the drain from some married soldiers['] quarters, the canteen, bakery, non-commissioned staff-officers['] quarters, and one set of barracks; everything from the west side of the post finds its natural outlet through this canon, and the same is true of the droppings of cattle deposited in the canon above the spring. There is no sewer system for the greater number of houses on this side of the post. Wash-water used by laundresses finds its way either directly or indirectly into this canon, and near its banks at various places are earth closets which have been in use some time, all of which places the spring in great danger of contamination." Fort Bowie Medical History, July, 1893. Copy in the files of FBNHS.

under the impression that the pipe was air bound, which prevented the outflow of water, but this gave a negative result also. There can be no question about the gradual failing of the spring. . . .⁴⁰

To compensate for the dwindling output from Bear Spring, the soldiers hauled water from west of the post and deposited it into the two lower reservoirs.⁴¹ However, less than 4,000 gallons could be produced daily to serve the needs of the roughly 150 people composing the garrison. The quantity was insufficient should the troops have to contend with a fire emergency.⁴²

Conditions improved enough in June and July for the post commander to observe that "the supply reservoirs are now full and unless the springs materially fail I have no doubt they can be kept full until the rainy season sets in and relieves us of our anxiety."⁴³ Besides a renewed flow from Bear Spring, the west spring continued an output sufficient to permit the steam engine and ice machine to function.⁴⁴ In the fall heavy rains filled the reservoirs, but this did nothing to substantially improve the flow of water from the springs.⁴⁵

40. Fort Bowie Medical History, May, 1893. Copy in the files of FBNHS.

41. Ibid.

42. Murray, "History of Fort Bowie," p. 287.

43. Major Thomas McGregor to AAG, Department of Arizona, June 17, 1893. Fort Bowie, LS. Copy in the files of FBNHS.

44. Fort Bowie Medical History, July, 1893. Copy in the files of FBNHS.

45. Fort Bowie Medical History, September, 1893. Copy in the files of FBNHS; Murray, "History of Fort Bowie," p. 288.

As 1894 began there was little optimism at Fort Bowie concerning resurgent water supplies. Post officials looked anew on the spring located north of the fort and heretofore used strictly for livestock. "Observation leads me to believe," wrote the surgeon, "that the water from the north spring is suitable for drinking purpose if care be exercised to keep it and the gulch above clean."⁴⁶ Instead, however, an attempt was made to increase the quantity of water at Bear Spring.⁴⁷ The effort proved successful; on April 6 a dynamite blast blew open a new stream of water which began flowing through the pipeline into Fort Bowie. Shortly afterwards the reservoir at the engine house was cleaned out, along with that located up the hillside above HS 025.⁴⁸ "The water problem is believed to be solved entirely satisfactorily," noted the post surgeon.⁴⁹ Water flowed plentifully throughout the summer and it was estimated that the "full flow" would continue for another year.⁵⁰ Yet longstanding uncertainties over the supply of water, along with other considerations, outweighed such assumptions. Fort Bowie soon succumbed to the realities of the times.

46. Fort Bowie Medical History, January, 1894. Copy in the files of FBNHS.

47. Fort Bowie Medical History, February, 1894. Copy in the files of FBNHS.

48. Fort Bowie Medical History, April, 1894. Copy in the files of FBNHS. See Fort Bowie Medical History, December, 1893, for earlier accounts of cleaning the reservoirs. Copy in the files of FBNHS.

49. Ibid. Owen Wister wrote his mother May 14, 1894: "Major [Thomas McGregor] telegraphed [Brigadier] Gen. [Alexander M.] McCook, Department Commander, that the Post would have to be abandoned unless water could be found. . . . McCook said 'try to find water.' So, as a last chance, the Major took giant powder to the spring that had gone dry and blew the bottom out of a mountain, finding water quite as suprisingly as Moses did. . . ." Owen Wister Out West, p. 202.

50. Fort Bowie Medical History, July, 1894. Copy in the files of FBNHS.

D. Roads and Trails

The earliest major transportation route through the vicinity of Fort Bowie was that used by the overland mail before either fort was established. Coaches approached the spring in Apache Pass from the north through Siphon Canyon on what was later termed the "Old Pass Road." Entering the pass a short distance west of the spring, the road from there veered southwest, then west, continuing in the direction of Tucson.¹ In 1868 Major Henry Martyn Robert described the road leading down Siphon Canyon: "Road for say one mile to end of Pass, level & good. At this point a fork in the road, to the right leading to Santa Fe (via San Simon), & to the left leading down the valley to [Fort] Goodwin. . . . Road new & very soft through light soil."² Another observer approaching Fort Bowie through Siphon Canyon in 1870 stated that "the road from San Simeon [sic] valley, winds around through a narrow pass or canyon, along the bed of a creek, for some five or six miles, when it ascents [sic] rolling hills. Bowie is located on one of those hills. . . ."³

Soon after the establishment of the first Fort Bowie the portion of the "Old Pass Road" that led to the spring was extended up and over the grade that ultimately the second fort was built upon.

1. "Map of the Military Reservation at Camp Bowie . . . February 1869." The route of the "Old Pass Road" north and east of Siphon Canyon is traced on "Map of Military Reservation at Fort Bowie, A.T." Surveyed by Second Lieutenant Thomas B. Dugan, Third Cavalry, 1883. NA, RG 49. Records of the Office of the Quartermaster General. Consolidated correspondence file, 1794-1915. (Hereafter cited as Dugan, "Map of Military Reservation at Fort Bowie.")

2. Field Notes, Jan. 10- Feb. 6, 1868.

3. Marion, Notes of Travel through the Territory of Arizona, p. 33.

From this high ground the road abruptly turned down a canyon leading northwest towards San Simon Valley. Two miles from the site of second Fort Bowie the road turned east. This was the "New Pass Road to New Mexico, Santa Fe & the Rio Grande."⁴ Likewise, the route traveled west from the spring over a new course to the summit of Apache Pass, about two and one-half miles from the second post. This became the "New Road from Tucson."⁵ As it ran through the fort the road angled in from the northwest, passing behind one set of cavalry barracks (HS 010), the quartermaster storehouse (HS 013), and the commissary storehouse (HS 014), and in front of the corrals (HS 018). Then it turned sharply northeast down the canyon.⁶

Plats dating from the mid-1870s reveal that the route westward towards Tucson divided about three miles from Fort Bowie after crossing the summit of the pass. From there the northern road led to Ewell's Springs enroute to Tucson while the southern road went toward Sulphur Springs.⁷ Yet another road intersected the

4. "Map of the Military Reservation at Camp Bowie . . . February 1869."

5. Ibid.

6. "Diagram of Camp Bowie, A.T., August, 1870." On this map the eastward and westward projections of the road are designated, respectively, "Mail Road to New Mexico" and "Mail Road to California." However, the map erroneously shows the road passing north of the corrals instead of south of them. Ibid. On a map of December, 1870, the route is called "Road from Tucson A.T. to La Mesilla N.M." "Diagram of Camp Bowie, December, 1870."

7. See Sketch Map (1877); and "Diagram of the Military Reservation at Camp Bowie A.T." First Lieutenant Earl D. Thomas, Fifth Cavalry, Acting Engineer Officer. August, 1877. NA, RG 49. Records of the General Land Office. Abandoned Military Reservations. (Hereafter cited as Thomas, "Diagram of the Military Reservation at Camp Bowie.")

Sulphur Springs route near the fork. This led south towards Fronteras, Sonora.⁸ About three miles along this highway a route known as Pinery Road took off diagonally southeast, shortly intersecting a trail leading six miles northeast to Fort Bowie, enroute passing along the east side of Helen's Dome. Still another trail ran two miles west from the fort to the summit of Apache Pass.⁹ The main road east of the fort also divided approximately 1 1/2 miles from the post. The "New Pass Road" continued on its former course; it was also called the "Mountain Road," and it headed towards New Mexico. The other road proceeded in a northeasterly direction into San Simon Valley and on to New Mexico¹⁰

The "Old Pass Road" through Siphon Canyon saw regular use throughout Fort Bowie's active existence. About three miles north of the post the route diverged. One avenue headed generally northwest towards Fort Grant and was known as "Grant Road". The other route, called "Pueblo Viejo Road," continued north to Bowie Station on the Southern Pacific Railroad (after 1881).¹¹ Just northeast of the fort a trail left the main pass road and headed due

8. *Ibid.*; Dugan, "Map of Military Reservation at Fort Bowie"; Plat, "Fort Bowie, Arizona." Line Survey by First Lieutenant Thomas S. McCaleb, Ninth Infantry. February, 1893. NA, RG 92. Records of the Office of the Quartermaster General. Consolidated correspondence file, 1794-1915. (Hereafter cited as McCaleb, "Fort Bowie, Arizona.")

9. Sketch Map (1877); Thomas, "Diagram of the Military Reservation at Camp Bowie"; McCaleb, "Fort Bowie, Arizona."

10. *Ibid.*, Dugan, "Map of Military Reservation at Fort Bowie."

11. Sketch Map (1877); Thomas, "Diagram of the Military Reservation at Camp Bowie"; Dugan, "Map of the Military Reservation at Fort Bowie"; McCaleb, "Fort Bowie, Arizona."

south past Bear Spring.¹² Another trail left Fort Bowie near the site of the new hospital (HS 033) and went southeast three-quarters of a mile to intersect the southbound route at Bear Spring.¹³ There were doubtless other minor trails located around Fort Bowie and routinely used for years.

12. Thomas, "Diagram of the Military Reservation at Camp Bowie"; McCaleb, "Fort Bowie, Arizona."

13. Sketch Map (1877); Thomas, "Diagram of the Military Reservation at Camp Bowie."

E. Cemetery

In 1870 a group of visitors approaching Fort Bowie along the Old Pass Road through Siphon Canyon mounted the rising ground west of the fort and encountered the post cemetery. As one of them recollected,

The . . . thing that attracted our attention was the graveyard, in which reposed the bodies of many persons who had lost their lives in combats with the Apaches; those who had been waylaid and murdered and a few who had died of disease. Knowing that persons' now living have friends buried there, it may be a source of consolation to them to know that the graves of their departed friends at Camp Bowie, are marked with slabs, and that green grass grows upon every mound.¹

While the writer may have taken some license as regards the verdure, the description was otherwise appropriate. The cemetery was a receptacle mostly for the victims of violence, the unlucky number of those people forced by circumstance to reside in a troubled frontier environment. The cemetery was located little more than one-half mile west of the second Fort Bowie "in a little flat at the foot of the western side of the hill on which the 'Old Post' was established. . . ." ² Late in 1870 it reportedly contained some thirty graves and had no enclosure.³

It is likely that the three soldiers of the First California Volunteer Cavalry under Lieutenant Colonel E. E. Eyre killed at

1. Marion, Notes of Travel through the Territory of Arizona, p. 34.

2. "Descriptive Commentaries," Fort Bowie, Ariz. Vol. 125 (1871).

3. Ibid.

Apache Pass in June, 1862--Privates James F. Keith, Peter Mahoney, and Albert Schmidt--were buried at this site and formed the nucleus around which the cemetery grew.⁴ In the years that followed, numerous casualties of the Apache wars, as well as victims of disease and accidents at Fort Bowie, were interred in the cemetery. By 1883, when the total interments to that time were formally tabulated, there were sixty-one graves present.⁵ And other burials occurred between that date and the post's abandonment.

A few of those buried in the cemetery commanded more than passing notice. Colonel John Finkle Stone, a civilian entrepreneur, had begun extensive mining operations in Arizona, and notably in Apache Pass, at the time of his death at the hands of Indians in October, 1869. During the summer of 1878 First Lieutenant Austin Henely, Sixth Cavalry, a native of Ireland, drowned while attempting to cross the swollen White River at Camp Supply, about thirty miles south of Fort Bowie. His friend, Second Lieutenant John A. ("Tony") Rucker, tried to rescue Henely but lost his own life in the attempt. The double tragedy shocked the Fort Bowie garrison. Both officers were well-liked and popular with the troops. Furthermore, Rucker was the son of Colonel Daniel H. Rucker, the Assistant Quartermaster General and brother to the wife of Lieutenant General Philip H. Sheridan, commander of the Military Division of the Missouri. The Army and Navy Journal contained the following account of the fatal event:

4. Eyre to Lieutenant Benjamin C. Cutler, July 14, 1862, in War of the Rebellion, Series I, vol. L, Part 1, p. 126; "Report of Interments at Fort Bowie, A.T., March 22, 1883. Recorded in Cemeterial Book, QMGO, p. 92." Miscellaneous records. Microfilm MC 12.

5. "Report of Interments at Fort Bowie, A.T., March 22, 1883." Miscellaneous records. Microfilm MC 12. See Appendix C.

They met their deaths in White River Canon. Henely had been scouting between Camp Supply and the Hatchet Mountains, and had returned with his Indian company. His command he had stationed in the canon in the vicinity of Point of Rocks, when he started on horseback up the canon toward Supply Camp. Twice he had succeeded in crossing the fearful torrent of water that was rushing madly along its course, carrying everything with it that came in reach, and arriving about opposite to Supply Camp, he made a third attempt to cross the angry stream. Reaching the rapid current, his horse lost his foothold in the bed of the stream, and Henely was plunged into the water. He swam with the current for a considerable distance, when his body was thrown against a tree with great force, far out in the stream. The blow he received rendered him helpless. Lieut. Rucker, who was near at hand, mounted his horse and rode rapidly a short distance below, and plunged into the stream, hoping to catch Henely as he floated by. But alas! the fate of noble Rucker. He, too, was separated from his horse, immediately sank in the roaring, rumbling current, and was seen no more alive. Rucker's body was found at 7 o'clock the same evening, the body of Henely was found near where Rucker's was taken out. Henely's skull was fractured, and it was thought by the surgeon that death ensued immediately after the fracture was received, which was probably at the tree or stump described above. Efforts at resuscitation were thoroughly made, but death had claimed its own. The bodies were sent to Bowie on the 12th, and buried on the 18th at that post. The funeral was one of the most imposing ever witnessed in

Arizona, the officers and men performing the last sad rites.⁶

Captain Curwen B. McLellan, commanding Fort Bowie, reported on the interment proceedings:

The remains of these two Officers were interred in the cemetery at this post on the 13th inst. [of July], with the usual solumn [sic] and appropriate ceremonies, rendered more impressive by the very manifest sorrow felt by both citizens and soldiers, who attended the service over the remains of these young Officers, for whom they entertain feelings of attachment and high regard. The graves are located in the Southwest corner of the North section of the cemetery, and are numbered as follows: Henely's, No. 45, and Rucker's No. 46, and are well marked. . . . Appropriate Head boards will be painted and erected as soon as suitable lumber is received by the QrMr's Dept. . . .⁷

Slightly over a year later Captain McLellan's wife died suddenly. She was not buried in the post cemetery, however.⁸ There is little record of individuals buried in the cemetery after 1883, although in

6. August 10, 1878. See also the notices in the Army and Navy Journal, July 20 and July 27, 1878.

7. McLellan to AAG, Department of Arizona, July 26, 1878. Fort Bowie, LS. Copy in the files of FBNHS. See also Telegram, July 19, 1878, Headquarters, Department of Arizona, to Commanding Officer, Fort Bowie. Department of Arizona, Communications Sent. Copy in the files of FBNHS.

8. Arizona Daily Star, September 4, 1879.

January, 1886, two black soldiers, Sergeant Robert Evans and Private Jeremiah Lawson of Troop C, Tenth Cavalry, both killed by an irate Apache scout, were interred there.⁹

The condition of the cemetery varied considerably over the period of the post's occupation. Whereas in 1870 there was no enclosure surrounding it, in 1878 it was described as being "enclosed with adobe walls, four feet high, and has an entrance which is secured by a double gate."¹⁰ Two years later the cemetery was said to be "in good order, and properly enclosed."¹¹ But in September, 1881, the adobe wall was crumbling and the gates needed replacement.¹² In 1883 the enclosure still needed repairs,¹³ and in June, 1884, the cemetery's condition attracted the attention of the Quartermaster General in Washington:

Information has been received here from relatives of one of the Officers buried in the post-cemetery . . . (Genl Rucker, Retired) that the condition of that cemetery is not good: no gate to the enclosure and thus liable to

9. Charles D. Roberts, "Extracts from Diary of Charles D. Roberts, Fort Bowie, Arizona, 1885-86." Arizona Historical Society; Lummis, Dateline Fort Bowie, p. 88.

10. McLellan to AAG, Department of Arizona, July 26, 1878. Fort Bowie, LS. Copy in the files of FBNHS.

11. Inspection Report, Fort Bowie, August 12, 1880. NA, RG 159. Entry 15. 1164/80. See also Inspection Report, Fort Bowie, September 4, 1880. NA, RG 159. Entry 15. 1168/80.

12. Inspection Report, Fort Bowie, September 5, 1881. NA, RG 159. Entry 15. 1199/81.

13. Inspection Report, Fort Bowie, September 10, 1883. NA, RG 159. Entry 15. 865/83.

entrance of cattle, and that the graves are not in good order.¹⁴

The commander of Fort Bowie was directed to submit a requisition for materials necessary to improve the cemetery. In compliance, Major Eugene B. Beaumont asked for the following items:

Sixteen hundred (1600) Pickets, 4 feet long and 3 inches wide.
Two hundred and twenty (220) pcs. 2" x 4" and 10 feet long.
Seventy-five (75) pieces 6" x 8" and 7 feet long.
Seventy (70) pieces 1" x 8" and 10 feet long.
(100) one hundred lbs. Nails 4d
(100) one hundred lbs. Nails 10d

Total cost of the improvements, including labor, was estimated at \$240.98.¹⁵

These materials took months to arrive.¹⁶ In the meantime the energetic Beaumont began a personal campaign to replace the headboards in the cemetery with more substantial monuments.¹⁷ He wrote to the commanding officer of Fort Bayard, New Mexico, where the Sixth Cavalry was stationed, and asked if the regiment cared to

14. Lieutenant Colonel John G. Chandler to Colonel Judson D. Bingham, June 24, 1884. Miscellaneous records. Microfilm MC 12.

15. "Special Requisition," July 17, 1884. Miscellaneous records. Microfilm MC 12.

16. See Inspection Report, Fort Bowie, September 2, 1884. NA, RG 159. Entry 15. 1232/84.

17. Beaumont to AAG, Department of Arizona, March 29, 1885. Fort Bowie, LS. Copy in the files of FBNHS.

raise a stone memorial in the cemetery to honor Lieutenant Rucker. The suggestion was declined.¹⁸ Beaumont also wrote the adjutant general of California outlining a similar proposal to memorialize officers of the California Volunteers who had been buried at Fort Bowie.¹⁹ This, too, apparently met with no success.

In the spring of 1885 new wooden headboards arrived with the articles previously requisitioned to improve the cemetery. A picket fence was erected around the graves, using the foundation of the former adobe wall as a footing.²⁰ Charles Lummis, correspondent covering the Geronimo campaign for the Los Angeles Times, portrayed the cemetery in poetic terms during his tenure at Fort Bowie in 1886:

Three-quarters of a mile west of the Fort, on a pretty little bench above the arroyo, it stands within a high picket fence; its white head-boards shining in the sun, while sparrows chatter and doves coo over the narrow mounds. Between its ridges the ground is gay with golden poppies and snowy margueritas; and here and there upon some unforgotten grave, a buckhorn cactus spreads its prickly antlers, or a turks'-head nestles close against the bare gravel. There are but two memorial stones in the whole inclosure; all the rest is lumber--pine boards planed and painted white, while cramped black

18. Beaumont to Major Abraham K. Arnold, January 19, 1885. Fort Bowie, LS. Copy in the files of FBNHS.

19. Beaumont to the Adjutant General, State of California, January 24, 1885. Fort Bowie, LS. Copy in the files of FBNHS.

20. Inspection Report, Fort Bowie, April 10, 1885. NA, RG 159. Entry 15. 776/85. See photograph of the cemetery c. 1887 showing the picketed enclosure.

letters, in straggling lines, tell their terse story. How many a romance is in that lonely half-acre! All burying grounds cover that which was once hope and joy and love; but this little bench along the barren mountain-walls of Apache Pass, is eloquent with the story of the Arizona frontier. It is full of Apache workmanship. The dumb upheavals of its brown breast tell of the old stage creaking through the desolate canon; the sudden little puff of smoke from behind yon innocent tuft of bear-grass, matched in sickly curl from that rock and another from the aloe-bunch beyond; the sturdy driver tumbling from his perch; the tangled horses floundering in terror; the ashen traveler dragged from his concealment; and last of all a horrid bonfire, whose odorous smoke goes up with the tortured shrieks of a writhing form.²¹

Lummis counted thirty-three markers. Some of the headboard inscriptions he recorded read as follows:

O.O. SPENCE

Born in Pennsylvania.

Aged 28 years.

Killed by Indians April 7, 1876

NICHOLAS M. ROGERS.

Born in St. Joseph, Mo.

Killed by Indians April 7, 1876.

21. Los Angeles Times, April 18, 1886, quoted in Lummis, Dateline Fort Bowie, p. 85.

JOHN McWILLIAMS
Killed by Apaches Feb. 26, 1872.
Aged 26.

A.F. BICE, F. PETTY, F. DONOVAN.
Killed by Indians in Apache Pass, Jan.
24, 1872.

In Memory of
Col. STONE.
Supposed to be [his grave].

In Memoriam of
GEO. KNOWLES,
Prvt. Co. H, 32 U.S. Inf., captured and tortured
to death by Apache Indians,
May 26, 1868.

In memory of
LITTLE ROBE,
Son of
GERONIMO,
Apache Chief.
Died Sept. 10, 1885;
Age 2 years.

In memory of
MARCIA,
An Apache child.
Died July 3, 1885;
Age 3 years.²²

22. *Ibid.*, pp. 86-88; Charles F. Lummis, The Land of Poco Tiempo
(New York: Charles Scribner's Sons, 1897), pp. 211-13.

Major Beaumont reported in September, 1886, that the cemetery fence "needs painting which will be done as soon as practicable."²³ During the following year the wooden headboards over the graves were replaced with marble ones, and footboards were added to the mounds.²⁴ The cemetery remained intact until after Fort Bowie was abandoned. Then, in March, 1895, the military graves were opened and the remains disinterred for reburial in San Francisco National Cemetery.²⁵ There the soldier dead of Fort Bowie repose today.

23. Inspection Report, Fort Bowie, September 4, 1886. NA, RG 159. Entry 15. 1036(2)86.

24. Inspection Report, Fort Bowie, August 14, 1887. NA, RG 159. Entry 15. 959(3)87.

25. Murray, "History of Fort Bowie," p. 303n. As early as 1882 it was proposed removing the dead of the California Volunteers to a cemetery contemplated "at the Presidio or at some other suitable place on the Pacific Coast. . . ." Inspection Report, Fort Bowie, March 16, 17, 18, 1882. NA, RG 159. Entry 15. 334/82. The civilian dead of Fort Bowie apparently still lie in the post cemetery.

F. Firing Ranges.

The development of the soldier's proficiency in accurate small arms firing became a major concern to the army during the years following the Civil War. In 1872 a formal system of target practice was inaugurated and in the late 1870s and 1880s regular programs of marksmanship were instituted at garrisons throughout the country.¹ At Fort Bowie it appears that regular, systematized rifle and carbine practice was begun about 1880; a target range for the post was recommended by an inspecting officer in June of that year, although some sort of training could have been implemented before that time.²

There were several ranges established for target shooting, all of which were located some distance from the post because of the unevenness of the terrain. One observer commented that "it is almost impossible to get a 600 yard range without going two miles off."³ Moreover, it took time and a good amount of labor to construct the requisite targets and butts, the earthen barriers raised in front of and behind the targets both to protect the operators and scorers and to prevent the scattering of bullets.⁴

1. Rickey, Forty Miles a Day on Beans and Hay, pp. 103-05.

2. First Lieutenant Louis A. Craig to Post Quartermaster, Fort Bowie, June 23, 1880. Fort Bowie, LS. Copy in the files of FBNHS.

3. Inspection Report, Fort Bowie, December 21 and 22, 1882. NA, RG 159. Entry 15. 148/83. The same was also true for cavalry drill. Captain William A. Rafferty to AAG, Department of Arizona, January 20, 1883. Fort Bowie, LS. Copy in the files of FBNHS.

4. See Inspection Report, Fort Bowie, March 16, 17, 81, 1882. NA, RG 159. Entry 15. 334/82. Natural hills or abrupt rises in the ground might also serve as rearward butts, and undoubtedly did at the firing ranges at Fort Bowie. For regulations concerning the preparation of ranges, see Captain Stanhope E. Blunt, Instructions in Rifle and Carbine Firing for the United States Army (New York: Charles Scribner's Sons, 1885), pp. 180-88.

In the early 1880s target practice at Fort Bowie was conducted once a week between September 1 and May 31. The ranges were divided into distances of 100 and 600 yards, and the infantry and cavalry troops fired at paper bulls-eyes.⁵ The targets were labeled Types "A" and "B", the former signifying that used for short-range firing (100, 200, 300 yards), the latter that used for mid-range firing (400, 500, 600 yards).⁶ "The ranges are not level," wrote Captain William A. Rafferty, "the first is toward the south, a bad direction for light, the second toward the north west. Both ranges are intersected by ravines, side canyons, etc."⁷ By late summer, 1884, a third range, this of 1000 yards, had been added, and the Type "C" paper target for long range firing (600-1000 yards) was now employed.⁸ Furthermore, soldiers using the short range were shooting at the revolving targets which had been devised by Colonel T. T. S. Laidley of the Ordnance Department. An official description of the Laidley targets stated that

5. Inspection Report, Fort Bowie, December 21 and 22, 1882. NA, RG 159. Entry 15. 148/83; Inspection Report, Fort Bowie, September 10, 1883. NA, RG 159. Entry 15. 865/83; Post Commander to AAG, Department of Arizona, September 9, 1883. Fort Bowie, LS. Copy in the files of FBNHS. Ideal practice seasons varied. One officer noted that April, May, June, September, and October were the best months for target training. Captain William A. Rafferty to AAG, Department of Arizona, December 20, 1882. Fort Bowie, LS. Copy in the files of FBNHS.

6. Post Commander to AAG, Department of Arizona, September 9, 1883. Fort Bowie, LS. Copy in the files of FBNHS; Blunt, Rifle and Carbine Firing, pp. 142-44. The elliptical bulls-eye on the Type A target covered a sheet of paper 6 feet long and 4 feet wide; that on the Type B target fairly covered a sheet about 6 feet square. Ibid., p. 143.

7. Rafferty to AAG, Department of Arizona, December 20, 1882. Fort Bowie, LS. Copy in the files of FBNHS.

8. Beaumont to AAG, Department of Arizona, September 11, 1884. Fort Bowie, LS. Copy in the files of FBNHS; Blunt, Rifle and Carbine Firing, p. 144.

these belong to the class of revolving targets and are composed of two similar frames, each forming a target of the requisite size, securely joined to the opposite ends of two nave boxes and balanced on a common axle. The frames are made in preference of light wood. . . . The parts of the wooden frame are joined by pins of hard wood, the use of metal nails or screws, or anything that might obstruct the passage of the ball, being carefully avoided. The frames are made of only two different sizes--6' X 6' and 6' X 12'.⁹

At the other ranges stationary targets probably made of wood by the various troops and companies were used.¹⁰

A year later there were four ranges at Fort Bowie, described thusly:

One short range from 100 to 300 yards inclusive. The 100 yard firing point on this range is situated about 20 feet below the Target Butts, the 200 and 300 yard points on the side of a hill opposite the Butts. Between said points and the Butts there is a deep ravine. One range [is] available for 500 and 600 yard practice. Between the firing points and Butts on this range is a deep ravine[,] the Butts being on one hill and the firing points on another opposite. One range available for practice at 600 yards. The firing point at this range is on a raised

9. Blunt, Rifle and Carbine Firing, p. 150. More details of construction appear in ibid., p. 150ff.

10. Beaumont to AAG, Department of Arizona, September 11, 1884. Fort Bowie, LS. Copy in the files of FBNHS; Blunt, Rifle and Carbine Firing, pp. 148-49.

platform about 9 feet above the ground. Between the firing point and Butts there are numerous small arroyas [sic]. Also a range that has been used for 1000 yard practice, this range is, like all others over a deep ravine. The firing point [is] on one hill, the Butts on the hill opposite.

All the ranges at this Post are very poor owing to the fact that it is impossible to get sufficient space without crossing a ravine. The targets used are the Regulation "A", "B" and "C", one at each range. The Targets are placed on the ground (from 4 to 6 feet to the left of the Butts), none of the new appliances for mounting targets having been adopted at this Post.¹¹

At Fort Bowie there occurred very little skirmish firing practice because of the difficulty of conducting such exercises over the broken terrain.¹² To conserve ammunition, each company or troop was equipped with a reloading kit so that the casings might be used again and again.¹³ Indoor rifle training, in which various firing positions were practiced without ammunition, often took place in the barracks squad rooms.¹⁴

11. Captain Matthew Markland to Inspector of Rifle Practice, Department of Arizona, December 16, 1885. Fort Bowie, LS. Copy in the files of FBNHS.

12. Ibid.

13. Rafferty to AAG, Department of Arizona, December 20, 1882. Fort Bowie, LS. Copy in the files of FBNHS.

14. Beaumont to AAG, Department of Arizona, September 11, 1884. Fort Bowie, LS. Copy in the files of FBNHS.

The training had become more refined by 1886. Target practice now occurred daily during the "season". Fixed targets were now used that had iron frames, while the target butts were constructed of logs and earth.¹⁵ Naturally, repairs and improvements to the ranges were necessary each year,¹⁶ and at Fort Bowie there was innovation in attempting firing systems that had been previously considered hopeless because of the terrain. The number of ranges seems also to have multiplied, as Major Henry E. Noyes commented,

Owing to the situation of Bowie, among the hills and mountains, there is a different ground for each range and all are over rough and broken ground. The skirmish range is some distance from the Post. Any range can be found from 100 yards upward. There is one short range, one mid-range and one long range target on each Troop target practice ground. Of these some are Laidley pattern and others are sliding targets with separate pits or butts for each. There are 16 of each pattern of Iron Skirmish targets. The months of April and May are the best months for target practice.¹⁷

15. Inspection Report, Fort Bowie, February 7, 1886. NA, RG 159. Entry 15. 661/86.

16. First Lieutenant Wilbur E. Wilder to AAG, Department of Arizona, February 23, 1888. Fort Bowie, LS. Copy in the files of FBNHS.

17. Noyes to Inspector of Small Arms Practice, Department of Arizona, August 6, 1889. Fort Bowie, LS. Copy in the files of FBNHS. Skirmish targets were "iron skeleton frames, representing the outline of a soldier in the firing positions, standing, kneeling, and lying prone. . . . They are covered with cloth and with black paper, cut as silhouettes to the shape of the frames." Blunt, Rifle and Carbine Firing, p. 146.

Apparently, skirmish, volley, and revolver firing was practiced at Fort Bowie despite problems with the uneven terrain. But the troops had to go as many as three miles from the post "to the foot hills" in order to get long range and volley firing training.¹⁸

Direct evidence of the location of most of the Fort Bowie target ranges is lacking. The vague references in the correspondence to the existence of ranges "toward the south", "toward the north west," and "North and east near [the] post" are only generally helpful in determining their specific locations.¹⁹ The discovery of expended cartridges and the identification of the vestiges of two target butts have helped to locate one site just west of the creek bottom in the south end of Siphon Canyon below the post cemetery. Situated approximately 1000 yards southwest of the second fort, this tract was doubtless used for short- and intermediate-range firing, as well as for some revolver practice, based on the expanse of terrain at that point and the types of casings retrieved there. The sites of other shooting ranges have yet to be discovered with certainty, although some scattered cartridge casings have been found about one-half mile below and east of the site of Fort Bowie, tentatively locating yet another range. Perhaps the identification of more old target butts on the relatively flat areas of ground around the fort area, together with inquiry made of local landholders regarding the finding on their property of copper or brass cartridge shells, would help to pinpoint these numerous sites once so inextricably a part of Fort Bowie's routine.

18. Major Thomas McGregor to Inspector of Small Arms Practice, Department of Arizona, September 10, 1890. Fort Bowie, LS. Copy in the files of FBNHS.

19. Rafferty to AAG, Department of Arizona, December 20, 1882. Fort Bowie, LS. Copy in the files of FBNHS; Inspection Report, Fort Bowie, February 7, 1886. NA, RG 159. Entry 15. 661/86.

G. The Overland Mail Station, Quartz Mill, and Indian Agency

The location of the site of the Butterfield Mail Station in Apache Pass has long been in doubt. When the Butterfield system was inaugurated in 1858 its route was periodically marked by the erection at appropriate points of "large square enclosures, with walls of adobe."¹ The station erected in Apache Pass, and which operated there until 1861, was similarly constructed and was probably built along the north side of a wash in the vicinity of the spring. James Tevis, a Butterfield employee, recalled that the spring was one-fourth mile east of the station. John Cremony, who fought in the Battle of Apache Pass in 1862, remembered that the station was 600 yards from the spring, roughly one-third of a mile.²

Tevis noted that the mail station was

A stone corral . . . built with portholes in every stall. Inside, on the southwest corner, were built, in "L" shape, the kitchen [with fireplace] and sleeping rooms.

1. Report of the Postmaster General, 1858 (Washington: Government Printing Office, 1858), p. 742.

2. James H. Tevis, Arizona in the '50's (Albuquerque: University of New Mexico Press, 1954), p. 94; John C. Cremony, Life Among the Apaches (San Francisco: A. Roman and Company, Publishers, 1868; reprint, Tucson: Arizona Silhouettes, 1951), p. 62. The site currently interpreted as the mail station is most likely incorrect. This site is directly north of the cemetery on a flat of land close to the overland road to the summit of Apache Pass. For an analysis of the evidence regarding this location versus the probable correct one, see Wilton E. Hoy, "The Apache Pass Stage Station: A Reassessment of its Location." (Unpublished manuscript dated 1976 in the files of FBNHS). Some kind of structure nevertheless stood at the former location, and remains of it were stabilized by the National Park Service in 1968. This structure most likely was a storage facility connected with the quartz crushing operation set up in 1869. (See below.)

At the west end, on the inside of the corral, space about ten feet wide was apportioned for grain room and storeroom, and here were kept the firearms and ammunition.³

While the corral was of stone, the main part of the station building was most likely built of adobe.⁴ At the time of the Bascom Affair--the fatal dispute with Cochise which provoked an increase in Apache disturbances--more than sixty soldiers and civilians gathered for protection in the structure. Again, during July, 1862, while the Battle of Apache Pass was raging, some sixty-seven soldiers, besides two mountain howitzers and some horses, managed to take refuge in the structure.⁵

It is uncertain whatever became of the mail station in the years following its abandonment. However, during the active existence of the first Fort Bowie, established in 1862, there was a gold-bearing quartz extraction operation located on the probable site of the old station. An already existing structure plus proximity to the spring would seem to have been important incentives governing selection of a site for such a mill. The mill was

3. Arizona in the '50's, pp. 93, 146.

4. Roscoe B. Conkling and Margaret B. Conkling, The Butterfield Overland Mail, 1857-1869 (2 vols.; Glendale: The Arthur H. Clark Company, 1947), II, 132. John Cremony, however, stated that the building was of stone. Life Among the Apaches, pp. 62, 164. Another man, Thomas T. Hunter, wrote that "while there in 1867 I looked at the little old stone cabin built by Butterfield's men. . . ." "Early Days in Arizona." Arizona Historical Review (April, 1930), p. 105.

5. Cremony, Life Among the Apaches, pp. 162-64; Hoy, "Apache Pass Stage Station," pp. 2,2; Conkling, Butterfield Overland Mail, II, 137.

established as part of the Apache Pass Mining Company, founded in 1867, but which failed early in 1869 and was revived by Colonel John Finkle Stone and his associates, Messrs Lyon and Anderson.⁶ Anderson ran the ten-stamp quartz mill, and besides served as post trader at the first Fort Bowie, a short distance away.⁷ In July, 1869, Stone and Company signed a contract with a party in Pinos Altos for 1000 tons of ore from the nearby "Harris Lode," the ore to be hauled by wagons to Anderson's mill for crushing.⁸ One night Apache Indians stole onto the mill grounds and made off with a horse. The very next night

the storehouse of Mr. Anderson, containing a large amount of grain and machinery, and acids for mining, belting, etc., etc., was broken into by the Indians and considerable damage done by breaking bottles of valuable acids, cutting belting, etc., etc., and carrying away some 800 pounds of grain. The storehouse is about 600 yards from the mill, and up to that time unguarded.⁹

6. The Arizonan, July 10, 1869.

7. "Map of the Military Reservation at Camp Bowie, Arizona . . . February 1869"; "Report on Barracks and Hospitals," p. 471.

8. The Arizonan, July 3, 1869. See "Col. John Finkle Stone and the Apache Pass Mining Company," Arizona Historical Review, VI, (July, 1935), p. 74.

9. The Arizonan, July 3, 1869. The site of this storehouse is very likely that which is presently designated the site of the old stage station. The distance conforms nicely to that given above (600 yards). Undoubtedly the storehouse was situated west of the mill, for an eastward projection of 600 yards would place it east of the future site of the second Fort Bowie, an extremely unlikely place for its location. Likewise, rising hills and broken terrain precluded its location north or south of the mill. Moreover, it was probably built to be accessible to the principal freighting artery in the area, notably the "Old Pass Road."

The mining enterprise abruptly ended in the autumn of 1869 with the death of Colonel Stone at the hands of Apaches.¹⁰ In 1870 a visitor to Fort Bowie noted the then-defunct quartz mill:

The quartz-mill . . . presented a very poverty stricken appearance. There being no covering over the machinery, stamps, dies, engine, etc., were badly rusted, and the whole concern was fast becoming worthless. Instinct led us to the dump pile, where lay about a ton of refuse ore, in pieces of which, our eyes detected several "colors" and small pieces of gold. . . . We were told that the owners of the mill intended to move it to Bear Creek [Bear Spring]--distant four miles [sic]-- where there is plenty of water the year round.¹¹

For a time it was considered moving the old mill to Tucson; eventually the machinery was removed to another location.¹²

After 1869 the site of the overland station and the mining operation that followed it remained uninhabited until 1875. In January of that year Indian Agent Thomas J. Jeffords applied to

10. Sidney R. DeLong to Colonel Eugene B. Beaumont, October 17, 1885. NA, RG 49. Records of the General Land Office. Abandoned Military Reservations.

11. Marion, Notes of Travel through the Territory of Arizona, p. 34. "It is generally supposed that a good mill erected at Bear Spring, about three quarters of a mile from the post, where a sufficient supply of water can be had, backed by sufficient capital, could be profitably employed in grinding ore from the Harris mine. . . ." "Report on Barracks and Hospitals," p. 471.

12. Arizona Citizen, December 7, 1872; Captain William M. Wallace to Mr. Albert Ordway, July 13, 1877. Fort Bowie, LS. Copy in the files of FBNHS.

the Commissioner of Indian Affairs for permission to move his headquarters from Pinery Canon, some twenty miles south of Fort Bowie, to Apache Pass. Jeffords cited the need to closely observe his wards and their relationships with emigrants passing through the Apache country via the road by Fort Bowie. "In Apache Pass," he wrote,

about a mile from Camp Bowie, there is a small adobe building, and by moving the present log houses, occupied as an Agency here, I can erect suitable storehouses that will be amply sufficient for two or three years. . . . At a cost of one thousand dollars (\$1000) I shall be able to move all stores on hand, take down, move, and re-erect the log buildings, and fit up a convenient Agency at Apache Pass.¹³

Jefford's request was granted in late April¹⁴ and on May 14, 1875, the Chiricahua agency was removed to Apache Pass.¹⁵ There is little doubt that the "adobe building" in Apache Pass was left over from the quartz mill operation formerly located there. A sketch map possibly prepared by Sidney R. DeLong in 1877 indicated the site of the "Agency" as being at almost the precise location where

13. Jeffords to Edward P. Smith, January 2, 1875. NA, RG 75. Records of the Bureau of Indian Affairs. Copy in the files of FBNHS.

14. Telegram, First Lieutenant Calbraith P. Rodgers to AAG, Department of Arizona, April 27, 1875; AAAG, Department of Arizona to Commanding Officer, Fort Bowie, April 29, 1875. NA, RG 75. Records of the Bureau of Indian Affairs. Copy in the files of FBNHS.

