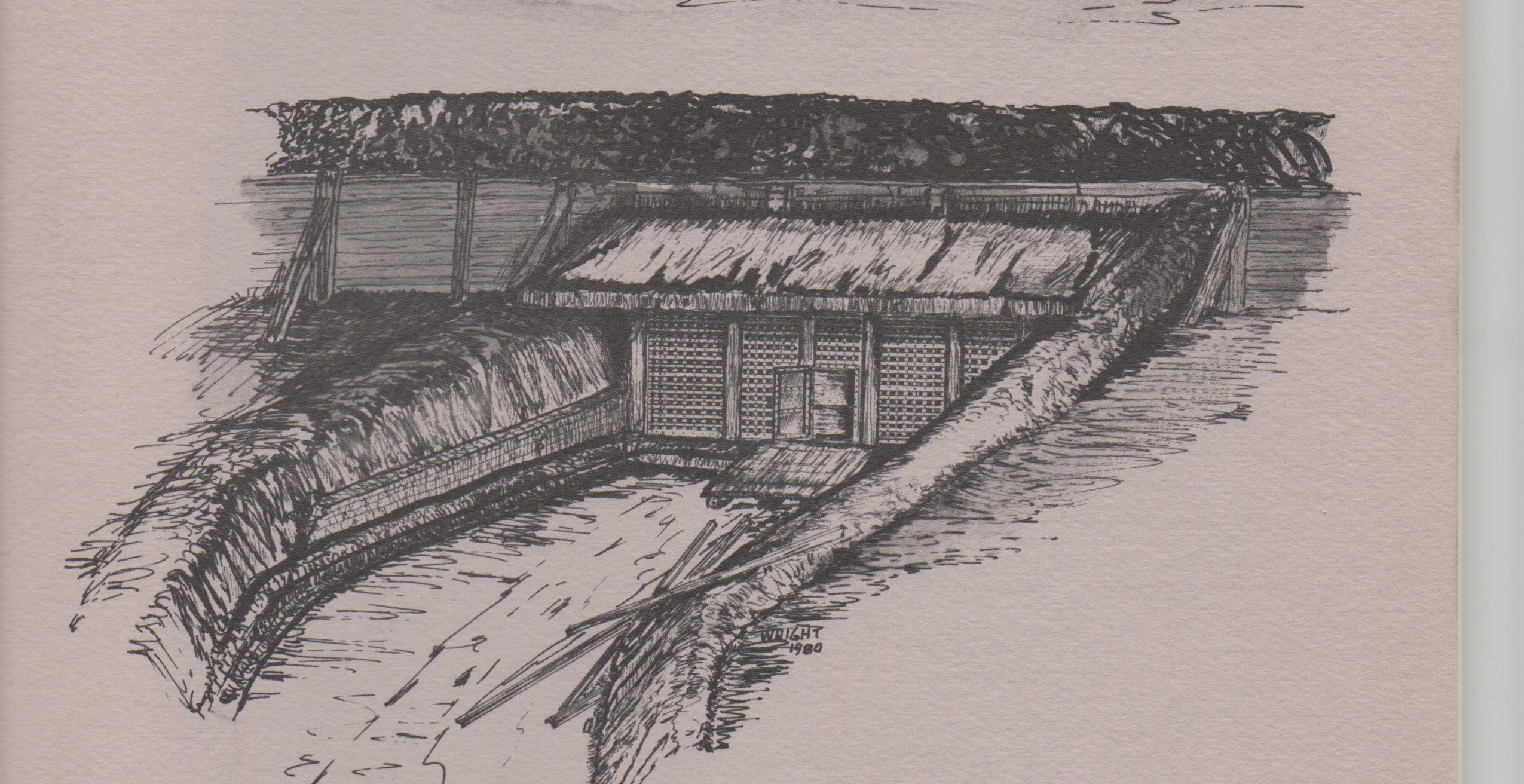
Archaeological Report No. 8

## THE CONFEDERATE MAGAZINE AT FORT WADE GRAND GULF, MISSISSIPPI

# EXCAVATIONS, 1980-1981

William C. Wright



Mississippi Department of Archives and History and Grand Gulf State Military Monument 1982 Archaeological Report No. 8

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and

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> William C. Wright Historical Archaeologist

#### INTRODUCTION

The excavations at Fort Wade during the summer season of 1980 were the result of an unsuccessful expedition to locate and record the sites of certain structures at the near extinct town of Rodney, Mississippi. Due to a total lack of local interest, and even open hostility, the endeavor to work at Rodney was cancelled. The Mississippi Department of Archives and History found itself with a crew and no archaeological project.

In 1978, the University of Southern Mississippi had conducted a limited archaeological investigation at Fort Wade, Grand Gulf State Military Monument. Unfortunately, the Commission which governs Grand Gulf was unhappy with the results of this work, and had little to show for a tremendous sum of money expended on the work. When the Commission was approached with an offer to continue the excavations with no cost to them they readily accepted the offer.

At the end of the 1980 summer season the excavations, centered around the remains of the Confederate Magazine within Fort Wade, were approximately sixty percent completed even though approximately 4,153 cubic feet of overburden had been removed by hand. It would be another season before the entire magazine would be unearthed.

The Grand Gulf Commission and the Mississippi Department of Archives and History were in agreement that the work should be continued, but the economy did not allow either agency to fund the project entirely. The Grand Gulf Commission agreed to contract with a crew of four and the Mississippi Department of Archives and History would contribute the services of a historical archaeologist and his expenses, to serve as supervisor and coordinator of the project. All vehicle expenses, as well as work area, were furnished by Grand Gulf.

The 1981 summer season was as successful as the previous season. Work at the Magazine was completed, and the entire structural remains were left open for public viewing. The original goals for excavating Fort Wade were multi-purpose, and perhaps ego oriented. When the fortifications were mapped by Federal engineers, following Grand Gulf's evacuation by the Confederates, one of the several maps showed a hotshot furnace within Fort Wade, but no magazine. This author has never believed there was ever a hotshot furnace at Fort Wade, although there was one at Fort Cobun, a companion fort to the north of Fort Wade. Therefore the primary goal was, once and for all, to prove or disprove the hotshot furnace theory.

Certain other goals developed once excavation had established the fact that visible metal debris was the remains of a jail cell converted into a magazine and not that of a hotshot furnace. These basically were: what type of ammunition was in the magazine, and how did the Confederates detonate the magazine when it was purposely destroyed? Another goal was hopefully to determine how the magazine was constructed in relation to the earthwork.

Goals for 1981 were simply a continuation of those established the previous season: to continue excavating the remaining forty percent of the magazine, to continue the study of artifactual and structural evidence, and to prepare the site for public viewing.

In all, the two seasons of excavation at Fort Wade were a total success. Because of its relative depth most of the structure and artifacts were in situ, and the blast displaced so much earth that the powder trail used to detonate the magazine was left as a perfect feature, covered by falling earth.

#### THE MILITARY STRUGGLE FOR FORT WADE, GRAND GULF

## HISTORICAL BACKGROUND OF THE SITE

The first Europeans to take notice of the Grand Gulf area were the French. In 1682, the expedition of René Robert Cavelier, Sieur de La Salle, and his lieutenant, Henri de Tonty, passed Grand Gulf on their voyage down the Mississippi River to discover water passages into Spanish territory, or a possible route to the Pacific.<sup>1</sup> Maps subsequent to this voyage note the site as "Grand Gouffre" to signify a large whirlpool. This whirlpool or large eddy was formed by the Big Black River entering the Mississippi River almost head on against the latter's current flowing eastward from Coffee's Point. On the south side of the confluence is a very large rock outcrop termed "Point of Rock" which added velocity to the whirlpool.

Throughout the territorial and early statehood years Grand Gulf flourished as a cotton shipping port on the Mississippi River. Its location between the Big Black on the north and Bayou Pierre on the south was ideal for transportation of goods from the interior. During the 1830s a railroad was constructed between Port Gibson, some seven miles to the southeast, and Grand Gulf. At this time Grand Gulf was handling more cotton than Vicksburg or Natchez. Despite these years of enterprise Grand Gulf, as a viable town, was to die a quick death. Grand Gulf survived plagues and floods, but a tornado struck in 1853, and apparently the town never recovered before being totally destroyed by war nine years later.<sup>2</sup>

Following the fall and occupation of New Orleans on April 24, 1862, the Federal fleet of Flag Officer David G. Farragut proceeded up the Mississippi River with impunity toward their objective... Vicksburg. Baton Rouge fell on May 8, and Natchez surrendered four days later. This lack of resistance south of Vicksburg gave the Federal commander a false impression of Confederate strength along the Lower Mississippi. The demand upon the city to surrender was answered by both the civil and military authorities in a very negative tone. After a brief reconnaissance to determine the strength of Vicksburg's defenses a council of war was held between Farragut, his fleet commanders, and Brigadier General Thomas Williams. Williams was the commander of the Federal troops aboard the fleet's ships. It was determined that the defenses were too strong for an assault.<sup>3</sup>

While the fleet was pondering the fate of Vicksburg Captain James A. Hoskins, Brookhaven Light Artillery, masked his battery of four six-pounder guns on the bluff behind Grand Gulf and prepared to give the fleet a warm reception when they returned downriver.<sup>4</sup> On May 26, the Federal fleet led by the <u>Richmond</u> and two transports appeared at Grand Gulf. Hoskins allowed the transports to get in front of his guns before giving the command to fire. After striking the transport <u>Laurel Hill</u> several times, killing one and wounding two, the Confederates limbered up and left Grand Gulf.<sup>5</sup>

Captain Thomas T. Craven of the <u>Brooklyn</u> brought his vessel about to retaliate. The <u>Kineo</u> and <u>Katahdin</u> followed the <u>Brooklyn</u> back to the front of Grand Gulf. As the ships opened fire on the town, citizens began displaying white flags. A delegation of townspeople launched a small boat toward the <u>Brooklyn</u> and informed Captain Craven that Grand Gulf had:

> ...only some three or four hundred inhabitants in it, who were entirely at the mercy of the wandering bands of free-booters; that they had come there without their consent and fired upon our warships without the least warning from a concealed battery as they were sweeping down by the swift current; that they could not and would not and ought not to be held responsible for these outrages.<sup>6</sup>

Craven accused them all of being guilty and was determined to "...set fire to the place."<sup>7</sup> However, after conferring with General Williams it was decided to place a heavy levy on the population consisting of wood, poultry, beef, and pork.<sup>8</sup>

While at the Grand Gulf landing General Williams was informed that the Confederate camp was located a mile and a half behind the town. Williams ordered Major Fredrick A. Boardman to take two companies of the Fourth Wisconsin Infantry to capture the guns and destroy the camp. The infantry reached the camp just as the last of the Confederate rear guard was leaving. A brief exchange of gunfire resulted in Boardman's death and the serious wounding of Williams' aide-de-camp, Lieutenant George Dekay.<sup>9</sup>

The Confederates returned to work at Grand Gulf almost immediately after the withdrawal of the Federal fleet. Farragut had stationed seven gunboats on the Mississippi just south of the Vicksburg defenses to keep an eye on the city. After a week of not hearing from Farragut the commander of this squadron, Captain James S. Palmer, became apprehensive about the Confederates' erecting batteries along the river, which might interrupt communications with the fleet, and sent the <u>Winona</u>, Lieutenant Edward T. Nichols commanding, to investigate the bluffs to Natchez.<sup>10</sup>