15. "Report of the Commissioner of Indian Affairs," November 1, 1875, in Report of the Secretary of the Interior, 1875 (Washington: Government Printing Office, 1876), p. 711.

the quartz mill appeared on earlier maps.¹⁶ On a more formal map completed the same year the building is present, although unlabeled.¹⁷ And the son of Indian Agent John B. Clum wrote that the Jeffords agency was "only a mile away" from Fort Bowie, certainly a general statement but one approximately correct, nonetheless.¹⁸ Moreover, it is very likely that the structure was, in fact, the old Butterfield Overland Mail Station, abandoned in 1861. Former Butterfield employee James Tevis returned to the area in 1880 and remarked that the mail station was still standing at that time.¹⁹ The successive occupations of the site by the mail station, the quartz mill, and, finally, the Indian agency ended in April, 1876, with the consolidation of the Chiricahua agency with that at San Carlos far to the north.²⁰ Thereafter the building evidently deteriorated away.²¹ The only structure remaining at the site is a small reservoir, possibly a vestige of the quartz mill operation. Undoubtedly one of the richest historical areas in the vicinity of Fort Bowie, the site warrants the intensive archeological examination previously recommended to determine assuredly the tentative conclusions advanced here and elsewhere.²²

16. Sketch Map (1877).

17. Thomas, "Diagram of the Military Reservation at Camp Bowie."

18. Woodworth Clum, Apache Agent, The Story of John Clum (Boston: Houghton Mifflin Company, 1936), p. 170.

19. Tevis, Arizona in the '50's, p. 232. An 1883 map updated from one prepared the preceding year by Second Lieutenant Thomas B. Dugan showed the old structure being used as a "pack train station." See "Map of the Military Reservation at Fort Bowie, Arizona." Copy in the Map Collection, University of Arizona Library.

20. "Report of the Commissioner of Indian Affairs," October 30, 1876, in Report of the Secretary of the Interior, 1876 (Washington: Government Printing Office, 1877), p. 407.

21. Conkling and Conkling mentioned the presence of a mound of adobe at the site in the 1940s. Butterfield Overland Mail, II, 132.

22. See Hoy, "Apache Pass Stage Station," p. 7 and passim.

H. The Reservation Boundary

Fort Bowie was retained by virtue of its very occupation by the army between 1862 and 1870. In the mid-1860s, however, a temporary reserve measuring about one mile square was staked off from the center of the first post.¹ Then in February, 1869, a reservation was surveyed by First Lieutenant George M. Wheeler of the Engineer Corps. In the mountainous terrain Wheeler probably compensated for possible error to insure at least a mile-square reserve. The surveyed tract, enclosing 768.83 acres or roughly one and one-quarter square miles, took more the form of a parallelogram than a square, with two sides running southwest for 5,310.36 feet and two sides running northwest for 6,312.56 feet.² Little more than a year after the Wheeler survey, and in conformance with its specifications, President Ulysses S. Grant declared the Camp Bowie Military Reservation.³ Fort Bowie proper was situated in the southeastern corner of the reserve, which was criss-crossed by the various roads that ran through the adjacent country.⁴

The 1869 reservation boundaries remained effective until 1877. By that time there were diversified interests such as mining and ranching that threatened to encroach on the reserve. Especially obnoxious were the throngs of prostitutes that congregated short distances from the post at the disreputable "hog ranches." One

1. Sidney R. DeLong to Major Eugene B. Beaumont, October 17, 1885. NA, RG 49. Records of the General Land Office. Abandoned Military Reservations; Murray, "History of Fort Bowie," p. 69n.

2. "Map of the Military Reservation at Camp Bowie. . . February 1869."

3. Outline Descriptions of Military Posts in the Military Division of the Pacific, p. 7.

4. "Map of the Military Reservation at Camp Bowie. . . February 1869."

such enterprise, apparently located less than a mile down the "New Pass Road" northeast of the fort,⁵ caused the post commander no small grievance in June, 1877:

Cp. Bowie, A.T. June 22, 1877.

To George Atkins, Roscoe Bryant and others. It is clearly evident that you have built a ranche and established yourself within a stones throw of the Military Post, maintaining abandoned women, and keeping intoxicating liquor for no other purpose than to trade with the men of this garrison. The presence of such a place is necessarily subversive of Military discipline. I shall therefore use every means in my power to break it up. . . .

[Sgd.] [Captain] W.M. Wallace,
Comdg Post.⁶

Captain Wallace threatened to throw these civilian violators of the military reservation boundaries into the guardhouse,⁷ and to discourage the troublesome element even more he cited an 1853 ordinance prohibiting the settlement of such persons on all lands within one mile of the reserved tract.⁸ But the military intimidation was ignored by the proprietors of the ranch, and in August Captain Wallace directed First Lieutenant John A. Rucker, Sixth

5. Sketch Map (1877). This map shows an "Abandoned Ranch" at the above mentioned location.

6. Fort Bowie, LS. Copy in the files of FBNHS. See also, Kane, "Sidney R. DeLong," pp. 308-09.

7. Ibid.

8. Fort Bowie General Orders No. 88, June 22, 1877. Copy in the files of FBNHS.

Cavalry to cause the immediate removal of the occupants of said ranche (or ranchi) to a point one mile distant from this post in a northeasterly direction. You will cause a picket guard of three men to be stationed at the ranche, and will instruct said guard to not permit the reoccupation of that establishment.⁹

The difficulty over the hog ranch was a major factor contributing to the decision, in the late summer of 1877, to expand the boundaries of the reservation. Sidney R. DeLong, the post trader who had gained considerable engineering experience as a young man, offered to complete a survey of a tract six miles square, enclosing thirty-six miles, using the flag pole on the parade ground as the center point. DeLong completed his project in early September. The results were forwarded to the Arizona department headquarters and to the War Department, together with the recommendation that a new reservation conforming to the DeLong survey be declared.¹⁰ In its detail, the survey proceeded as follows:

Commencing at an initial point seven links South of FlagStaff upon the parade ground, and thence West 240 chains, or 3 miles, to a Pine post in center of west line, marked in black letters U.S. M.R., C.W.L., 1877; thence

9. Wallace to Rucker, August 6, 1877. Fort Bowie, LS. Copy in the files of FBNHS.

10. Wallace to AAG, Department of Arizona, September 5, 1877. Fort Bowie, LS. Copy in the files of FBNHS; First Lieutenant Earl D. Thomas to Chief Engineer, Department of Arizona, September 24, 1877. NA, RG 49. Records in the General Land Office. Copy in the files of FBNHS.

South 240 chains, or 3 miles, to a Pine post 3 1/2 x 5 in., Painted white and marked in black letters U.S.M. Res., S.W.C., 1877, being the South west corner. (Remarks upon this South of West half line: From center post of west line 150 links, or 33 yards, to Ewell Spring roads, 350 links, or 77 yards to Sulphur Spring Road, 13c, 501, or 297 yards to Pinery and Fronteres Roads.) From South West corner post, East, 480 chains, or six miles, to a Pine Post set on top of a mountain in stones, painted white, marked in black letters U.S. Mil. Res., S.E.C., 1877, being the S.E. corner. (Remarks upon this South line: From South West corner, East 70 chains, or 1540 yards, the line crosses the roads to Fronteres, and at 78c, 501, or 1727 yards, line crosses the road to Pinery; at 99c, 501, or 2189 yards, line crosses Helen's Dome trail, at 320 chains, (4 miles) line crosses Bear Springs trail and enters the Mountains.) Coming back to initial point, and thence North 240 chains, or 3 miles, or 5280 yards to a Pine Post 7 x 7, painted white, marked in black letters Ctr. N.L., 1877 (Remarks on this line: From initial points north on this line 55c, or 1211 yards, to where it crosses roads leading from San Simon to Camp Bowie, via what is known at Goodwin Canon.) From center post in North line, west 240 chains, or 5280 yards, to a large cedar tree on mountain side, one foot in diameter, and marked U.S.M.R., N.W.C., 1877. (Remarks on this west half of this line: At 52, 50, or 1155 yards from center of North line, line crosses Road leading from Camp Bowie to Camp Grant and Pueblo Viejo, where is set a Pine Post on left of road painted white and marked in black letters, U.S. M.R., 1877, and 78c, or 1716 yards from center points of north line going west, line crosses trail leading from Camp Bowie to Camp Grant,

formerly traveled by the military express.) From center post in North line east directly to Southern base of a high mountain peak in Stein's peak range, known as Picacho de Gabilan, or Hawkpeak, 3 miles, or 240 chains, or 5280 yards, to a Pine post 7 x 7, painted white, standing on East bank of an arroyo, marked in black letters, U.S. Mil. Res., N.E.C., 1877, and stands 2c, or 44 yards, west of road leading from Camp Bowie to Ralston and on East. From the initial point in center of parade, a high point known as Helen's Dome bears S. 30¼ 40' W., distant, (estimated) 120 chains or 1 1/2 miles, or 2640 yards. (General remarks: The corners have all been set, except the East line, except that portion leading South from North East corner to road leading [to] Cienega del Sauz, not run and chained, as it lies entirely in the Chiricahua Mts., and the west line, North half not run and chained, lies entirely in the mountains. Dec. of needle 13¼, 45' E.)¹¹

Ostensibly, the reservation was extended to take under army control grazing lands and springs formerly lying beyond its

11. Sidney R. DeLong, "Notes on a Survey of the Military Reservation at Camp Bowie, A.T." NA, RG 94. Records of the Adjutant General's Office. Copy in the files of FBNHS. In conjunction with the above, see Sketch Map (1877), which was likely the rough draft of Thomas, "Diagram of the Military Reservation at Camp Bowie" (q.v.). See Captain William M. Wallace to AAG, Department of Arizona, September 5, 1877. Fort Bowie, LS. Copy in the files of FBNHS. A less detailed but more formal description of the boundaries is in Headquarters, Department of Arizona, General Orders No. 1, January 3, 1878. NA, RG 49. Records of the General Land Office. Copy in the files of FBNHS.

authority, but also "to prevent the encroachment of settlers,"¹² most notably, perhaps, those "settlers" who purveyed goods and services having a deleterious effect on the soldiers at Fort Bowie. On November 24, 1877, the request for extension was sent to the President. Three days later Rutherford B. Hayes signed the measure and the enlarged Camp Bowie Military Reservation was created.¹³ The reserve embraced 23,040 acres of land.¹⁴

In 1882 the reservation was re-surveyed by Second Lieutenant Thomas B. Dugan, Third Cavalry. The Dugan plat of Fort Bowie and its adjacent lands showed a 13° variation from that completed by DeLong in 1877.¹⁵ Another survey was made in 1888, but the plat has not been located.¹⁶ And in 1893 a line survey by First Lieutenant Thomas S. McCaleb followed the identical course of Sidney R. DeLong's in 1877.¹⁷ Fourteen years after the post was

12. General William T. Sherman to the Secretary of War, October 26, 1877. NA, RG 49. Records of the General Land Office. Copy in the files of FBNHS.

13. Secretary of War George W. McCrary to Hayes, November 24, 1877, with endorsement, November 27, 1877. Copy in the files of FBNHS. See also Commissioner J.A. Williamson to John Wasson, December 6, 1877. NA, RG 49. Records of the General Land Office. Copy in the files of FBNHS.

14. Headquarters, Department of Arizona, General Orders No. 1, January 3, 1878. NA, RG 49. Records of the General Land Office. Copy in the files of FBNHS.

15. See Dugan, "Map of Military Reservation at Fort Bowie"; Post Adjutant to Commanding Officer, Troop M, Third Cavalry, December 29, 1882. Fort Bowie, LS. Copy in the files of FBNHS.

16. First Lieutenant William Black to the Quartermaster General, April 15, 1889. NA, RG 49. Records of the General Land Office. Copy in the files of FBNHS.

17. See McCaleb, "Fort Bowie, Arizona."

abandoned, in October, 1908, the reservation was surveyed by Jesse B. Wright for the General Land Office.¹⁸ At that time the corner posts lay within the following designated sections:

Southeast--Township 15S, Range 29E, Section 28 SE 1/4 NE
1/4 NW 1/4

Southwest--Township 15S, Range 28E, Section 28 SE 1/4 NE
1/4 NW 1/4

Northwest--Township 14S, Range 28E, Section 28 SE 1/4 NE
1/4 NW 1/4

Northeast--Township 14S, Range 29E, Section 28 SE 1/4 NE
1/4 NW 1/4¹⁹

18. Survey maps, Bureau of Land Management Office, Phoenix.

19. Ibid.

I. Mines

During the period of Fort Bowie's active status, 1862-1894, there were several mines or prospects located in the vicinity of the post and reservation. One of these, informally started by members of the California Volunteers was situated about one mile southeast of the first post.¹ The Apache Pass Mining Company apparently occupied this claim in the late 1860s. The company seems to have failed shortly after its incorporation and was succeeded by that of the same name headed by Colonel John F. Stone (President and Superintendent) and his associates. First Lieutenant George Macomber of Fort Bowie owned a share of the company, but he died in an accident at the post in September, 1869.² Another shareholder was First Lieutenant William H. Winters.³ With Stone's death at the hands of Apaches the next month, the enterprise collapsed.⁴

The principal feature of Stone's concern was the so-called "Harris Lode," which in fact, constituted the shaft formerly sunk by the volunteers southeast of the post.⁵ After Stone's death the property was sold to a California party reportedly for the sum of

1. Sidney R. DeLong to Colonel Eugene B. Beaumont, October 17, 1885. NA, RG 49. Records of the General Land Office. Abandoned Military Reservations. One claimant was Lieutenant Benjamin F. Bayley, who filed as an owner of the Chiricahua Lead and the General Grant Lead near Fort Bowie. Pima County Book of Records, May 17, 1864, and December 28, 1865. Copy in the files of FBNHS. See Sketch Map (1877).

2. Captain William M. Wallace to Mr. Albert Ordway, July 13, 1877. Fort Bowie, LS. Copy in the files of FBNHS.

3. Weekly Arizonian, October 9, 1869, cited in Murray, "History of Fort Bowie," p. 118n.

4. The Arizonan, July 10, 1869; The Arizonan, October 16, 1869.

5. Named for Harris, who discovered the lode. He committed suicide at Ralston in 1870. Wallace to Ordway, July 13, 1877. Fort Bowie, LS. Copy in the files of FBNHS.

\$125,000.⁶ During the 1870s the Harris Mine was partly owned by Indian Agent Thomas J. Jeffords, who in 1875 petitioned the government and won approval to move the Chiricahua Agency to Apache Pass, possibly to keep a closer eye on his mining assets there. Jeffords and the post trader, Sidney R. DeLong, located another claim in the area, probably about two miles west of the second fort.⁷ The new owners were known as Brown, Jeffords, and Company. But the mining firm never worked any of the old claims and likely permitted their patent to expire in the autumn of 1877.⁸ That time coincided with plans to extend the military reservation for the purpose of excluding such interests as mining. With the declaration of the revised boundaries by the President in November, 1877, the thirty-six-mile-square reserve was thenceforward closed to prospectors. Efforts to gain special permission to mine areas of the reservation, requested in the 1880s by James H. Tevis and others, were at first denied, then granted.⁹

6. DeLong to Beaumont, October 17, 1885; NA, RG 49. Records of the General Land Office. Abandoned Military Reservations; "Report of Sale of Real Estate filed Jan. 25, 1870." Copy in the files of FBNHS; The Arizonan, March 5, 1870.

7. DeLong to Beaumont, October 17, 1885; NA, RG 49. Records of the General Land Office. Abandoned Military Reservations; Wallace to Ordway, July 13, 1877. Fort Bowie, LS. Copy in the files of FBNHS. See Sketch Map (1877).

8. Wallace to Ordway, July 13, 1877. Fort Bowie, LS. Copy in the files of FBNHS.

9. See "Brief. In the Matter of Mining Claims on the Military Reservation Fort Bowie, Arizona," September 15, 1880. NA, RG 49. Records of the General Land Office. Copy in the files of FBNHS; Arizona Daily Star, October 27, 1880. Most of the Tevis claims were centered in Willow Canyon and presently lie outside the National Park Service boundary. For a preliminary evaluation, see Memorandum, Gordon Chappell to Wilton E. Hoy, November 6, 1976, "Survey of Apache Pass historic mining operations." Copy in the files of FBNHS.

A period of policy confusion followed, for the privilege granted some prospectors brought a flood of similar requests, until finally all mining permits were abrogated and further applications were forthrightly rejected.¹⁰ Thereafter no mining occurred on the reservation.

The identification and evaluation of the various historic mining properties near Fort Bowie, not yet accomplished, is beyond the scope of the present study. Those sites mentioned in the documentary sources appear to lie well beyond the boundaries of the present Fort Bowie National Historic Site. One of them, the Harris Lode, reportedly located a mile or so south of the post, was perhaps that described in 1885 by young Charlie Roberts, son of Captain Cyrus S. Roberts, Seventeenth Infantry:

[Private Richard L.] Tea, Cyrus and I went out to Col. Stoneman's [Stone's?] mine this afternoon. . . . After a hard walk of 2 miles, all up hill, we arrived at the mine at 2.15. The mine is situated on the side of a hill, it is divided in two sections, one is simply a deep ditch. The other is a long tunnel and a couple of shafts leading into it. Tea let me down with a rope into the deep shaft (about 25 ft) and I came out by the tunnel. Cyrus went in by the tunnel and was hauled up by Tea through the shaft. We then went around to climb the hill nearest the post. It is at least 1500 ft high and is the one that they station lookouts on. We tried [sic] twice to climb it but failed, but on the third time succeeded in getting to the top, right over the post it looks, but in reality it is a

10. Captain William A. Rafferty to AAG, Department of Arizona, August 10, 1881. Fort Bowie, LS. Copy in the files of FBNHS; Colonel Eugene B. Beaumont to Captain Cyrus S. Roberts, October 19, 1885. Fort Bowie, LS. Copy in the files of FBNHS.

mile airline. We could see the road to New Mexico 50 miles away accross [sic] the San Simon flat and we could see San Simon station, 23 miles from here and Bowie Station, 14 miles. We built a fire and of course alarmed the garrison, who seeing the smoke, thought the hostiles were around again.¹¹

11. "Extracts from Diary."

J. Abandonment of Fort Bowie

Several times in the twenty-five year history of the second Fort Bowie rumors circulated concerning its possible abandonment by the army. In 1874 closure of the post was considered, but renewed Apache disturbances caused any such plan to be dropped. But by 1889, almost three years after the surrender of Germonimo and his followers, the situation had changed. The area once inhabited by renegade Apaches was now comparatively quiet, and with the larger and more modern facility of Fort Huachuca nearby, there seemed little reason to continue the old post. As an inspecting officer remarked, "the necessity for Fort Bowie has passed. . . . The post is not now worth repairing. . . . The old buildings are in very bad order and condition."¹

Nonetheless, the fort survived for a few more years, despite the reality its situation presented in 1889. During the 1890s a small number of renegade Indians under the Apache Kid caused some turmoil in the border country and troops from Fort Bowie participated in the search for these tribesmen. However, wrote Brigadier General Alexander M. McCook, Commander of the Department of the Colorado under whose jurisdiction the post was now administered,

the further occupation of Ft. Bowie can have no influence one way or the other . . . [on the movements of] this small party . . . and . . . is hardly of consequence when compared with [the] good for abandoning the post.

1. Report of Lieutenant Colonel George D. Ruggles, March 23, 1889. NA, RG 49. Records of the General Land Office. Abandoned Military Reservations. Copy in the files of FBNHS. See also endorsement of March 30, 1889, stating that "the further occupation of Fort Bowie seems to be unnecessary. . . . The Indians that formerly occupied that stretch of country are all now in Alabama." Ibid.

The greatest economy must be exercised in the use of water to continue the garrison there, and the wear and tear on transportation for this service is very great. Further expenditures on barracks and quarters and other repairs better be saved and applied where more lasting good will result. [Forts] Bayard and Grant and Huachuca, offer good protection to the country subject to raids by the party referred to. . . .²

Opposing the recommendation, the Governor of Arizona Territory, Lewis C. Hughes, urged that the fort be retained. "Until the kid and his band are captured or destroyed, its abandonment in the interest of public safety should be postponed."³ But General McCook countered that "The Kid" lacked a sizable following and was, in fact, merely "a refugee from the civil authorities," and not on a par with Germonimo as contended by Governor Hughes.⁴ The real problem at Fort Bowie, maintained McCook, remained the potential dearth of water. "Last summer the water supply at Fort Bowie was so limited, that I feared a water famine would cause the removal of troops. . . ."⁵ In a more general sense, said McCook, Fort Bowie

is a miserable post, located in a rock gulch, surrounded by rocky peaks; there is no ground for any kind of

2. McCook to the Adjutant General, September 8, 1893, in *ibid.*

3. Hughes to Secretary of the Interior Hoke Smith, September 28, 1893, in *ibid.*

4. *Ibid.*; McCook to the Adjutant General, October 21, 1893, in *ibid.*

5. McCook to the Adjutant General, October 5, 1893, in *ibid.*

mounted exercise within a mile of the post; no soil for gardens. As there is no further use for this post in a military point of view, I recommend that it be abandoned. . . .⁶

But in the spring of 1894 the post won a reprieve, General McCook's counsel notwithstanding. The desire to promote economy in Army circles coincided with an outpouring of affidavits from residents of southeastern Arizona Territory as part of a protest engineered by Governor Hughes.⁷ The War Department concurred in Commanding General John M. Schofield's belief that prohibitive transportation costs in moving the garrison at that time justified its retention.⁸

The decision only postponed the inevitable, however, for in the autumn of the same year the recommendations for abandoning

6. Ibid. "This makes the fifth time a similar recommendation has been made," reported The Denver Republican, September 23, 1893, "and each time the authorities, while admitting that the removal was really advisable, pleaded the expense of the transfer as a strong objection. Now, however, with the transfer of department headquarters to this city and the action of the quartermaster general in materially enlarging the barracks at Fort Logan, it is thought that General McCook's plan will carry and the cavalry, [at Fort Bowie] be ordered here." See also The Army and Navy Journal, January 27, 1894.

7. See statements of John P. Gray et al, circa November and December, 1893. NA, RG 49. Records of the General Land Office. Abandoned Military Reservations. Copies in the files of FBNHS.

8. Schofield to Secretary of War, March 23, 1894. NA, RG 49. Records of the General Land Office. Abandoned Military Reservations. Copy in the files of FBNHS. See also Acting Secretary of War to Governor of Arizona Territory, March 27, 1894, in ibid.; and The Adjutant General to Commanding General, Department of the Colorado, April 3, 1894, in ibid.

the post were approved. In October the troops prepared to depart. Commissary and Quartermaster stores were packed and shipped away. The ice machine was sent off for use at Fort Grant, and the steam engine was dismantled and its sections carted away to another station.⁹ A major blunder committed during the closing process involved the premature removal of the telegraph line over the complaints of the department chief signal officer.¹⁰ Consequently, all messages had to be carried the thirteen miles and back from Bowie Station. Two families with children remained at the fort after the troops had departed, and there were no medical supplies available; when emergencies arose, as they occasionally did, the lack of telegraphic communication was sorely felt.¹¹

The soldiers departed for their new station at Fort Logan, Colorado, in October. There were 118 men (two troops of the Second Cavalry), 9 women and children, and 110 horses and mules leaving Fort Bowie.¹² Novelist Owen Wister recorded the scene:

Remember the last morning when the troops left, Mrs. Fowler watering her chrysanthemums that hereafter would have no mistress. Also the appealing looks of pet dogs begging not to be left behind. Also the gradual dismay

9. Owen Wister, "Stray Notes on the Abandonment of Fort Bowie, October 17th 1894." Owen Wister Collection. Arizona Historical Society; Arizona Weekly Star, October 11, 1894, cited in Murray, "History of Fort Bowie," p. 303.

10. Wister, "Stray Notes"; Arizona Daily Star, October 18, 1894, cited in Murray, "History of Fort Bowie," p. 289n.

11. Wister, "Stray Notes."

12. Arizona Weekly Star, October 11, 1894, cited in Murray, "History of Fort Bowie," p. 302n.

of cows, cats and all domestic animals that were left behind & how they clustered round [First Lieutenant Herbert H.] Sargent's house at night, knowing human beings were there. Also the cow that tried to come in.¹³

Lieutenant Sargent commanded a detachment composed of two non-commissioned staff officers, one or two non-commissioned officers and eight enlisted men left behind to close Fort Bowie.¹⁴ Already the civilian population from around the post had moved in to salvage for their own use what could be stripped from the buildings. Wrote Wister:

The natives began to descend and ravage like vultures--notably the Barfoot family of Dos Cabezas. Sometimes they stole timber off the buildings, or doors, or windows. Once there was a somewhat thrilling collision between the soldiers and the Thieves. . . . At length the place got so dangerous that Sargent would send no one down through the canon to Bowie, and for safety the whole company of people moved up toward Sargent's quarters along the Officer's [sic] line. . . . At night [he] could not sit by an open window but some one [would] shoot [at] him from outside.¹⁵

Threatened by the settlers by day and practically barricaded from them by night, the men completed their task amid mounting apprehension. "Finally the detachment, its work being done,

13. "Stray Notes."

14. Ibid.

15. Ibid.

departs," Wister concluded, "and leaves old Bowie and the lonely graveyard and the flowers and the looting natives."¹⁶ All domestic animals that could not accompany the soldiers were shot to prevent their suffering from starvation.¹⁷ On November 14, 1894, the Camp Bowie Military Reservation was formally transferred to the Department of the Interior for disposition.¹⁸ Within three or four years of the abandonment, most of the structures of the old post were bereft of all wooden components, notably doors, roofs, windows, door jambs, the lumber all carted away by local residents for their personal use. Only the stone foundations and the adobe walls remained, but over the years the adobe, too began to slowly disappear, a casualty of time and erosion. On June 20, 1911, much of the land comprising the old reservation was sold at public auction in Phoenix.¹⁹ Structural deterioration of the buildings continued through most of the first half of the twentieth century. Then in 1964, Congress, recognizing the overall significance of the site to American history, authorized the establishment of Fort Bowie National Historic Site, and on July 29, 1972, the park was placed on the National Register of Historic Places.²⁰ The new status

16. Ibid.

17. Ibid.

18. Report of the Secretary of War, 1894 (Washington: Government Printing Office, 1894), p. 342; Message of the War Department, November 14, 1894. NA, RG 49. Records of the General Land Office. Abandoned Military Reservations. The authority for the transfer was contained in Section III, General Orders No. 72, Headquarters of the Army, July 17, 1884, entitled "An Act to provide for the disposal of abandoned and useless military reservations and stations."

19. Frank H. Parker to Commissioner, General Land Office, June 22, 191. NA, RG 49. Records of the General Land Office. Abandoned Military Reservations. Copy in the files of FBNHS.

20. National Register forms for Fort Bowie National Historic Site were revised in 1980.

paved the way for stabilization and restoration programs designed to save the fragile and few tangible remains of the old fort. Hopefully those efforts will succeed.

RECOMMENDATIONS

1. A few of the structures at the second Fort Bowie served in successive capacities throughout the post's development and occupation. For example, the building currently designated HS 012, the Oil House, functioned at different times in its existence as a bakery, kitchen, tailor shop, barber shop, and temporary barracks, among other things. In 1889, relatively late in the fort's history, it became the Oil House. Likewise, HS 007 for seventeen years served as the post bakery; its site is presently interpreted as that of the Tailor Shop, a status it assumed only late in its service. Most current names for the structures that once stood at Fort Bowie National Historic Site derived from their historical designations on an 1889 plat of the post. While such references are useful administratively, they do not necessarily reflect the primary military roles assigned certain structures at the fort. The period of 1885-86 is considered to be the height of army activity there. Consequently, it is recommended that most of the structures be interpreted for that approximate period, before some were converted to perform secondary functions during the years of Fort Bowie's decline. It is suggested that the interpretive markers for affected structures be changed accordingly.

2. It is recommended that the marker designating HS 027 as the "Non-Commissioned Officers' Quarters" be changed to read "Non-Commissioned Staff Quarters." Non-commissioned officers were line personnel and resided either in the company barracks or in quarters provided for them and their families. Non-commissioned staff officers served under the aegis of the quartermaster, commissary, ordnance, and other staff departments occupied with matters of supply and food distribution and the maintenance of equipment, all related to the well-being of the command. The distinction between NCO and NCS was significant and the erroneous identification should be corrected.

3. It is recommended that intensive archeological work be undertaken in the area of the Anderson quartz mill operation to determine whether the site was, in fact, also that of the Butterfield Overland Mail Station (1858-61) and the Chiricahua Apache Indian Agency (1875-76).

APPENDICES

Appendix A:

Expenditures for Repairs on Specific Buildings at Fort Bowie, 1887-1890.

1887

From "Report of the Quartermaster-General," October 6, 1887, in Report of the Secretary of War, 1887 (Washington: Government Printing Office, 1889).

Officers' quarters No. 1	\$	65
Officers' quarters No. 2		65
Officers' quarters No. 3		65
Officers' quarters No. 4		65
Officers' quarters No. 5		65
Officers' quarters No. 6		65
Officers' quarters No. 25		65
Barracks No. 8		120
Mess-hall No. 9		78
Barracks No. 10		120
Commissary store-house		130
Commissary office		100
Barracks No. 19		120
Total	\$	1,123

1888

From "Report of the Quartermaster-General," October 5, 1888, in Report of the Secretary of War, 1888 (Washington: Government Printing Office, 1889).

Officers' quarters No. 1	50
Officers' quarters No. 2	50
Officers' quarters No. 3	50
Officers' quarters No. 4	50
Officers' quarters No. 5	50
Officers' quarters No. 6	50
Barracks No. 8	150
Barracks No. 10	150
Store-house No. 14	125
Guard-house (old)	55
Office	60
Corrals	75
Barracks No. 19	100
Barracks kitchen	85
Quartermaster's store-house	65

Ice-house (built)	390
Officers' quarters No. 25	125
New guard-house	25
Non-commissioned staff officers' quarters.	115
Total	<u>\$1,820</u>

1889

From "Report of the Quartermaster-General," October 5, 1889, in Report of the Secretary of War, 1889 (Washington: Government Printing Office, 1890).

Officers' quarters, adobe, No. 1	99.33
Officers' quarters, adobe, No. 2	101.49
Officers' quarters, adobe, No. 3	115.20
Officers' quarters, adobe, No. 4	119.31
Officers' quarters, adobe, No. 5	47.00
Officers' quarters, adobe, No. 6	52.49
Old bakery (tailor shop), adobe, No. 7	27.35
Barracks, adobe, No. 8	49.45
Barracks, adobe, No. 10	211.75
Wash and bath house, adobe, No. 11	12.00
Subsistence store-house, adobe, No. 14	94.16
Adjutant and quartermaster's office, adobe, No. 17.	119.75
Corrals, adobe, No. 18	75.60
Butcher shop, adobe, No. 21	75.00
Quartermaster's store-house, frame, No. 22	240.00
Ice-house and engine-house, frame and adobe, No. 24.	140.00
Officers' quarters, frame, No. 25	238.40
Non-commissioned staff quarters, frame, No. 27.	92.00
Civilian employees' quarters, adobe, No. 29	135.50
Mess hall, etc., to barracks No. 8, frame, No. 31. [Constructed during the year.]	2,314.40
School-house, frame, No. 32. [Under construction.]	523.30
Total	<u>\$4,883.48</u>

From "Report of the Quartermaster-General," October 9, 1890, in Report of the Secretary of War, 1890 (Washington: Government Printing Office, 1891).

Officers' quarters No. 1	52.44
Officers' quarters No. 2	50.56
Officers' quarters No. 3	42.10
Officers' quarters No. 4	3.76
Officers' quarters No. 5	25.94
Officers' quarters No. 6	15.04
Barracks No. 8	81.45
Troop store-room No. 9	18.80
Barracks No. 10	78.94
Wash and bath house No. 11	116.84
Oil-house, No. 12 (built)	298.00
Subsistence store-house No. 14	106.50
Post canteen No. 15	170.09
Administration building No. 17	27.19
Shops, stables, corrals, and wagon-shed No. 18	48.87
Quartermaster's store-house No. 22	59.52
Engine-house No. 23	9.40
Ice-machine-house, No. 24	18.80
Officers' quarters No. 25	27.19
Guard-house No. 26	4.70
School-house No. 32	10.65
Magazine No. 35 (built)	528.00
Gun-shed No. 36	141.30
Total	<u>\$1,936.08</u>

Appendix B:

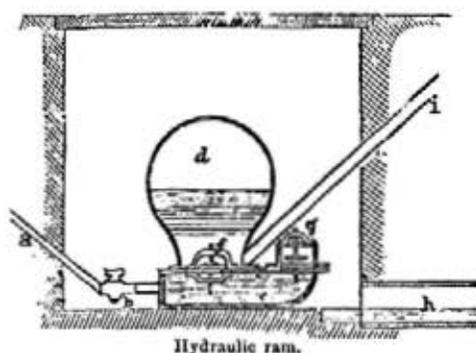
Explanation of the Operation of the Hydraulic Ram. (From Johnson's New Universal Cyclopaedia: A Scientific and Popular Treasury of Useful Knowledge. New York, 1878. Vol. II, pp. 1047-48.)

Hydraulic Ram, a well-known machine invented by Montgolfier for elevating a part of the water furnished by a stream to a height greater than that of the source from which it is drawn. Its action depends upon the property of inertia which water, in common with all heavy bodies, possesses. A heavy body, moving with a given velocity, performs, while being brought to rest, an amount of mechanical work sufficient to raise the body to the height due to the velocity. A car, for instance, moving upon a track with a velocity of 48 feet per second, or nearly 33 miles per hour, and reaching a steep incline, would mount it to a height of 35.82 feet (friction and resistance of the air not considered), that being the height which a heavy body must fall to acquire a velocity of 48 feet per second. The mechanical work performed by a moving body in coming to rest is represented by the resistance opposed to its motion, multiplied by the distance which the body moves against this resistance; so that the resistance necessary to stop a moving body, or the pressure which it can exert while stopping, is great or small according as its motion is arrested suddenly or slowly.

In the hydraulic ram the moving body is the mass of water contained in a long pipe, the exit of which is alternately opened and closed. The resistance opposed to the water's motion when its exit is closed, is the elastic force of air confined in a closed vessel, and the work performed by it consists in compressing this air, which, by its tendency to expand, forces the water to a higher level. The accompanying figure is a section of a hydraulic ram,

showing also the chamber or pit in which it is placed. a is the supply-pipe leading from the pond or other source of supply. The longer this pipe is the better, provided there is fall enough to give the necessary velocity; b is a cock for closing the supply-pipe; c is a plate to which the air-vessel d is bolted. Below this plate are two compartments--one, c, forming a channel through which the water passes freely when the valve g is open, and communicating with the air-vessel by the valve f, which allows the water to enter the air-vessel, but not to return. The other compartment communicates freely with the air-vessel, and with a rising pipe, for conveying the water to the higher level. The valve g being in the position shown, the water commences to move through the supply-pipe, escaping at g and passing off through the waste-pipe h. The velocity soon becomes so great as to lift the valve g, which closes the outlet. While coming to rest the water in the pipe exerts a pressure sufficient to lift the valve f, and compress air in the air-vessel by flowing into it. As soon as the water comes to rest, the pressure ceases, the valve f closes, the valve g opens, and the same thing occurs again. The expansion of the air in the air-vessel causes a uniform flow through the rising pipe.

J.P. Frizell



Appendix C

"Report of Interments at Fort Bowie, A.T., March 22, 1883. Recorded in Cemeterial Book, QMGO, p. 92."
Miscellaneous records, Microfilm MC 12. Arizona Historical Society.

Number and name of person interred	Number and locality of grave	Rank	Company and regiment	Cause of death	Age	Place of Nativity	Date of death	Remarks
1. Albert Schmidt	8 Left section		1stCC	Wounds	Unk	Unknown	6/25/62	Killed by Apache Indians
2. Peter R. Mahoney	7 Left section		1stCC	Wounds	Unk	Unknown	6/25/62	Killed by Apache Indians
3. J.F. Keith	6 Left section		1stCC	Wounds	Unk	Unknown	6/25/62	Killed by Apache Indians
4. R.W. Wells	9 Left section		E, 1st CC	Unknown	28	Unknown	5/23/63	
5. Vivian Lucero	5 Left section		A, 1stNMI	Unknown	28	Unknown	7/24/65	
6. Samuel Payson	4 Left section		L, 1stCC	Unknown	45	Unknown	8/2/65	
7. William Carmichael	3 Left section	Private	L, 1stCC	Infl of the Brain	35	Unknown	10/6/65	
8. John Slater	33 Right section	Lieut	5thCC	Wounds	35	Unknown	11/5/67	Killed by Apache Indians
9. John C. Carroll	35 Right section	1 Lieut	32ndUSI	Wounds	23	Kentucky	11/5/67	Killed by Apache Indians
10. Juan C. Tapia [?]	38 Right section	1 Lieut	NMI	Chronic Hepatitis	33	Unknown	2/1/66	
11. John Walters	2 Left section	Private	G, 14thUSI	Paritcnitis	24	London, Eng.	8/16/66	
12. James McIntyre	21 Left section	Private	G, 32ndUSI	Gunshot Wound	20	England	1/6/67	Shot through abdomen by the Actg Comsy Sergt Co G 32 US Inf.
13. Cassius A.B. Fisher	12 Left section		1stCC	Wounded	20	New York	2/19/67	Killed by Apache Indians
14. James F. Walker	49 Right section			Injuries Accidental	6	California	8/4/67	Child of emigrants passing through to Texas, died of injuries received through the passing over of a wagon.
15. John Brownley	13 Left section	Citizen		Wounds	25	Unknown	5/26/68	Killed by Apache Indians. Citizen mail driver.
16. George Knowles	26 Left section	Private	D, 32ndUSI	Tortured by Indians	23	England	5/26/68	Captured and tortured to death by Apache Indians, near Camp Bowie, A.T.
17. Robert King	25 Left section	Private	D, 32ndUSI	Tortured by Indians	33	Galway Ireland	5/26/68	" " "
18. Daniel Bock	27 Left section	Private	D, 32ndUSI	Chronic Dysentery	23	New York City	8/19/68	
19. George Macomber	41 Right section			Congestion of the Brain	Unk	---	9/15/68	Infant son of 1st Lieut. George Macomber 32nd US Infantry.
20. John M. Cass	14 Left section	Capt	4thCC	Abscess of Liver	38	Hallowell, Me.	2/18/69	
21. John Kelly	23	Citizen		Cancer in stomach	--	Ireland	11/70	Late a private Co. G, 1st U.S. Cavalry.
22. J.G. Duncan	22	Citizen		Consumption	34	Pennsylvania	12/17/70	
23. Unknown	10			Unknown	--	Unknown	Unknown	
24. Unknown	1			Unknown	--	Unknown	Unknown	
25. Unknown	11			Unknown	--	Unknown	Unknown	
26. Unknown	15			Unknown	--	Unknown	Unknown	
27. Unknown	19			Unknown	--	Unknown	Unknown	
28. Unknown	36 Right section			Unknown	--	Unknown	Unknown	
29. Unknown	20 Left section			Unknown	--	Unknown	Unknown	
30. Col. Stone	34 (supposed) Right	Citizen		Wounds	Unk	Unknown	10/69	Killed by Indians.