The voyage proceeded without difficulty. The <u>Winona</u> returned to the squadron on June 5, and Nichols reported to Palmer that a large force of workers was employed in throwing up earthworks at Grand Gulf.<sup>11</sup> Palmer, fearful of the threat to his communications, immediately ordered the <u>Wissahickon</u> and <u>Itasca</u> to investigate. At 12:30 p.m., June 7, the gunboats arrived off Grand Gulf. Commander John DeCamp of the <u>Wissahickon</u> sent a landing party ashore under a flag of truce. The workers were notified to abandon the works, as he intended to shell them. Anchoring off the town, the two gunboats fired several rounds of shrapnel at a number of Confederates near the earthworks. In a show of contempt the Confederates returned the fire with small arms. At dark the two moved upstream to the confluence of the Big Black River.<sup>12</sup>

The next morning the two boats returned to the front of Grand Gulf to again shell the earthworks. Several shells were fired just to harass the Confederates during the day, but had little effect. During the night of June 8, the Confederates moved a number of 6and 12-pounders into position behind the town and at 4:15 a.m. opened fire on the two gunboats. The boats cleared for action and returned the fire. The ll-inch Dahlgren was disabled on the Wissahickon but the boat returned fire with its starboard 24-pounder howitzer and 20-pounder Parrott rifle. The Itasca. experiencing difficulty with its anchor, replied with its 32-pounder. The engagement between the gunboats and the light field artillery lasted for two hours before the boats broke off the engagement. The Wissahickon had been hulled seventeen times, but without serious damage to the vessel. The Itasca had been struck twenty-five times and had casualties of one killed and one wounded. The Wissahickon had two wounded.<sup>13</sup>

After damage repair teams completed patching the gunboats they again fired upon Grand Gulf for an hour, but the light guns had withdrawn from the works. However, the town was set on fire by the naval shells.<sup>14</sup>

DeCamp reported to Palmer that the Confederate earthwork at Grand Gulf had a natural strength by its height, offering a plunging fire on the river, and the gunboats could not elevate their guns to "...injure the batteries on the hill," and had "...no remedy against their plunging shot."<sup>15</sup>

On June 10, Palmer ordered the <u>Wissahickon</u>, <u>Itasca</u>, <u>Iroquois</u>, and <u>Katahdin</u> to Grand Gulf. At 6:15 p.m. the four gunboats opened fire upon the town and Confederate emplacements. After two hours of firing without a reply from the Confederates the boats moved upriver and anchored for the night.<sup>16</sup>

The next morning Palmer's boats moved down the Mississippi to Natchez to check for additional fortifications. Two days later the gunboats repassed Grand Gulf on the return upriver. After shelling Grand Gulf and receiving no fire in return the gunboats continued on to Vicksburg.<sup>17</sup> At New Orleans Farragut received communications urging him to open the river at Vicksburg--the only point under Confederate control. A mortar flotilla consisting of sixteen vessels of Commander David D. Porter was conveyed by the <u>Richmond</u> and <u>Brooklyn</u> upriver in advance of the remainder of the fleet. In passing Grand Gulf on June 17, Captain Craven on the <u>Brooklyn</u> noted in his report that the town was in ruins, the recently constructed earthworks and the town entirely deserted.<sup>18</sup>

The <u>Empire Parish</u> towing two mortar schooners lagged behind the <u>Brooklyn</u> and the rest of Porter's flotilla and arrived at Grand Gulf a day later on June 21. As the <u>Empire Parish</u> passed the town it was fired on by a masked battery. One shot temporarily disabled its boilers, but after being repaired the steamer proceeded to Vicksburg.<sup>19</sup>

Farragut, aboard the Hartford escorting General Williams' transports containing four regiments and two batteries, was two days behind the Empire Parish, but had been alerted at Rodney to the hidden guns at Grand Gulf. Instead of passing Grand Gulf, Williams' transports entered Bayou Pierre in hopes of landing the infantry in the rear of Grand Gulf at Port Gibson, but a raft some six miles from Port Gibson prevented this maneuver. Bayou Pierre was too narrow to turn the transports around, so the transports were forced to back down to Barry's Plantation where the Fourth Wisconsin, Ninth Connecticut, and one section of guns belonging to the Second Massachusetts Artillery--all under the command of Colonel Hallbert E. Paine--landed. A road led from the plantation to Grand Gulf some four miles to the northeast. After two miles the advance party reached a fork in the road and learned that the road to the right led to the Confederate encampment along the railroad near Hamilton's Plantation. Federal reserves were rushed forward as Paine's advance encountered the Confederate pickets. The Confederates withdrew after a brief but heated skirmish. As the Union troops entered the camp they encountered a locomotive with a flatcar upon which was mounted a fieldpiece surrounded by cotton bales. Paine's men fired on the locomotive, but it had sufficient steam to escape, with raised the Confederate artillerists returning the fire from the car.20

Paine's men continued northwest to near Willow Springs where they burned another abandoned Confederate encampment. From Willow Springs they countermarched to Grand Gulf, burned the few remaining structures, and reboarded the transports.<sup>21</sup>

Upon arriving below Vicksburg, Williams' infantry rounded up about 1,200 Negroes from the Louisiana side of the river for the purpose of digging a canal across the peninsula opposite Vicksburg. Most of Farragut's fleet ran past the Vicksburg batteries to link with Flag Officer Charles H. Davis' gunboat fleet above the city. While all the enemy's attention was focused on taking Vicksburg, the Confederates again began work on the fortifications at Grand Gulf.

The luckless <u>Empire Parish</u> was once again the victim of Grand Gulf's guns on July 6, while towing the bark <u>Houghton</u> upriver. This action resulted in two Federals' being killed. On July 22 the gunboats <u>Kennebec</u> and <u>Katahdin</u>, with the confiscated ferry <u>Rosalie</u> from Natchez, passed in front of Grand Gulf. Within several minutes the <u>Katahdin</u> was struck six times in the hull and once topside, and the <u>Rosalie</u> took a direct hit near the pilothouse. The severe power of the heavy guns from the gunboats forced the Confederates once again to abandon their positions. The casualties aboard the vessels this time were three wounded. Captain Henry H. Bell of the <u>Kennebec</u> noted that there was not a single house standing in Grand Gulf. He also mentions that the Confederate artillerists were firing "12-pounder bolts."<sup>22</sup>

The fleet remained above Vicksburg until the makeshift gunboat <u>Arkansas</u>, built by the Confederates at Yazoo City and captained by Issac N. Brown, C.S.N., moved down the Yazoo River to wreak havoc among the Federal fleet. Farragut, despite having a large fleet of ships, many of which outgunned the <u>Arkansas</u>, was again compelled to run the batteries at Vicksburg with the intention of sinking the <u>Arkansas</u> while she was tied along the waterfront. Failing to damage the <u>Arkansas</u>, the ships took Williams' infantrymen on board below Vicksburg and headed downstream on July 24.<sup>23</sup>

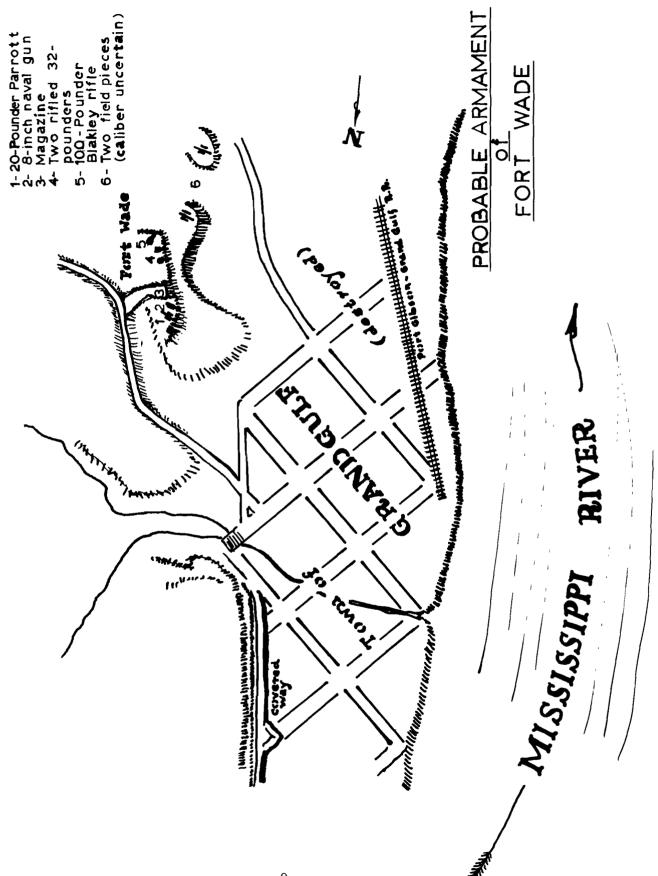
As Farragut's fleet passed Grand Gulf, expecting to run a gauntlet of Confederate artillery, it threw a few shells into the emplacements, but not a shot was returned. It was impossible for the observers to discern a single living thing among the ruins of what had once been a prosperous town.<sup>24</sup> Farragut's fleet continued on to New Orleans after disembarking Williams' troops at Baton Rouge.

The inactivity of Federal vessels on the Mississippi from August 1862 until early 1863 lulled the Confederate high command into neglecting the uncompleted fortifications at Grand Gulf. Meanwhile, the Federal army was not inactive during this same period in their attempt to circumvent a frontal assault on Vicksburg by attempting to gain a foothold and attack the city from the rear. These endeavors became known as the Bayou Campaigns. The Federal army operating against Vicksburg had a new commander, Major General Ulysses S. Grant, a tenacious leader who knew how best to use the power of his command. Grant was not successful in any of the Bayou Campaigns in reaching the rear of Vicksburg, but these did serve a major purpose in conditioning his men for the campaign which would come in late spring and summer of 1863. Grant also had a much better fighting army than Williams. Unlike Williams' army, which was primarily made up of New Englanders, Grant formed his men and corps commanders from the midwestern states. These troops, which were already an amalgamation of men used to the rigors of hard work, were now veterans of the winter campaigns and acclimated to the weather of the Lower Mississippi.

The Confederate high command realized in early March that Grant's plan to cut a canal at the base of DeSoto Peninsula would end in failure like Williams' similar plan, and the fleet would attempt to run the batteries and possibly land troops south of Vicksburg.<sup>25</sup> On March 5, 1863, Major General Carter L. Stevenson wrote Lieutenant General John C. Pemberton at Jackson expressing a fear: "If we do not occupy Grand Gulf the enemy will, and then be enabled to invest us... I respectfully recommend that at least three or four heavy guns from here [Vicksburg] be put in position there as soon as possible; that at least two of [Brigadier] General [John S.] Bowen's regiments, with his two 20-pounder Parrotts and field battery, occupy it at once."<sup>26</sup> Pemberton replied at once, Pemberton replied at once, concurring with his plans and authorizing Stevenson to order Bowen's brigade to Grand Gulf from the Big Black River railroad bridge near Bovina.<sup>27</sup> By mid-March Bowen's 2,500 troops, aided by numerous impressed slaves, were laboring around the clock erecting new fortifications as well as strengthening the original works. The field pieces of Wade's, Guibor's, and Landis' Batteries were mounted in these positions. But still the heavy guns had not arrived down the Big Black before Bowen was notified that the Hartford and the Albatross had passed the batteries at Port Hudson, Louisiana, on the night of March 14-15 and were headed upriver.28 On March 18, Bowen received a telegram informing him that the expected heavy artillery was being shipped down the Big Black on the Anne Perette. Another telegram was handed Bowen saying that the two Federal gunboats had passed Natchez that morning at 5:30 a.m.<sup>29</sup>

Bowen could ill afford the loss of the heavy guns and the <u>Anne</u> <u>Perette</u> should the approaching gunboats find her unloading them at Grand Gulf. Bowen notified Captain John C. Landis, stationed at Winkler's Bluff on the Big Black, "to allow no boats to pass into the Mississippi River without my order, and warn all that arrive, while the gunboats are in this vicinity, to move further up [the Big Black]."<sup>30</sup> Meanwhile, Colonel Wirt Adams' cavalry was to scout for an overland route by which the siege guns on board the <u>Anne</u> Perette might be transported from the Big Black to Grand Gulf.<sup>31</sup>

Before the siege guns arrived, the <u>Albatross</u> and <u>Hartford</u> appeared. Negroes on the bank below Grand <u>Gulf</u> pointing up at the bluffs warned Farragut, aboard the flagship <u>Hartford</u>, that the Confederates had occupied the heights.<sup>32</sup> Colonel William Wade, commanding a battery of 20-pounder Parrott rifles, held his fire until the boats drew abreast of his guns. On Wade's signal the



Parrotts opened fire. Although the gunboats were forewarned and prepared to return fire with the much heavier broadside guns, it was almost impossible to elevate the guns enough to be effective against the bluffs at such close range. They did return Wade's fire, but continued upriver at full speed. Wade's Battery had been very accurate in aim against their primary target, <u>Hartford</u>, killing two and wounding six. The Confederates suffered no casualties or damage.<sup>33</sup>

The <u>Anne Perette</u> arrived at Grand Gulf with her cargo of five guns, two 8-inch, one banded 32-pounder rifled, and two 32-pounder rifled but not banded. The search for an overland route failed to locate a means to move the big guns to Grand Gulf, but with the movement of the Federal vessels upriver the search was abandoned. The 8-inch guns and two banded 32-pounders were the property of the Confederate States Navy, intended for a vessel being prepared at Shreveport, Louisiana, but Pemberton diverted them to Grand Gulf.<sup>34</sup>

Bowen's gunners found the use of the naval carriages difficult, for on March 25 Bowen wrote Pemberton that the naval carriages were "cumbrous" and requested two chassis carriages for 42-pounders and one 8-inch columbiad carriage and chassis. He also requested tarpaulins at the same time.<sup>35</sup>

Bowen sent Pemberton a brief report on March 27, describing the fortifications at Grand Gulf. He noted:

I have the honor to forward herewith a sketch of the defenses constructed at this place, prepared by the engineer officer in charge. The distance from the Point of Rocks battery to the mouth of Big Black being too great for a certain blockade of that stream, I have located a battery of two 12-pounder guns and two 24-pounder howitzers at Winkler's Bluff (the first available point on the stream) for its defense. This battery can be reenforced in good time by my Parrott guns if the enemy attempt to ascend that river. The Big Black at Winkler's is so narrow as to preclude its passage until our guns are taken or silenced. I have built huge piles of dry wood on the beach opposite our batteries, and have a detail ready to fire them if the enemy attempt to pass us under the cover of night. A signal station at Hard Times Landing, opposite and 5 miles above, provided with rockets for night alarms and with flags for daylight communication with the Point of Rocks battery, will give us timely notice of the enemy's approach, as they can see some 6 miles farther up, making in all 10 or 11 miles of river under immediate surveillance. I have built one furnace, and have another under construction, for heating shot, or rather shell, as I have no guns to throw heavy round shot, and intend to experiment on shell stuffed with clay or brick dust. The guns on navy carriages cannot be handled with the facility of those on the chassis carriages, and I fear the firing will not be as rapid as desirable.

The covered way will be occupied by a regiment, and about 100 sharpshooters will be deployed as skirmishers along the bank (under cover), to prevent the <u>Hartford</u> from using the howitzers I understand she carries on her main truck, or to pick off any that may expose themselves on board. I am satisfied that if they attempt a bombardment they will be sorry for it, but fear they may be able to run by without material damage or injury.

Our camp is located on the only level ground in the neighborhood, and about one mile and a half from the batteries; the battery camps about a mile from the guns, all southeast of the town site; my headquarters intermediate between the main camp and the batteries.<sup>36</sup>

The well entrenched troops of Grand Gulf had but a few days before their fortifications were tested by the Federals. On March 31 the <u>Hartford</u>, <u>Switzerland</u>, and <u>Albatross</u> headed downstream. Orders were issued to the infantry and artillery to prepare for action. Farragut's vessels arrived after dark and ran the batteries at full speed. Despite the protection of darkness the boats did not entirely escape damage. The <u>Hartford</u> was struck once, killing one, the <u>Switzerland</u> received two hits but no casualties, and the Albatross escaped injury.<sup>37</sup>

In the action of March 31, the defenders at Grand Gulf were not as fortunate as in the past. In the brief fifteen minute engagement Fort Wade suffered ten casualties, not from the hands of Union gunners but probably from carelessness. One of Wade's Battery's 20-pounder Parrott rifles burst, killing two and seriously wounding eight, with a number of others nearby receiving minor injuries. Among the wounded was Captain Henry Guibor, commander of Guibor's Battery, and Lieutenant John Kearney, also of Guibor's Battery. The remaining five wounded and two dead were from Wade's Battery. Bowen witnessed the tragedy, but was uninjured. He made a report of the accident in his correspondence to General Pemberton on April 1:

> I regret to report that one of the 20-pounder Parrott guns burst at the fourth fire, killing 2, mortally

wounding 1, and wounding 7, besides some scratches. I append a list. I entered the battery just as the gun exploded, and it affords me pleasure to bear testimony to the gallant conduct of the men there. Though many were knocked down, besides the wounded, only an imperceptible pause in the firing was occasioned, the men sprung up and to the other guns so quickly. The lieutenant of the burst gun replaced No. 1 of the next piece, who was killed, and it would not have been possible for the enemy to have discovered the accident from any slackening of the fire.<sup>38</sup>

During the battle with the <u>Hartford</u>, <u>Switzerland</u>, and <u>Albatross</u>, the XIII Corps of Major General John A. McClernand was moving through the Louisiana swamps searching for a suitable crossing south of Vicksburg. The theory was to establish a base from which the transports might run past the Vicksburg batteries empty and then transport the Federal army to the east side of the river where they might march rapidly inland. This movement of McClernand's Corps did not go undetected by the Confederates. Major Isaac Harrison's Fifteenth Battalion Louisiana Cavalry harassed the Federals and notified Bowen at Grand Gulf of the march.<sup>39</sup>

Bowen dispatched Colonel Francis M. Cockrell with two infantry regiments and a section of field artillery to the Louisiana shore. Cockrell posted his comparatively small band along the south side of Bayou Vidal while Harrison's cavalry struck the Federal engineers as they endeavored to construct a road through the swamp.<sup>40</sup> This was a risky maneuver, as the Federal fleet could prevent Cockrell's men from rejoining Bowen at Grand Gulf. On April 8, Pemberton told Bowen that he could move his command into Louisiana but should leave the batteries at Grand Gulf to avoid capture, as he did not feel McClernand's movements were that important.<sup>41</sup>

Cockrell's troops successfully held the Federals in check around New Cartridge until the passage of the Vicksburg batteries by the fleet with the loss of only one vessel on the night of April 16. Bowen telegraphed Pemberton on the 17th, "Shall I withdraw my troops from across the river, if possible, or leave them there? Please answer at once."<sup>42</sup> The same day Pemberton ordered Bowen to withdraw his troops from Louisiana, but Cockrell had evidently anticipated the order, as he had all but seventy across on the 17th. The seventy, who remained as rear guard, returned to Grand Gulf the next morning in skiffs.<sup>43</sup>

Bowen's Grand Gulf garrison was strengthened by the arrival of Brigadier General Martin E. Green's brigade from the Big Black River railroad bridge, along with the Sixth Mississippi Infantry Regiment, the First Confederate Batallion, and the Pettus Flying Battery from Jackson. They were notified while camped at Rocky Springs of Bowen's decision to stop the Federals west of Port Gibson.<sup>44</sup>

With the arrival of Green's command, Bowen combined the two brigades under his command at Grand Gulf. This brought Bowen's strength to about 4,200 effectives for the defense of Grand Gulf.<sup>45</sup> The fleet, which succeeded in passing the guns at Vicksburg on the night of April 16, was now lying off Davis Bend, above Grand Gulf, repairing damage suffered in passing the batteries and receiving supplies from New Cartridge. The <u>Lafayette</u> and <u>General Price</u> dropped down to reconnoitre Grand Gulf's defenses on April 23, but after a brief exchange of shots withdrew out of range.<sup>46</sup>

The Confederate high command's actions resemble a "committee's" during the critical period. The Federals had opened a series of cavalry raids in north Mississippi to confuse and disperse the Confederates and take their minds off Grant's movements. One of these raids did have a definite impact on the defenses at Grand Gulf. Colonel Benjamin H. Grierson's cavalry were moving unchecked down the length of the state from their base at LaGrange, They avoided a major conflict, hardly halting until Tennessee. they reached Newton Station on the Southern Railroad of Mississippi some sixty miles east of Jackson. Unable to cope with the confusion caused by Grierson, Pemberton ordered Bowen to detach Wirt Adams' Cavalry to intercept the Federals near Hazlehurst," and he ignored Bowen's plea for more reinforcements. Without Adams' Cavalry, Bowen was now unable to anticipate the moves of the enemy, nor was he able to convince Pemberton that the real attack would come at Grand Gulf, or points south of Vicksburg. Pemberton was convinced by Carter Stevenson that the main attack would take place north of the city from the Yazoo River. On April 27, Bowen wrote his commander, accurately outlining the probable moves of the enemy:

> ...all the movements of the enemy during the last twenty-four hours seem to indicate an intention on their part to march their army still lower down in Louisiana, perhaps to Saint Joseph, and then to run their steamers by me and cross to Rodney. In view of this, and from the fact that Port Gibson is almost essential to this position, I have examined myself and now have the engineers on a reconnaissance selecting a line of battle south of Port Gibson. Were it possible for me, with my extended line and small force, to spare them, I would recommend the sending of a regiment and section of artillery to Rodney, which would materially delay their crossing and advance. I now feel quite sanguine of success in the event they make a direct attack upon my front, or right,

or immediate left. But if they get so far to my left and rear, continuing to threaten my right and front, I must either imperil my whole command by too great an extension of my line or else submit to a complete investment, with Port Gibson in their possession. The gunboats, five in number, are still just above, firing occasionally at our batteries....<sup>48</sup>

Bowen was right about everything but the landing site. Rodney had been suggested in the Federal plans, but Bruinsburg was chosen instead.

The above message was followed by a flurry of exchanges between Bowen and his commander:

> Bowen to Pemberton, April 28, 1863: "Reports indicate an immense force opposite me. Harrison is fighting them now."<sup>49</sup>

Pemberton to Bowen, April 28, 1863: "Have you force enough to hold your position? If not, give me the smallest additional force with which you can. My small cavalry force necessitates the use of infantry to protect important points."<sup>50</sup>

Bowen to Pemberton, April 28, 1863: "...I advise that every man and gun that can be spared from other points be sent here."<sup>51</sup>

Pemberton to General Joseph E. Johnston at Tullahoma, Tennessee, April 28, 1863: "The enemy is at Hard Times, La. in large force with barges and transports, indicating an attack on Grand Gulf, with a view to Vicksburg. I must look to the Army of Tennessee to protect the approaches through northern Mississippi."<sup>52</sup>

Pemberton to Stevenson at Vicksburg, April 28, 1863: "Hold 5,000 men in readiness to move to Grand Gulf, and on the requisition of Brigadier General Bowen move them. With your batteries and rifle-pits manned, the city front is impregnable."<sup>53</sup>

Pemberton to Bowen, April 28, 1863: "I have directed General Stevenson to have 5,000 men ready to send on your requisition, but do not make requisition unless absolutely necessary for the safety of your position. I am also making arrangements for sending you 2,000 or 3,000 men from this direction in case of necessity. You cannot communicate with me too frequently."<sup>54</sup>

Stevenson to Pemberton, April 28, 1863: "The men will be ready to move promptly. To cross the Mississippi, both gunboats and transports must pass the batteries at Grand Gulf. An army large enough to defend itself on this side would consume much time in crossing. As it is not known what force has been withdrawn from this front, it is not improbable that the force opposite Grand Gulf is there to lay waste the country on that side, and is a feint to withdraw troops from a main attack here. I venture to express the hope that the troops will not be moved far, until further developments below render it certain that they will cross in force."<sup>55</sup>

This reassurance from Stevenson that he knew more about what was going on than Bowen typifies the utter incompetence and petty jealousy in Pemberton's staff.