Number and name of person interred	Number and locality of grave	Rank	Company and regiment	Cause of death	Age	Place of Nativity	Date of death	Remarks
31. George Macomber	42 Right section	1 Lieut	32ndUSI	Injuries accidental	Unk	Unknown	9/19/69	Died of injuries received through the falling of a derrick.
32. Thomas Mooty	37 Right section			Burned	2	Fort Selden NM	5/7/71	
33. Julian Aguiera	39 (supposed) Right			Wounds	46	Santa Cruz Mex	8/8/71	Killed by hostile Indians while riding the U.S. Mail.
34. A. Andrews	24 Left section	Private	K, 3rdUSC	Acute Dysentery	26	Unknown	10/1/71	
35. A.F. Rice	32 Right section	Citizen		Wounds	--	Unknown	1/24/72	Killed by Apache Indians.
36. F. Lilly [?]	32 Right section	Citizen		Wounds	--	Unknown	1/24/72	Killed by Apache Indians.
37. T. Donovan	32 Right section	Citizen		Wounds	--	Unknown	1/24/72	Killed by Apache Indians.
38. John McWilliams	31 Right section	Citizen		Wounds	--	Unknown	1/24/72	Killed by Apache Indians.
39. Mary McDonnell	30 Left section	Child			17 days	Arizona	6/10/72	Child of Private Andrew McDonnell, Co. F 23 Inf.
40. S. Meryilde Grijalba	29 Right section	Child			5 mos.	Arizona	6/15/72	Child of Meryilde Grijalba, Post Guide.
41. Frederick Auction	18 Left section	Private	D, 5thUSC	Typhoid pneumonia	22	Chicago	7/5/72	
42. Tilghman F. Roth	17 Left section	Private	D, 23rdUSI	Typhoid fever	31	Unknown	8/20/72	
43. Isabella Munson	28 Right section	Citizen			3 mos.	Unknown	2/21/73	
44. William H. Patrick	16 Left section	Private	D, 5thUSI	Chronic diarrhea	22	Wisconsin	3/3/73	
45. William McComb	43 Left section	Sergeant	F, 23rdUSI	Consumption	30	Unknown	7/16/74	Died of consumption, Sergt, Co. F 23rd Inf.
46. Eugene W. Crittenden	43 Right section	Major	5thUSC	Apoplexy	47	Kentucky	8/1/74	Died of apoplexy. Major 5th U.S. Cavalry.
47. Juan Frientis	-- Right section	Citizen	Mexico	Chronic pneumonia	56	Mexico	3/25/75	Died of chronic pneumonia. Citizen employed at Camp Bowie by Post Trader.
48. W.M. Restgers [?]	52 Right section				31	New York	10/16/75	
49. C.O. Spance	53 Right section	Citizen			33	St. Joe Mo.	4/23/76	Killed by Apache Indians.
50. David Wallace	51	Private	L, 6thUSC			Frost Co. Penn.	4/76	Killed by Apache Indians.
51. Adam Eckstien [sic]	50 Right section	Private	G, 6thUSC	Consumption		Germany	10/30/76	
52. Thomas Ross	49 Right section	Private	L, 6thUSC	Pernicious fever		America	11/16/76	
53. James Stapleton	48 Right section	--	H, 6thUSC	J.M.Fever	34	Ireland	12/22/77	
54. Henry Stone	47 n.s.n.w.cor.	Private	L, 6thUSC	Typhoid fever	34	New York	1/22/78	
55. Lieut Austin Henely	45 n.s.n.w.cor.	1 Lieut	6thUSC	Drowning		Ireland	7/11/78	Drowned while crossing mountain stream from his to Capt. Madden's camp.
56. Lieut. J.A. Rucker	46 n.s.n.w.cor.	2 Lieut	6thUSC	Drowning		Michigan	7/11/78	Drowned while endeavoring to rescue Lieut. Henely from drowning near Camp Supply.
57. Nicholas Marninger	47 n.s.n.w.cor.	B.Smith	L, 6thUSC	Lightning		America	8/9/78	Struck by lightning when returning home from work.
58. Thomas Dowdill	48 n.w.cor.e.sec.	Private	E, 12thUSI	Heart Disease		Ireland	1/30/79	Disease of the heart.
59. Charles P. Laging	49 n.w.cor.s.sec.	Private	M, 6thUSC	Gun Shot wound	23	New York	2/6/82	Died from Gunshot wound.
60. Pedro Valdez	50 Right section	Citizen		Pneumonia			1/29/83	Packer in employ of Q.M.D. (Mexican by birth)
61. Ormsby M. Shuck	51 Right section	Private	M, 6thUSC	Abscess	22 1/2	Harris Co. Ind.	3/10/83	Died in Post Hospital-- Abscess.

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"Diagram of Post." March, 1883. Copy in the files of Fort Bowie National Historic Site.

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ILLUSTRATIONS

Illustration 1

The environs of Fort Bowie, 1869.
Detail from "Map of the Military
Reservation at Camp Bowie, Arizona,
Surveyed February 1869." Surveyed
by First Lieutenant George M. Wheeler.

Courtesy of the National Archives.

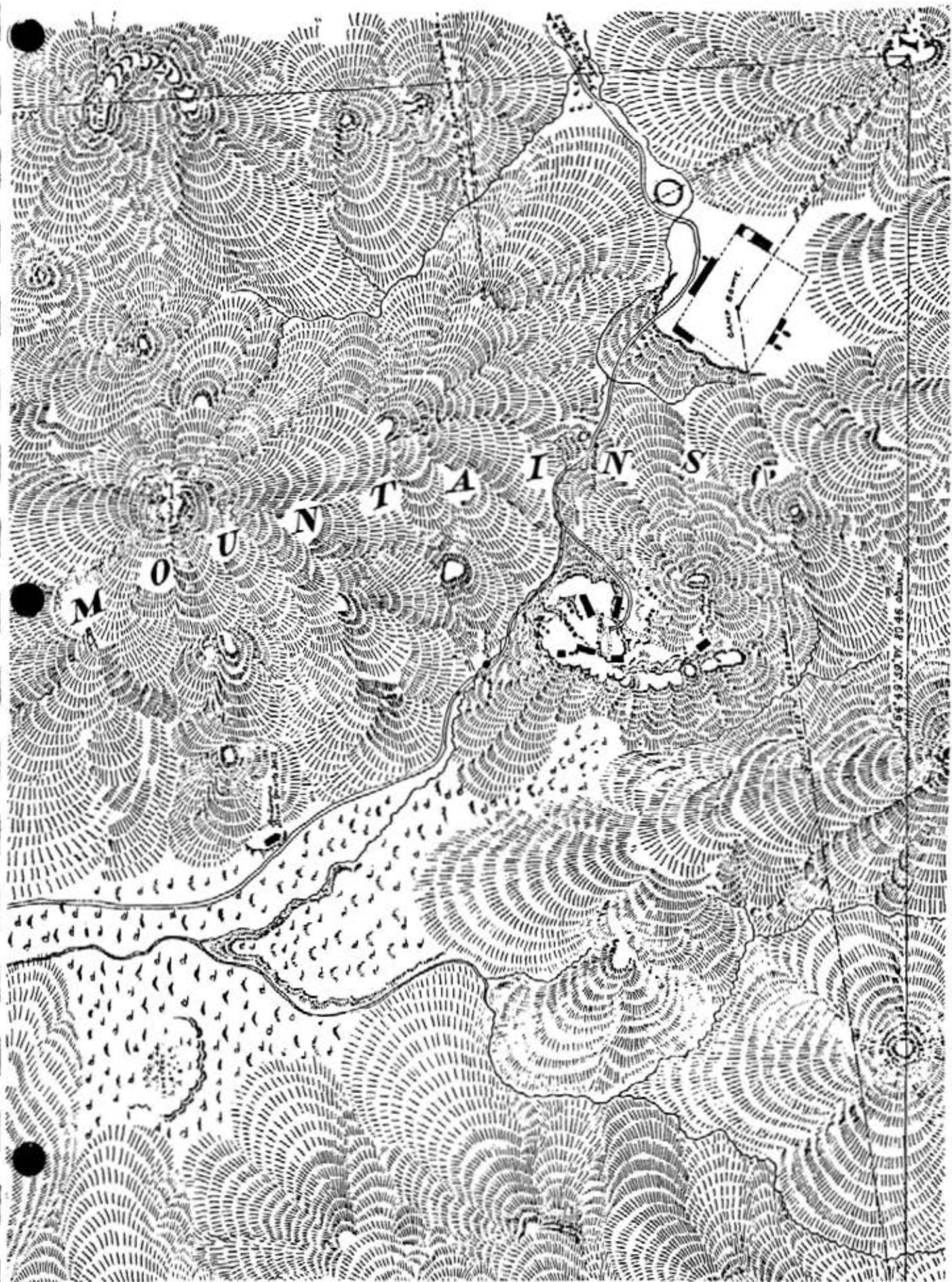
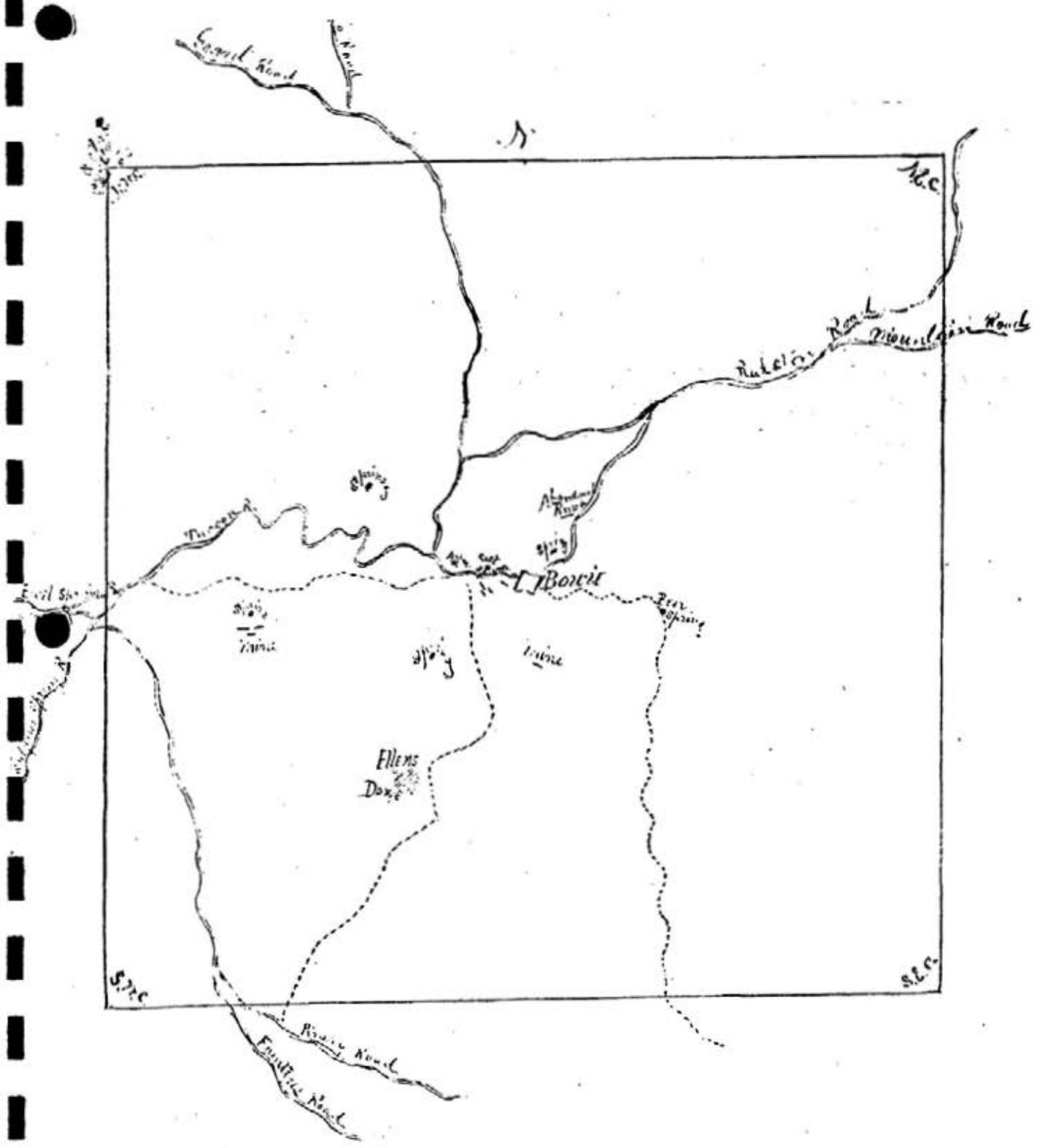


Illustration 2

Sketch map of the Camp Bowie
Military Reservation, dated
1877.

Courtesy of the National Archives.



one inch to the mile.

Illustration 3

The Military Reservation in 1877.
Detail from "Diagram of the
Military Reservation at Camp
Bowie, A.T.," August, 1877.

Courtesy of the National Archives.

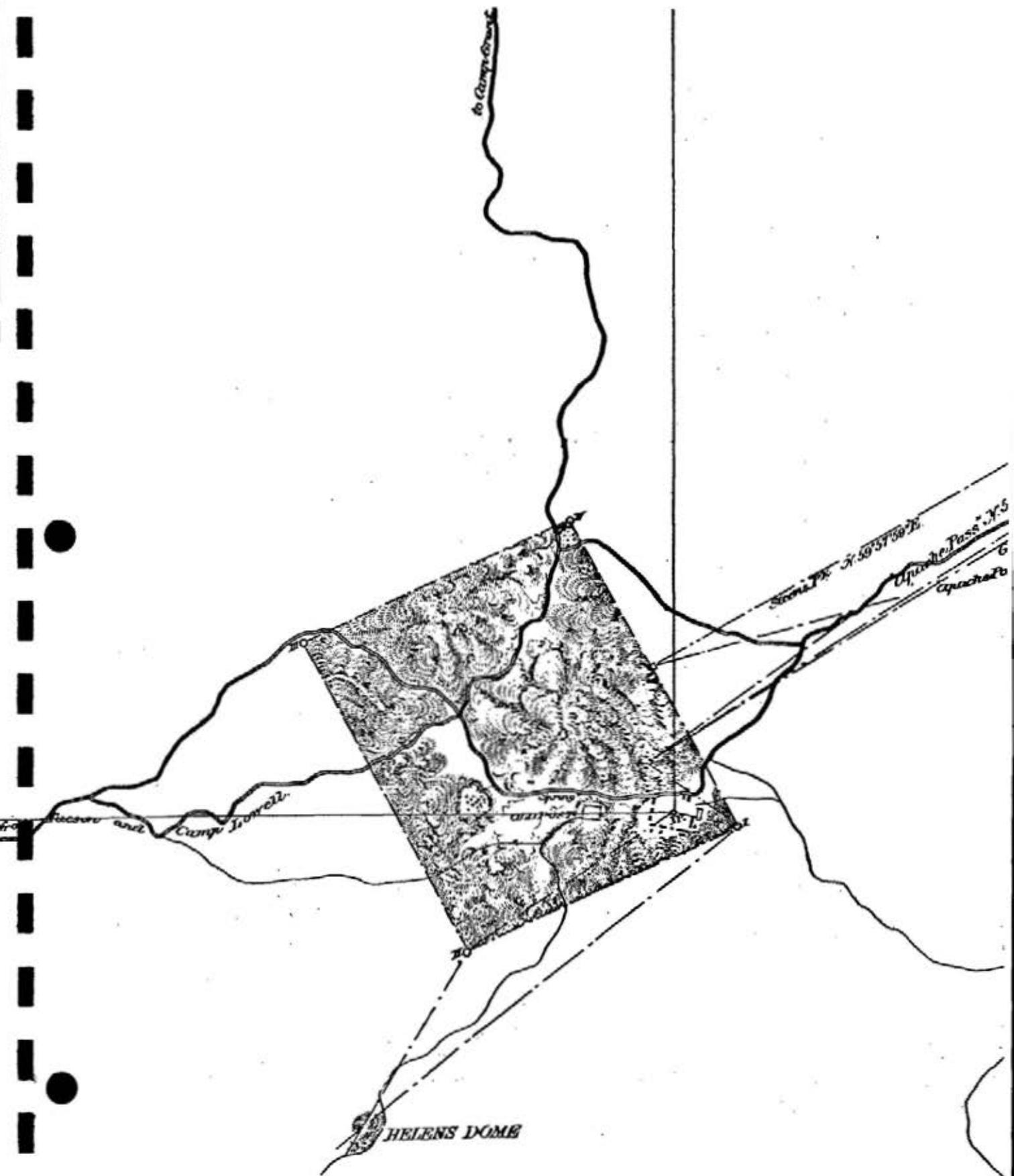


Illustration 4

The area of Fort Bowie in 1893.
Detail from "Fort Bowie, Arizona."
Line Survey by First Lieutenant
Thomas S. McCaleb, February, 1893.

Courtesy of the National Archives.



Illustration 5

Plat of Fort Bowie early in 1869.

Detail from "Map of the Military
Reservation at Camp Bowie, Arizona,
Surveyed February 1869." Surveyed
by First Lieutenant George M. Wheeler.

Courtesy of the National Archives.

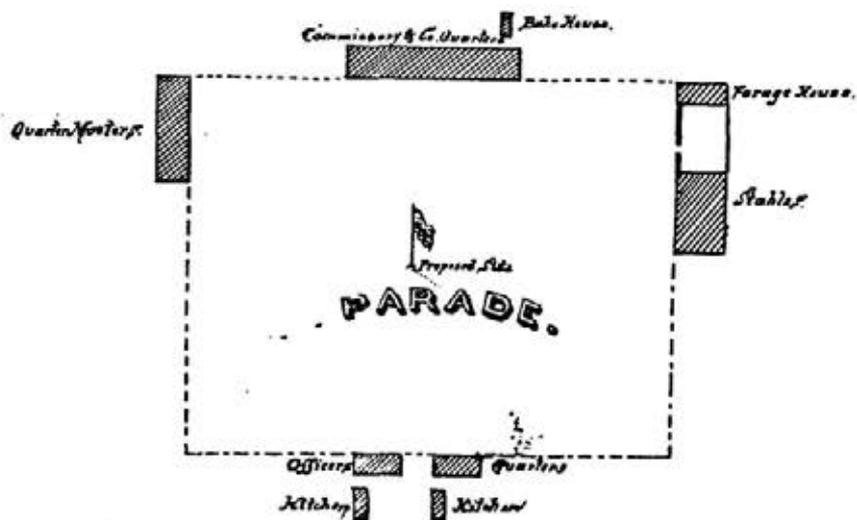


DIAGRAM OF POST.



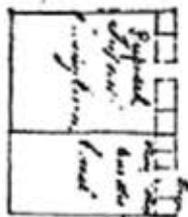
Scale, one inch to five feet.

Illustration 6

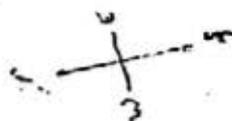
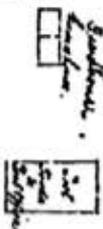
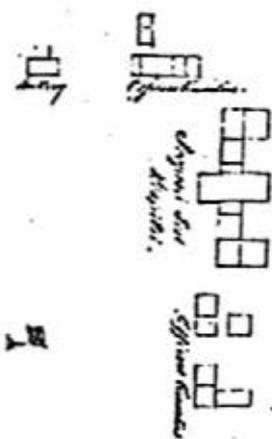
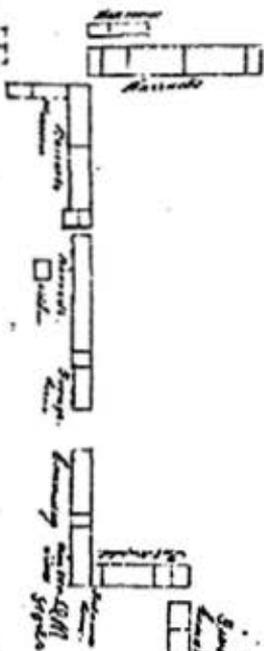
Plat of Fort Bowie in August, 1870.

From "Descriptive Commentaries from
the Medical Histories of Posts."
National Archives Microfilm Publications,
Roll M903, vol. I.

Handwritten note: "Hand 5 window"



Handwritten note: "Hand 5 window"



Handwritten note: "Hand 5 window"

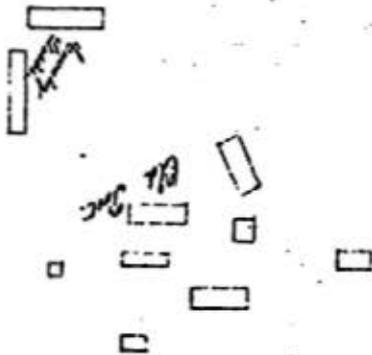


Illustration 7

Fort Bowie in December, 1870.

From "Descriptive Commentaries from
the Medical Histories of Posts."
National Archives Microfilm Publications,
Roll M903, vol. I.

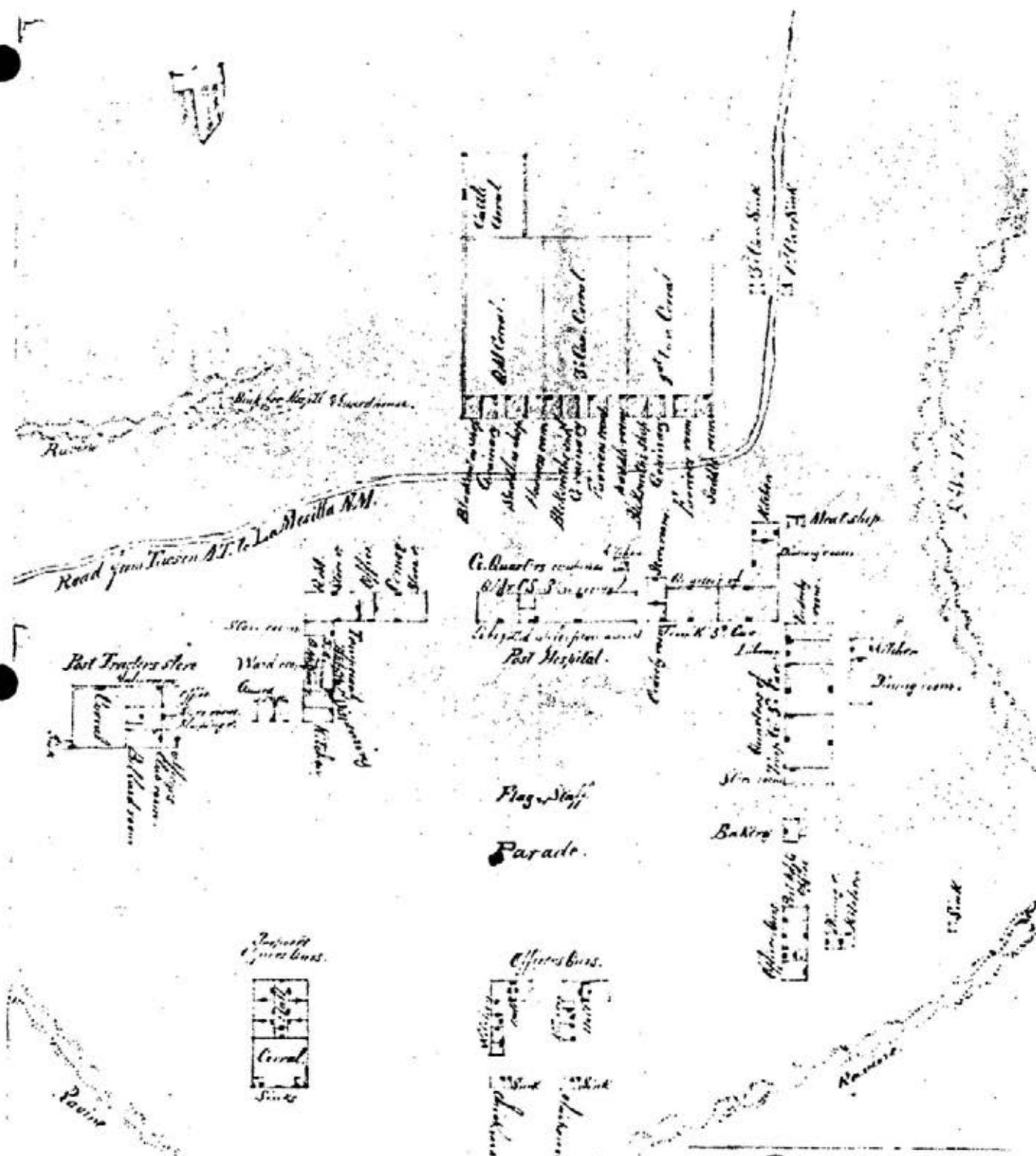


Diagram
 of
 Camp Bowie.
 A.T.
 December 1870.
 Scale: 1/2 inch to 1 foot.

Illustration 8

Plat of Fort Bowie, 1871, based
on the preceding illustration.

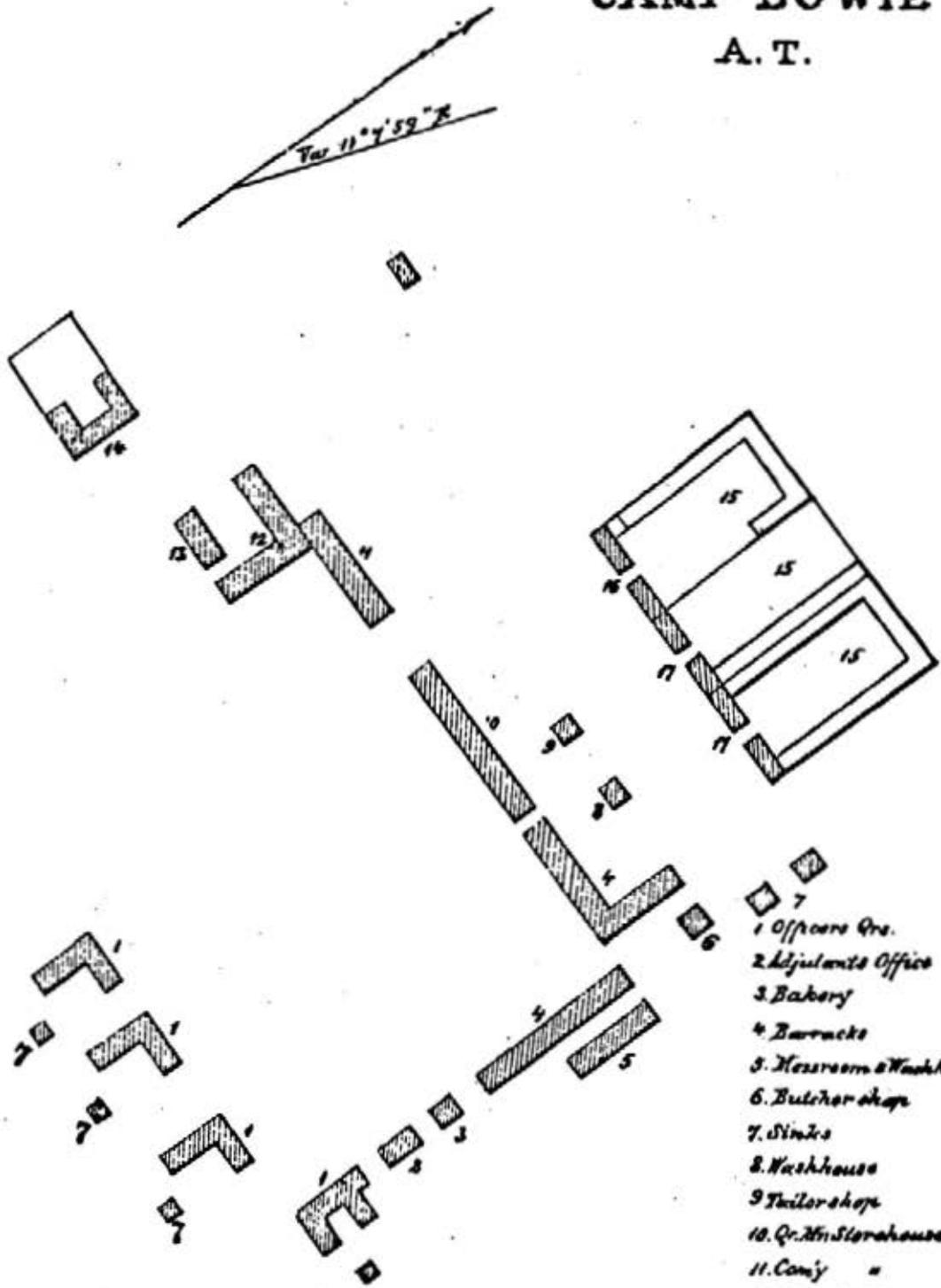
Courtesy of the National Archives.

Illustration 9

Plat of Fort Bowie as of February,
1877.

From Outline Description of Military
Posts in the Military Division of the
Pacific. . . . (San Francisco, 1879).

CAMP BOWIE A. T.



- 1 Officers Qrs.
- 2 Adjutants Office
- 3 Bakery
- 4 Barracks
- 5 Messroom & Washhouse
- 6 Butcher shop
- 7 Sinks
- 8 Washhouse
- 9 Tailors shop
- 10 Gr. & Storehouse
- 11 Comy "
- 12 Hospital
- 13 Guardhouse
- 14 Post Trader
- 15 Corral
- 16 Shops
- 17 Grass rooms

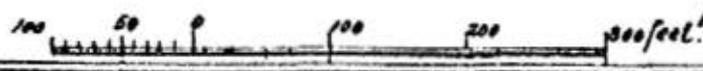


Illustration 10

Plat of Fort Bowie, 1879.

Courtesy of the National Archives.

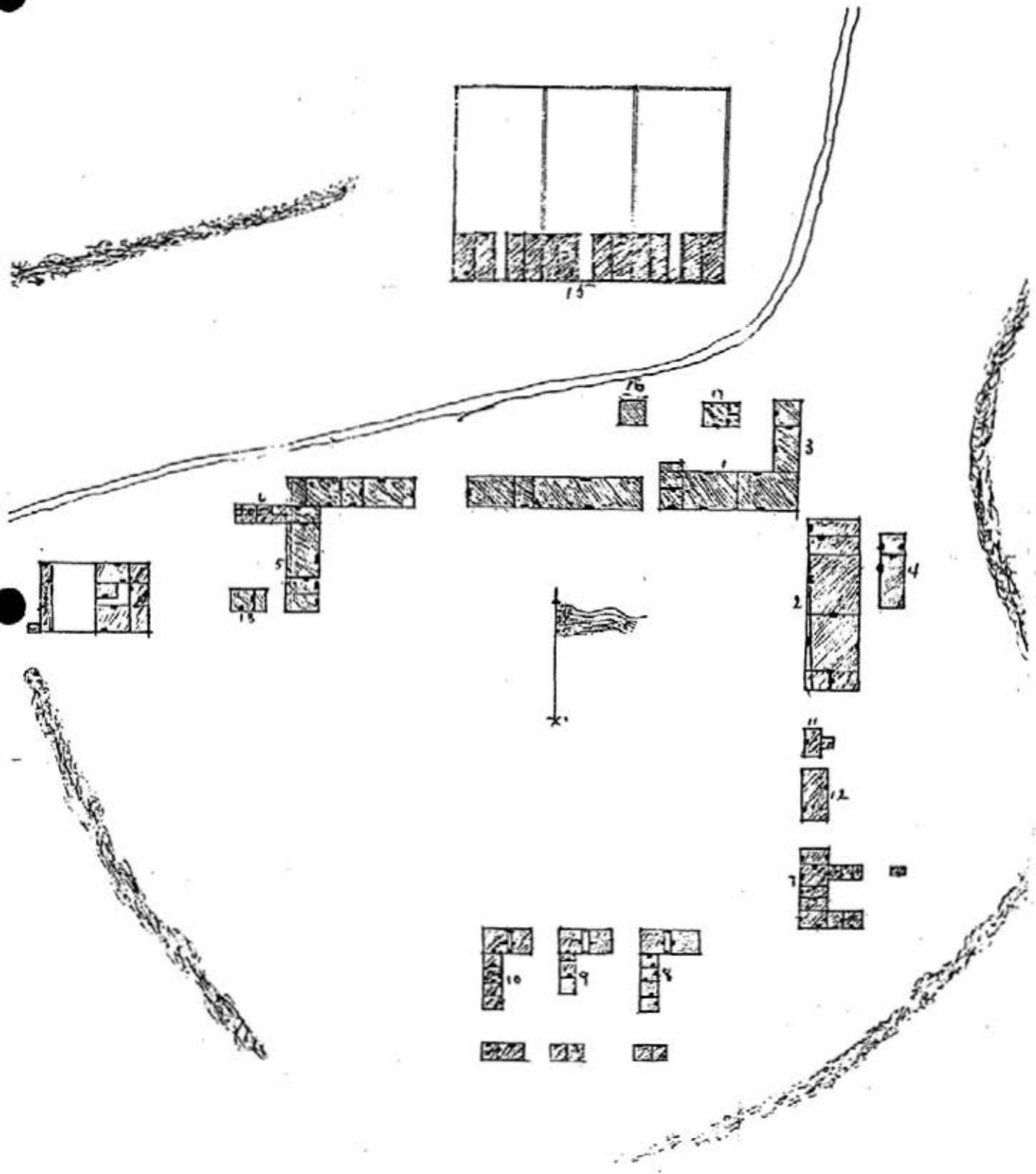


Illustration 11

Plat of Fort Bowie as it appeared
in March, 1883.

Courtesy of the National Archives.

Reference Table
to

Diagram of Post

- a Officers Quarters
 - b Post Library
 - c " Bakery
 - d Company Quarters
 - e " Kitchens
 - f Wash-house
 - g Barber Shop
 - h Butcher "
 - i Q.M. Storehouse
 - k Grain " "
 - l Com'ny "
 - m Hospital
 - n Guard-house
 - o Adjutants Office
 - p Post Trader and Post Office
 - r Q.M. Corral.
 - s Comp'y "
 - t Packtrain
 - u Mess
 - v Woodsheds
 - w Sinks
 - x Plagstuff
- Laundress Quarters at Old Camp

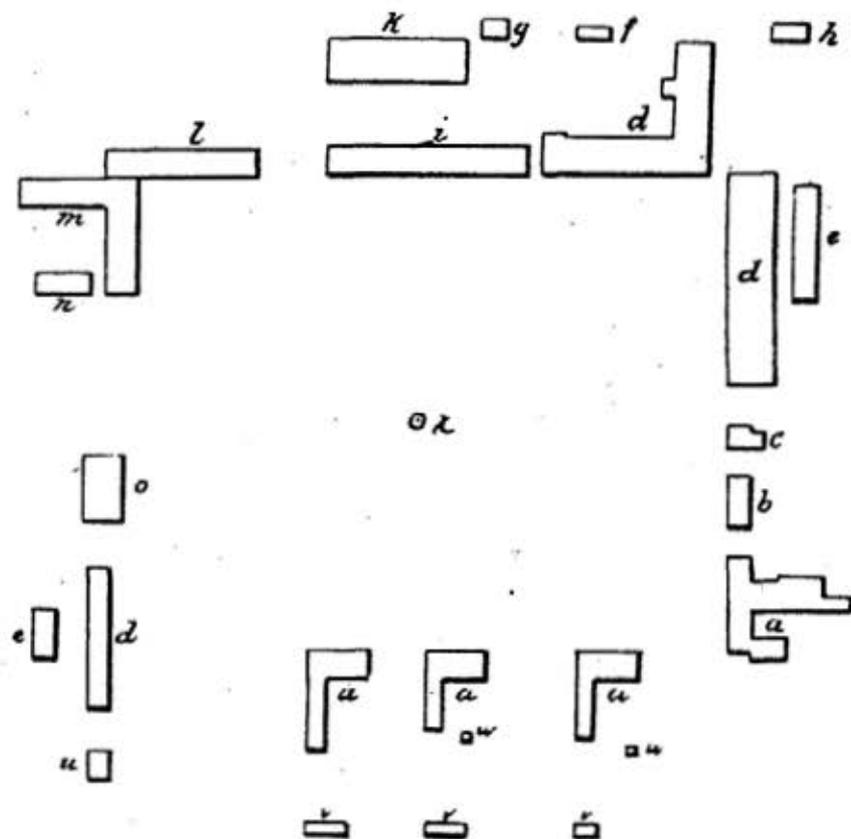
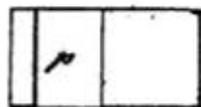


Diagram of Post

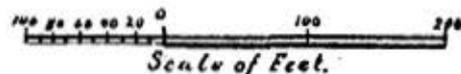


Illustration 12

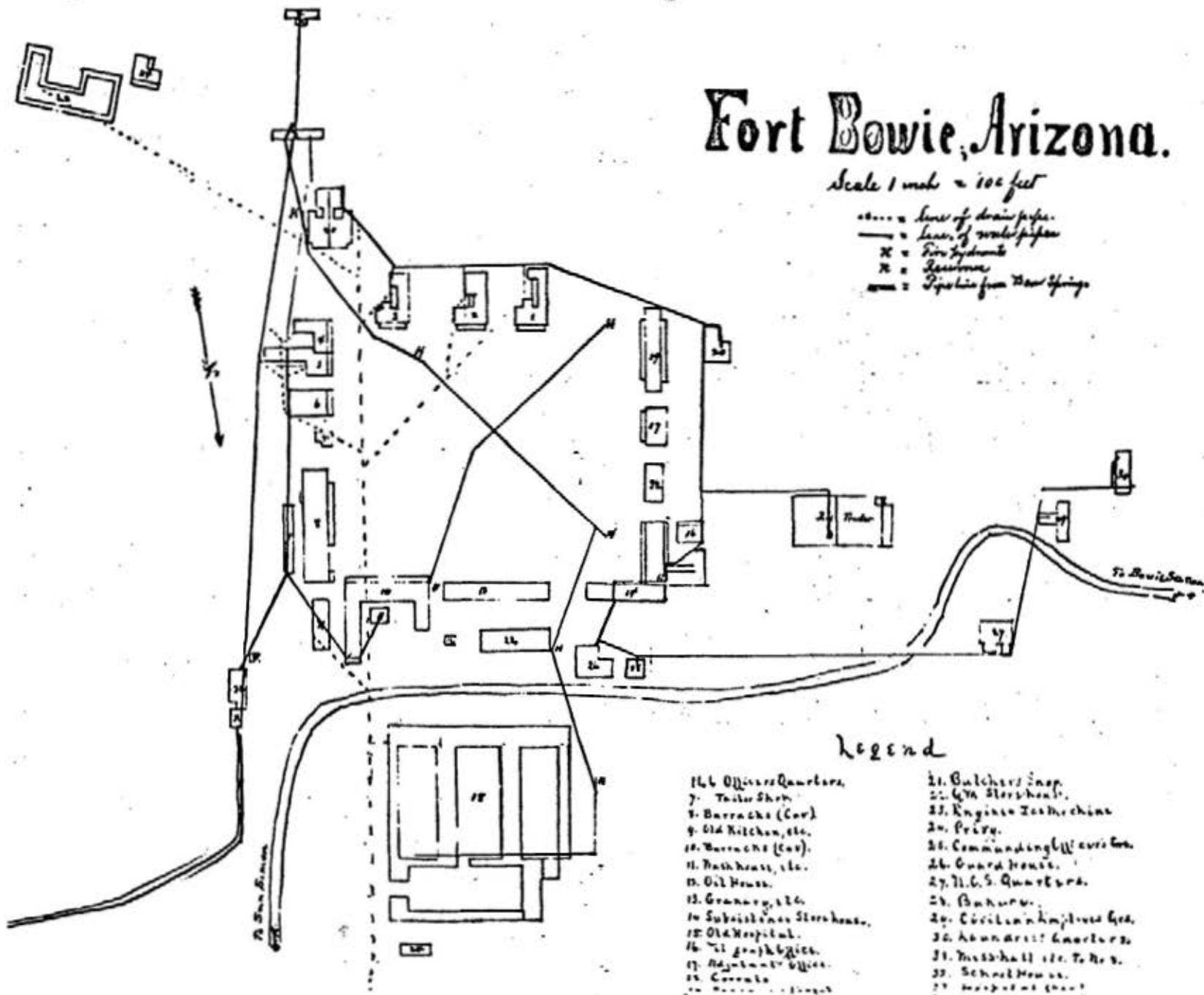
Plat of Fort Bowie, May 20, 1889,
showing location of water and
drainage lines.

Courtesy of the National Archives.

Fort Bowie, Arizona.