The next day, April 28, 1863, all questions were answered as to Grant's intentions when the Federal gunboats launched their main attack on Grand Gulf. Grand Gulf's defenses were still not completed when the assault was made,<sup>56</sup> but Bowen had distributed his artillery at two main points, Fort Cobun and Fort Wade. His infantry filled the area between these two fortifications. Cobun, near the Big Black, mounted two 32-pounder rifles, one 8-inch Dahlgren, and a 30-pounder Parrott rifle, manned by Battery A, First Louisiana Heavy Artillery. A double line of rifle pits and a covered way led from Fort Cobun to Fort Wade, three-quarters of a The covered way was a passageway deep enough to mile distant. allow troops to move from one interior line to the next with relative safety from the trajectory of the fleet's guns. The rifle pits and covered way were held by the Third Missouri (C.S.) Infantry Regiment under Lieutenant Colonel Finley M. Hubbell.

Fort Wade was situated on a flat terrace behind the old town and located immediately below the cemetery. The armament at Wade consisted of one 100-pounder Blakely rifle, one 8-inch Dahlgren, one 20-pounder Parrott rifle, and two 32-pounder rifles. These guns were manned by the men of Wade's and Guibor's Missouri Batteries, under the command of Colonel William Wade, Bowen's chief of artillery. A secondary line of defense began at the cemetery above Fort Wade and continued southward along the bluff crest. This line was held by the Sixth Missouri Infantry Regiment under Colonel Eugene Erwin. In addition five field pieces, 10- and 20-pounder Parrott rifles, were positioned in and near the lower battery. Besides the fortifications actually in Grand Gulf, Lieutenant Colonel George H. Forney's First Confederate Battalion with two 12-pounders was at Winkler's Bluff protecting the raft blocking the Big Black River. Four miles up the Big Black at Thompson's Hill, Bowen posted the First Missouri Cavalry (dismounted) and Lieutenant Colonel Ras Stirman's Arkansas Sharpshooters, supported by four field guns of Captain William E. Dawson's Third Missouri Battery. The remnants of Bowen's infantry were held in reserve behind the bluff crest at Grand Gulf.<sup>57</sup>

Two divisions of the XIII Corps, Brigadier General Eugene A. Carr's and Brigadier General Peter J. Osterhaus' almost 10,000 men, had boarded transports for attacking Grand Gulf once the guns were silenced, but Grant feared the number was insufficient to take Grand Gulf and had them disembarked to await the arrival of two more divisions under Brigadier Generals Alvin P. Hovey and Andrew J. Smith. As soon as these reinforcements arrived before daylight on the 29th, Grant ordered three divisions on board with a fourth held in reserve. This brought the infantry strength of McClernand's attack force to 17,000 men ready to go ashore once the batteries were silenced.<sup>58</sup> At this time Major General William T. Sherman's XV Corps was to make a feint against Snyder's Bluff on the Yazoo River twelve miles north of Vicksburg. Major General James B. McPherson's XVII Corps was en route through Louisiana following McClernand's path.

The orders outlining the assault called for the attack to begin at 7:00 a.m. on April 29. The fleet was led by the <u>Pittsburg</u> which had an experienced Mississippi River pilot on board used to the peculiar currents of Grand Gulf.<sup>59</sup> The <u>Pittsburg</u> was followed by the <u>Louisville</u>, <u>Carondelet</u>, and <u>Mound City</u>. The gunboats opened fire on Fort Cobun at 7:50 a.m. and continued bombardment moving downstream. The battery at Cobun did not return the fire until 8:15 a.m. The four city series gunboats began their attack on Fort Wade after turning their bows upstream, showering a storm of shot and shell upon Wade's gunners.<sup>60</sup>

The warships <u>Tuscumbia</u>, <u>Lafayette</u>, and Porter's flagship <u>Benton</u> joined the gunboats and attacked Fort Cobun's batteries at 8:25 a.m. These vessels struggled to maintain their position in the eddies caused by the Big Black's waters entering the Mississippi at Point of Rock.<sup>61</sup> Shortly after it became evident to Grant that the bombardment was having little effect on the batteries and no effect on the defending infantry, he boarded a tug and joined the <u>General</u> <u>Price</u>, which was convoying the transports and barges. He viewed the progress of the battle from this position while anxious infantrymen awaited orders.<sup>62</sup>

Grand Gulf's artillery resisted the gunboats although outnumbered many times over. The gunners at Fort Wade watched as projectiles struck the slanted sides of the gunboats and went shrieking over the Louisiana shore.<sup>63</sup> Porter ordered the <u>Lafayette</u> to drop down to assist the gunboats in silencing Fort Wade. Finally the two 32-pounders were silenced, the parapets knocked to pieces, and Colonel William Wade was killed. Fort Wade was now considerably reduced.<sup>64</sup>

A shot from Fort Cobun struck the pilothouse of the <u>Benton</u>, wounding the pilot and demolishing the wheel. The <u>Benton</u> became unmanageable in the eddies and drifted downstream before striking the Louisiana shore, where damage was temporarily repaired. The <u>Benton</u>'s place in line was taken by the <u>Pittsburg</u> after Fort Wade's guns were silenced.<sup>65</sup>

The height of Fort Cobun offered a certain protection from the gunboats nearby, since they could not elevate their guns to that height. At the same time the Confederate gunners were hindered by being unable to depress their muzzles when the vessels were very close. The boats, joined by the repaired <u>Benton</u>, now circled beneath Fort Cobun, approaching within three hundred yards. At 12:30 p.m. a shot disabled the port engine of the <u>Tuscumbia</u>, forcing her withdrawal downstream. During this lull the men at Fort Wade managed to repair some damage to their parapets and remount part of the armament.<sup>66</sup>

At 12:50 p.m. Admiral Porter went upriver to confer with Grant. The consensus was that although several of the Confederate guns had been silenced they were just as capable of resisting an attack as when the battle began some five hours before, and the Confederate infantry had not suffered at all. It was decided to disembark the troops and march them across Coffee's Point opposite Grand Gulf to DeSharoon's Plantation about three miles below Grand Gulf's guns. Porter then signaled his fleet to join the <u>Benton</u> upstream. All safely anchored at Hard Times Landing, with the exception of the disabled Tuscumbia, by 2:30 p.m.<sup>67</sup>

When the battle commenced Bowen had tried to wire Stevenson to rush reinforcements, but the wire was down. However, the sound of heavy firing in the direction of Grand Gulf finally convinced Stevenson that Bowen had been right. He ordered Brigadier Generals William E. Baldwin and Edward D. Tracy to move their brigades to assist Bowen at Grand Gulf.<sup>68</sup>

With the cessation of bombardment Bowen took inventory of the damage and made repairs to the works. Despite the some 2,500 projectiles fired into Grand Gulf by the fleet on April 29, very little real damage was done. Nearly all the fleet's guns outweighed the guns at Grand Gulf. Bowen's subordinates reported three killed and eighteen wounded. Unfortunately, one of the dead was Bowen's chief of artillery, Colonel William Wade.<sup>69</sup> Grand Gulf

might certainly be classified as a Confederate victory. They had withstood a five-hour continuous battle against gunboats with only thirteen guns, six of which were 30-caliber Parrott or less in size. The Federal fleet engaged at Grand Gulf mounted eighty-one guns, many of them being ll-inch Dahlgrens or 9-inch rifles. The losses among the attacking fleet of ironclads and warships were much greater. The Benton, seven killed, nineteen wounded; Tuscumbia, five killed, twenty-four wounded; Pittsburg, six killed, thirteen wounded; Lafayette, one wounded. There were no casualties reported aboard the other vessels. The Tuscumbia was hit eightyone times. This vessel had relatively thin armor and many of the Confederate shells penetrated and burst inside, putting the Tuscumbia out of service for some time. The Benton received fortyseven hits, and the Pittsburg took thirty-five direct strikes.<sup>70</sup>

Action was not long in returning to Grand Gulf. During midafternoon the <u>Lafayette</u> dropped down to halt repairs being made to the works. An interval of fire was kept up until 8:00 p.m. by the gunboat, but the guns of Grand Gulf returned very few shots. At 7:45 p.m. the rest of the fleet had cast off from Hard Times. The gunboats pounded Grand Gulf while the empty transports and barges ran past the batteries under cover of darkness, taking advantage of the shadows along the Louisiana bank. One casualty occurred aboard the Mound City during the night engagement.<sup>71</sup>

The next morning, April 30, the transports were employed in ferrying McClernand's command from the Louisiana side to Bruinsburg Landing where the Federals made a rapid march to the bluffs. Grant's original plan, in case Grand Gulf could not be taken by assault, was to land at Rodney, as Bowen had accurately predicted, but informers revealed to the Federals two roads running from Bruinsburg to Port Gibson. While McClernand's XIII Corps was initiating the greatest amphibious landing in American history prior to World War II, McPherson's XVII Corps was nearing Hard Sherman's XV Corps had thoroughly confused Times Landing. Stevenson by making a feint against Snyder's Bluff, on the Yazoo River twelve miles north of Vicksburg, and as soon as word reached him of Grant's successful landing he withdrew to follow McClernand and McPherson's route through Louisiana.

Bowen's fears now were a reality. His pleas for reinforcements to prevent such a landing had gone unheeded. Bowen assigned the Second Missouri Infantry Regiment, one company of the Sixth Mississippi, and the heavy artillery the task of holding Grand Gulf as he formed the remainder of his infantry and field batteries for the march toward Port Gibson.<sup>72</sup> Bowen had already positioned the Sixth Mississippi Infantry Regiment, the First Confederate Battalion, and the Pettus Flying Battery west of Port Gibson a few days before.<sup>73</sup> He now ordered Green to move most of his brigade in that direction along the road leading to Magnolia Church. About 1:30 a.m., May 1, Green's pickets clashed with McClernand's vanguard at the A. K. Shaifer home.<sup>74</sup>

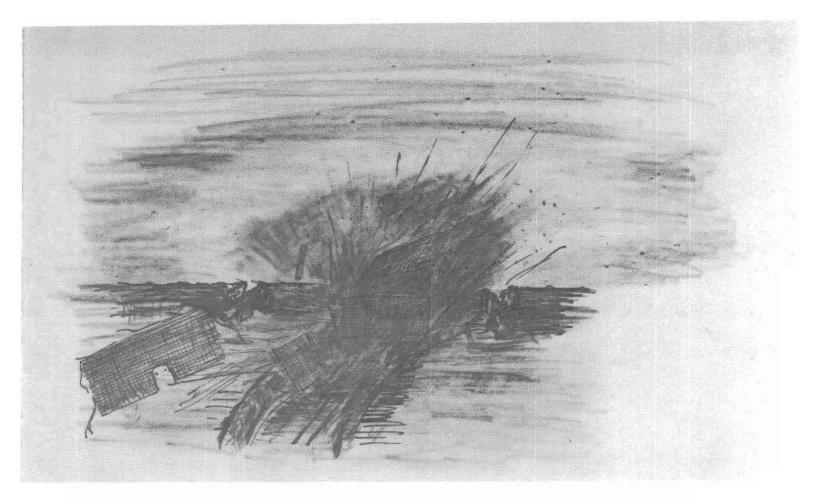
Bowen's 8,000 Confederates were now committed to a battle with 23,000 Federals who were receiving reinforcements continually. They held the field against these overwhelming odds for eighteen hours. Tracy's and Baldwin's brigades did arrive, but were so exhausted from a forced march of some fifty miles that their fighting capacity was greatly diminished. General Tracy was killed early in the fight and his command was assumed by Colonel Isham W. Garrott of the Twentieth Alabama. Finally, his right was turned and his tired troops were forced to withdraw at 5:30 p.m. Bowen's predicament can best be described as having too little, too late.