Scale 1 inch = 100 feet

- line of drain pipes.
- line of water pipes
- X = Fire hydrant
- X = Reservoir
- = Pipes from Deer Springs



Legend

- | | |
|-----------------------------|------------------------------------|
| 16. Officers Quarters. | 21. Butcher Shop. |
| 7. Tailor Shop. | 22. Gun Storehouse. |
| 8. Barracks (Cor). | 23. Engine Test Machine. |
| 9. Old Kitchen, etc. | 24. Privy. |
| 10. Barracks (Cor). | 25. Commanding Officer's Quarters. |
| 11. Bath house, etc. | 26. Guard House. |
| 12. Oil House. | 27. U.S. Quarters. |
| 13. Granary, etc. | 28. Butcher. |
| 14. Subsistence Storehouse. | 29. Civilian Employees Quarters. |
| 15. Old Hospital. | 30. Gunners' Quarters. |
| 16. Telegraphic. | 31. Mess-hall etc. for N. S. |
| 17. Adjutant's Office. | 32. School House. |
| 18. Corral. | 33. Hospital. |

Illustration 13

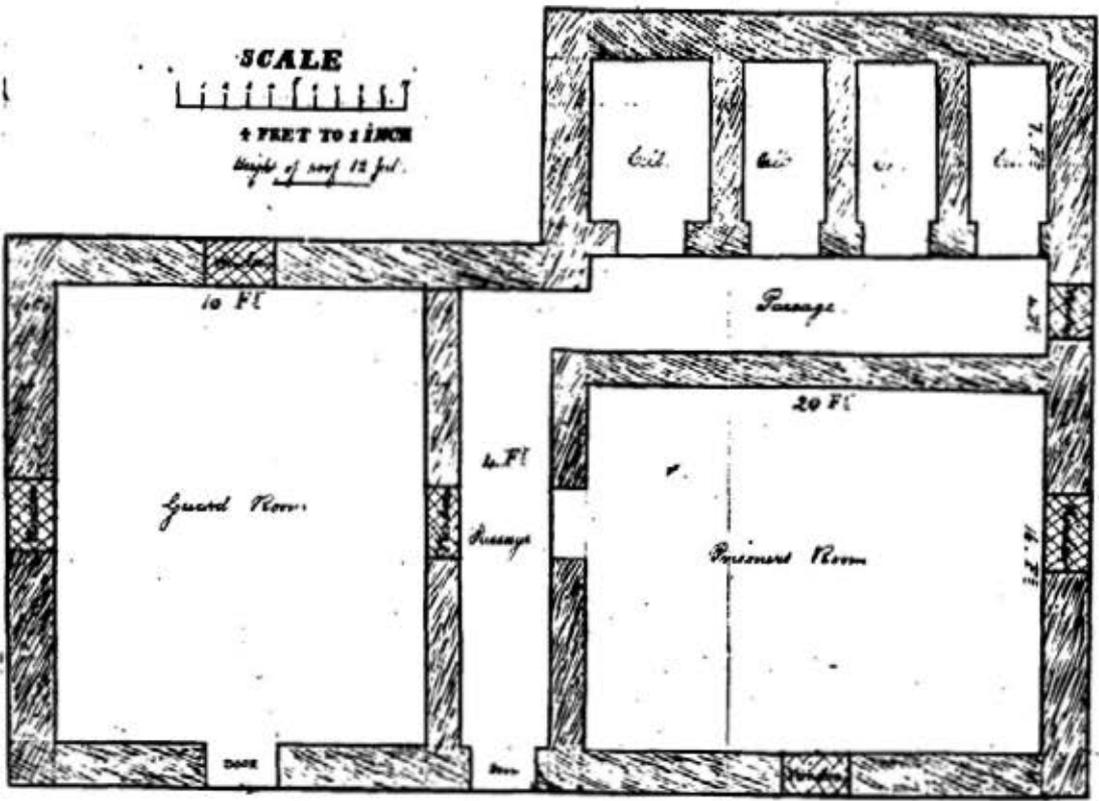
Plan for Guardhouse (HS 016)
proposed in 1875. A modification
of this design was evidently
erected in the following year.

Courtesy of the National Archives.

No. 1.

Plan of proposed new Guard House at Curly Cove, A.S.

SCALE
1/4 FEET TO 1 INCH
Height of roof 12 feet.



Estimated cost - 465.90
Approved by Sec of War
Dec 11 - 1896 -
Feb 20/76 Order to Build
See 4176 of 75

Total 47 Feet

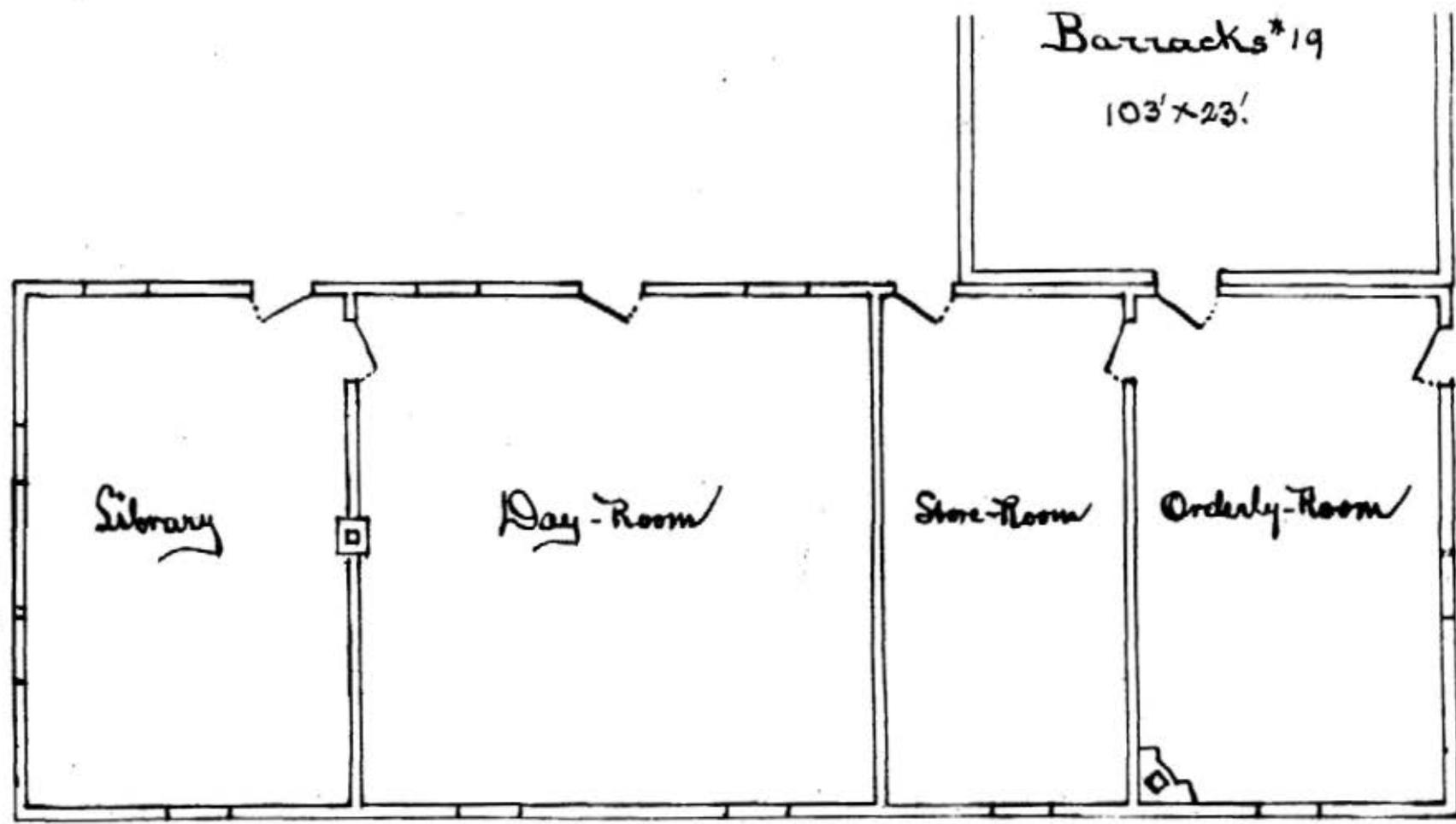
C. F. Rogers
1' 5" Curly Cove
Covey Post.

Inscribed
Jas. H. Hardie
Arch. Eng.

Illustration 14

Floor plan of proposed wing to
the Infantry Barracks (HS 019),
1888. Construction never occurred.

Courtesy of the National Archives.



Scale 8 ft to 1 inch.

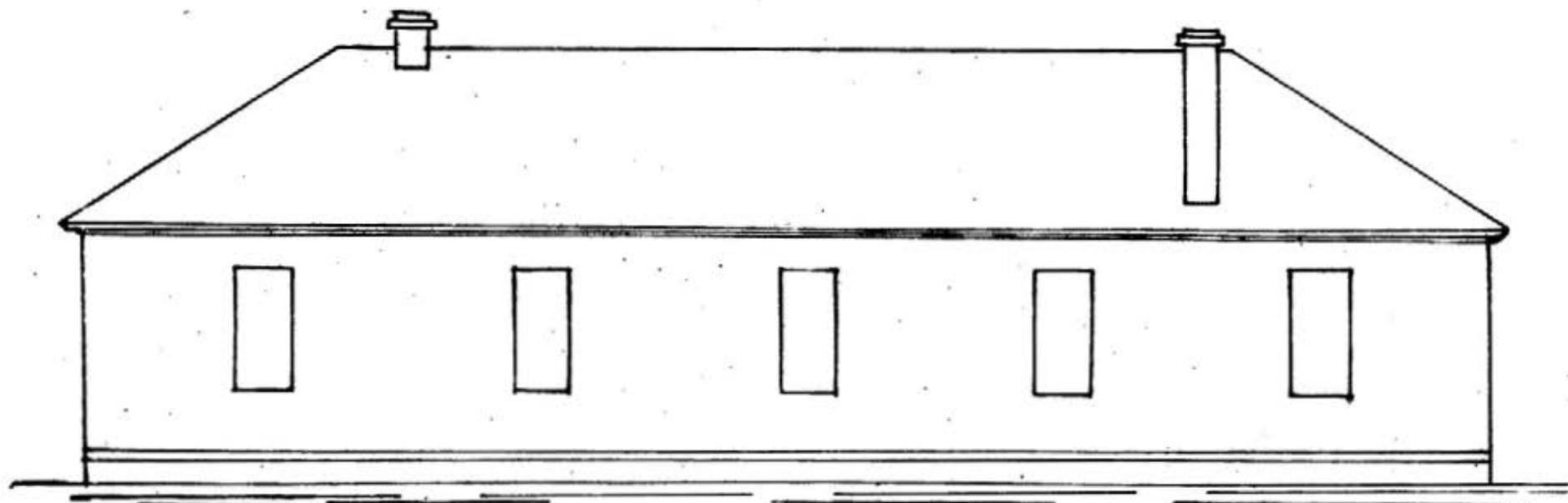
Proposed Addition to Barracks #19

Estimated cost 2314⁴⁹ Fort Bowie, A.T.
 June 26-88 approved by Sec of War
 March 21. 1888. $\frac{1253}{88}$ Div 9
 9m 0

Illustration 15

Proposed addition to Infantry
Barracks (HS 019) which was never
built.

Courtesy of the National Archives.



Proposed Addition to Barracks #19
Fort Bowie, A.T.
March 31, 1888.

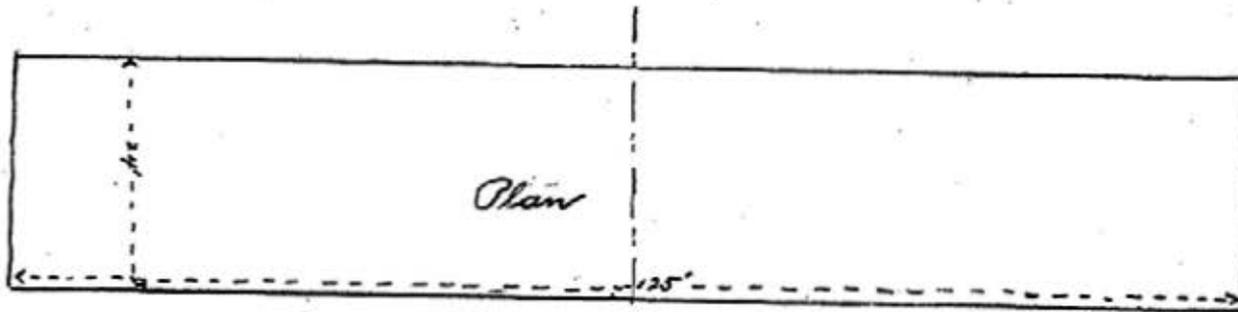
Estimated Cost 2314.40
July 26-88 app^d by Secretary of War
1253-88 Ser E. Amer O

Illustration 16

An early plan for the granary
that eventually became the
Quartermaster Storehouse (HS 022).

Courtesy of the National Archives.

Scale 20' to 1"



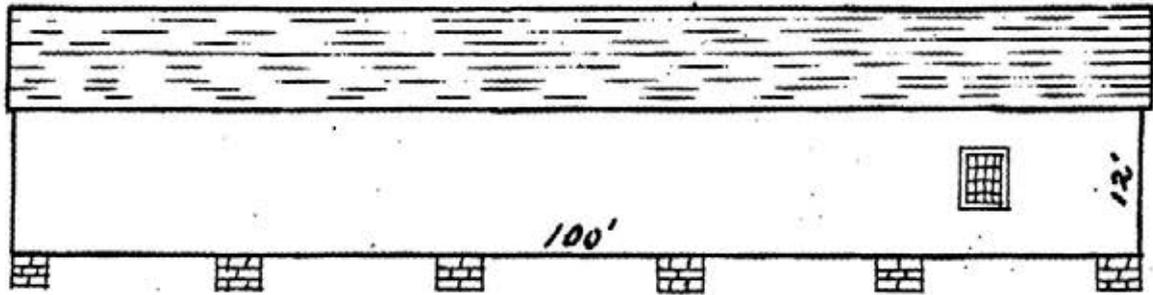
Annex to Grammar -

Illustration 17

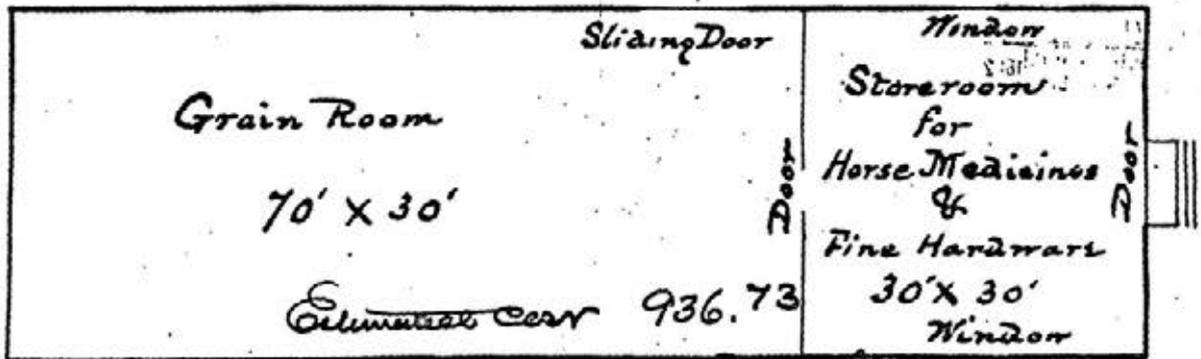
Diagram of the Quartermaster
Storehouse (HS 022) erected in
1883.

Courtesy of the National Archives.

Plan and Elevation
of
Quartermaster Storehouse
for
Fort Bowie Arizona



Elevation



Sept 28-82 Purchased by Genl War

n° 30-82 Order to Sargent

Fort Bowie A.T.
August 17th 1882

6670

J.W. E. H. (6)
Supt. of A.A.M.

Illustration 18

Front elevation plan for the
Commanding Officer's Quarters
(HS 025). Note the modifications
that were incorporated into the
final design.

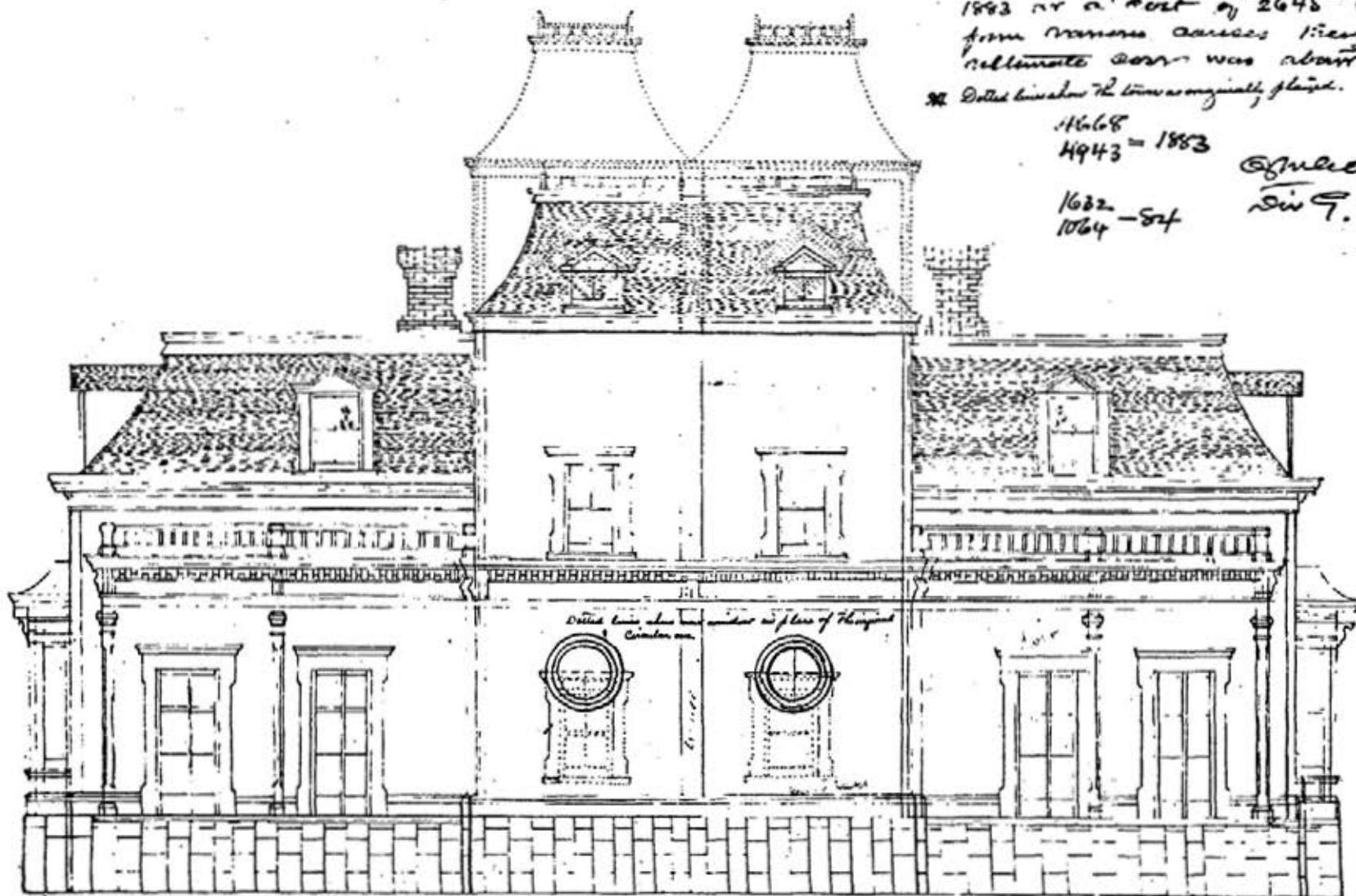
Courtesy of the National Archives.

Memo
 These quarters were originally
 constructed by the War in Dec
 1863 at a cost of \$2645 but
 from various causes their
 ultimate cost was about 4000
 * Dotted lines show the lines originally planned.

1868
 1873 = 1883

Agued
 Div 9.

1882
 1864 - 84



* Front Elevations * New Building Offices Quarters at
 Fort Bowie Ariz.
 Trusler 1

Illustration 19

Side elevation plan for the
Commanding Officer's Quarters
(HS 025).

Courtesy of the National Archives.

* Dotted lines show the tower as originally planned.

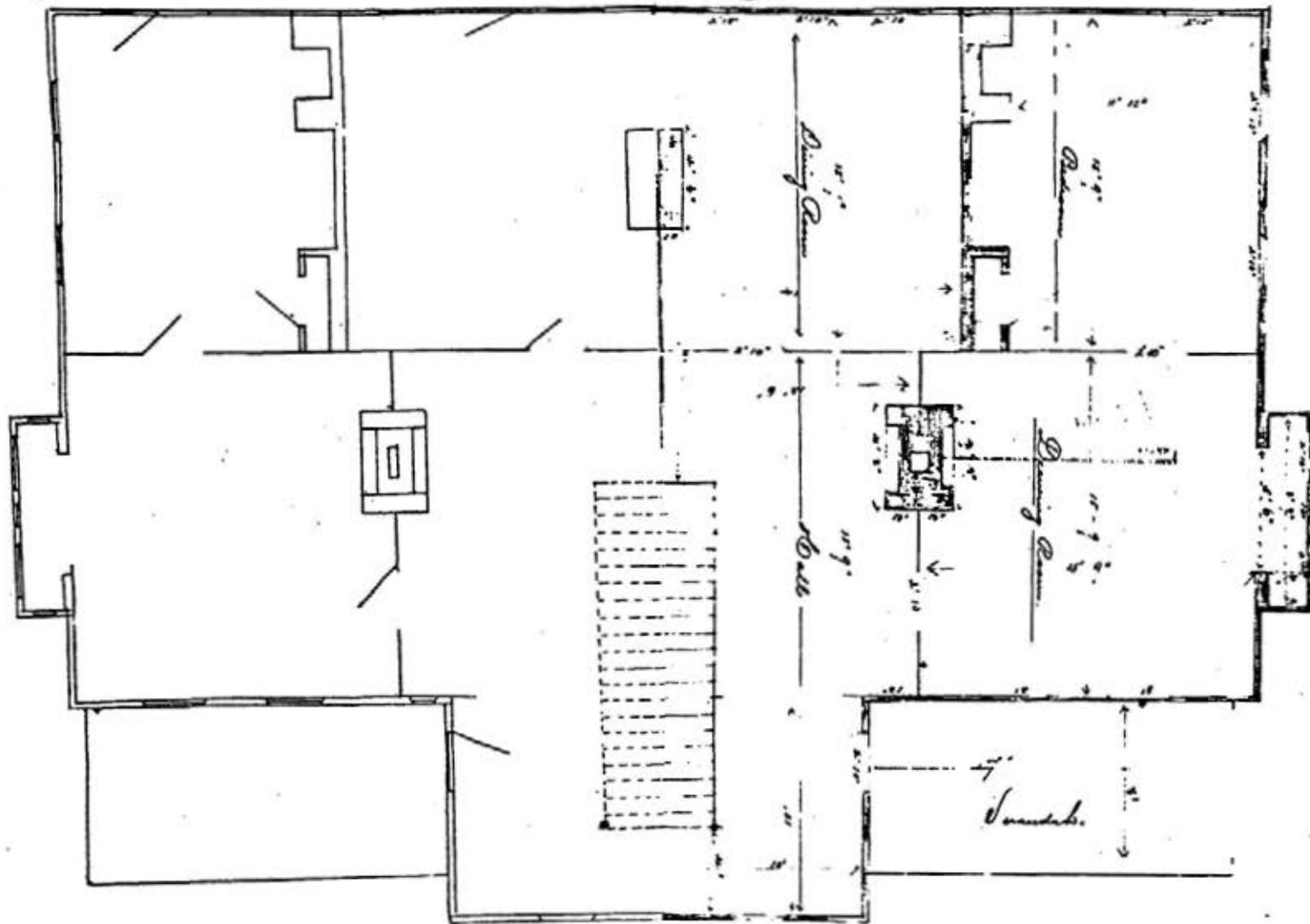


→ Side Elevation : New Building ← Offices Quarters
4668 1632
4943-53 1704-54
Tracing 2 See memo note on tracing 1
Terr Boice A.P.

Illustration 20

Floor plan of Commanding Officer's
Quarters (HS 025). First floor.

Courtesy of the National Archives.



* First Floor * Two Building * Officers Quarters

Scale: - 1/2" to the foot.

* N. O. *

Tracy 3

4168
4942-83
1632
1084-84

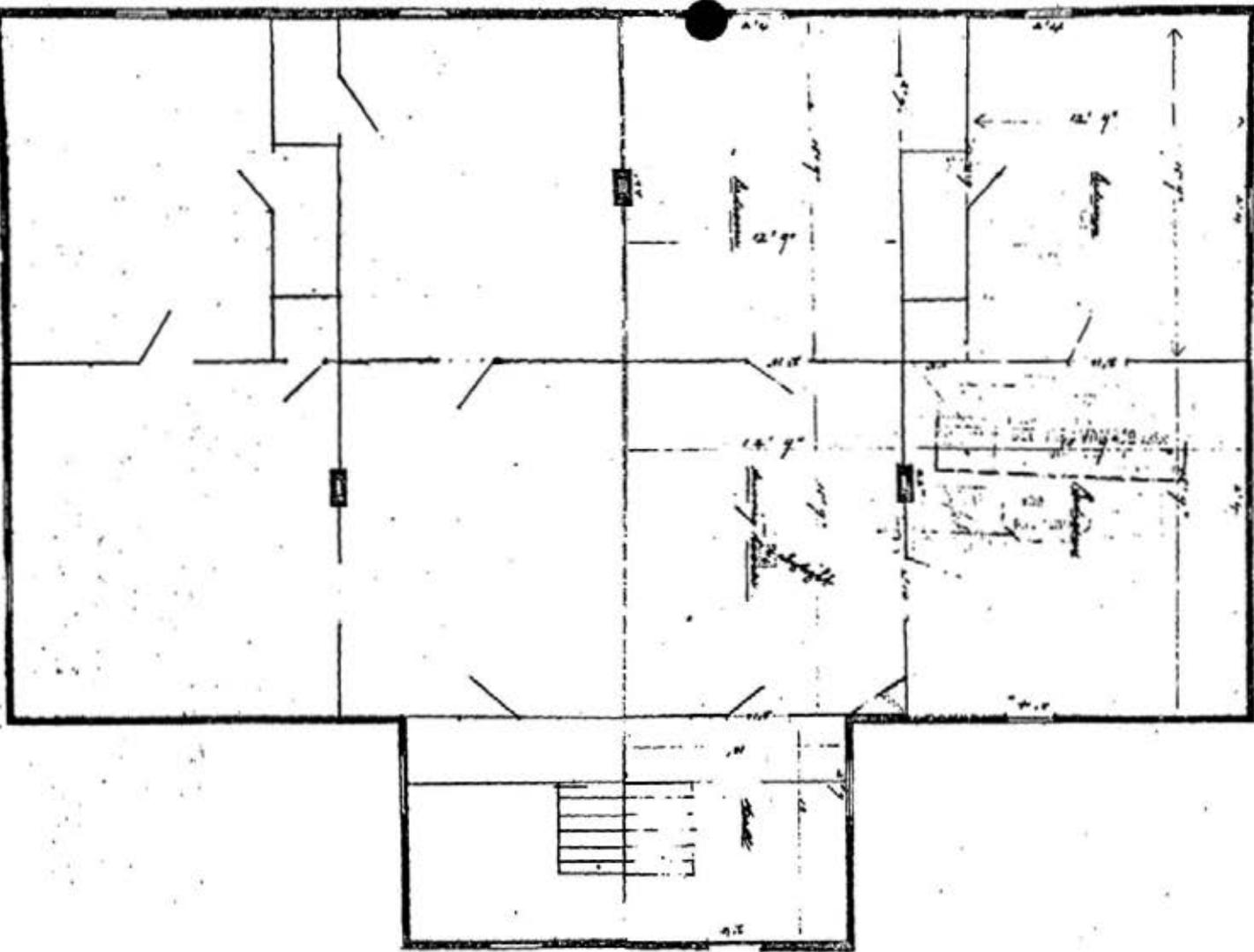
opmco
low 9

For Review at
See memo note on Tracing 1

Illustration 21

Floor plan of the Commanding Officer's
Quarters (HS 025). Second floor.

Courtesy of the National Archives.



* Second Floor, New Building *

Scale: - 1/4" to the foot.

* Original -

Tracing H -

Officers Quarters

Jury Room

4668
4942-83

Low 9
Bsmemo

AT

1622
1064-97

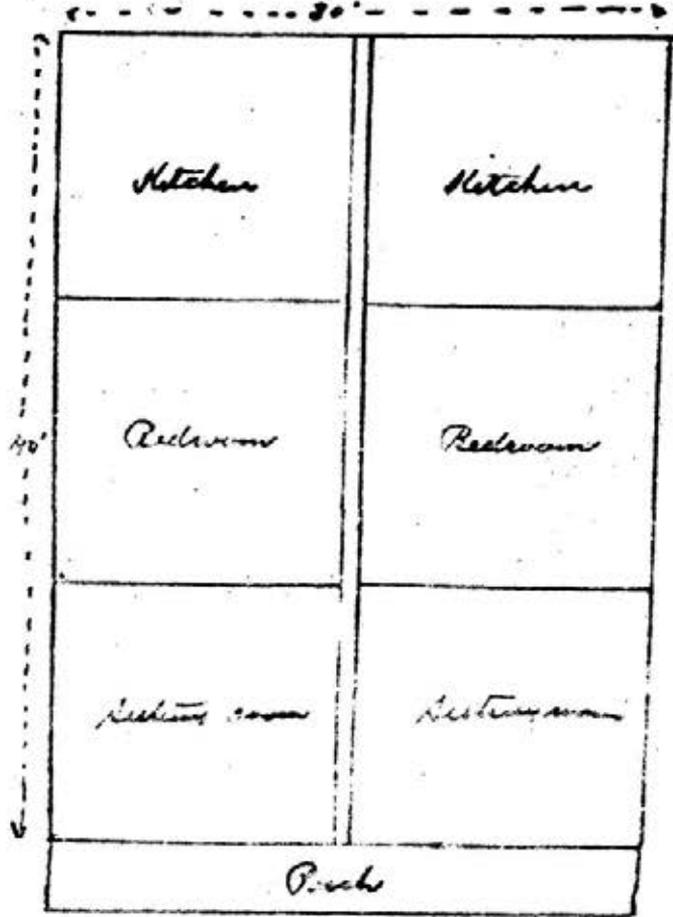
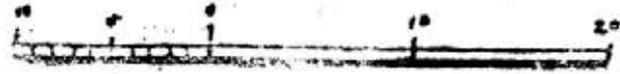
See memo now in tracing #1

Illustration 22

Floor Plan prepared in 1887 for a
set of Non-Commissioned Staff
Quarters which were never built.

Courtesy of the National Archives.

Scale 1" to 10'

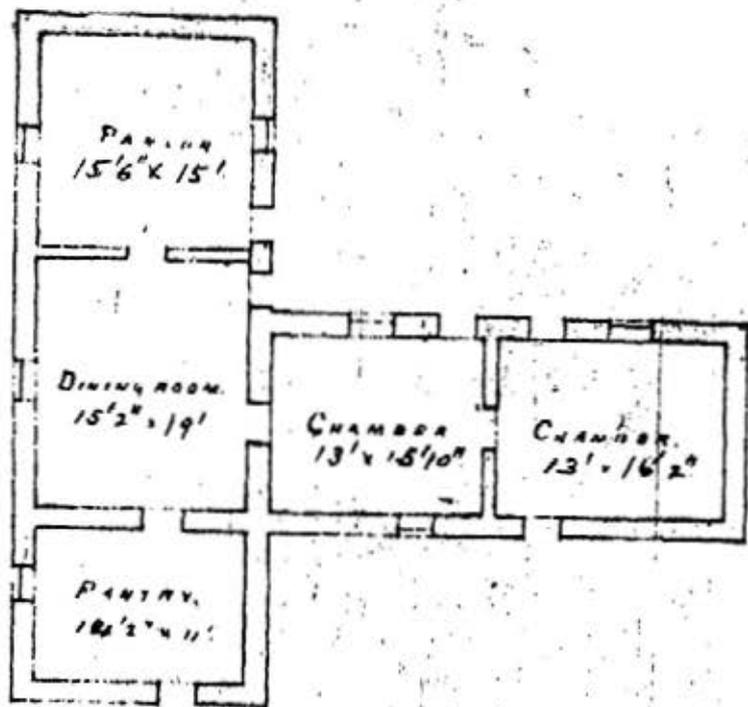


Non Com Staff Quarters

Illustration 23

Floor plan of the Laundresses' Quarters (HS 030), also known as the Old Mess House and the Old Mail Station.

From "Proceedings of a board of officers. . .," July 8, 1890. Miscellaneous records, Microfilm MC 12, Arizona Historical Society.



TO STORE 530'

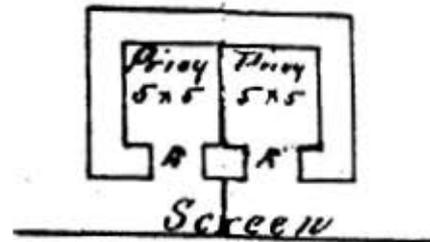
PLAN OF "OLD MESS-HOUSE."

Illustration 24

Plan proposed in 1879 for a
schoolhouse at Fort Bowie. This
design was not adopted.

Courtesy of the National Archives.

Plan of
privy



Plan of main
Building

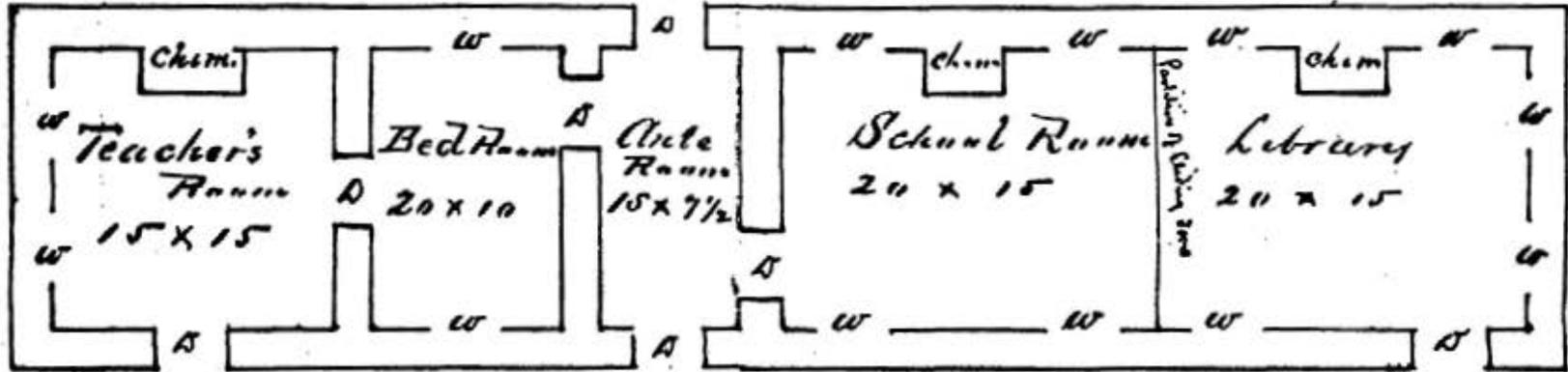
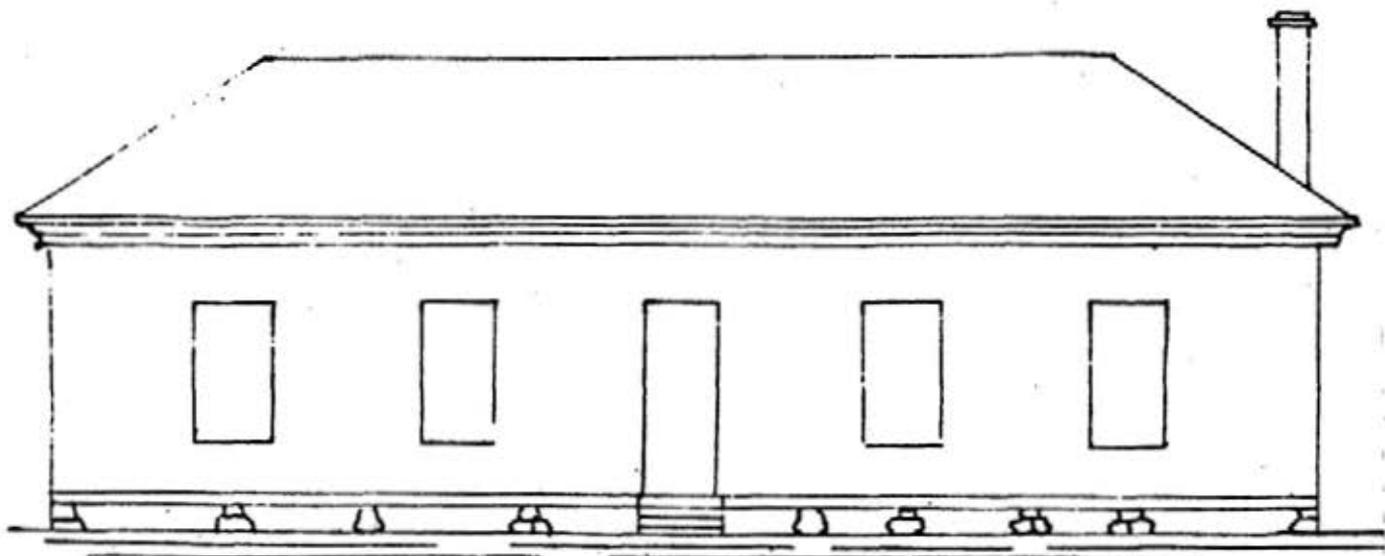


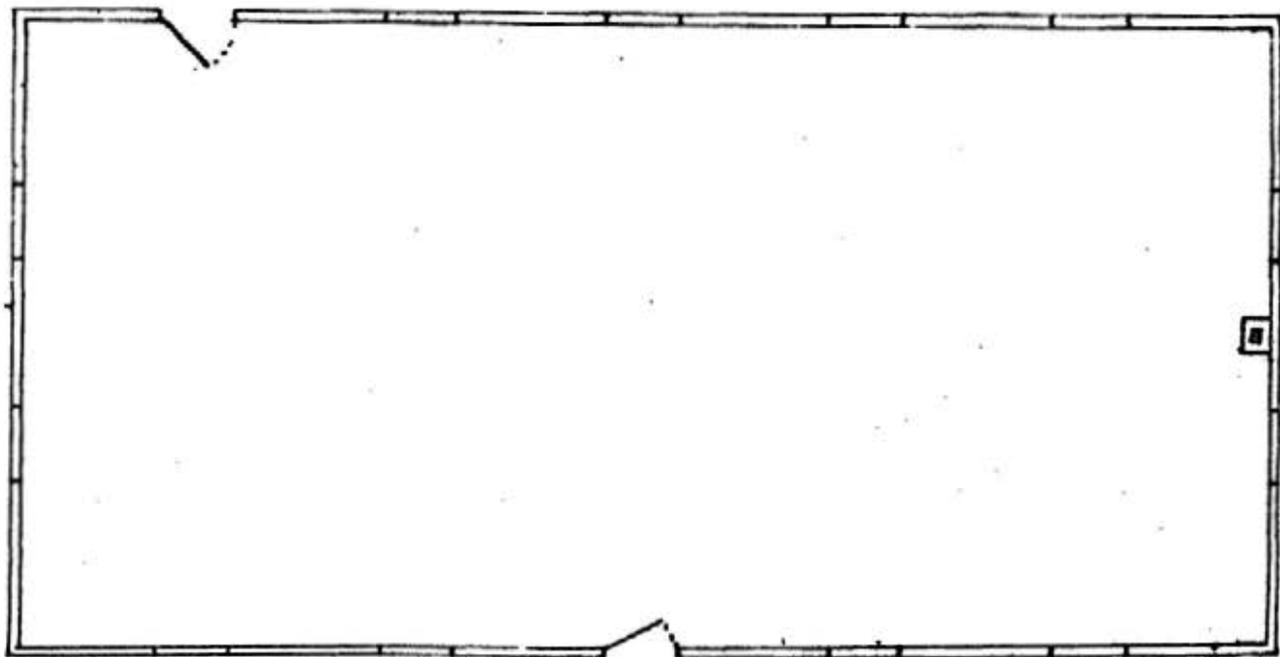
Illustration 25

Plan of Schoolhouse (HS 032)
erected at Fort Bowie in 1889.

Courtesy of the National Archives.



Scale 8 ft. to 1 inch



Proposed Chapel, Court-Martial Room, & School room ^{etc}

Illustration 26

Floor plan of New Hospital (HS 033)
built in 1889.

Courtesy of the National Archives.

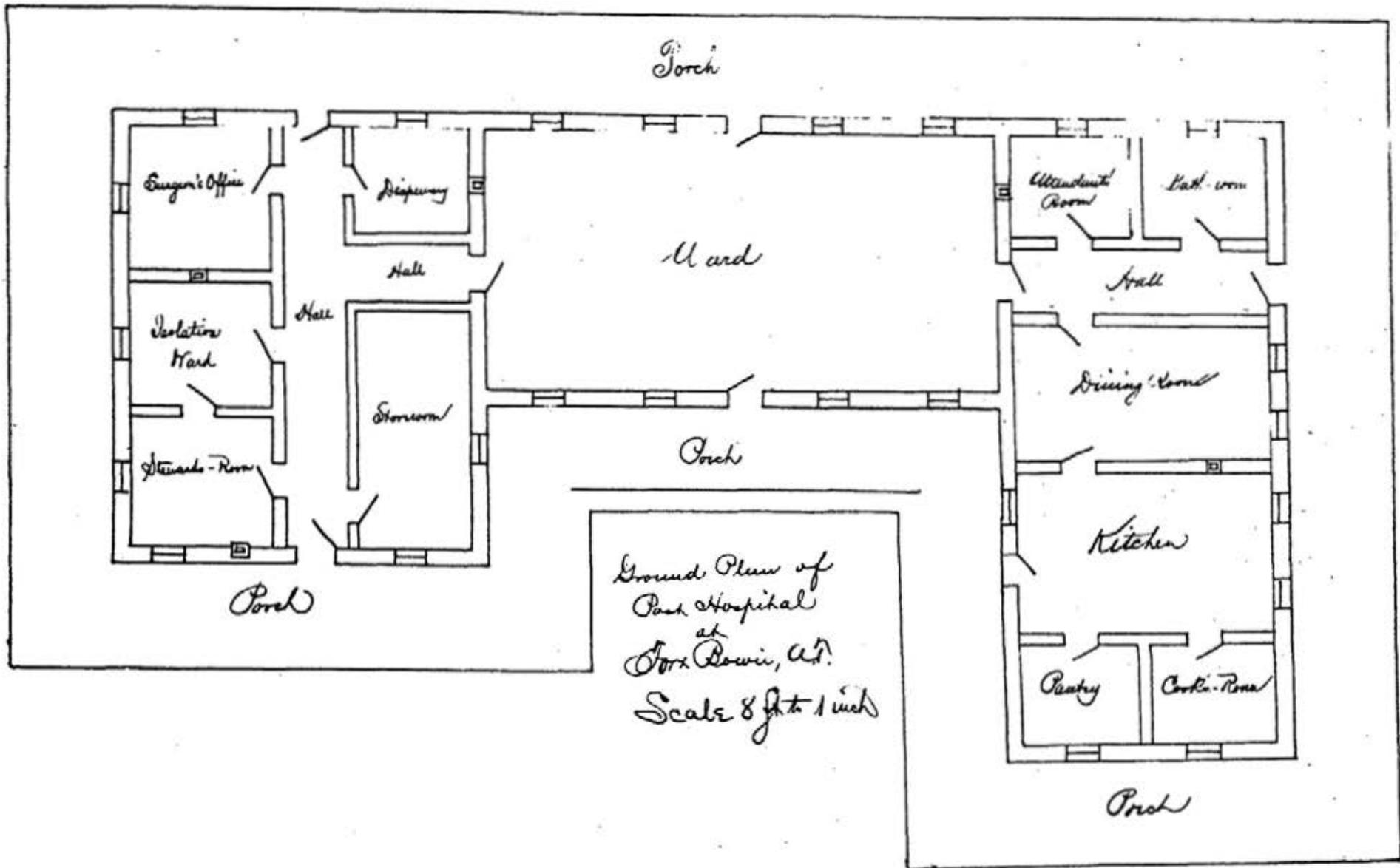
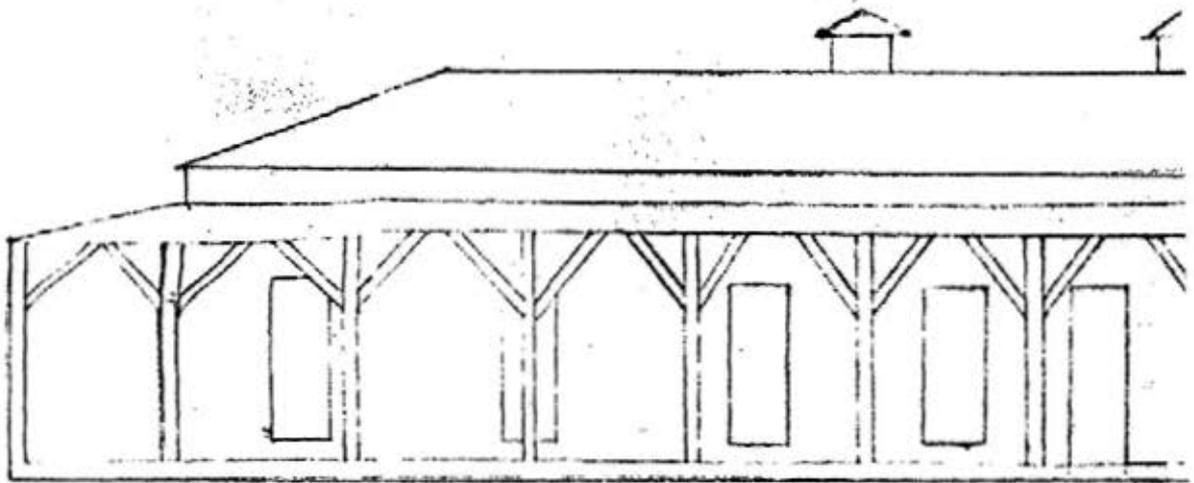


Illustration 27

Front elevation of the New
Hospital (HS 033).

Courtesy of the National Archives.

Scale right hand to the iron.



Hand elevation - iron

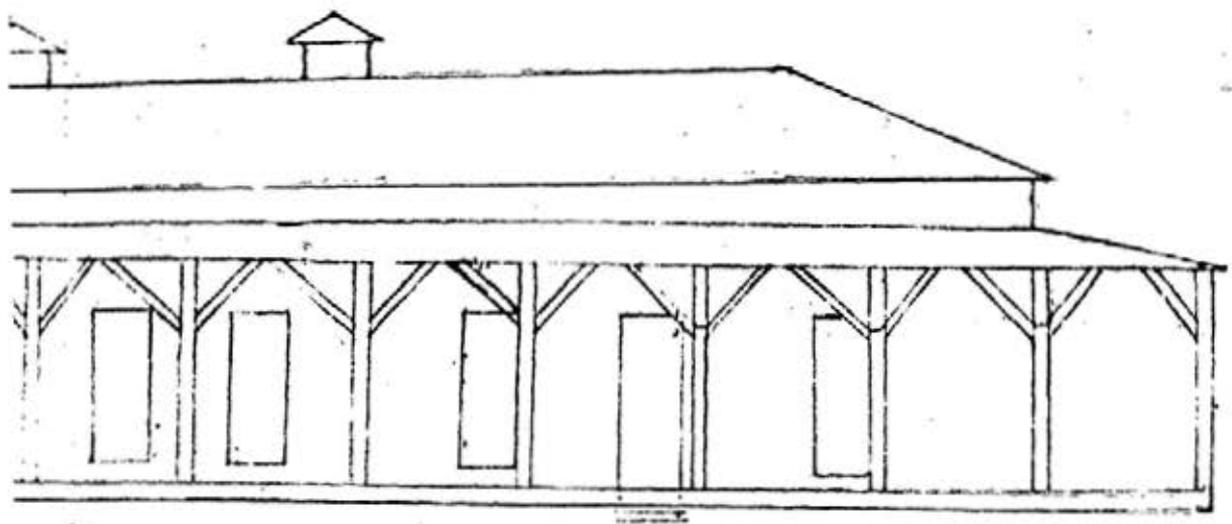
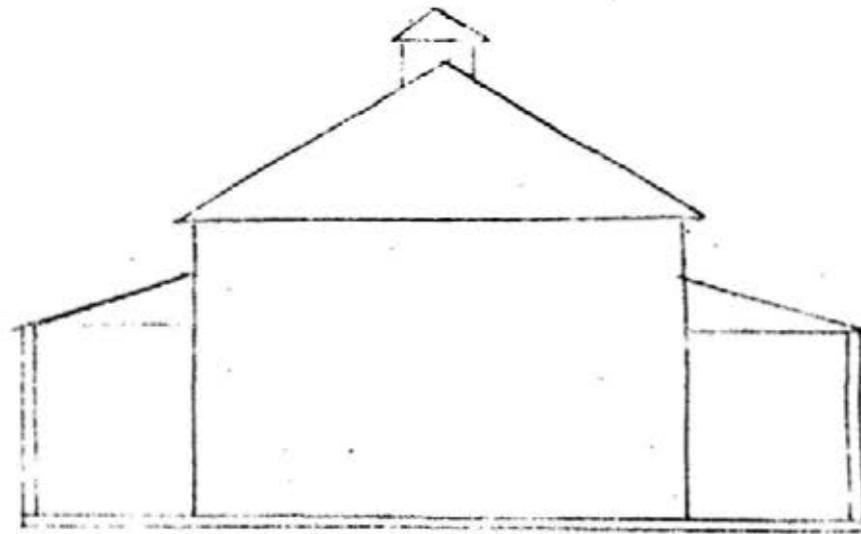


Illustration 28

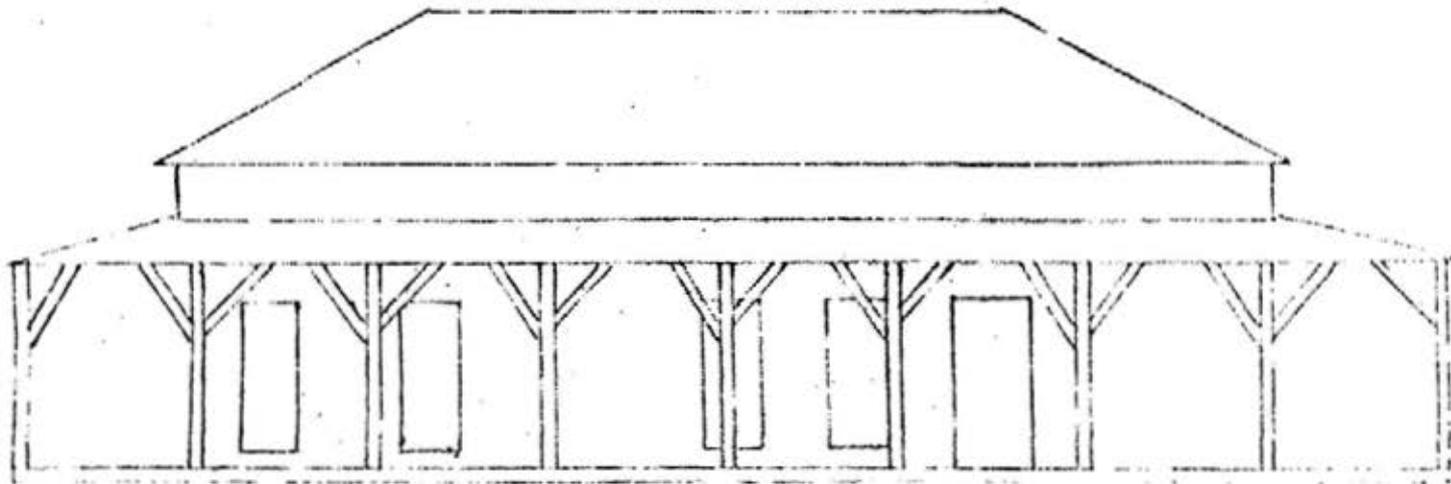
Top: Cross-sectional view of central
section of the New Hospital (HS 033).

Bottom: Side elevation of New Hospital
(HS 033).

Courtesy of the National Archives.



cut of central section.

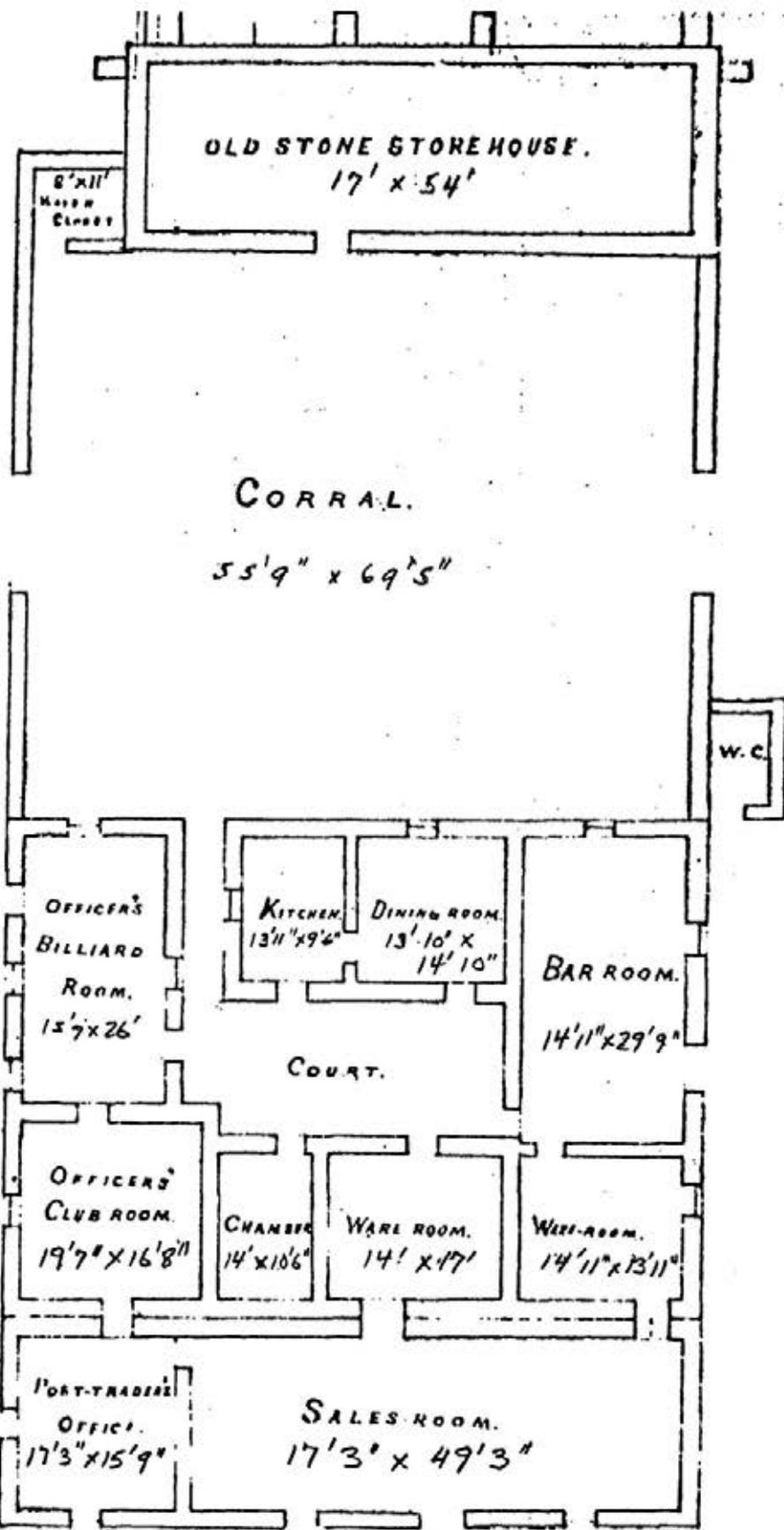


side section facing West

Illustration 29

Floor plan of the Post Trader's
Store (HS 035).

From "Proceedings of a board of
officers . . . ," July 8, 1890.
Miscellaneous records, Microfilm
MC 12, Arizona Historical Society.



OLD STONE STOREHOUSE.
17' x 54'

8' x 11'
HIDDEN
CLOSET

CORRAL.

55'9" x 69'5"

W.C.

OFFICERS'
BILLIARD
ROOM.
15'7" x 26'

KITCHEN.
13'11" x 9'6"

DINING ROOM.
13'10" x
14'10"

BAR ROOM.
14'11" x 29'9"

COURT.

OFFICERS'
CLUB ROOM.
19'7" x 16'8"

CHAMBER
14' x 16'6"

WARE ROOM.
14' x 17'

WELL ROOM.
14'11" x 13'11"

PORT-TRADING
OFFICE.
17'3" x 15'9"

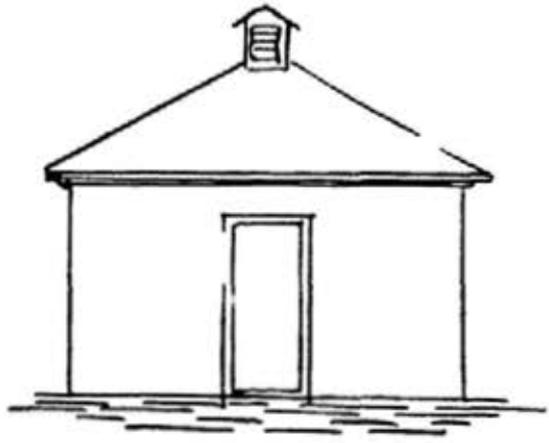
SALES ROOM.
17'3" x 49'3"

Illustration 30

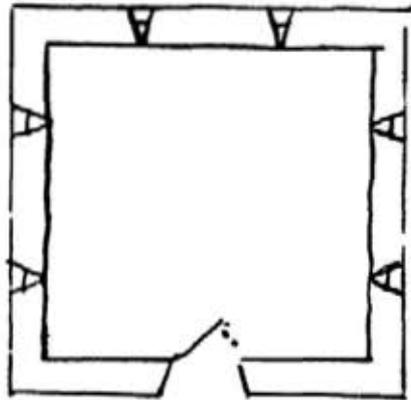
Left: Plan for the Magazine
(HS 036) erected at Fort
Bowie in 1890.

Right: Plan for the Gun Shed (HS 037)
at Fort Bowie. The structure
erected in 1890, however, did
not adhere to this design.

Courtesy of the National Archives.

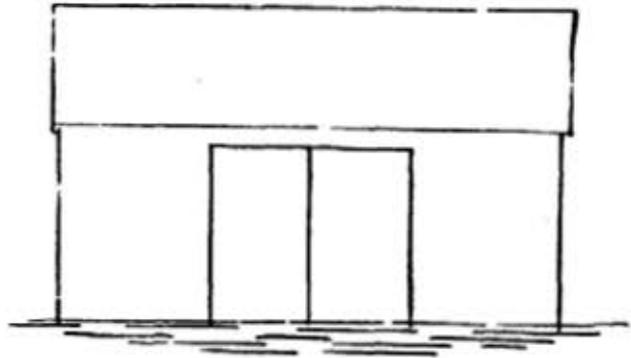


Scale 8 feet to inch

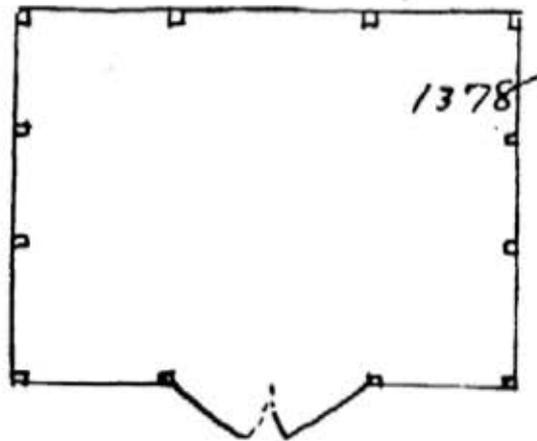


Proposed Magazine
at

Fort Bowie N.V.
March 31 1889



Scale 8 feet to inch



Proposed Gun-Shed
at
Fort Bowie, A.T.

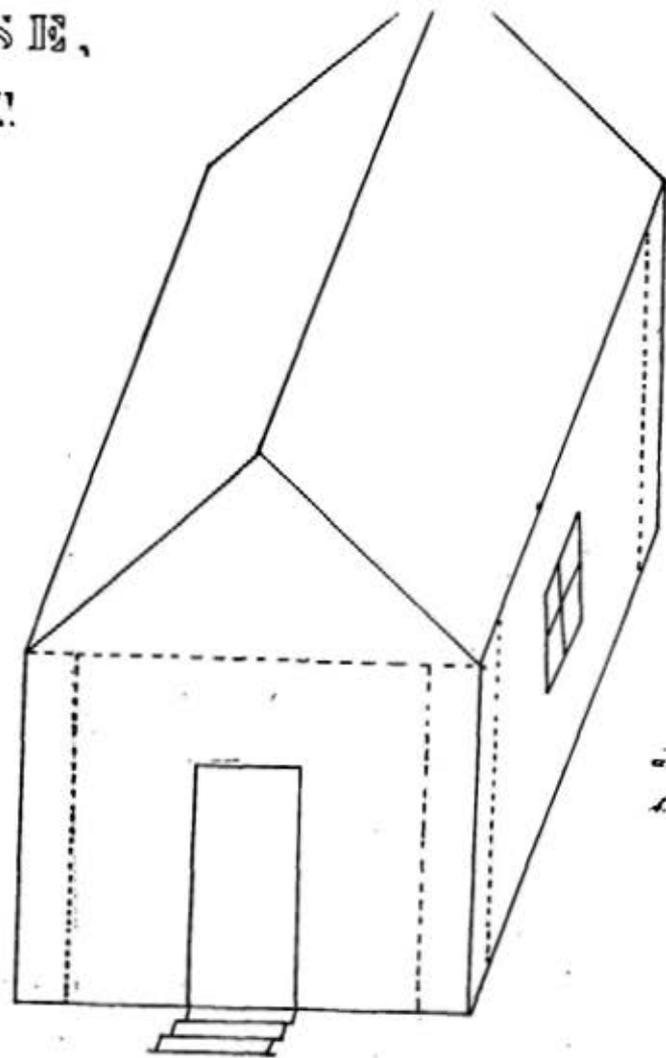
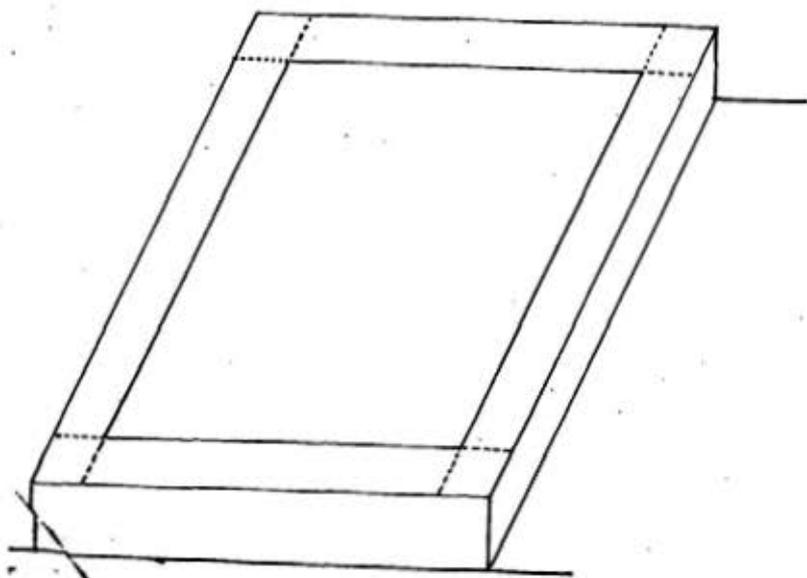
March 31, 1889.

Illustration 31

Plan of the Deadhouse proposed for Fort Bowie in 1889-90, but never erected. This is probably the plan drawn by Private Reginald Bradley.

Courtesy of the National Archives.

PLAN OF DEADHOUSE,
 TO BE ERRECTED AT
 FORT BOWIE, A. T.



*a foundation, & field ground
 & location of building*

Scale feet

Cost 27.25

Estimated cost 267.16 Class 15-93 Approved & authorized 53718 Approved

Illustration 32

Top: View of road running west from Fort Bowie through Apache Pass, as photographed by William A. Bell in November, 1867.

Courtesy of Colorado State Historical Society

Bottom: Lithograph print of the above photograph used to illustrate Bell's New Tracks in North America, published in London in 1869. The lithographer took considerable license with the photograph, embellishing the view to show part of the fortifications, soldiers present on the road, and cattle grazing in the valley.



Illustration 33

Earliest known pictorial representation of the first Fort Bowie, probably made about 1866. This is the best illustration of the first fort's building layout. Officers' quarters are located on the crest of the hill at right. The post trader's store is on the hill at center, while the enlisted men's quarters are in the draw below.

The present location of this picture is unknown, although it allegedly reposes today in the Los Angeles County Museum. The artist has not been identified.

Reproduced from Ben Jaastad, Man of the West: Reminiscences of George Washington Oakes, 1840-1917 (Tucson, 1956).



Illustration 34

The first Fort Bowie as photographed
in 1867 by William A. Bell. View to
the southwest.

Courtesy of the Colorado State
Historical Society.



Illustration 35

The first Fort Bowie by moonlight.

Engraving based on William A. Bell's
1867 photograph. From H.W. Bates (ed.),
Illustrated Travels (London, 1869), Vol. I.

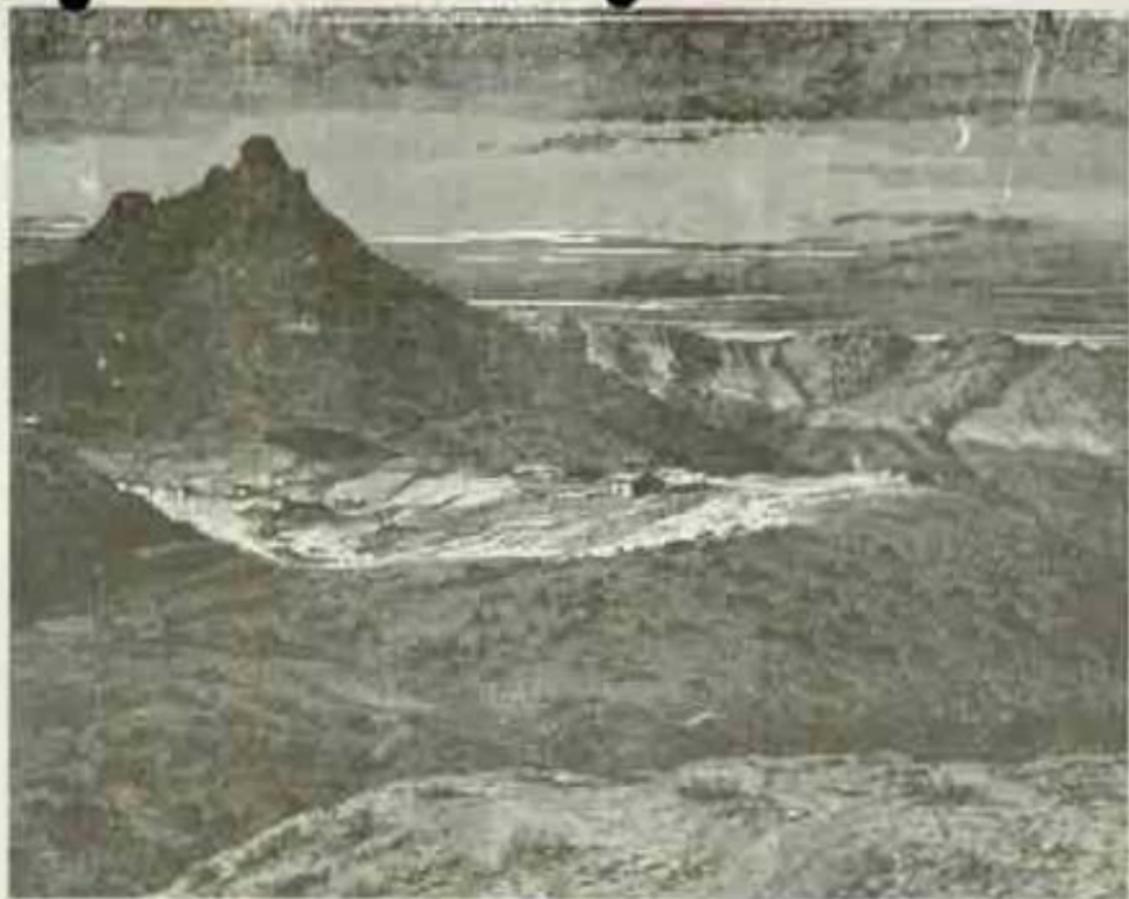


Illustration 36

The first Fort Bowie as it appeared about 1874 after the garrison had removed to the new site. Called "Camp Merijilda," the old post was used to house civilian employees. View to the south.

From a stereo view by D.P. Flanders of Los Angeles. Courtesy of Fort Bowie National Historic Site.

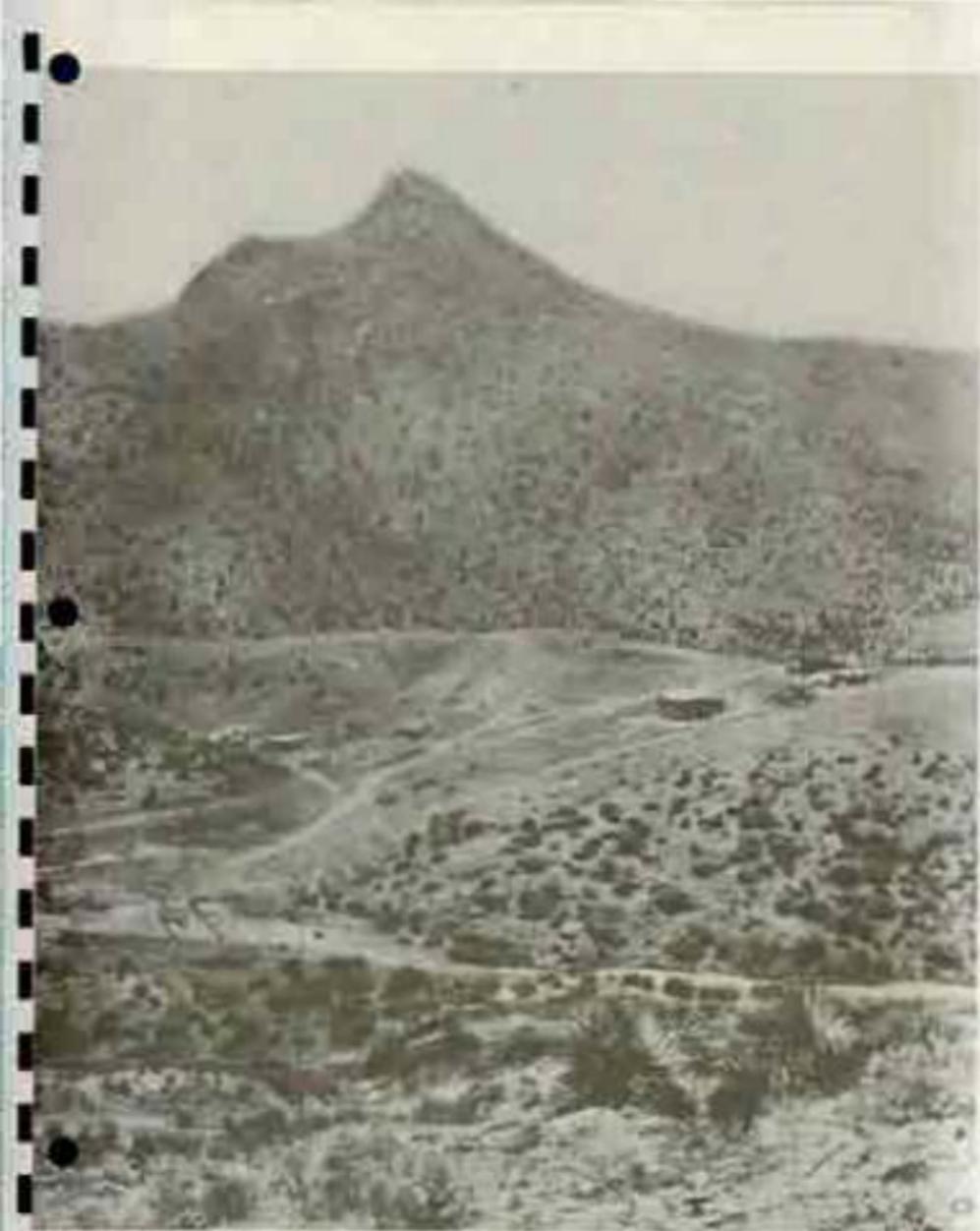


Illustration 37

Part of the first Fort Bowie about 1874, several years after the site had been abandoned by the Army. Note the Old Mail Station in the lower right foreground (not to be confused with the Butterfield Mail Station which was located elsewhere). The Old Mail Station (also known as the Old Mess House and the Laundresses' Quarters) served as quarters for civilian employees until 1894. View to the northwest.

From a stereo view by D.P. Flanders.
Courtesy of Fort Bowie National Historic Site.



Illustration 38

Another view of part of the first Fort Bowie taken in December, 1875, or January, 1876, showing the long adobe barracks erected on the slope in 1866. Buildings at foot of the hill are the Old Mail Station and its stable. View to the west.

From a stereo view by H. Buehman.
Courtesy of Fort Bowie National
Historic Site.



Illustration 39

Top: The first Fort Bowie as it appeared in 1893 or 1894. Notice hip roof added to the 1866 barracks. Also, a new roof has been added to the Laundresses' Quarters (HS 030) (Old Mail Station). View to the west.

Photograph by Owen Wister. Courtesy of the Arizona Historical Society.

Bottom: Stable to the Old Mail Station (HS 030) as it appeared in 1893 or 1894.

Photograph by Owen Wister. Courtesy of the Arizona Historical Society.



Illustration 40

The Old Mail Station (HS 030) as it appeared in 1890. In the distance can be seen a part of HS 029, the Civilian Employees' Quarters. View to the north.

From "Proceedings of a board of officers. . .," July 8, 1890. Miscellaneous records, Microfilm MC 12, Arizona Historical Society.



Illustration 41

Earliest known graphic depiction of the second Fort Bowie. The legend reads, "Camp Bowie, Apache Pass, A.T. New camp Qr. of Co. D 21st U.S. Inf'y Nov. 20 1869." View to the south. This water color was drawn by an unidentified soldier and given to his comrade, Aaron Abrams, who was also stationed at Fort Bowie. Abrams's son, Robert, of Orange City, Florida, presented the picture to Dr. Benjamin Sacks to pass on to the National Park Service. The original reposes today at Fort Bowie National Historic Site.

Courtesy of Fort Bowie National Historic Site.

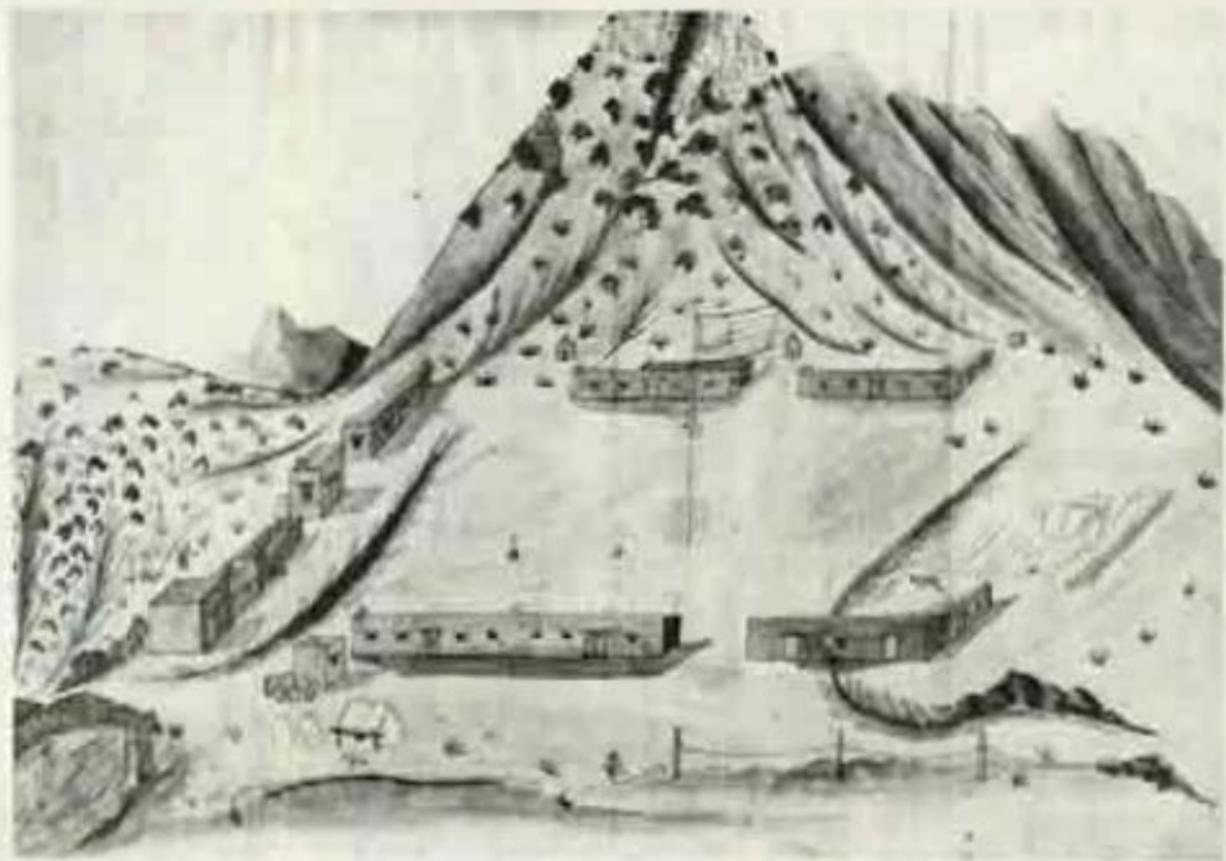


Illustration 42

Left: The second Fort Bowie, early 1874, before the eastward-running addition had been built on the Old Hospital (HS 015).

From a stereo view by D.P. Flanders. Courtesy of Arizona Historical Foundation.

Right: Fort Bowie, Arizona Territory, early in 1874. Note sink for hospital and guardhouse at lower right.

From a stereo view by D.P. Flanders. Courtesy of Arizona Historical Foundation.

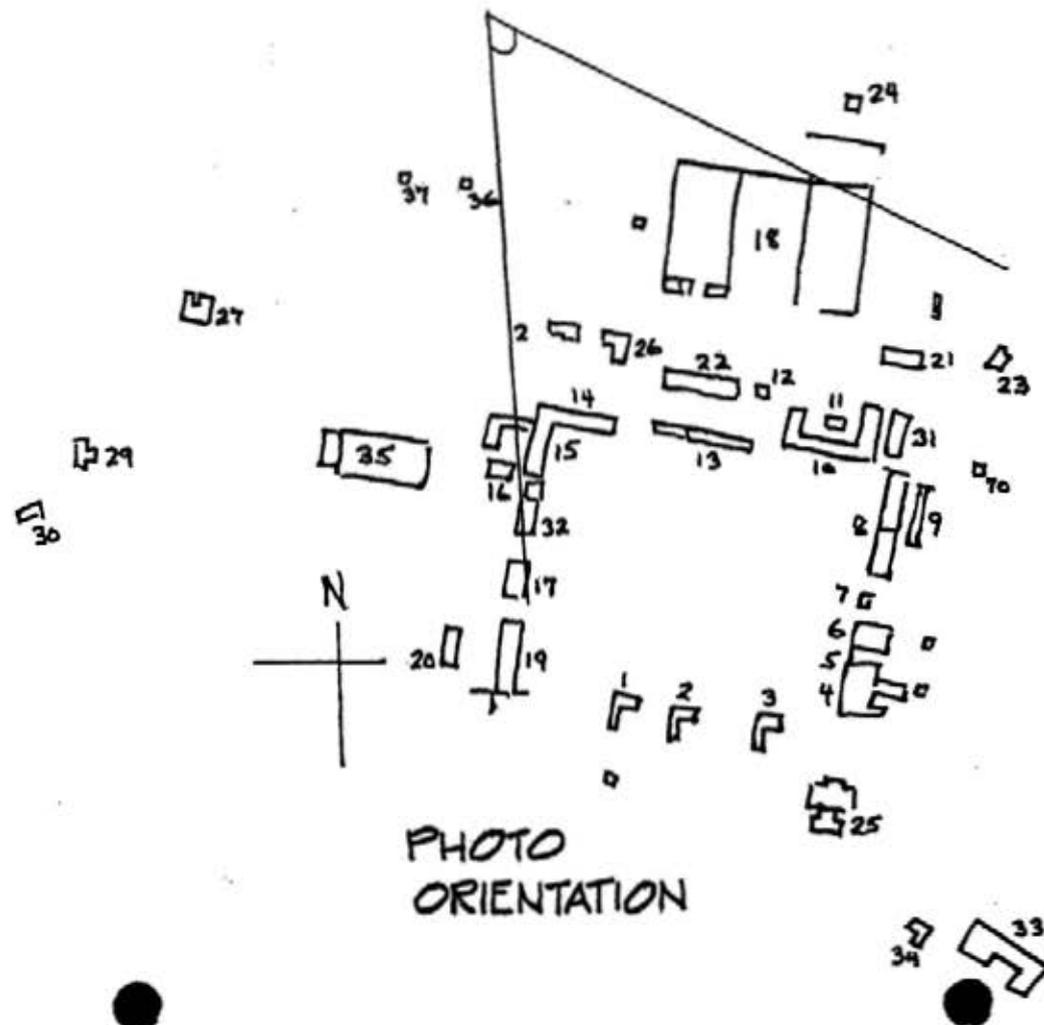




Illustration 43

Fort Bowie, c. late 1874.