Compelled to abandon the field, Bowen crossed his army over Bayou Pierre and burned the swinging bridges behind him. Grand Gulf was now untenable, and on his own initiative Bowen resolved to abandon Grand Gulf. He made this decision prior to receiving authorization from Pemberton in order to avoid mass confusion and blockage of the narrow roads at the last minute.<sup>75</sup> Pemberton's reply to the abandonment of Grand Gulf authorized Bowen's move. Pemberton ordered the demolition of guns, ammunition, and stores, but Bowen's quick decisions allowed him to save the stores.<sup>76</sup> A demolition team spiked the heavy guns and ignited the powder trains to the magazines at 4:30 a.m., Sunday, May 3, 1863.<sup>77</sup>

After daylight, Grant took over the ruined town of Grand Gulf as his base of operations against Vicksburg.<sup>78</sup> C. E. Affeld, a member of Battery B, First Illinois Artillery, arrived with Sherman's corps on May 11, and made this entry in his diary of that date:

> At about 7 p.m., we commenced loading [at Hard Times, Louisiana] and by 9 p.m. we were on the opposite side [Grand Gulf] unloading, which we did not finish until near 11 p.m. about which time we retired. A few hundred yards back from the river rises a very picturesque range of bluffs, which are from 50 to 60 feet high. The town of Grand Gulf that was formerly here is completely destroyed, nothing remains but cisterns and chimneys to indicate the former habitation.<sup>79</sup>

The Federal army continued to use Grand Gulf as a base until a supply link was made with the fleet above Vicksburg in early June. But war was not over for the ruined town of Grand Gulf. On July 16, 1864, a sharp skirmish occurred between a Federal patrol under Colonel Joseph Karge and Confederate partisans.<sup>80</sup> On the night of December 30, 1864, the tinclad <u>Rattler</u>, which had gained a certain amount of notoriety by firing into the Rodney Presbyterian Church a



Reconstruction of Magazine Explosion

year earlier, was tied off Point of Rock when she was struck by high winds, lost her anchor, and was washed into the bank where she bilged in the stern on a snag. The crew managed to save much of their effects and boarded the <u>Magnet</u> to go after a salvage barge. As the salvage crew was returning to refloat the <u>Rattler</u> they observed a band of Confederates on board. The Confederates, seeing the approaching Federal boat, set the <u>Rattler</u> on fire, burning it to the water line. Perhaps the <u>Rattler</u> has the distinction of firing the last shot at Grand Gulf. Prior to abandoning the vessel the crew loaded and spiked the 30-pounder deck guns, one of which cooked off in the fire.

The cruel reconstruction policy forced upon Mississippi after the war all but killed off any hope of revival for devastated towns such as Grand Gulf. Little recognition was afforded Grand Gulf's role in our American Civil War until 1958, when the Mississippi Legislature created the Grand Gulf Military Monument Commission to purchase land and develop the site into a state park. The dedication of the park was held on April 7, 1968, when it was officially opened to the public. Today the park draws approximately 48,000 visitors annually (1980 figures).

### NOTES

<sup>1</sup>John R. Swanton "Indian Tribes of the Lower Mississippi Valley and Adjacent Coast of the Gulf of Mexico," <u>Bureau of American</u> <u>Ethnology</u> Bulletin 43, 1911, p. 218.

<sup>2</sup>Franklin L. Riley, "Extinct Towns and Villages of Mississippi," <u>Publications of the Mississippi Historical Society</u>, Vol. V (1902), pp. 329-30.

<sup>3</sup>Francis Vinton Green, "The Army in the Civil War," <u>The</u> <u>Mississippi</u>, Vol. VIII, (New York: Charles Scribner's Sons, 1882), p. 19. <u>Official Records of the Union and Confederate Navies in the</u> <u>War of the Rebellion</u>, (Washington: Government Printing Office, 1894-1922), Series I, Vol. 18, pp. 491-94. <u>The War of the</u> <u>Rebellion: A Compilation of the Official Records of the Union and</u> <u>Confederate Armies</u>, (Washington: Government Printing Office, 1880-1901), Series I, Vol. 15, pp. 22-24. (The latter two works are hereafter cited respectively as <u>O.R.N.</u> or <u>O.R.</u>, followed by the series in Roman numerals, the volume number in Arabic, the part number, if any, and the page.)

<sup>4</sup><u>0.R.N.</u>, I, 18, pp. 513, 534.

<sup>5</sup>Ibid., p. 534. <sup>6</sup>Ibid., p. 535. <sup>7</sup>Ibid. <sup>8</sup>O.R., I, 15, pp. 23-24; <u>O.R.N</u>., I, 18, p. 535. 9<sub>Ibid</sub>. <sup>10</sup>O.R.N., I, 18, p. 546. <sup>11</sup>Ibid. <sup>12</sup>Ibid., p. 816. <sup>13</sup>Ibid., pp. 515, 797, 816. <sup>14</sup>Ibid., pp. 545, 816,797. <sup>15</sup>Ibid., p. 547. <sup>16</sup>Ibid., pp. 785, 798, 802, 821. <sup>17</sup>Ibid., pp. 798, 802. <sup>18</sup>0.R.N., I, 18, p. 557. <sup>19</sup>Ibid., pp. 557, 785. <sup>20</sup>0.R., I, 15, pp. 27-35. <sup>21</sup><u>Ibid.</u>, p. 27. <sup>22</sup>0.R.N., I, 15, pp. 707, 716, 717, 750. <sup>23</sup>Ibid., pp. 707, 717, 750. <sup>24</sup>Ibid.

<sup>25</sup>DeSoto Peninsula was a narrow strip of Louisiana which extended northward parallel to the Vicksburg waterfront. General Williams first devised the plan to cut a canal across the neck of DeSoto, thereby rerouting the Mississippi River so that it would bypass the front of Vicksburg and allow the fleet to move past the city without being as exposed to the batteries posted there. Grant tried a similar move, but like Williams also met with failures due to the river dropping. Nature succeeded in doing what the United States tried, but failed. In 1876, the Mississippi cut through the peninsula and today Vicksburg sits on the Yazoo River Diversion Canal, not the Mississippi River.

<sup>26</sup><u>0.R.</u>, I, 24, pt. 3, p. 653.

<sup>27</sup>Ibid., p. 658. Bowen's Brigade consisted of the following units: First and Fourth Missouri Consolidated, Second, Third, Fifth Missouri Infantry Regiments; Battery A, First Louisiana Heavy Artillery; Wade's, Guibor's, and Landis' Missouri Batteries. Pemberton originally authorized Stevenson to send Brigadier General Winfield S. Featherston's brigade with a battery of Parrott rifles, but Featherston had been sent to Fort Pemberton. John Stevens Bowen was born at Savannah, Georgia, October 30, 1830. He graduated from West Point with the class of 1853. Three years after graduation Bowen resigned from the army to be an architect in St. Louis, Missouri. When the Civil War broke out Bowen was serving as a captain of Missouri militia. He was appointed colonel of the First Missouri Infantry, and first saw duty at Columbus, After being promoted to brigadier general, March 14, Kentucky. 1862, Bowen was attached to Breckinridge's Division at Shiloh (Pittsburg Landing), Tennessee, where he was wounded. Bowen was promoted to major general for his distinguished services during the Vicksburg campaign, but died nine days after Vicksburg's surrender.

<sup>28</sup><u>Ibid</u>., p. 669. There seems to be quite a bit of confusion in the <u>Albatross</u>' also being called the <u>Monongahela</u> in Confederate correspondence.

<sup>29</sup><u>Ibid.</u>, p. 669. Pemberton told Bowen that the guns would be aboard the <u>Fulton</u>, but they were shipped on the <u>Anne Perette</u>. The <u>Fulton</u>, also heading down the Big Black River, was going to Hard Times, Louisiana, after commissary supplies.

<sup>30</sup>Ibid., p. 675.

<sup>31</sup><u>Ibid</u>. If an overland route could be found it would negate the possibility of capture should a gunboat rush down the Mississippi and catch the <u>Anne Perette</u> unloading at Grand Gulf.

<sup>32</sup>Loyall Farragut, <u>The Life and Letters of David Glasgow</u> <u>Farragut</u>, (New York: D. Appleton & Co., 1879), p. 337.

<sup>33</sup>O.R., I, 24, pt. 1, p. 469; O.R.N., I, 20, pp. 3, 4, 85, 763, 805; Farragut, <u>op. cit</u>., pp. 337-38.

<sup>34</sup><u>Ibid</u>., I, 24, pt. 3, pp. 714, 720.

<sup>35</sup><u>Ibid</u>., p. 724. The 42-pounder was an army caliber often used by the navy and often found in seacoast defenses. The carriage was better suited for earthworks than the naval 32-pounders. <sup>36</sup><u>Ibid</u>., p, 693-94. The inferred sketch noted as "not found." <sup>37</sup><u>O.R.</u>, I, 24, pt. 1, p. 468; <u>O.R.N.</u>, I, 20, pp. 35, 41, 48, 86-87, 765. <sup>38</sup><u>O.R.</u>, I, 24, pt. 1, p. 486. <sup>39</sup><u>O.R.</u>, I, 24, pt. 3, pp. 713-14. <sup>40</sup><u>Ibid</u>., p. 720. <sup>41</sup><u>Ibid</u>., p. 724. <sup>42</sup><u>Ibid</u>., p. 755. <sup>43</sup><u>Ibid</u>.

<sup>44</sup>William Candace Thompson, reminiscences of his war services, "From Shiloh to Port Gibson," <u>Civil War Times Illustrated</u>, October, 1964. At the time of the Battle of Port Gibson, Thompson was a lieutenant in Co. H, Sixth Mississippi Infantry Regiment. He was severely wounded during that battle.

<u>O.R.N.</u>, I, 24, p. 627. Admiral Porter stated: "Grand Gulf is the strongest place on the Mississippi. Had the enemy succeeded in finishing the fortifications no fleet could have taken them."

<sup>57</sup><u>O.R.</u> I, 24, pp. 610-28.

<sup>58</sup>U. S. Grant, <u>Personal Memoirs of U.S. Grant</u>, 2 vols. (New York: The Century Co., 1885-1886), I, p. 395.

<sup>63</sup>William M. Cliburn, letter to his wife from Grand Gulf, April 30, 1863: "...I was niernuf yesterday to smell the pouder & hier the balls whessl & roar & howl & squal...." Letters in the possession of Cliburn's great-grandson, Mr. Donald Colmer, Jackson, Mississippi. Cliburn was a private in Co. G., Sixth Mississippi Infantry Regiment. Company G was in Grand Gulf and not with its regiment at Port Gibson. Cliburn was killed May 16, 1863, during the Battle of Baker's Creek (Champion Hill).

<sup>07</sup>Edwin C. Bearss, "Grand Gulf's Role in the Civil War," reprinted from <u>Civil War</u> <u>History</u>, published quarterly by the State University of Iowa, March, 1959, p. 25.

<sup>12</sup>O.R., I, 24, pt. 1, p. 663. According to the Cliburn Letters Co. G was detached on picket duty at Grand Gulf. Thompson, "Shiloh to Port Gibson," p. 23.