Photographer unidentified, but possibly D.P. Flanders. Courtesy of Sharlot Hall Museum.

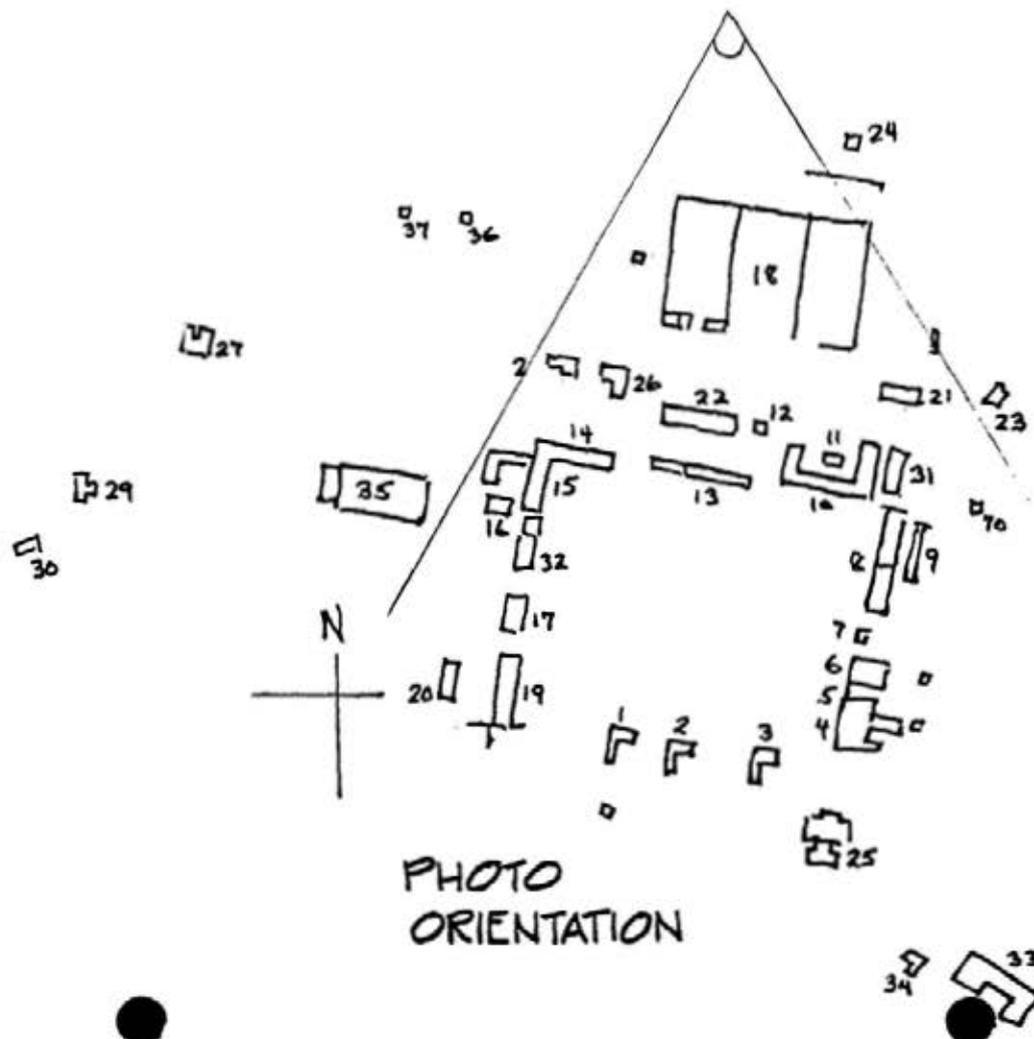
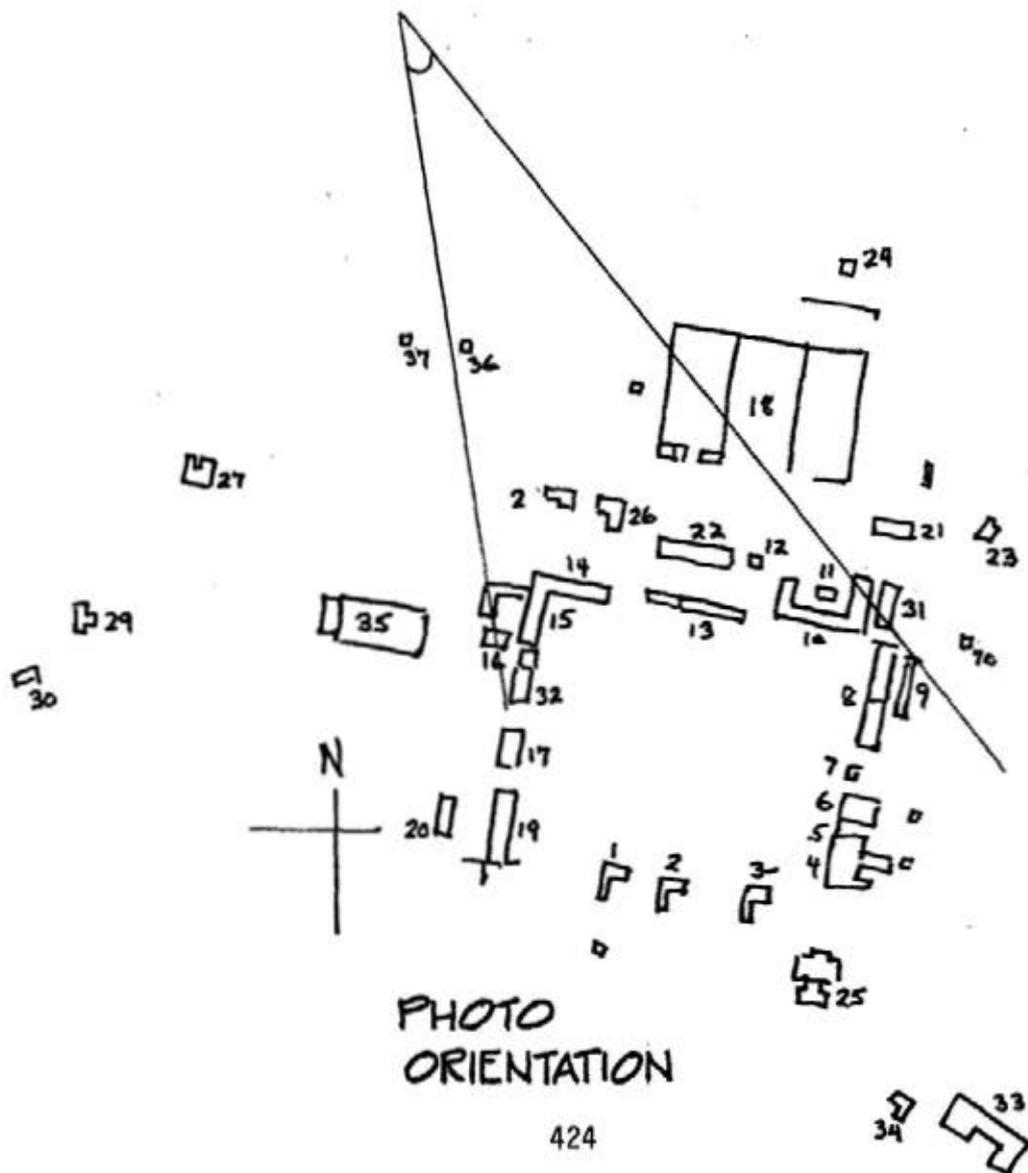




Illustration 44

Another view of Fort Bowie, c. late summer, 1874.

Photograph by D.P. Flanders. Courtesy of the National Archives.



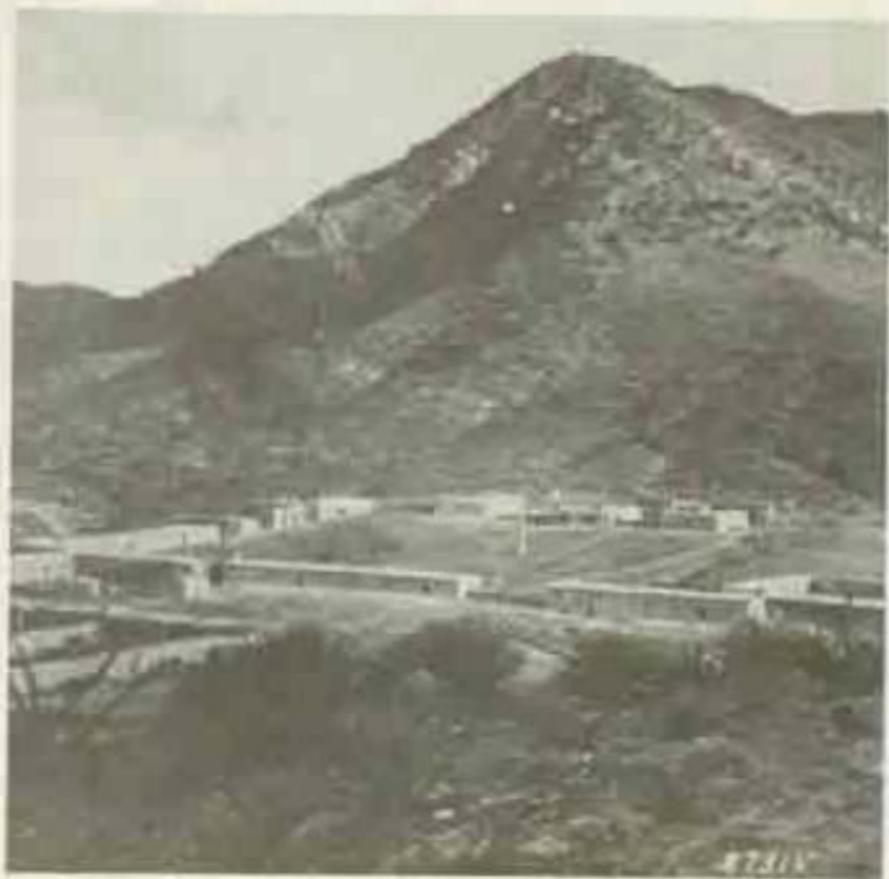


Illustration 45

Fort Bowie in 1876 or 1877. This photograph was taken after the construction of the second guard house (HS 016) on the same site of the first. This building was erected closer to the Old Hospital (HS 015) than its predecessor (see preceding illustration).

Photographer unidentified. Courtesy of the Arizona Historical Foundation.

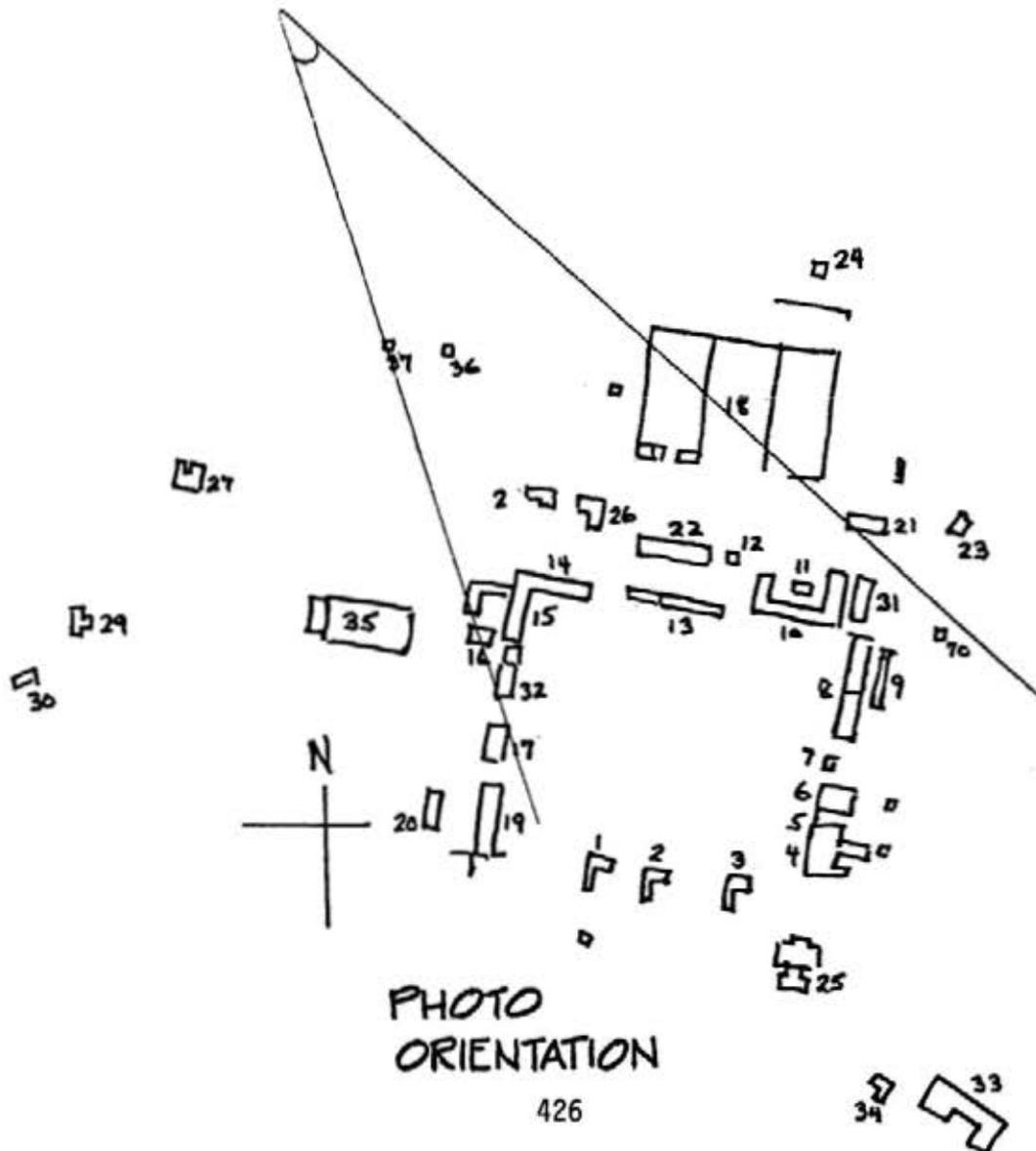






Illustration 47

Fort Bowie late in 1885 or early in 1886. Note the tent surrounded by an adobe wall adjacent to the New Guard House (HS 026).

Photograph by Baker and Johnston.
Courtesy of Fort Bowie National
Historic Site.

430

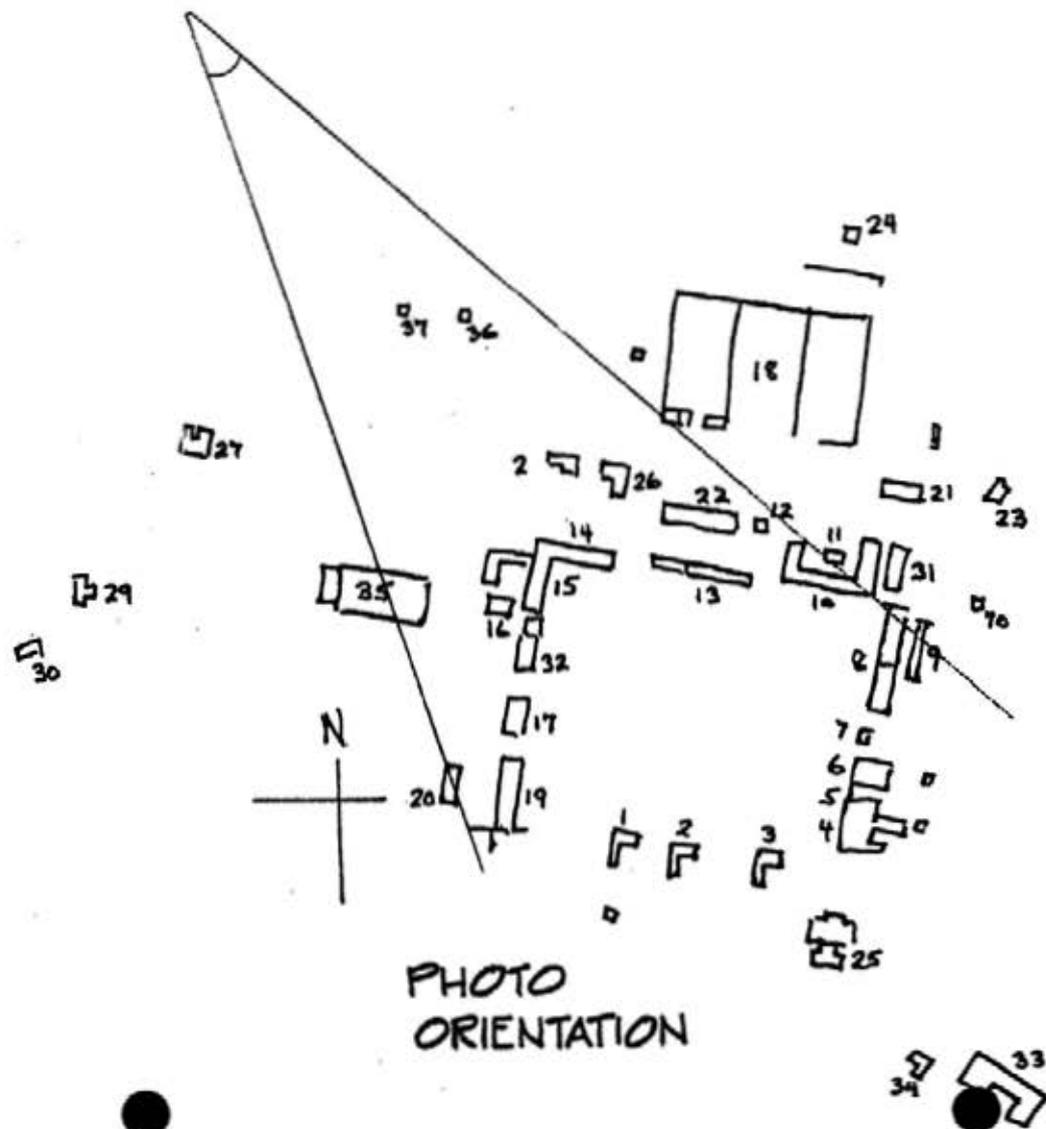




Illustration 48

Engraving of the preceding Baker and Johnston photograph. This picture accompanied an article on Fort Bowie appearing in Frank Leslie's Illustrated Newspaper, April 3, 1886, at the height of the Geronimo Campaign.

Courtesy of Fort Bowie National Historic Site.



A. B.

... ..



Illustration 50

Fort Bowie, summer, 1886, showing oven of New Bakery (HS 028) under construction. Note small unidentified structure on hillside above and left (east) of the Commanding Officer's Quarters (HS 025).

Photograph by A.F. Randall.
Courtesy of Fort Bowie National
Historic Site.





Illustration 52

Fort Bowie, c. 1887-88.
 Note that the Wash House
 (HS 011) on the north side
 of the Cavalry Barracks
 (HS 010) (see preceding
 illustration) has been
 replaced by a larger
 structure.

Photograph allegedly taken
 by First Lieutenant Charles B.
 Gatewood. Courtesy of Fort
 Bowie National Historic Site.

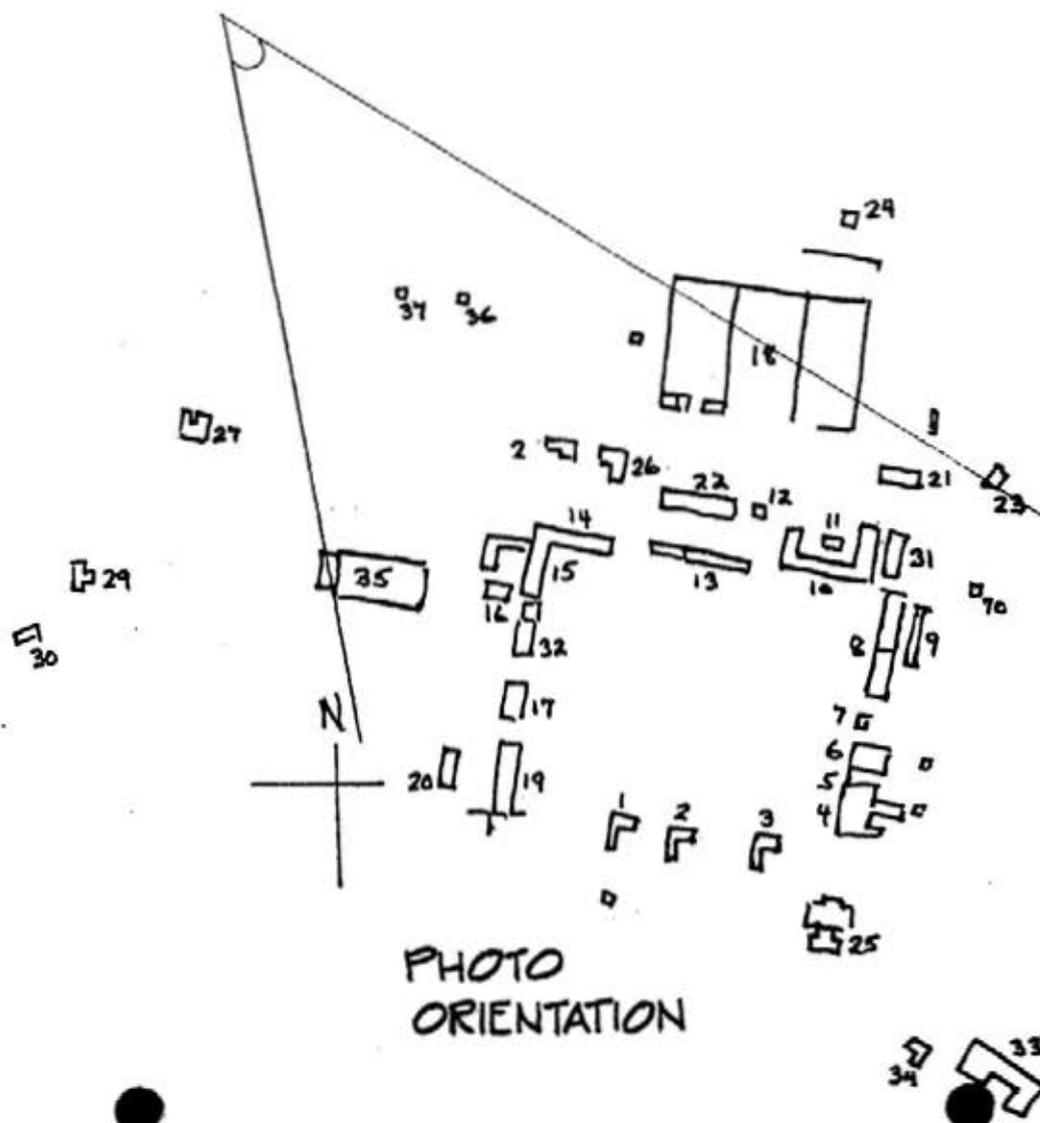


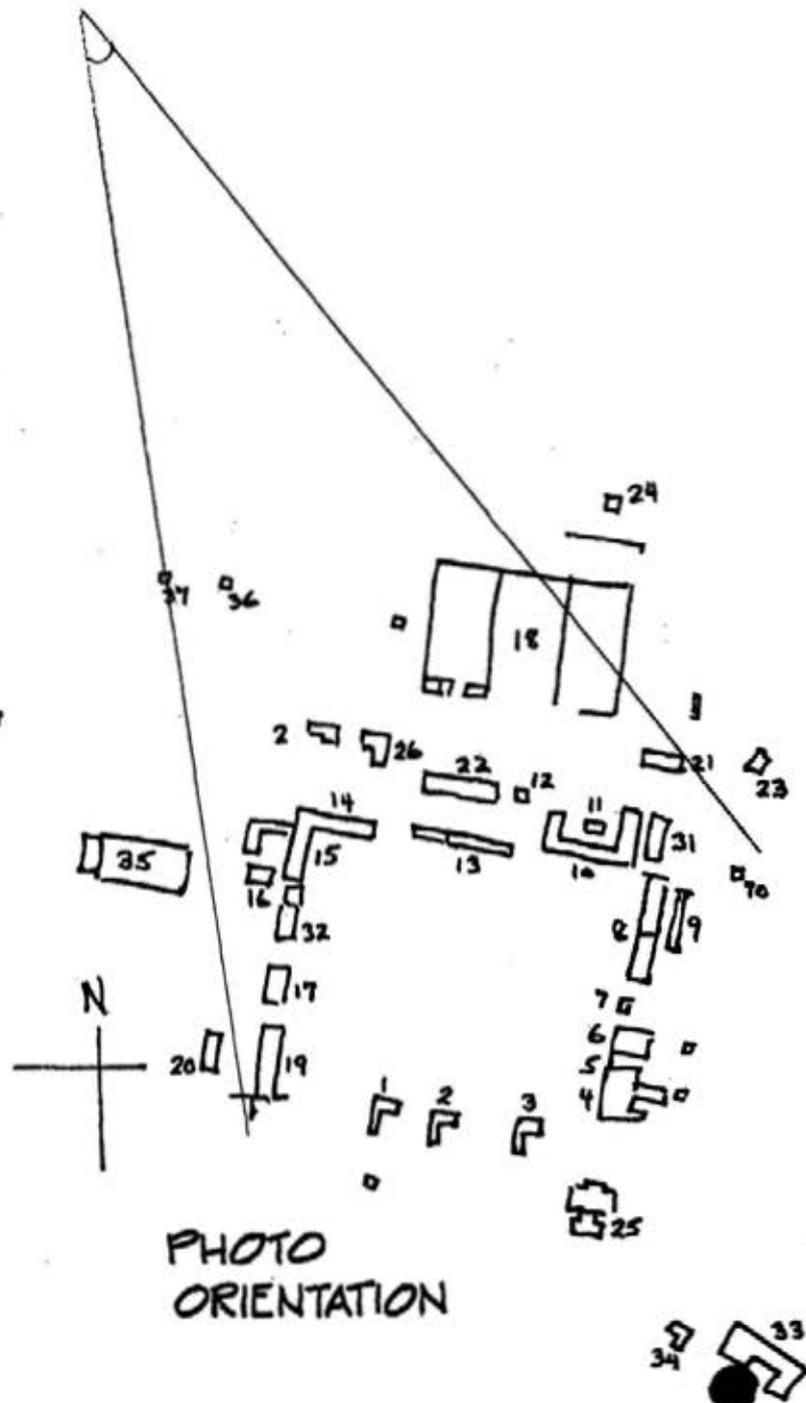


Illustration 53

Fort Bowie, c. 1887-88.
Officer in foreground is
Assistant Surgeon William D.
Crosby.

Photographer unidentified.
Courtesy of Special Collections,
University of Arizona Library.

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W. D. Crocker
and family

Illustration 54

Fort Bowie, 1893-94.
The New Hospital (HS 033)
can be seen right of center.

Photographer unidentified.
Courtesy of Fort Bowie
National Historic Site.

444

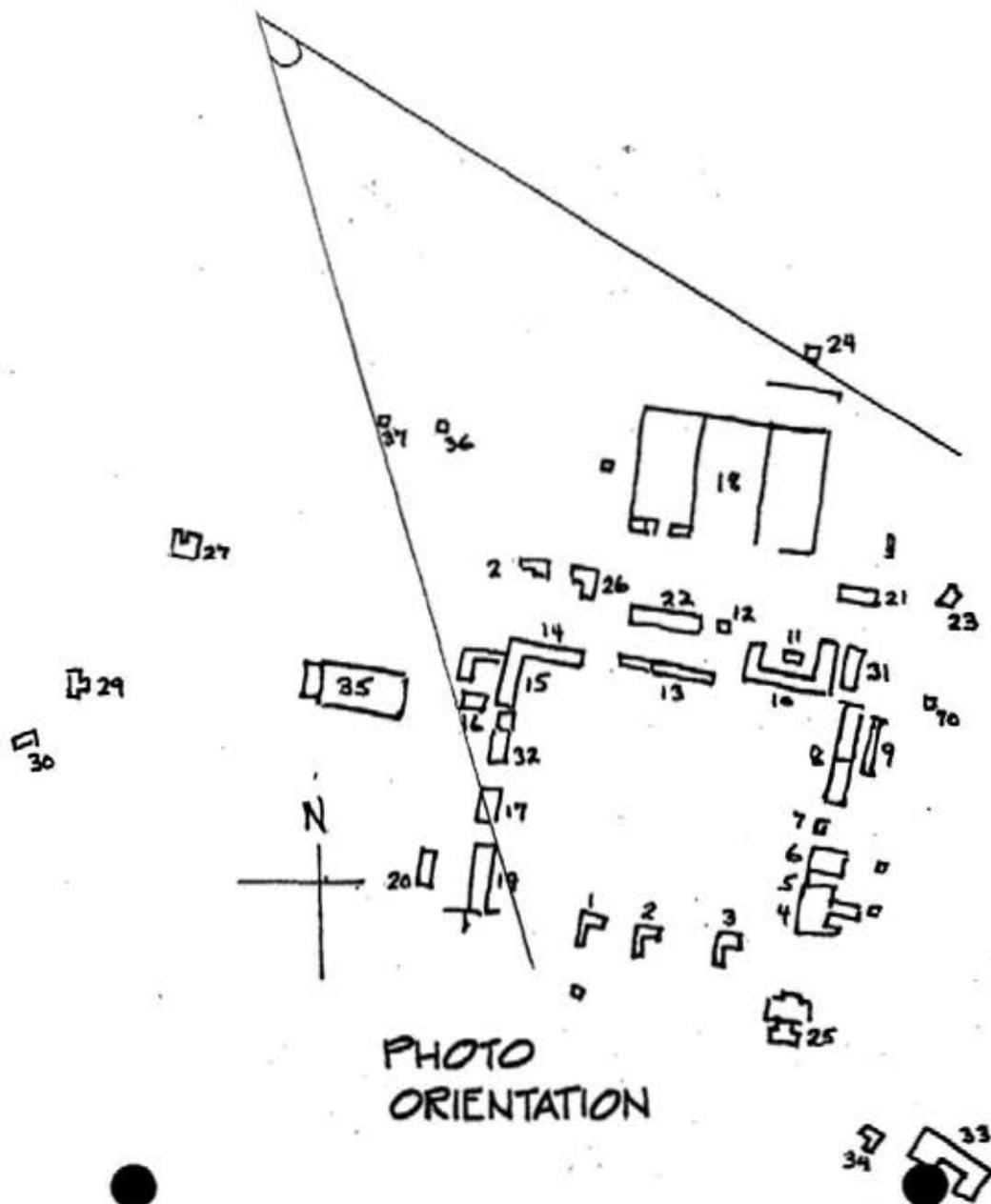
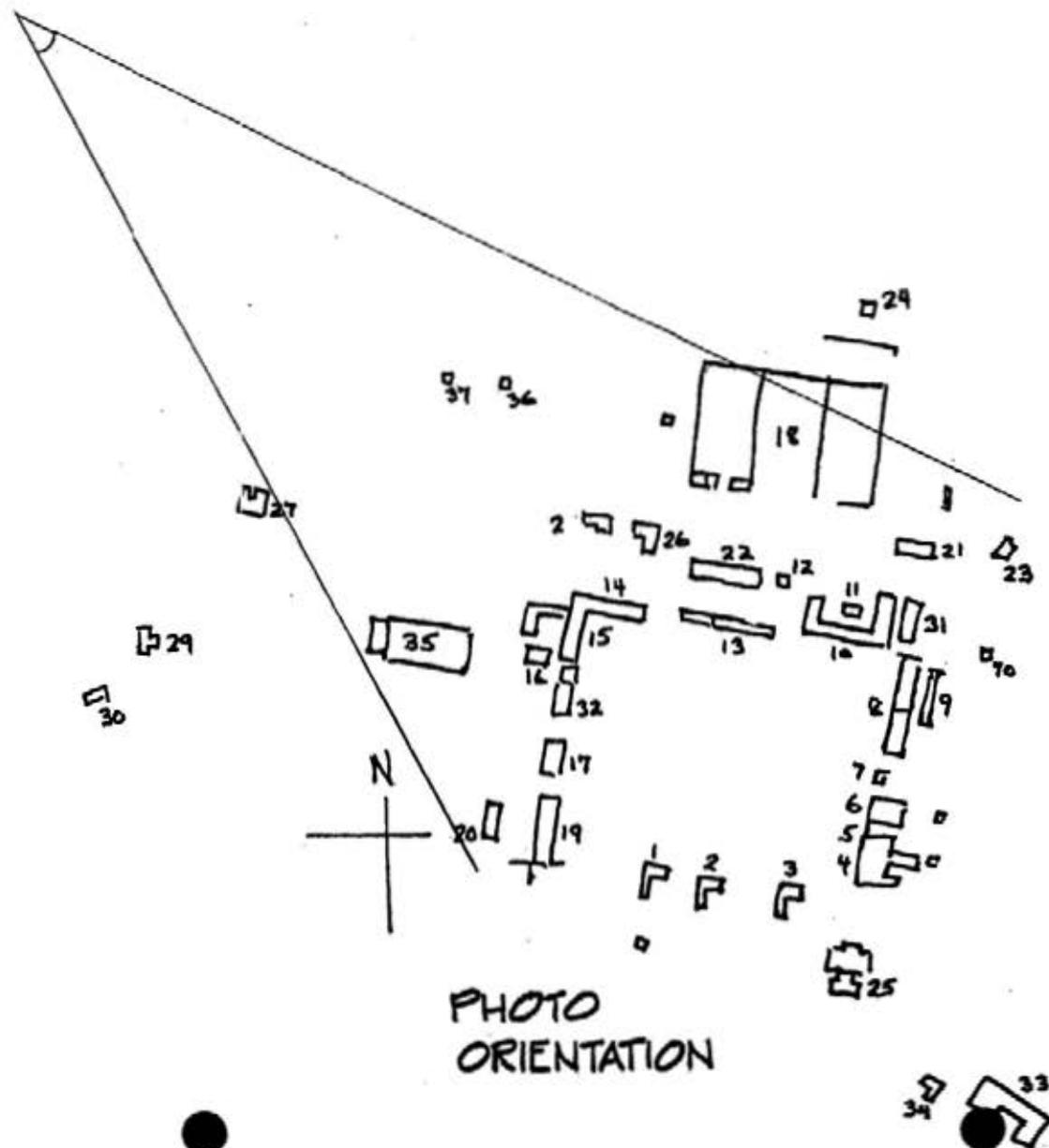




Illustration 55

Fort Bowie, 1894, shortly before the post was abandoned by the Government.

Photograph by Feldman of Tucson, Arizona. Courtesy of Fort Bowie National Historic Site.



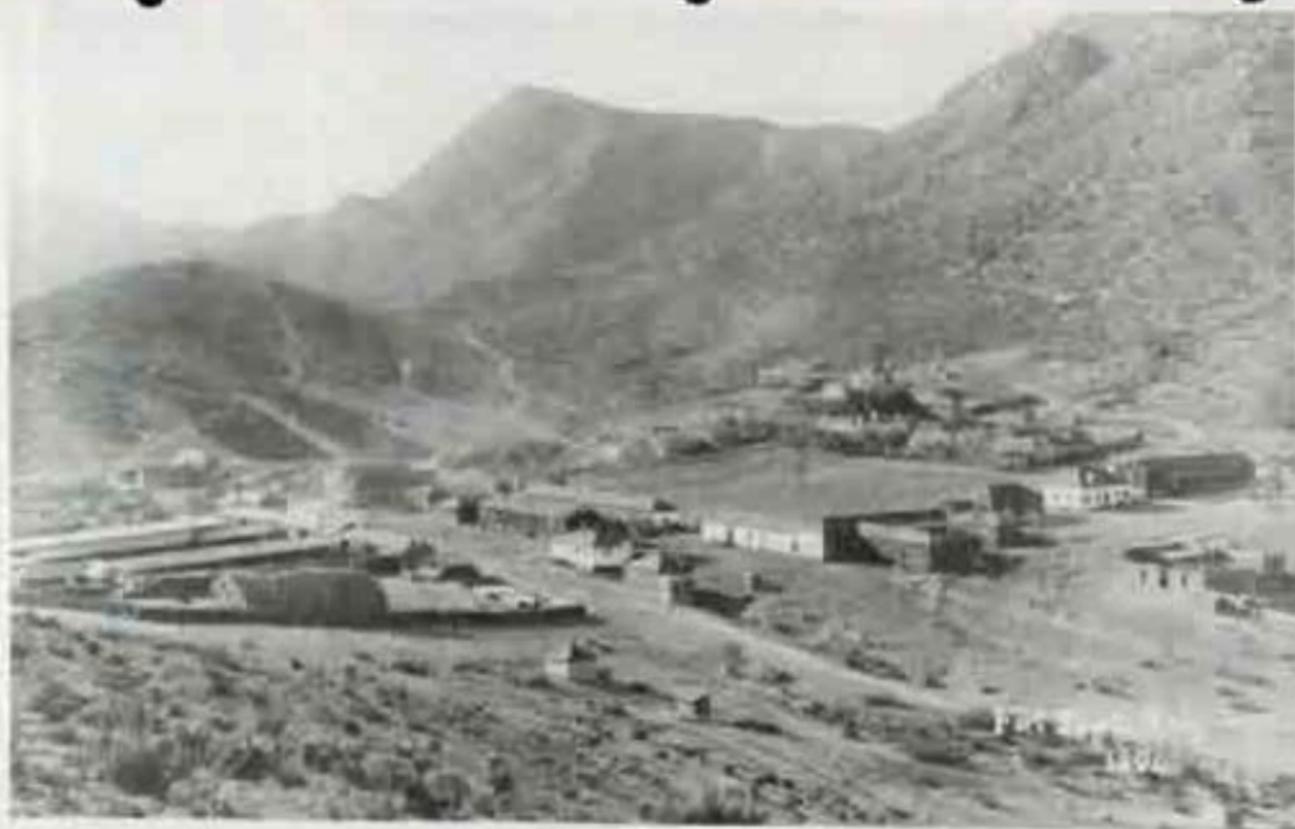


Illustration 56

Fort Bowie, 1886. Scene following Geronimo's surrender. Buildings in background, right to left, are Officers' Quarters HS 001, HS 002, and HS 003.

Photographed by C.S. Fly. Courtesy of the Western History Collections, Denver Public Library.