<sup>77</sup><u>Ibid.</u>, I, 24, pt. 1, p. 666; <u>O.R.N.</u>, I, 24, p. 629.
<sup>78</sup><u>Ibid</u>.

<sup>79</sup>C. E. Affeld, Battery B, First Illinois Artillery, Diary, in files of Vicksburg National Nilitary Park, Vicksburg, Mississippi.

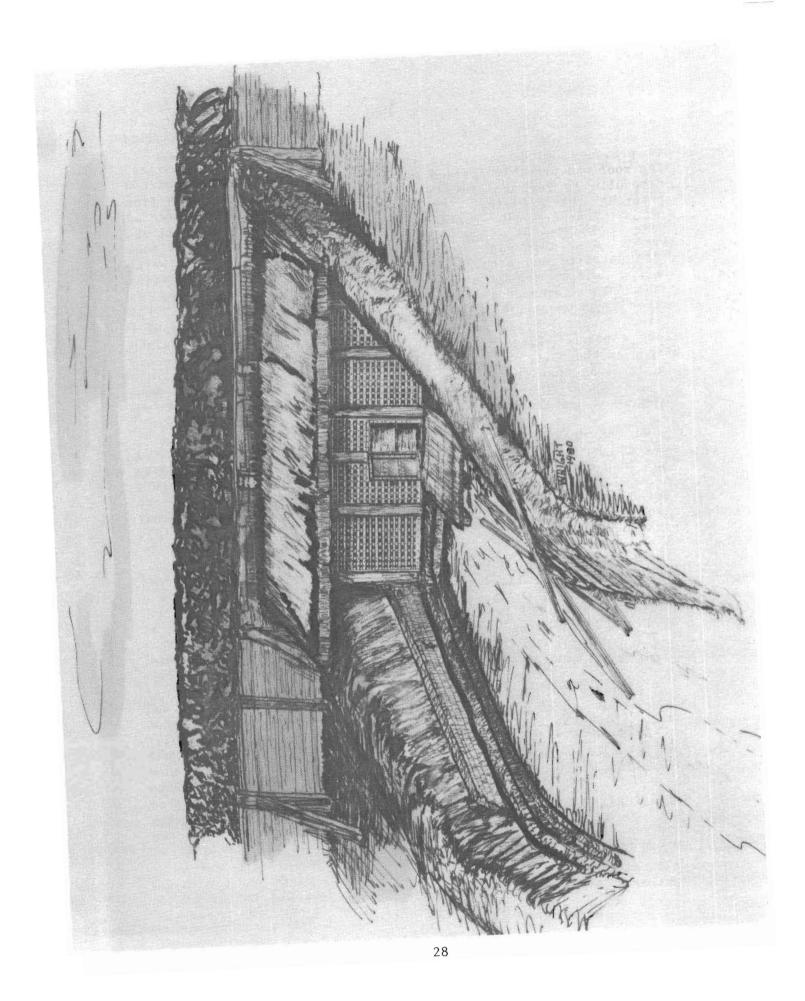
<sup>80</sup><u>0.R.</u>, I, 39, pt. 1, pp. 246-47. <sup>81</sup><u>0.R.N.</u>, I, 26, pp. 769-71.

Following the destruction of the magazine at Fort Wade and subsequent abandonment of the area by Confederate forces, Federal engineers and draftsmen visited the site of their antagonists' fortifications which they had failed to take under fire. The maps made by these teams from both the army and navy differ more than usual. As a rule maps drawn by the Federals during the war were very detailed and accurate, but not a single known map of Grand Gulf's defenses shows a magazine within Fort Wade, yet one does indicate a "furnace" where the magazine actually was found. This error might be attributable to the engineer/draftsman's mistaking a large amount of brick and a section of the former jail as the grate from a hotshot furnace. In all probability the rear wall section found in the parapet wall was partially exposed at the time. There is no doubt that the map in question, drawn by the navy, was made by personnel more familiar with seeing hotshot furnaces at defensive installations than jail cells being used as magazines.

During the viable lifetime of Grand Gulf as a town it had a well made and very secure jail made of  $2 \ge 1/2$ -inch iron bars riveted on four inch centers. The cell was probably housed within a structure located in the southern section of the town near the Grand Gulf-Port Gibson Railroad, and suffered the same fate as other structures when the Federal navy burned the town in the late 1862 engagements.

Brigadier General John S. Bowen, when ordered to fortify Grand Gulf, evidently realized that the cell could easily be used as a bombproof magazine. The Confederates, using impressed slaves and livestock, moved the jail from the town into Fort Wade by using at least six sections of railroad track as skids. This was done in a leapfrog manner with two or three sections being used at a time, allowing the cell to slide along the ground more easily.

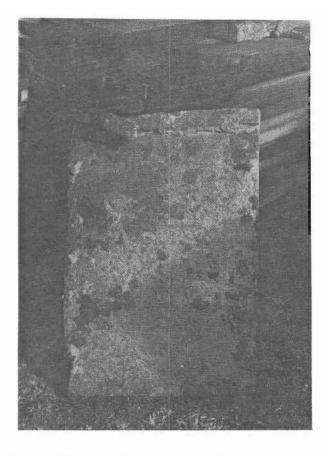
A similar, but double-unit cell of identical construction and workmanship is on display at Grand Gulf State Military Monument today. Both the cell used as a magazine and the cell on display had 24 x 36 x 1/2-inch doors, but the doors on the display cell were changed sometime during its use. This was a latter-day alteration by the City of Port Gibson, which donated the cell to Grand Gulf. The purpose of the relatively small doors was to force a prisoner to get onto his hands and knees to enter and exit the cell, therefore preventing him from attacking the jailor when the door was closed. A man on his hands and knees is not likely to be very aggressive.



Once the cell was into place near the western edge of Fort Wade it was boarded internally with 12 x 1-inch cypress planking nailed to stringers of the same size on the exterior. This planking was to prevent accidental sparks from occurring inside the magazine. The roof was probably boarded in the same manner and covered with a tarpaulin to keep moisture and earth from the parapet wall from entering the magazine. This roof covering probably extended several feet from the edge in an eave. Before the parapet wall was built up to the sides and partial roof, a layer of loose brick some two feet thick was placed around the three sides. This brick served two purposes. It acted as a ventilator between the magazine and the damp earth and served as a buffer to hopefully deter a shell should it penetrate the twelve or so feet of earthen wall before it struck the magazine. A drainage ditch was dug parallel to and approximately one foot in front of the magazine. The ditch made a right angle at the southeast corner and followed the south cutaway wall base eastward to the street below. A footbridge spanned the drainage ditch at the magazine door, which for some inexplicable reason was left at 24 x 36 inches instead of being replaced by a more accessible larger door. The footbridge was constructed of cypress runners approximately 8 x 10 inches with 12 x 1 inch planking. The magazine was several feet below the more exposed fort surface and protected from the river by an earthen parapet, and from enfilading fire from up or down the river it was protected to a degree by its depth within the cutaway. Despite this depth the magazine may have had a very close call. One 30-pound Federal Parrott shell was discovered within the drainage ditch turn at the southeast corner. It is possible that this shell, which had a paper time fuse and had failed to explode, might have been thrown into the ditch from the parapet wall when the magazine was deliberately blown up by the Confederates, but if its point of impact was where it was found it would probably have exploded the magazine.

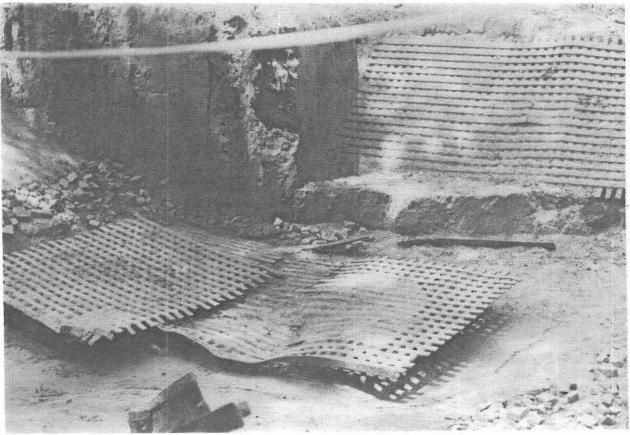
When the magazine was detonated on the morning of May 3, 1863, everything not conducive to its destruction had been removed. Most of the ordnance supplies which could be were moved into Vicksburg. The heavy guns at Fort Wade could not be moved, and ammunition for these must have been nearly expended during the engagement on April 29, if we are to judge by evidence unearthed during the excavation. There appeared to have been a surplus of ammunition for 20-pounder rifles, but there had been only two of these at Fort Wade, one of which burst during the engagement on March 31, 1863. The other 20-pounder Parrott rifle is unaccounted for in the losses of captured artillery during the Siege of Vicksburg, nor is it listed among the ordnance abandoned at Grand Gulf.<sup>2</sup>

The ammunition for the 20-pounders was stored along the north wall, the 6.4-inch shells for the 100-pounder Blakely rifle in the southeast corner. Bulk powder was stored near the center of the



Right: Door from Magazine. Size: 24" x 36" (22 x 33 cm).

Below: Floor and south wall (foreground) and rear or west wall of Magazine, <u>in situ</u>. Door may be seen near lower left corner of photograph. Photograph taken facing west.



west wall in captured U.S. navy brass containers (called safes, or magazines) capable of holding approximately a hundred pounds each. There were at least two of these in the magazine at the time of its destruction. These waterproof safes were fitted with a sealed cover much like that of a ship's porthole. This cover was sealed by a rubber gasket and held tight by a 1/2-inch turnbolt at either end. One was marked: "W.N.Y." (Washington Navy Yard) on the upper left corner, and followed by "U.S.N. 1858" on the upper right corner. There were no distinguishable markings on the other.

Charges ready for firing normally consisted of a measured amount of powder in closed flannel bags which had been treated with a solution of saltpetre (potassium nitrate, KNO<sub>3</sub>) to aid in total burning. Standard charges for Fort Wade's guns would have been: 100-pounder Blakely, eight pounds; 8-inch naval, ten pounds; 32-pounder rifled guns, six pounds; and the 20-pounder Parrott rifle, two pounds. It is not known how many and what size charges might have been in the magazine when the explosion occurred, but certainly these prepared charges were a contributing factor to the magazine's destruction.

The powder train used to ignite the charges in the magazine began near the angle of the cutaway and ran to the magazine. For some reason the door to the magazine was closed when the explosion occurred, which leads to the assumption that boards had been removed from the open iron gratework of the jail cell, allowing the powder train to reach the charges, or that sufficient powder was placed on the outside to blow away the plank covering on the interior of the magazine.

The resultant explosion tore away the roof, throwing it through the top of the parapet wall. The rear wall which was against the parapet was forced into the earthen wall, and rests in that position today at approximately a forty-five degree angle, with the upper edge toward the west. The north wall was completely disintegrated into fragments by the 20-pounder ammunition which lined that wall. The front, except for the door, disappeared with the roof. The door blew into the cutaway, and was found embedded in the brick of the north retaining wall. The south wall survived, but was blown away at the base to fall inward on top of the floor. The floor, which naturally supported the powder and ammunition, is in situ, but badly warped and broken. Angles which fastened the various walls to the roof remained with the roof. The angles around the floor either remained attached to the floor or were located immediately near their respective sides, although all were badly twisted and broken.

Six sections of nineteenth century style railroad track were still within the entrance cutaway. Four are in a relatively vertical position where they appear to have been leaning against the north wall of the cutaway. The other two are horizontal and probably still in their original position after serving as skids running east to west in the cutaway. It is not known if the track served any function once the jail cell had been moved into place.