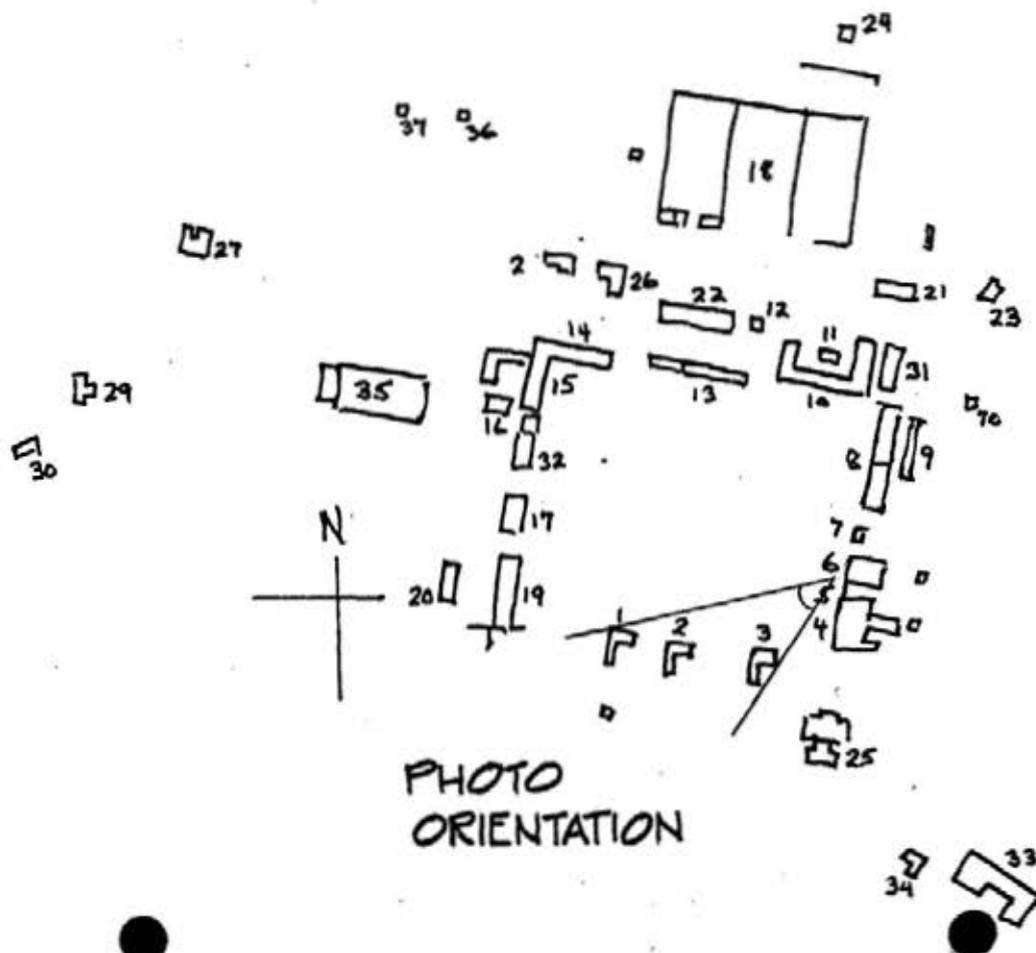




Illustration 57

Fort Bowie, 1886. Scene following Geronimo's surrender. Buildings wholly or partially visible are, right to left: Officers' Quarters (HS 003), Commanding Officer's Quarters (HS 025), Officers' Quarters (HS 004, HS 005, HS 006), Tailor Shop (HS 007), and Cavalry Barracks (HS 008).

Photographed by C.S. Fly.
Courtesy of Fort Bowie National Historic Site.

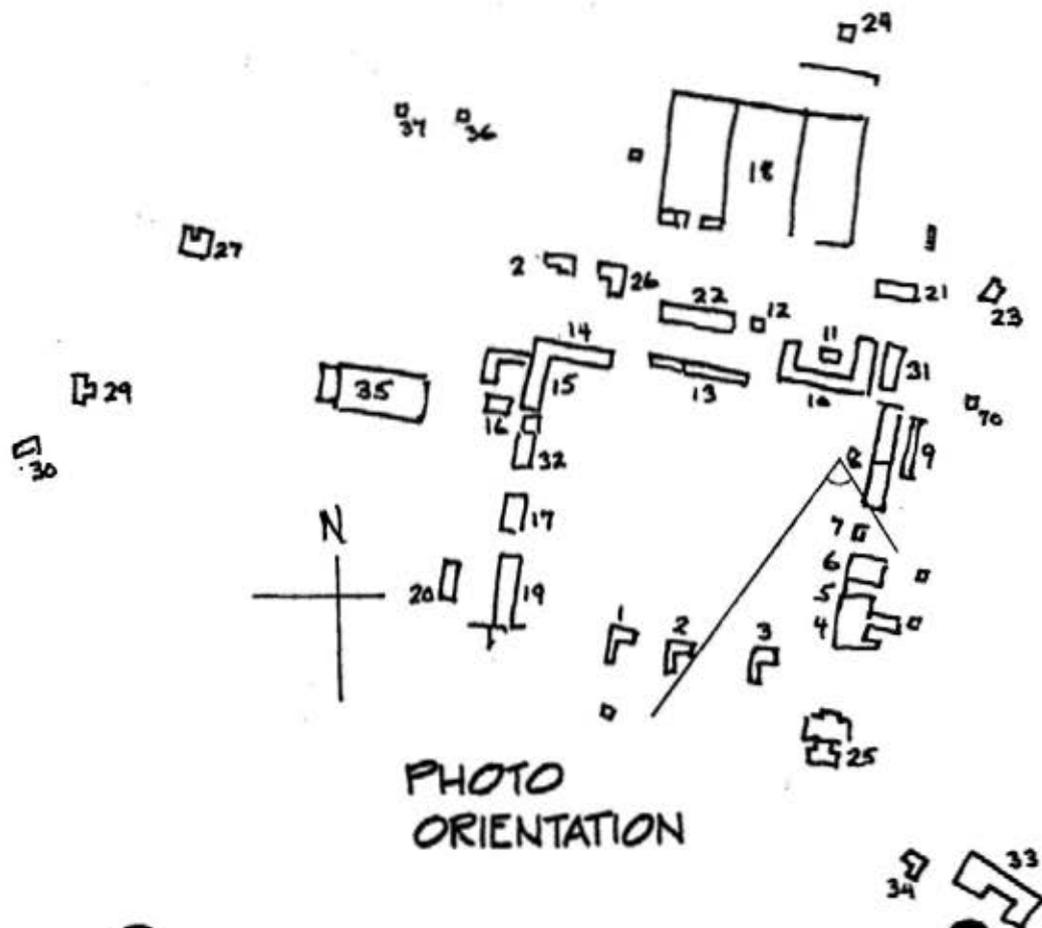




Illustration 58

Fort Bowie, 1885. View of east side of parade. Buildings present, right to left, are Officers' Quarters (HS 004, HS 005, HS 006), Tailor Shop (HS 007), Cavalry Barracks (HS 008), Butcher Shop (HS 021), Cavalry Barracks (HS 010). Note lantern and lamppost at right, and also the terraced walls built to compensate for the sloping ground.

Photographer unidentified. Courtesy of Fort Bowie National Historic Site.

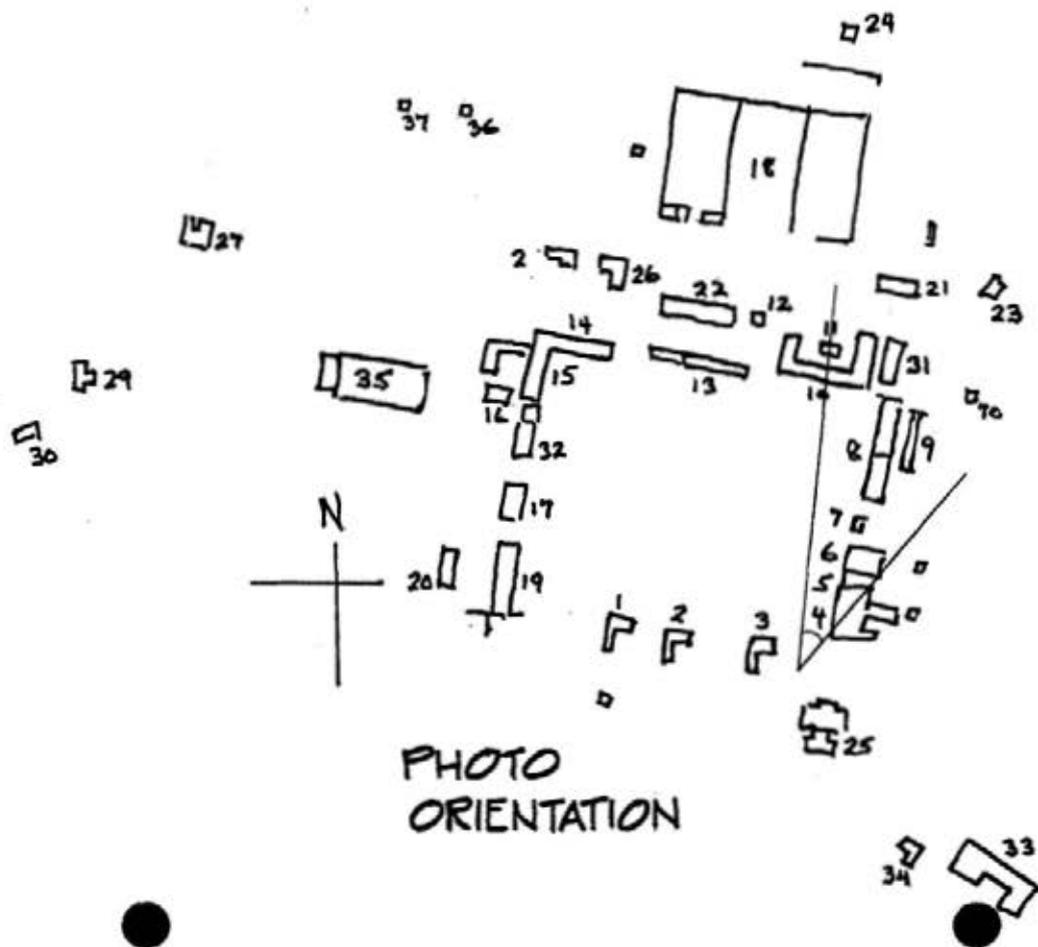




Illustration 59

Fort Bowie, 1893 or 1894.
Structures evident, right
to left, are: Officers'
Quarters (HS 004, HS 005,
HS 006--partly hidden by
cottonwood trees) and
Cavalry Barracks (HS 010).
Chimney at left belongs to
Officers' Quarters (HS 003).
Note lampposts.

Photograph by Owen Wister.
Courtesy of the Arizona
Historical Society.

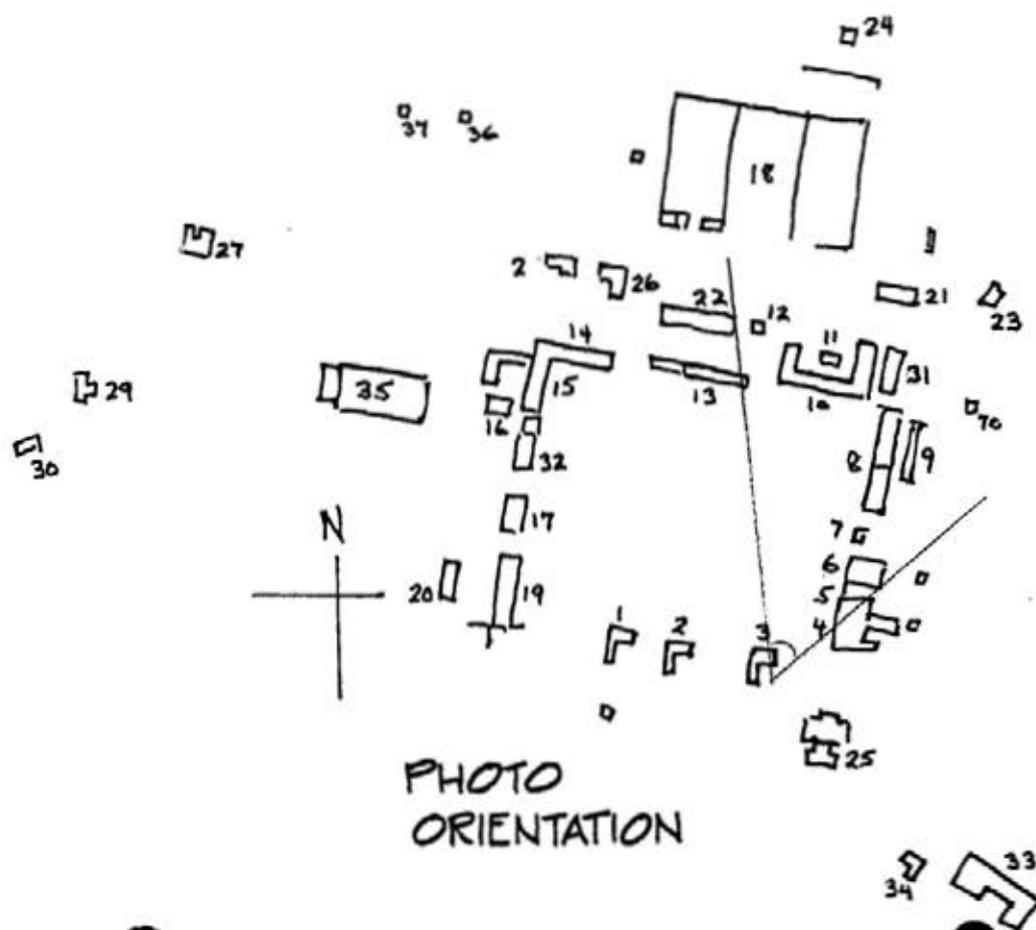




Illustration 60

Fort Bowie, 1888. View
of porch area of Officers'
Quarters (HS 004, HS 005).

Photographer unidentified.
Courtesy of Fort Bowie
National Historic Site.

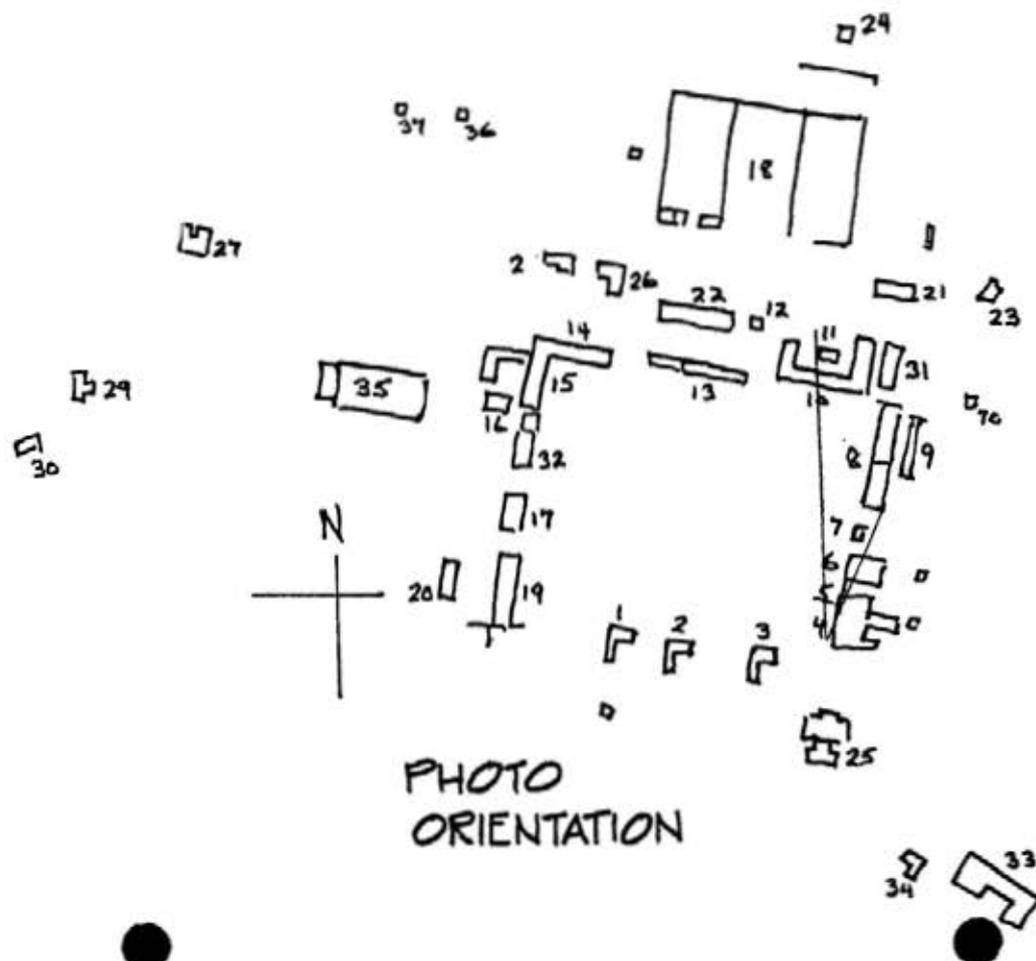






Illustration 62

Fort Bowie, September, 1886.
Scene during dress parade.
Buildings, left to right, are:
Officers' Quarters (HS 006),
Tailor Shop (HS 007), Cavalry
Barracks (HS 008), and a corner
of Cavalry Barracks (HS 010).

Photographer unidentified.
Courtesy of Fort Bowie
National Historic Site.

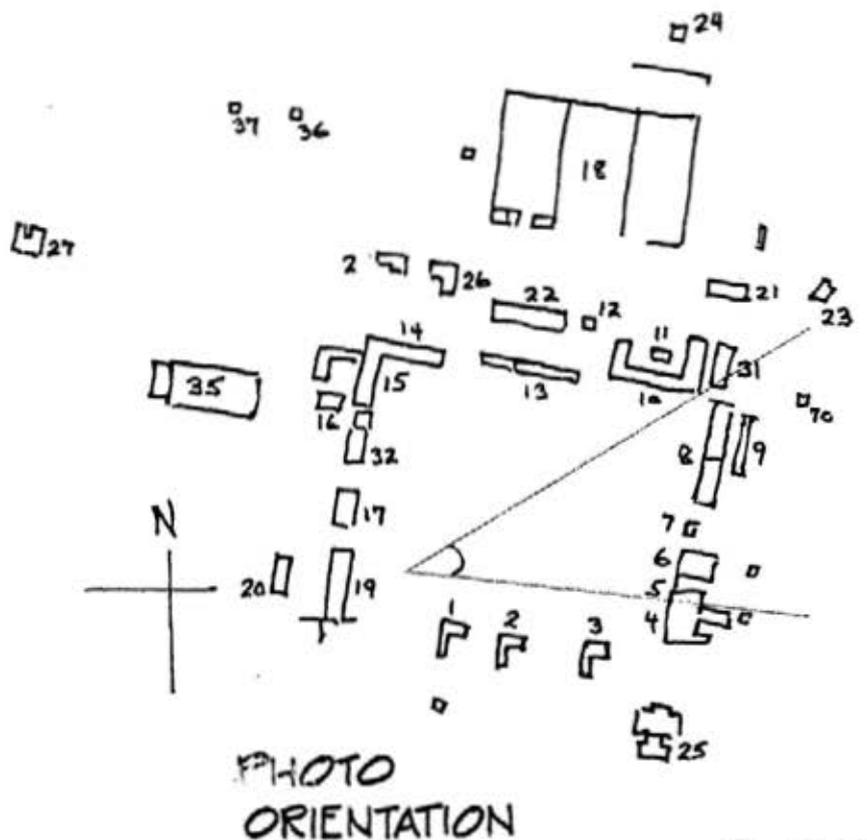




Illustration 63

Fort Bowie, 1886. Scene following the surrender of the hostiles under Geronimo, showing the tribesmen in front of the Tailor Shop (HS 007), at that time the Post Bakery. The building with the lattice-work is Officers' Quarters (HS 006).

Photographer unidentified.
Courtesy of the United States Military Academy.

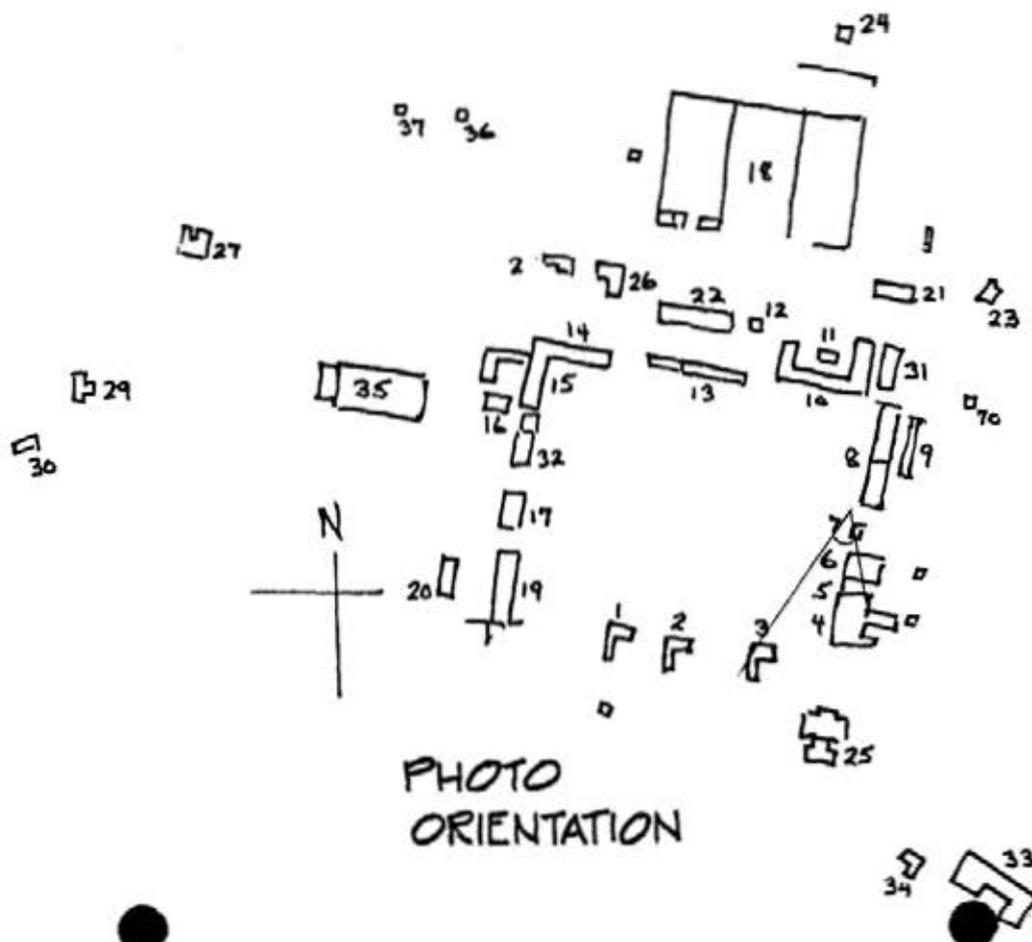




Illustration 64

Fort Bowie, 1886. Scene after Geronimo's surrender. Parts of structures visible are, right to left: Officers' Quarters (HS 003), Commanding Officer's Quarters (HS 025), Officers' Quarters (HS 025), Officers' Quarters (HS 006), Tailor Shop (Bakery at that time) (HS 007), and Cavalry Barracks (HS 008).

Photographed by A.F. Randall
Courtesy of Fort Bowie
National Historic Site.

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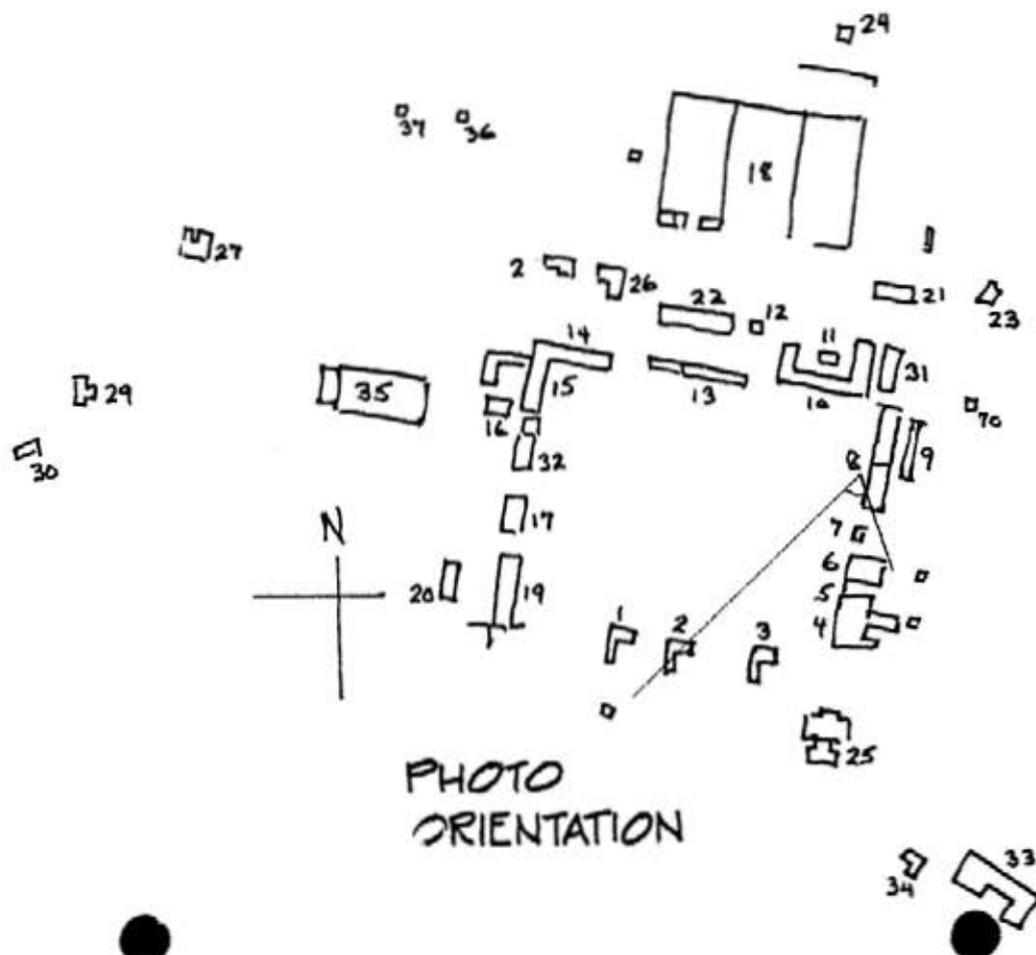




Illustration 65.

Fort Bowie, 1891, showing the rear of some structures. Buildings present are, left to right: Commanding Officer's Quarters (HS 025), Officers' Quarters (HS 004, HS 005, HS 006), Earth Closets or Woodsheds (HS 055, HS 056), Tailor Shop (HS 007), Cavalry Barracks (HS 008), and Kitchen (HS 009). In the distance at right can be seen the Infantry Barracks (HS 019).

Photograph by Joseph Amasa Munk.
Courtesy of the Southwest Museum.

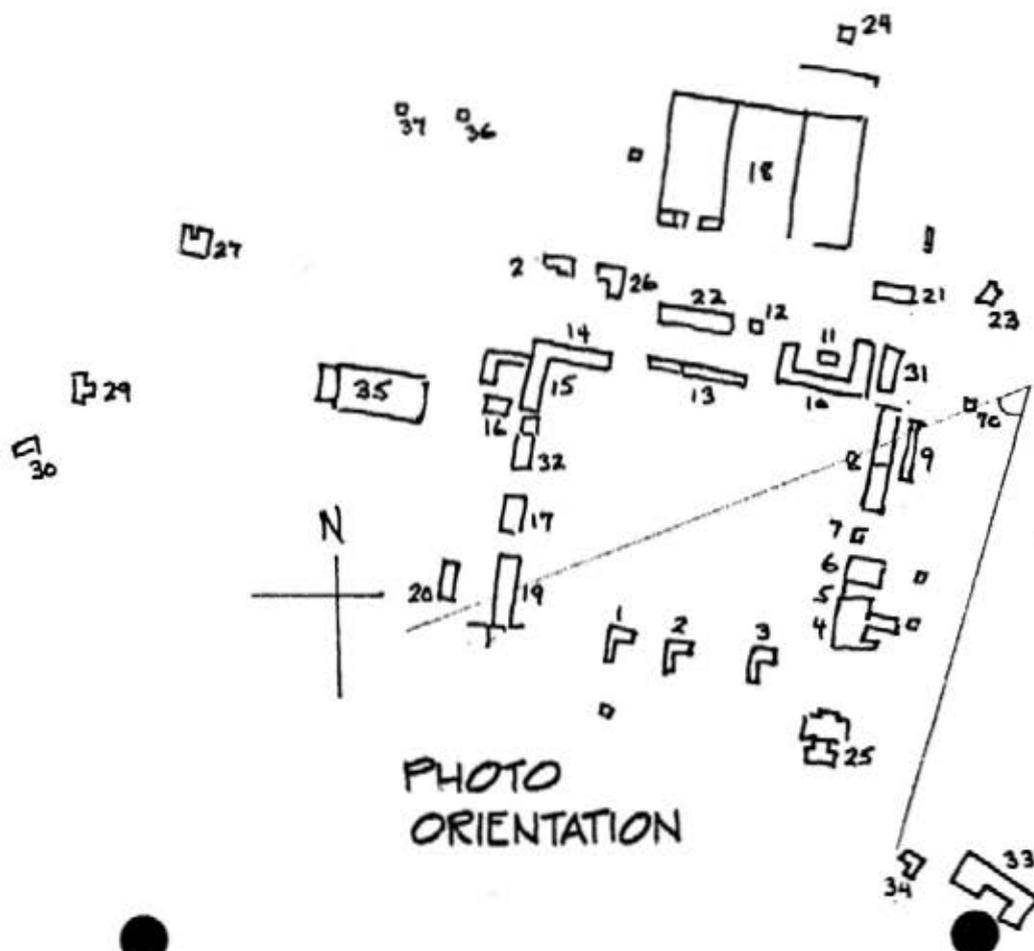




Illustration 66

Guard mount at Fort Bowie,
September 8, 1886. Notice
the construction of the flag
staff at center. Structures
visible in the background are,
right to left, Cavalry Barracks
(HS 008, HS 010), and Granary
(HS 013).

Photographer is unidentified.
Courtesy of Arizona Historical
Society.

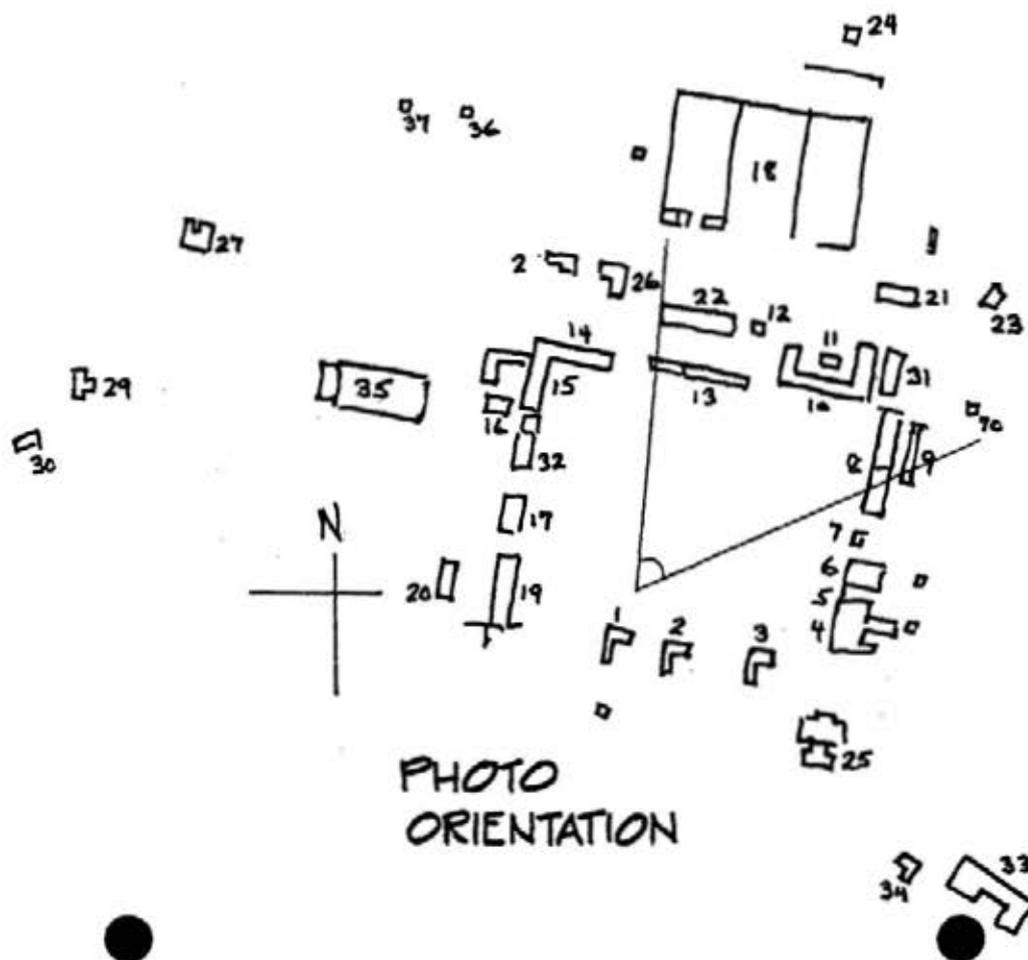






Illustration 68

View of Fort Bowie, c. 1890, showing the children of Major Thomas McGregor sitting in a donkey cart. Buildings apparent in the background are, right to left: Cavalry Barracks (HS 010), Granary (HS 013), and Subsistence Storehouse (HS 014).

Photographer unidentified. Courtesy of the Arizona State Library.

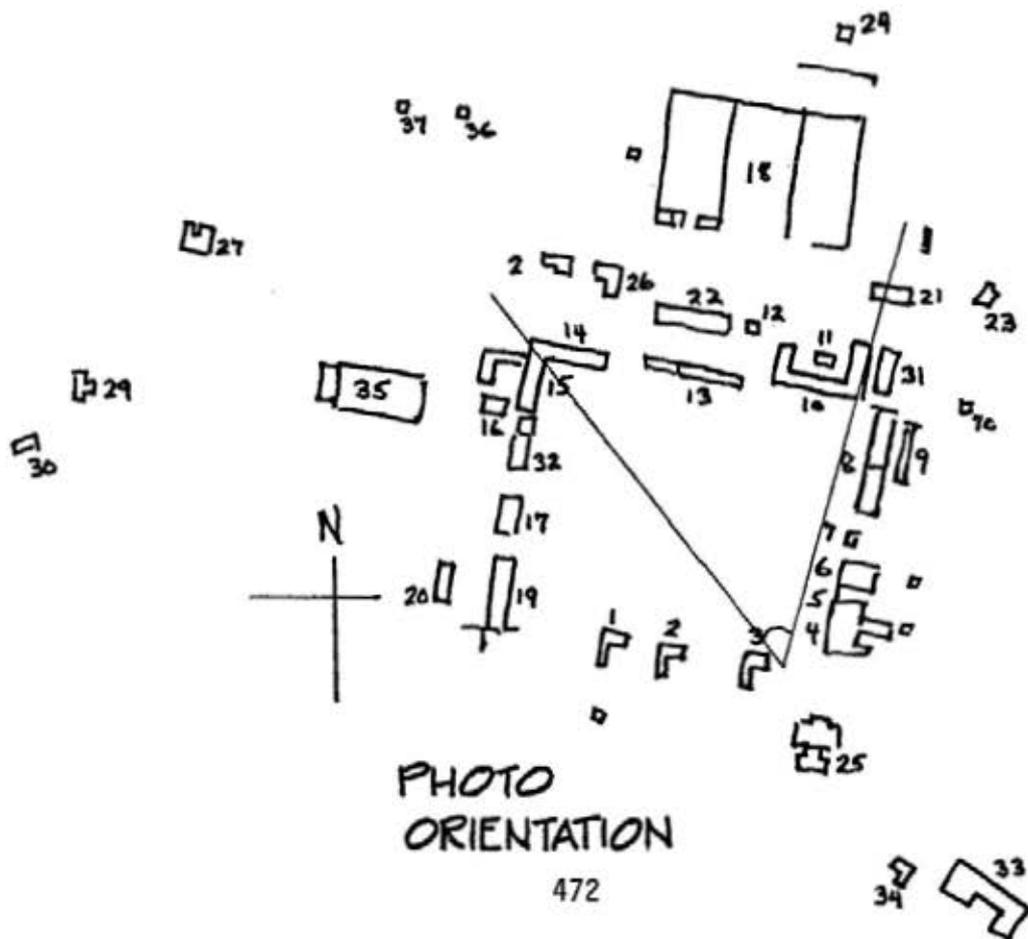




Illustration 69

Fort Bowie, 1888. Structures visible, right to left: Subsistence Storehouse (HS 014), Old Hospital (HS 015), Old Guard House (HS 016), and Post Trader's Store (HS 035).

Photographer unidentified.
Courtesy of the Arizona Historical Society.

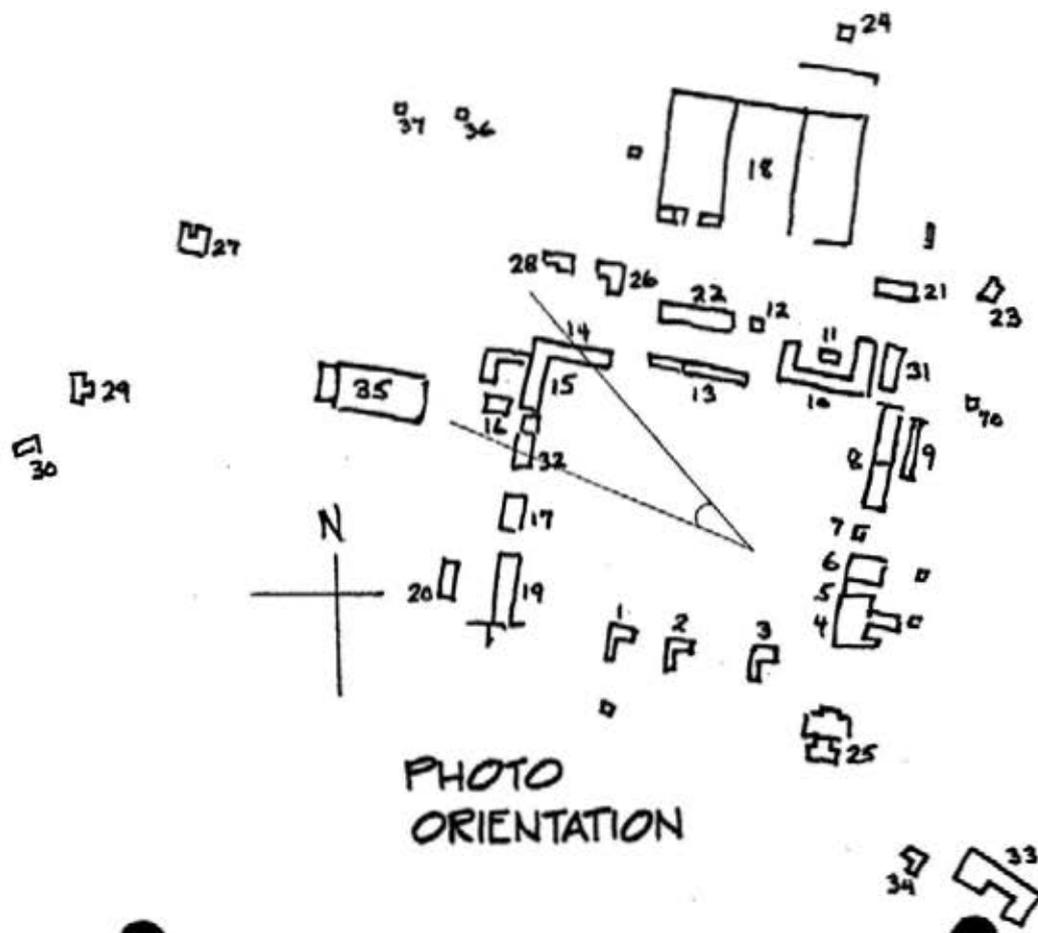






Illustration 71

Major Eugene B. Beaumont (with cane)
and some of his officers at Fort Bowie,
1886. They are seated in front of one
of the Officers' Quarters, probably
HS 005.

Photographer unidentified. Courtesy of
the Arizona Historical Society.



Illustration 72

The Commanding Officer's Quarters
(HS 025), Fort Bowie, as it appeared
soon after its completion, late 1884
or early 1885.

Photographer unidentified. Courtesy
of the United States Army Military
History Institute.