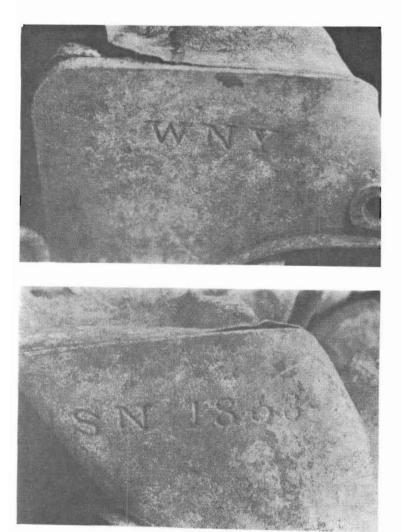
The explosion within such a closed environment may be a contributing factor to the survival of the ammunition which did not explode. There was apparently no fire after the initial explosion. In all likelihood the oxygen removed by the blast prevented the ignition of many of the 20-pound Reads, which utilized a wooden timefuse designed to be ignited by the enveloping flame of a cannon There were at least seven 6.4 shells for the 100-pound muzzle. Blakely rifle, two of which survived the explosion. These shells were fitted with naval type percussion fuses which are designed to detonate upon striking or receiving a severe jar along the nose or ogive. Since the safety wire was still intact, the several which did detonate probably fired simply because the sides burst, exposing the charge. One complete fuse from one of the burst 6.4 shells reveals the plunger still in a rearward position. The fuses were removed from the two surviving 6.4 Tennessee sabot type Confederate shells and the bursting charge was removed. One was loaded with ffg musket powder, the other with the usual large grain cannon powder. Each shell contained approximately three pounds of powder. When during excavation the safety wire was removed from one of the fuses and tossed against a cross-tie wall, the percussion cap on the plunger popped. The powder removed from the two shells ignited as rapidly as fresh black powder.

In addition to the 6.4-inch Tennessee sabot and 20-pound Read shells, fragments of seven 8-inch balls were found, along with four Confederate pressure-sensitive land mine fuses. They had not been designed for the 8-inch balls. The balls, however, had been loaded with the bursting charge, and probably simply burst by having open fuse holes, but certainly not with the same explosiveness as would have been the case if the wooden fuse plugs had been fitted to provide needed compression. One other spherical projectile was found, a Confederate 6-pound wood fuse plug ball. It was not for the ordnance being used at Fort Wade, but may have been a relic of Captain James A. Hoskins' Brookhaven Light Artillery, which capriciously occupied the site to harass Federal shipping with its four six-pounders, possibly picked up on the site by an artilleryman and placed in the magazine. The land mine fuses found are the only known specimens encountered from the Vicksburg area.

NOTES

<sup>1</sup>Thomas Yoselott, <u>The Official Atlas of the Civil War</u>, (New York: 1958), p. XXXII, plate 4.

<sup>2</sup>Francis Vinton Green, <u>The War of the Rebellion: A Compilation</u> of the Official Records of the Union and Confederate Armies, (Washington: Government Printing Office, 1880-1901), series I, Vol. 24, pt. II, p. 418.



"WNY" (Washington Navy Yard)

"USN 1858" (United States Navy 1858)

Markings on one of two Federal powder containers recovered from the Magazine. Both were severely damaged in the explosion of the Magazine.

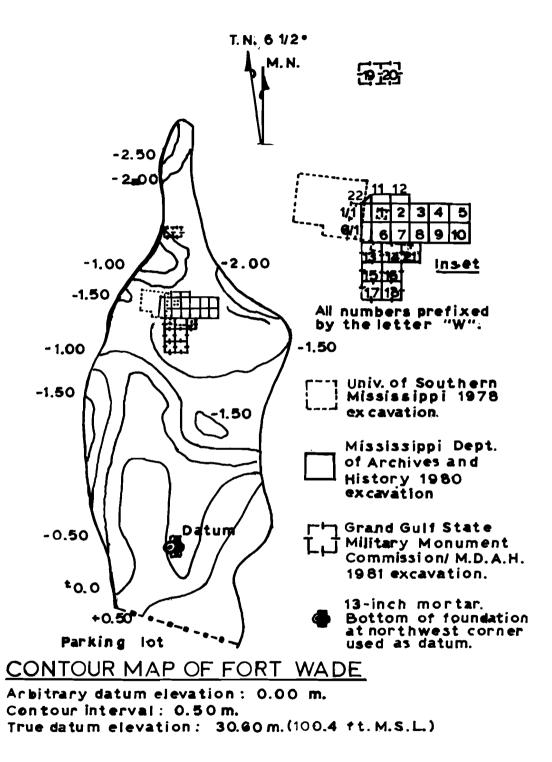
### PREVIOUS ARCHAEOLOGICAL WORK AT FORT WADE

The military action which took place at Grand Gulf during the American Civil War has been researched, written about, analyzed, and investigated, by historians, participants in the action, journalists, relic hunters, and archaeologists. Since the work performed there during the summer of 1980 dealt primarily with archaeology and its resultant research, we shall limit this section to that pertaining to archaeology.

During the summer of 1978, the University of Southern Mississippi (USM) contracted with the Grand Gulf Military Monument to do a limited archaeological investigation of certain areas of the Park. The crew, under the supervision of Dr. David Heisler, concentrated most of their efforts along the remains of the parapet wall which borders the western edge of Fort Wade. This earthen wall once protected the Confederate garrison of Fort Wade from the gunboats operating along the Mississippi River, but shortly after the abandonment of Grand Gulf by the Confederates the Federal troops occupying the site dismantled much of the wall. This wall had been severely damaged before the Federal army knocked it down. During the battle of April 29, 1863, the heavy guns of the navy nearly tore it to pieces. This damage was followed four days later bv the intentional destruction by the Confederates of the ammunition magazine beneath a part of it, which not only left a void in the wall but also created a very noticeable depression which can be distinguished today.

USM discovered one gun position along the parapet wall which revealed a wooden floor, or firing platform. The other focus of their attention was an iron grate made of  $2 \times 1/2$ -inch strap iron riveted at four inch centers to form a very strong structural member. Its location had been known for years to several people, but no one actually knew the great extent of this iron grate until 1978. For years it had been assumed to be the grate of the hotshot furnace alleged to have been in Fort Wade, but once this grate was uncovered all who were familiar with defensive fortifications knew this was no hotshot furnace grate, but part of a larger structure. Several fragments of shells and two complete specimens were found in association with this grate, which was positioned at nearly a forty-five degree angle with the uppermost side toward the west. Also near its lower edge was residue from a large quantity of black powder.

In addition to the pit to uncover this large grate, USM placed one trench of about  $1 \ge 2$  meters extending to the east from the southern end of pit and another  $1 \ge 1$  meter "telephone booth" type square about three meters north of the trench and about two meters



Scale: 1 inch = 20 meters

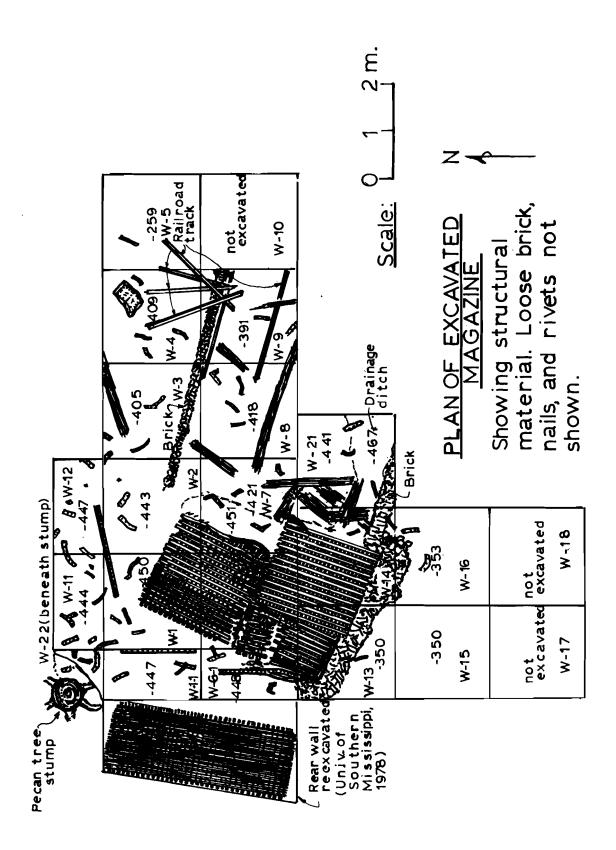
east of the large pit containing the grate. MDAH square W-6 cut into the northern edge of this trench and the small square was totally encompassed by W-1. When W-1 was excavated it was learned that USM's square was too shallow. It had failed to penetrate to the floor of the magazine by 1.40 meters. Had they gone that much deeper the floor of the magazine would have been discovered in 1978.

### PROCEDURES AND METHODS OF THE ARCHAEOLOGICAL INVESTIGATIONS

The datum used by the Mississippi Department of Archives and History (MDAH) crew during this excavation was the ground surface at the northwest corner of the 13-inch mortar on display inside Fort Wade. At the time of this investigation the field crew from MDAH did not have the information relating to the datum used by USM in 1978. Had this information been available, the same datum would have been used. The primary goal of the 1980 archaeological project was to investigate the significance of the three sections of railroad track which protruded above the ground surface east of the very large iron grate unearthed by USM in 1978, and to link a series of 2 x 2 meter squares from just east of these rails westward to near the previously mentioned grate beneath the remnant of the parapet wall.

A series of ten two meter squares was established in a grid of two five-square rows extending from west to east. The prefix "W" for Wade was used, with W-l being the westernmost square, continuing east to W-5. Square W-6 was the west pit on the south side of W-1 and W-10 was the easternmost square of the southern In establishing this grid it was noticed that the depression row. remaining from the 1978 excavations did not lie in a magnetic north-south direction, but were almost ten degrees off to the east. Perhaps the reason for this was learned when the transit was placed over the northwest stake of W-l. The compass was definitely not true to the line of stakes which had been placed from the northeast corner stake of W-5. However, since the grid was set by degrees of the transit and not the compass no harm was done. We learned that the reason for the erratic compass was the vast amount of ferrous metal beneath the very stake we were using. A variable gap existed between the depression left by USM and the squares W-1 and W-6. This area was to be taken out separately and the pits would be suffixed with the designation of W-1/1 and W-6/1 relative to the adjacent square.

It was known through personal observation of the 1978 excavation that the interior of Fort Wade was heavily overburdened with fill



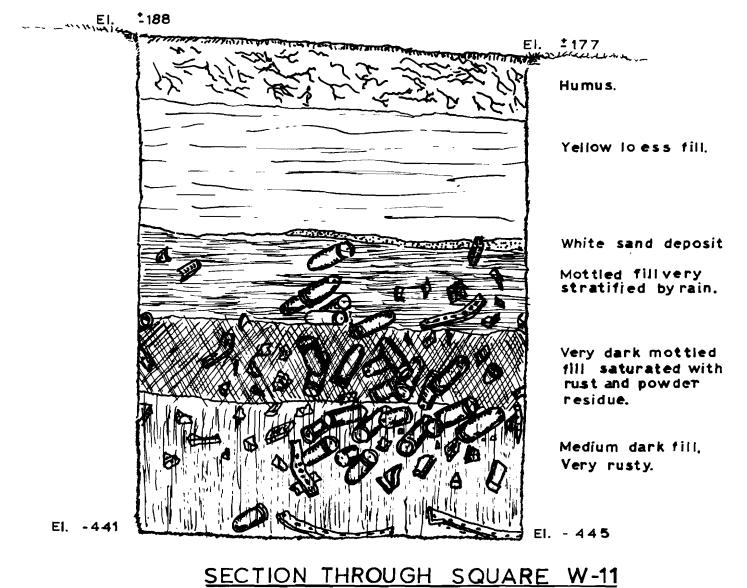
as a result of the dismantling of the parapet wall and of natural erosion, but this excavation was centered within the depression thought to have been the site of the magazine blown up by the Confederates upon their abandonment of Grand Gulf on May 3, 1863, and might contain artifacts at levels even lower than the natural ground level away from the depression. Because of this jumbled condition of the earth in the depression only the upper humus level would be removed with shovels. Once through this nearly 25-35 cm level the more intricate work of using a trowel was necessary.