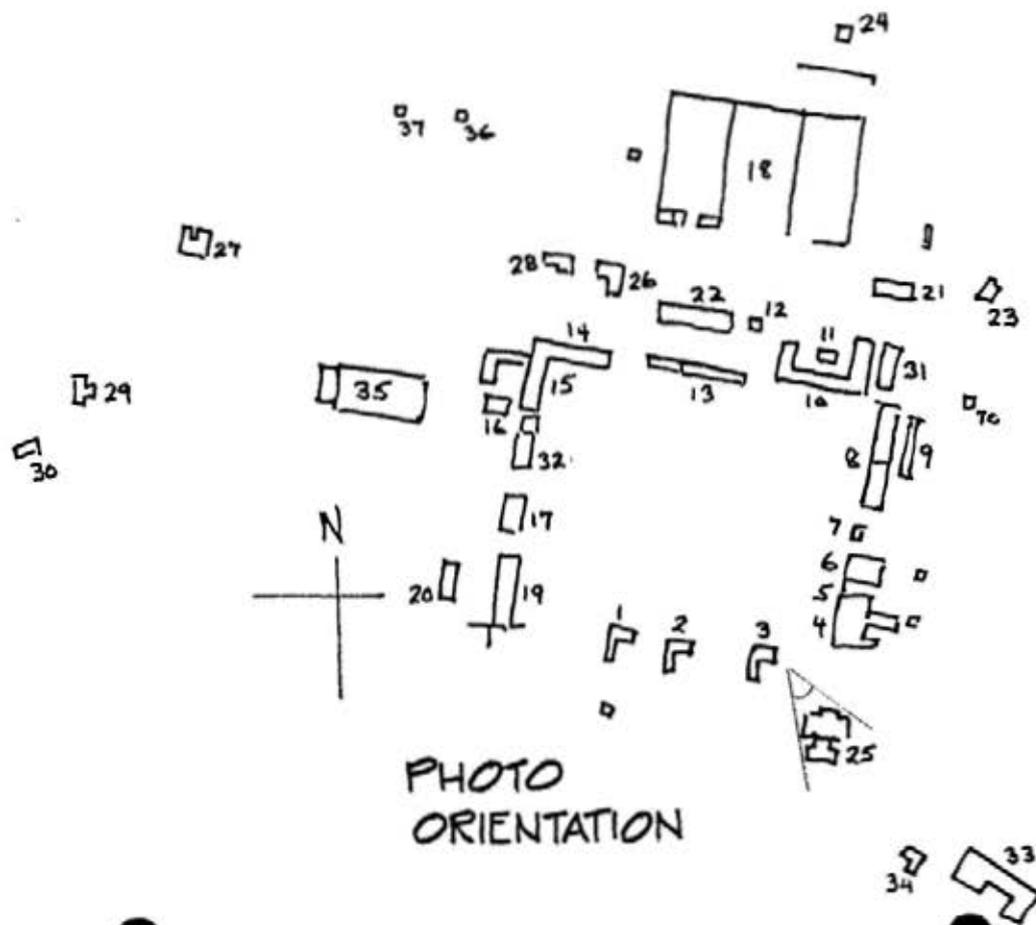




Illustration 73

Major and Mrs. Beaumont seated on stone wall (HS 059) before the Commanding Officer's Quarters (HS 025), c. 1888. Note water line and hose at right.

Photographer unidentified. Courtesy of the Arizona Historical Society.



Illustration 74

Fort Bowie Commanding Officer's
Quarters (HS 025), c. 1888.

Photographer unidentified.
Courtesy of Fort Bowie
National Historic Site.



Illustration 75

Drawing room of Major
Beaumont's Quarters
(HS 025), c. 1885-86.

Photographer unidentified.
Courtesy of Fort Bowie
National Historic Site.



Illustration 76

Interior view of the Commanding
Officer's Quarters (HS 025),
c. 1887-88, probably of the
second floor bedroom.

Photographer unidentified.
Courtesy of Fort Bowie
National Historic Site.

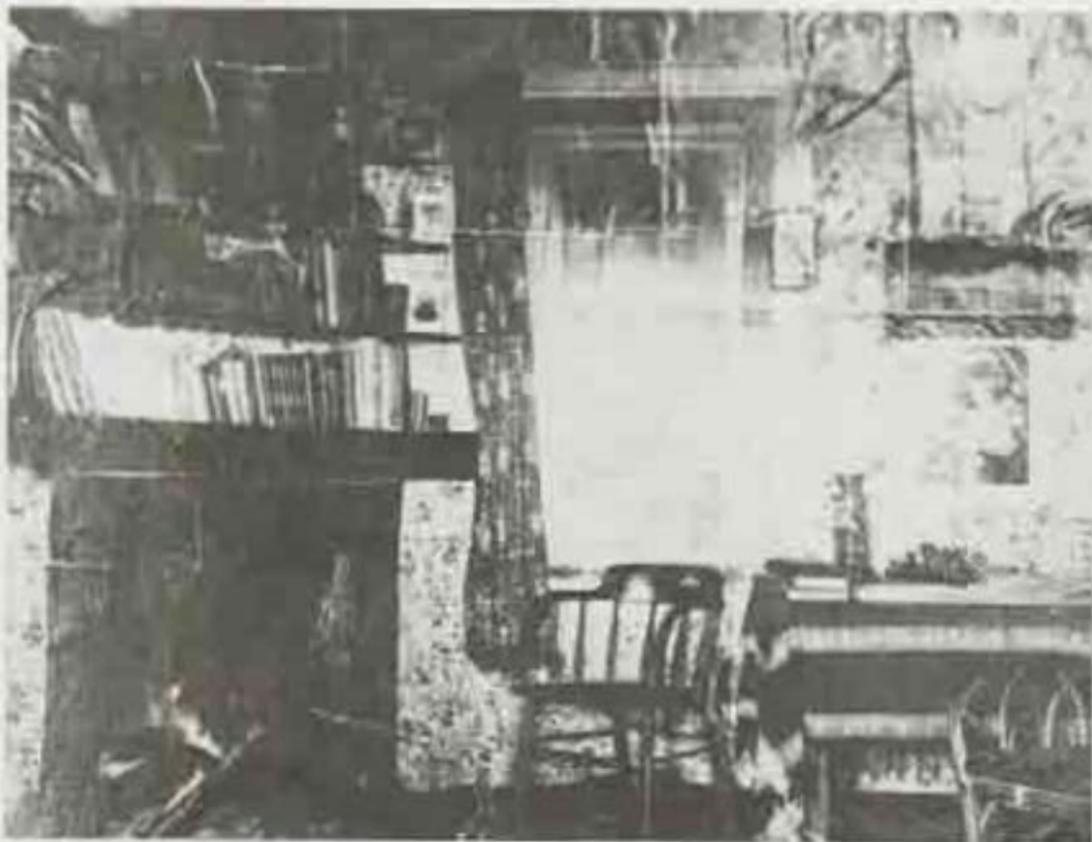


Illustration 77

The Fourth Cavalry band at Fort Bowie, 1886. In the background can be seen part of the Non-Commissioned Staff Quarters (HS 027).

Photographer unidentified.
Courtesy of the National Archives.

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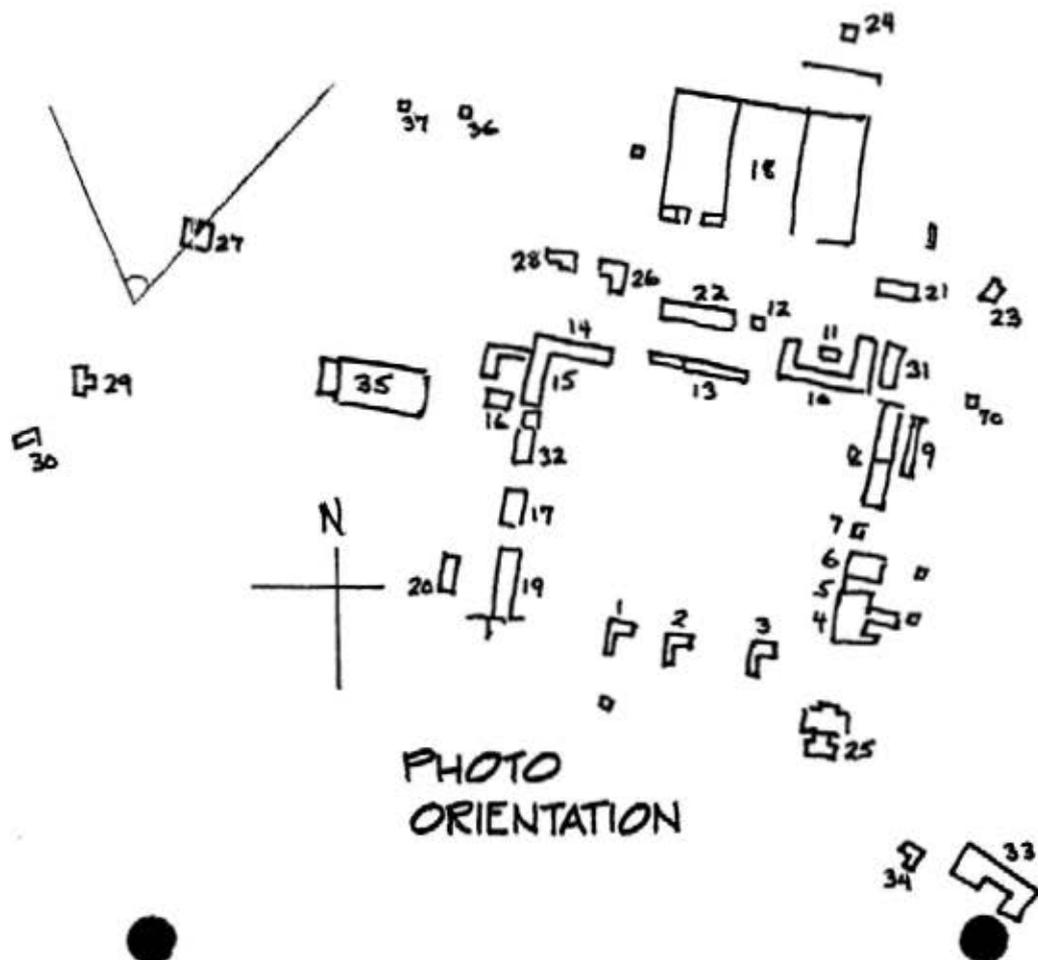




Illustration 78

The New Hospital (HS 033)
at Fort Bowie, c. 1890.

Photographer unidentified.
Courtesy of the Arizona
State Library.

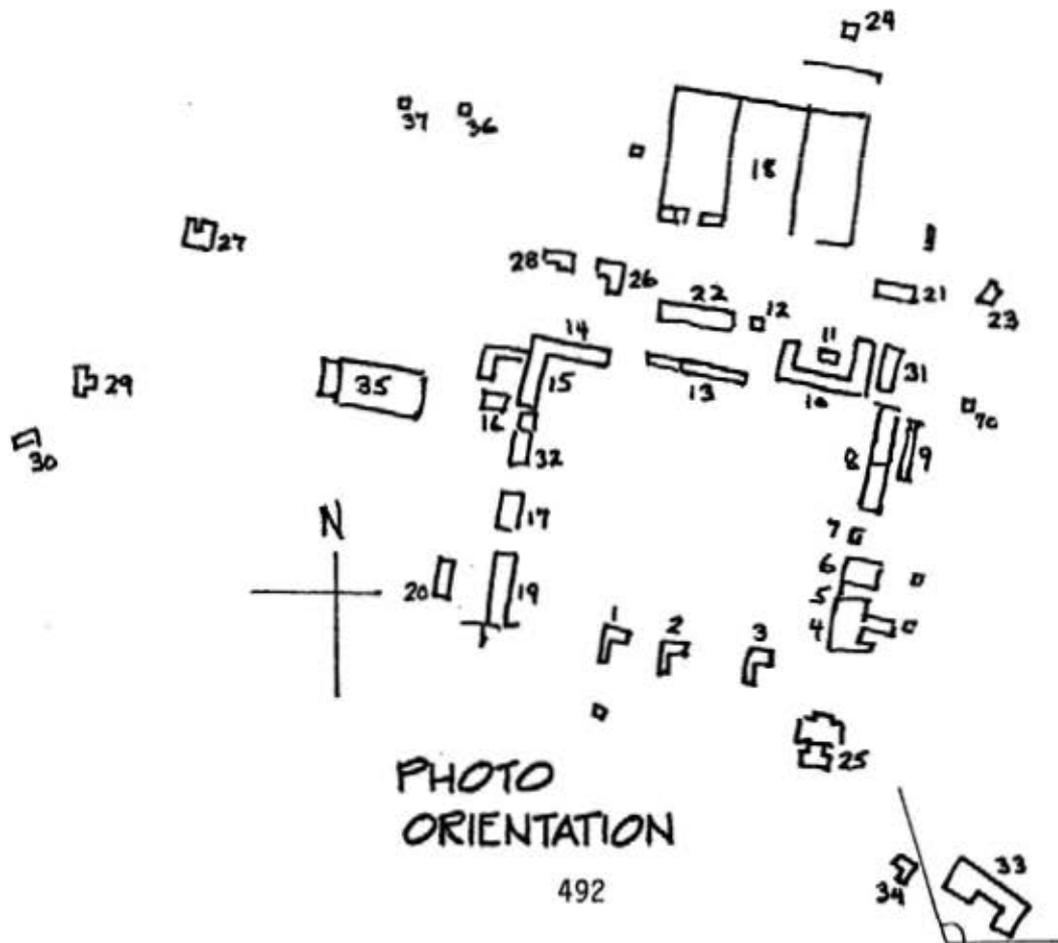




Illustration 79

Magazine (HS 036) at Fort
Bowie, erected in 1890,
as it appeared in 1902.

Photographer unidentified.
Courtesy of Fort Bowie National
Historic Site.

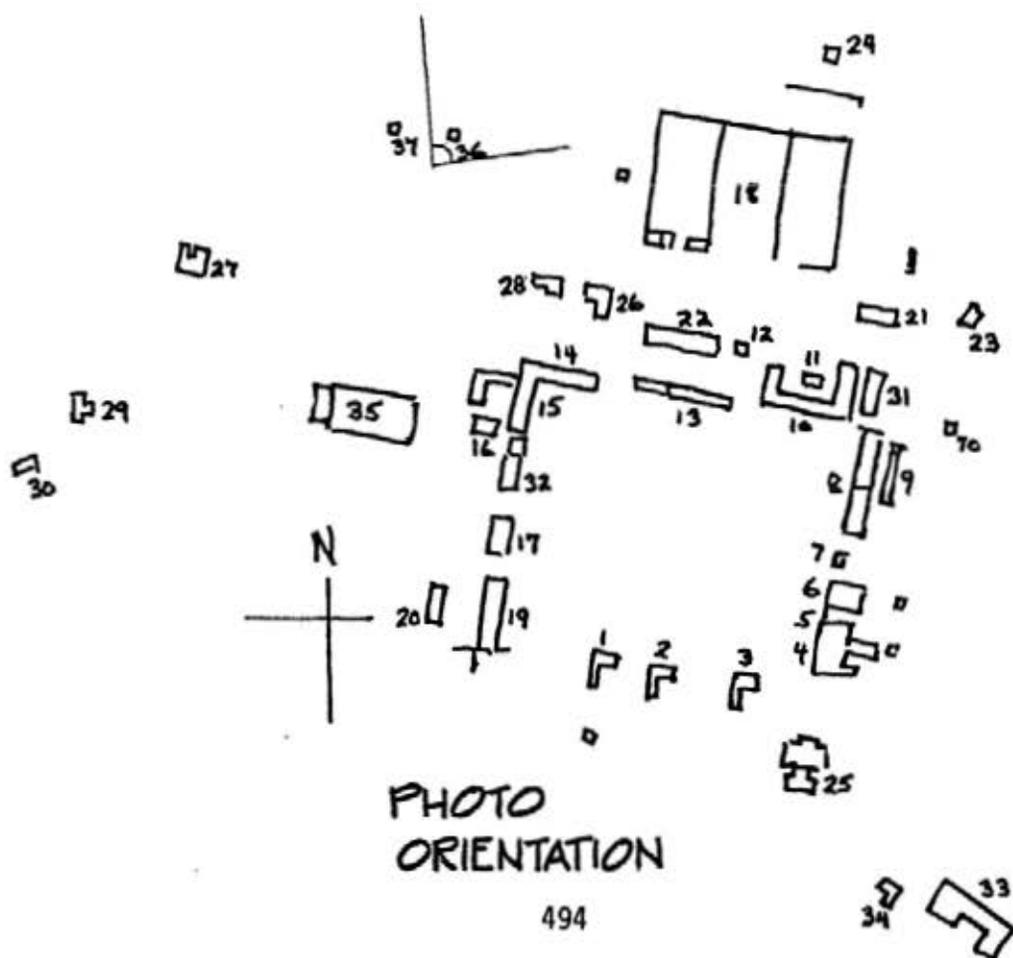




Illustration 80

View showing the rear and corral area of the Post Trader's Store (HS 035) at Fort Bowie, c. 1880s.

Photographer unknown.
Courtesy of the National Archives.

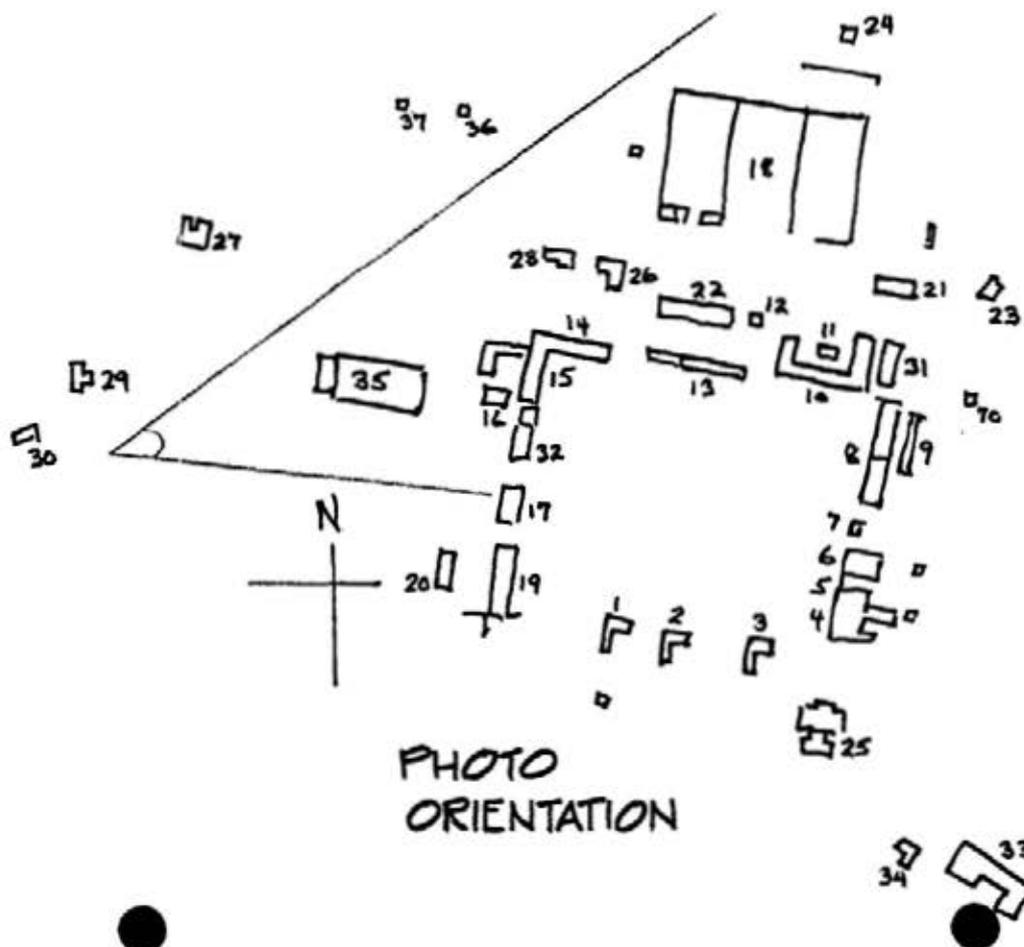




Illustration 81

Two views of the Post Trader's
Store (HS 035) taken in 1890.

From "Proceedings of a board of
officers . . . ," July 8, 1890.
Miscellaneous records, Microfilm
MC 12, Arizona Historical Society.



Illustration 82

Series of photographs taken by Owen Wister in October, 1893, during the burning of the Post Trader's Store (HS 035), then designated as the Post Canteen. Courtesy of the Arizona Historical Society.

Top: View of the rear of HS 035.

Bottom: The front of HS 035. As the blaze spreads, the soldiers begin removing interior furnishings.



Illustration 83

The Burning of the Post Canteen (HS 035), October, 1893.

Left: View of the court yard near the probable area of the fire's origin. Soldier at left is running hose into the dining room. Doorway at right leads into the barroom.

Right: Front of HS 035. Notice the drain pipes for carrying water off the flat roof.



Illustration 84

Top: Front of HS 035, showing
furnishings removed during
the fire.

Bottom: Soldiers fighting the blaze.



Illustration 85

Top: View of the south side of
HS 035.

Bottom: The south side of HS 035.



Illustration 86

The front of the canteen. (HS 035)
during the fire.



Illustration 87

The Fort Bowie Cemetery, c. 1887.

Photographer unidentified. Courtesy
of Fort Bowie National Historic Site.



Illustration 88

The road west of Fort Bowie,
September, 1886. This picture was
taken during the transportation of
hostile Chiricahua Apaches to Bowie
Station enroute to their exile in
Florida. The Post Cemetery with low
adobe wall can be seen in the left
distance.

Photographer unidentified.
Courtesy of Fort Bowie National
Historic Site.



Illustration 89

Upper reservoir at Fort Huachuca, Arizona. This structure was similar in appearance to those south of the Commanding Officer's Quarters (HS 025) at Fort Bowie.

Photographer unidentified. Courtesy of the National Archives.



Illustration 90

Top: Unidentified structure
at Fort Bowie, c. 1893-94.

Bottom: Unidentified structure
at Fort Bowie, c. 1893-94.

Photographed by Owen Wister. Courtesy
of the Arizona Historical Society.



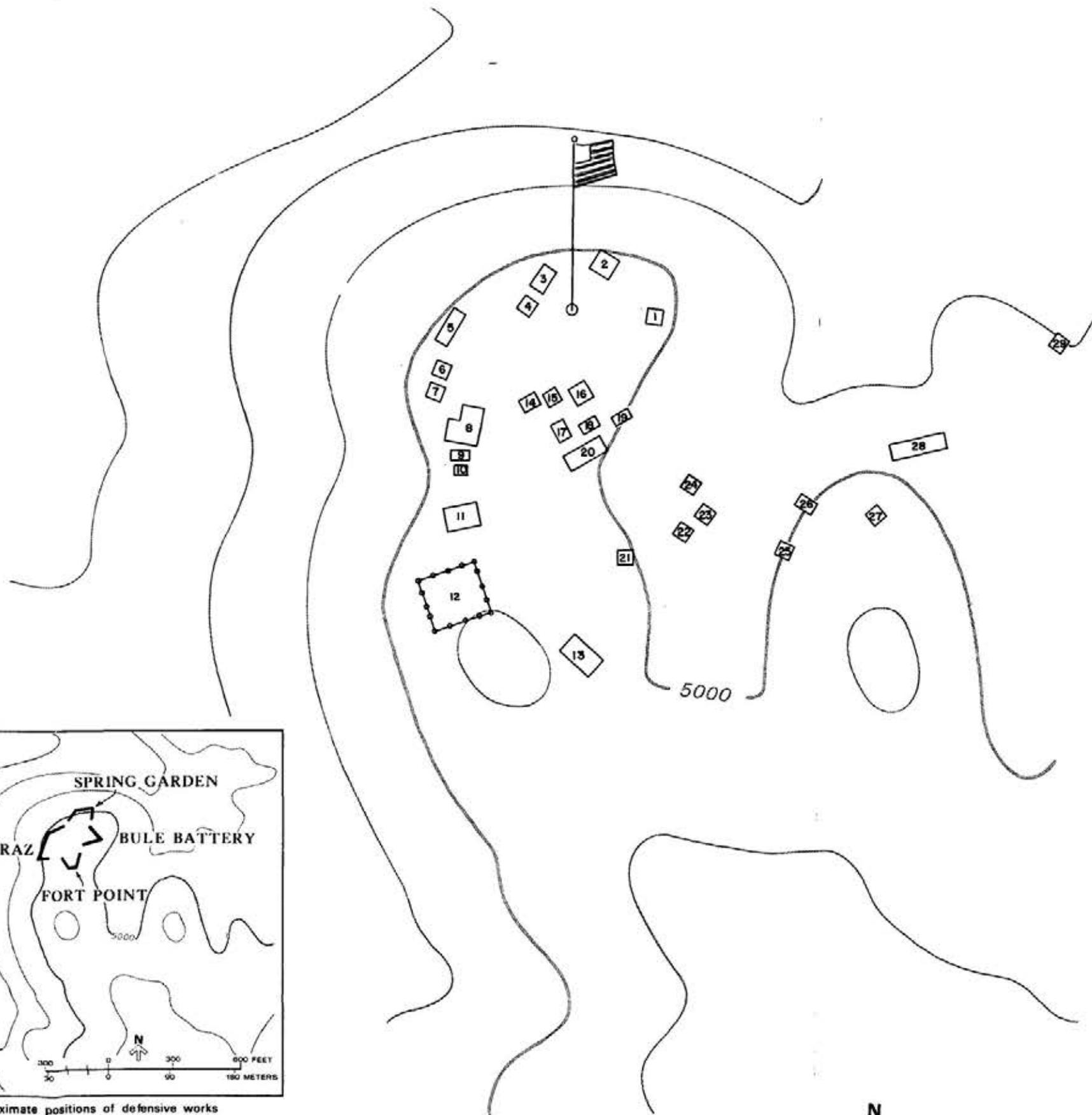
MAPS

Map No. 1

The First Fort Bowie, 1862-1869.

Compiled by Jerome A. Greene.

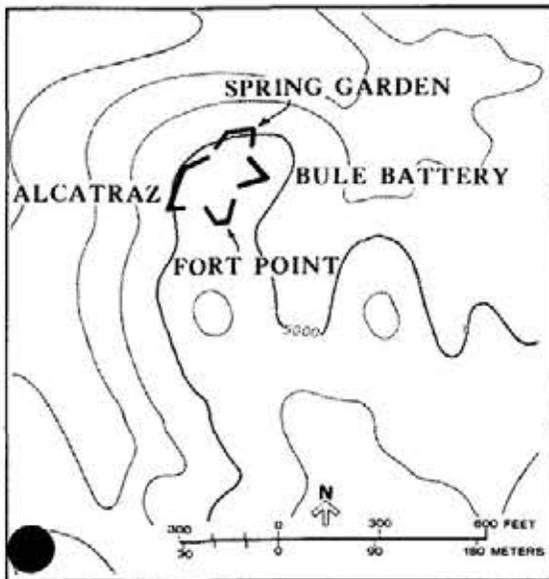
Drawn by Robert H. Todd.



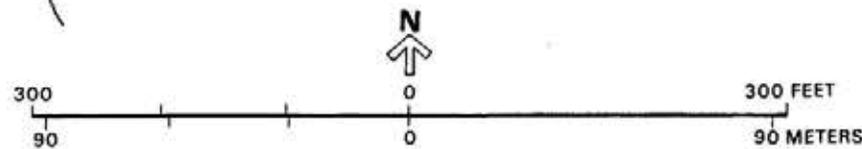
LEGEND

Tentative Identification of Structures:

1. Guard House
2. Officers' Quarters
3. Officers' Quarters
4. Unknown (Kitchen?)
5. Officers' Quarters
6. Unknown (Kitchen?)
7. Unknown (Sink?)
8. Officers' Quarters
9. Unknown (Kitchen?)
10. Unknown
11. Post Hospital
12. Quartermaster Corral
13. Post Trader
14. Unknown (Enlisted Men's Quarters?)
15. Unknown (Enlisted Men's Quarters?)
16. Unknown (Enlisted Men's Quarters?)
17. Quartermaster/Subsistence/Ordnance Storehouse
18. Quartermaster/Subsistence/Ordnance Storehouse
19. Part of early defenses
20. Barracks erected in 1866
21. Enlisted Men's Quarters
22. Enlisted Men's Quarters
23. Enlisted Men's Quarters
24. Enlisted Men's Quarters
25. Enlisted Men's Quarters
26. Enlisted Men's Quarters
27. Enlisted Men's Quarters
28. Stable
29. Old Mail Station (later "Old Mess House" and Laundresses' Quarters -- HS 030)



Approximate positions of defensive works overlooking Apache Spring, August, 1862. Site of the first Fort Bowie.



ON MICROFILM

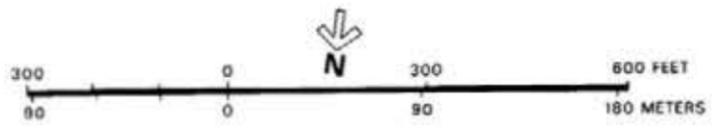
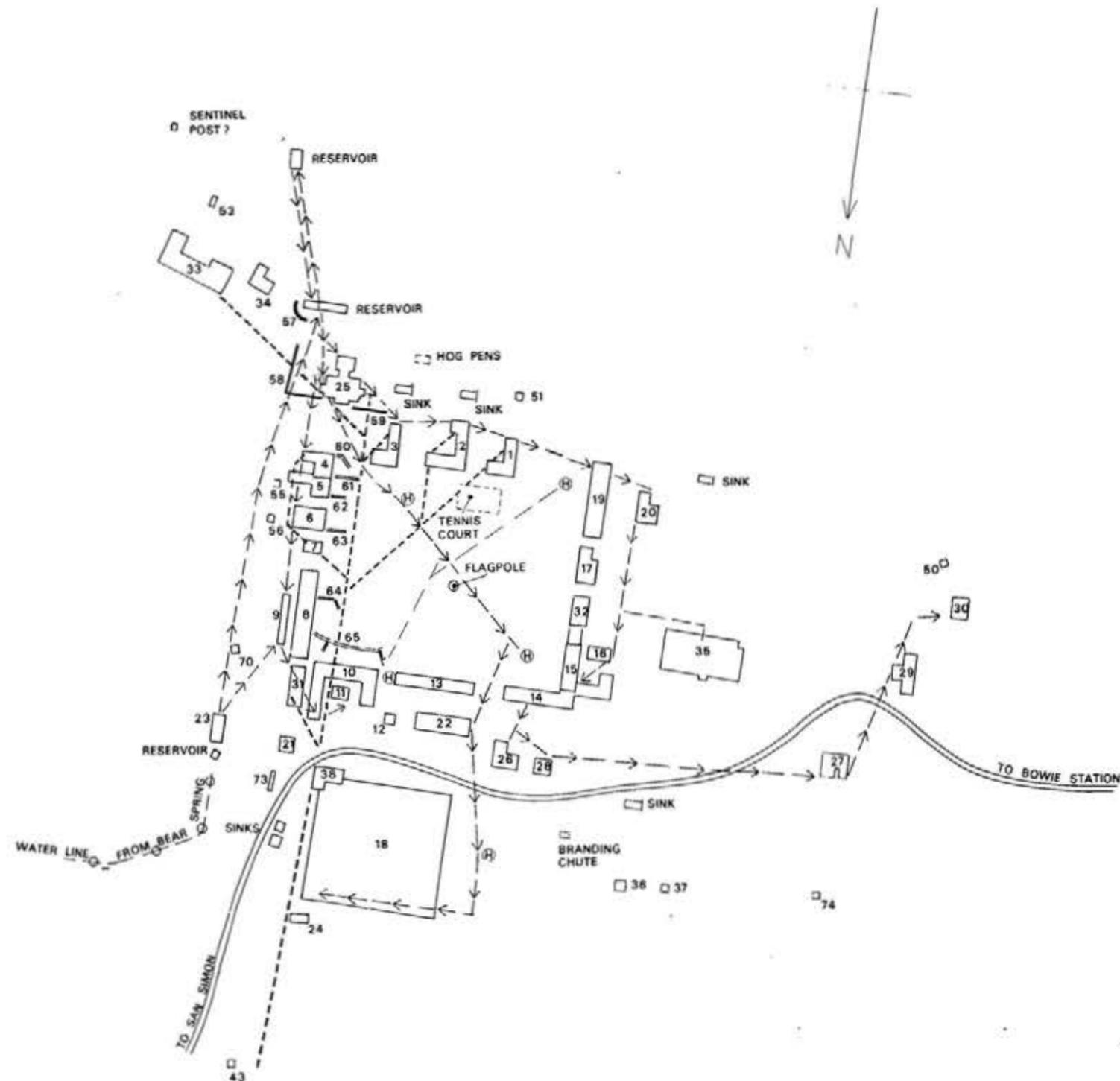
HISTORIC BASE MAP
 THE FIRST FORT BOWIE, 1862-1869,
 AS COMPILED FROM HISTORIC PHOTOGRAPHS,
 PLATS, AND ILLUSTRATIONS
 FORT BOWIE NATIONAL HISTORIC SITE, ARIZONA

Mapr No. 2.

Fort Bowie, Arizona Territory, 1869-1894.

Compiled by Jerome A. Greene.

Drawn by Robert H. Todd.



LEGEND

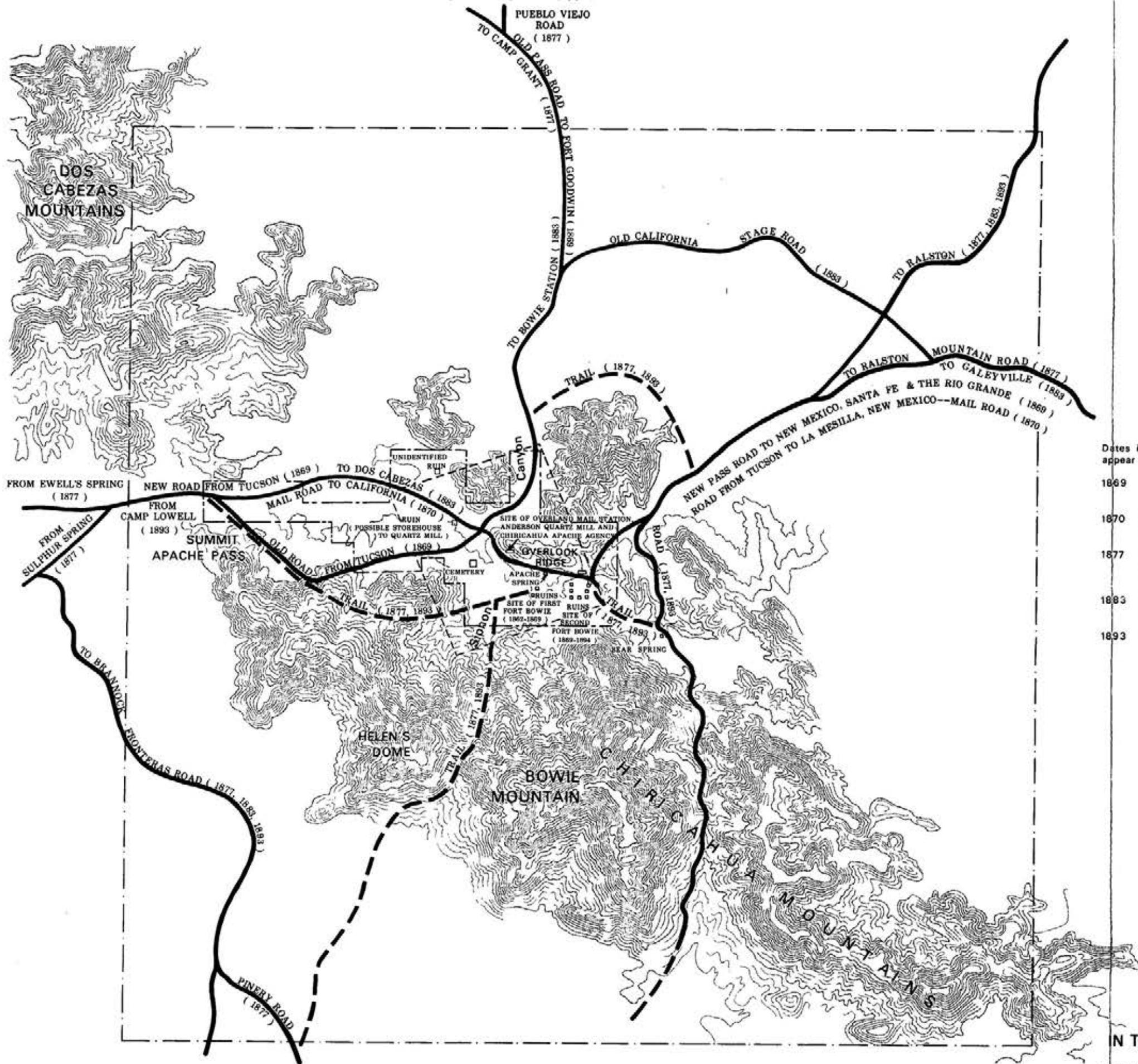
- POST WATER SYSTEM AS OF 1889
- ⊗ FIRE HYDRANT
- DRAIN PIPE

Structure Identification

- HS 1-6 Officers' Quarters
- " 7 Tailor Shop (second Post Bakery)
- " 8 Cavalry Barracks
- " 9 Kitchen
- " 10 Cavalry Barracks
- " 11 Wash House
- " 12 Oil House (first Post Bakery)
- " 13 Granary
- " 14 Subsistence (Commissary) Storehouse
- " 15 Old Hospital
- " 16 Old Guard House
- " 17 Adjutant's Office
- " 18 Corrals
- " 19 Infantry Barracks
- " 20 Kitchen and Messroom
- " 21 Butcher Shop
- " 22 Quartermaster Storehouse
- " 23 Engine and Ice Machine
- " 24 Privy
- " 25 Commanding Officer's Quarters
- " 26 New Guard House
- " 27 Non-Commissioned Staff Quarters
- " 28 New Bakery
- " 29 Civilian Employees' Quarters
- " 30 Laundresses' Quarters
- " 31 Mess Hall
- " 32 Schoolhouse
- " 33 New Hospital
- " 34 Hospital Steward's Quarters
- " 35 Post Trader's Store
- " 36 Magazine
- " 37 Gunshed
- " 38 Unidentified Structure
- " 43 Lime Kiln
- " 50 Earth Closet to HS 030
- " 51 Earth Closet/Woodshed to HS 001
- " 53 Outbuilding to HS 033
- " 55 Earth Closet/Woodshed to HS 005
- " 58 Earth Closet/Woodshed to HS 006
- " 57-59 Retaining Wall
- " 60-65 Terraced Walls
- " 70 Root Cellar or Ice House
- " 74 Earth Closet/Woodshed to HS 027

ON MICROFILM

HISTORIC BASE MAP
FORT BOWIE,
ARIZONA TERRITORY, 1869-1894
 LOCATION OF PRINCIPAL STRUCTURES DISCUSSED
 IN HISTORIC STRUCTURE REPORT. BASED ON FORMER
 ARCHEOLOGICAL AND ARCHITECTURAL SURVEYS AND
 ON ANALYSIS OF HISTORICAL PLATS AND PHOTOGRAPHS.
 FORT BOWIE NATIONAL HISTORIC SITE, ARIZONA
 UNITED STATES DEPARTMENT OF THE INTERIOR / NATIONAL PARK SERVICE 424-28-003A
 DEC 76 DSC

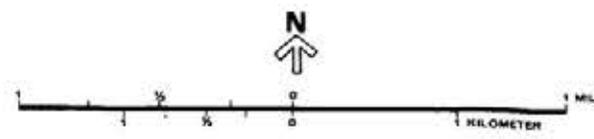


LEGEND

- RESERVATION BOUNDARY, 1869
- RESERVATION BOUNDARY, 1877
- · - · - PRESENT BOUNDARY (1979)
FORT BOWIE NATIONAL HISTORIC SITE

Dates in parentheses indicate the maps or plats on which appear the road or trail designations.

- 1869 Lieutenant George M. Wheeler, "Map of the Military Reservation at Camp Bowie, Arizona, Surveyed February 1869."
- 1870 "Diagram of Camp Bowie, A. T., August 1870";
"Diagram of Camp Bowie, A. T., December 1870."
- 1877 Sketch Map of Camp Bowie Military Reservation;
Lieutenant Earl D. Thomas, "Diagram of the Military Reservation at Camp Bowie."
- 1883 Lieutenant Thomas B. Dugan, "Map of Military Reservation at Fort Bowie, A. T."
- 1893 Lieutenant Thomas S. McCaleb, "Fort Bowie, Arizona."



ON MICROFILM

HISTORIC BASE MAP
APPROXIMATE LOCATION OF THE
MAJOR ROADS AND TRAILS
IN THE VICINITY OF FORT BOWIE, 1862-1894
FORT BOWIE NATIONAL HISTORIC SITE, ARIZONA
UNITED STATES DEPARTMENT OF THE INTERIOR / NATIONAL PARK SERVICE 424-28-002
DEC 79 DSC

As the nation's principal conservation agency, the Department of the Interior has basic responsibilities to protect and conserve our land and water, energy and minerals, fish and wildlife, and parks and recreation areas, and to ensure the wise use of all these resources. The department also has major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

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