Square W-10 was abandoned almost immediately because of a large pecan tree near the southeast corner, and it was decided not to damage this tree by cutting the very large roots. The use of true balks was dispensed with for safety reasons. The great depth would have demanded ultra thick balks, and since this area was a fill which was not stratified by years of weathering or cultural occupation, the risk was not worth the dubious benefit. Instead of balks the squares were opened in a checkerboard pattern. This would allow the recording of any definite strata by profiling the walls of adjacent squares. This would also allow a wheelbarrow to be pushed closer to the active square for dirt removal.

Almost immediately beneath the humus level, which was very easy to identify since the Confederates had denuded the ground and little activity had taken place there other than light gardening over the years, artifacts in the form of broken brick, fragments of iron strap, and shrapnel began to appear. The amount of brick precluded the use of a sifter; the workers would just have to be more careful not to miss small items. With the great number of cut nails being found, which would probably have gone through a half-inch screen anyway, little worry was given to their missing something as large as a smallarms bullet or button.

The excavation proceeded smoothly toward the west with few problems other than nearly two weeks of intermittent rain. When a square became flooded it was siphoned out with garden hoses and allowed to air dry. Very little delay was caused by the weather, as this time was spent in cleaning, inventorying, and labeling artifacts. The greatest delay was to come later when the temperature by midday was reaching over 105 degrees outside the pits and much hotter down in them where there was no breeze. Τo combat heat fatigue we tried to work forty-five minutes on and fifteen off, but fortunately a gasoline generator was obtained and by using box fans in the two and one-half meter deep pits the pits became much more bearable than the ground surface above, and production increased over 100 percent.

Two 1 x 2 meter pits had to be added north of W-1 and W-2 late into the excavation because a metal detector revealed a heavy iron mass off the grid pattern. This proved to be a large number of



# Looking northward

both exploded and complete artillery shells which had blown through the north wall of the magazine. Also mixed with the shells were many fragments of the iron bar from the north wall.

The same methods used during the 1980 excavations were continued in use during 1981. Since the 1980 project was directed toward locating the magazine and recovering its associated artifacts, the 1981 season became a study of the magazine and its relationship to the fortification which it served.

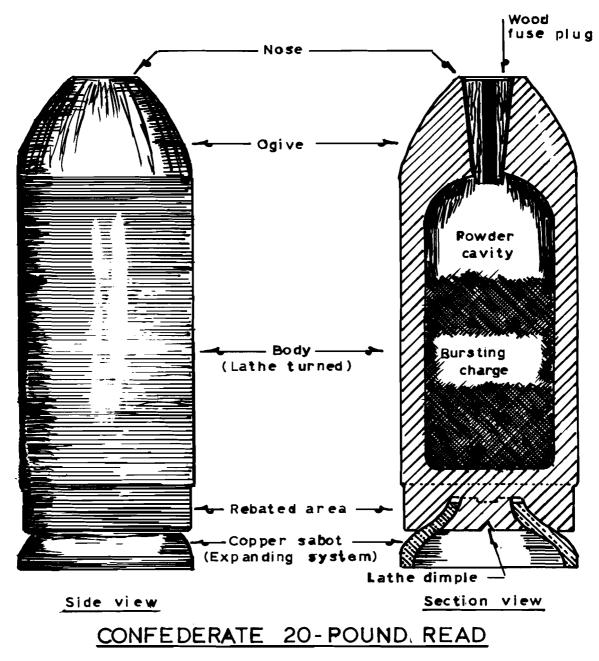
Nine additional two meter squares (W-13 to W-22) were laid out in 1981. W-13 keyed into the immediate south side of 1980's W-6/1. W-14 was then placed east of W-13, with W-15 through W-28 in pairs south of W-13 and W-14. Immediately east of W-14 was W-21, added later in the season. Two exploratory squares, W-19 and W-20, were placed several meters north of the magazine in the area of the position of one of the two 20-pounder Parrott rifles, but these squares proved negative. A very irregular and unorthodox pit was dug in almost a horizontal direction beneath a pecan tree in the northwest corner of the magazine into the parapet wall. This would not have been done had a metal detector not been used to test the walls. This unsightly pit was purely and simply a salvage operation to remove a number of 20-pound Read shells blown into that area by the magazine's explosion. Hopefully, this area will be straightened up when the tree is totally removed prior to constructing an enclosure with a cover.

The rear wall section, which was first uncovered in 1978 by USM, was again uncovered and left as it had been deposited by the explosion so that it might be viewed by the public.

At first all large pieces of shrapnel and pieces of iron strap were recorded, but the great amount of both prevented an elevation on each and every piece. Instead only complete shells, sabots, and artifacts not ordinarily encountered were recorded as to elevation and horizontal position within their respective squares.

#### CONCLUSION

Three organized archaeological investigations have been conducted at Fort Wade. The first, in the summer of 1978, was sponsored by the Grand Gulf State Military Monument Commission (GGSMMC) with a crew from the University of Southern Mississippi (USM). The second excavation was undertaken entirely by the Mississippi Department of Archives and History (MDAH) in 1980, and the last endeavor was a joint venture of GGSMMC and MDAH during the

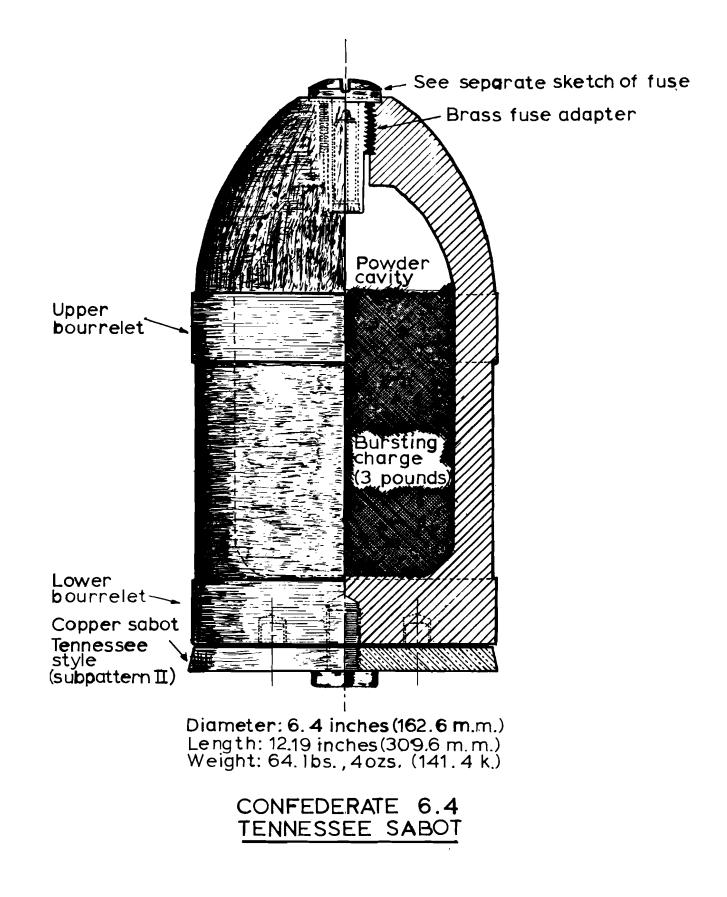


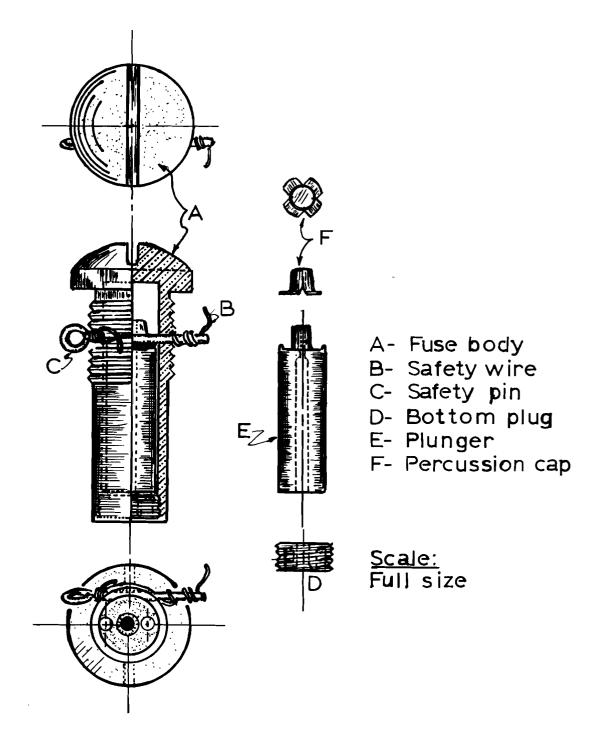
Diameter: 3.63 inches (92,2 mm.) Length: 10.37 inches (263.4 mm.) Weight: 16 ibs., 3 ozs. (7.3 k.) summer of 1981. It would be foolish to speculate upon the information gleaned from USM's brief report of the 1978 activities, therefore this report reflects only the two seasons, 1980-81, in which MDAH was actively involved.

Probably no nation in modern history expressed more resourcefulness than the Confederate States of America did during the years 1861-65. They were an agricultural people who had only one rolling mill and very few foundries, no standing army, no navy; waging war against a nation just entering upon the greatest ever industrial revolution the world had known. with а well-organized army and navy and with a population four times as great. The South had a few things in her favor: the Confederates fought on their own territory and had fine military leaders and a background of resourcefulness. The Confederates sent to defend Grand Gulf exemplified this resourcefulness and good leadership. They were mostly Missourians, unable to slip away for a quick return home like many of the soldiers fighting nearer their homes, and they were led by Brigadier General John Stevens Bowen, a man many historians consider the smartest general in the Army of Tennessee at that time. Bowen was born and raised in Georgia, educated at West Point, class of 1853, and served as an army engineer for three years. He resigned to take up the profession of architect in St. Louis, where he was living at the outbreak of war. There is little doubt that Bowen's background as an engineer made him the right man to construct the defenses at Grand Gulf.

The study of Grand Gulf's defenses with its two major fortifications, one at each end of the town, a passageway by which infantry could be moved rapidly from one interior line to the other, and works by which a large area could be defended with relatively few men, was the work of a brilliant military engineer. Bowen revealed resourcefulness in the selection of a jail cell for a magazine. Two hotshot furnaces were proposed for the two forts, but only the one at Cobun was ever completed. It is unlikely that it ever saw use, as there were no solid shot, or bolts, in the ammunition at either of the two forts. Bowen resolved to have unloaded shells filled with clay or brick dust for hotshot should the need arise.

The excavation of Fort Wade's magazine offered a rare opportunity for the historical archaeologist to study a Confederate magazine <u>in situ</u> because it was so totally covered with overburden at the time of its destruction. To this author's knowledge the use of a jail cell as a magazine is unique to Grand Gulf. The ammunition found among the magazine debris is also unusual, and perhaps unique. The 20-pound Read shells have only been located at Grand Gulf, and have become nationally known among Civil War buffs and collectors as the "Grand Gulf 20-pound Reads." The fuses used in the 6.4 Tennessee sabot shells and those for the land mines have





CONFEDERATE PERCUSSION FUSE Removed from 6.4 Tennessee-sabot shell.

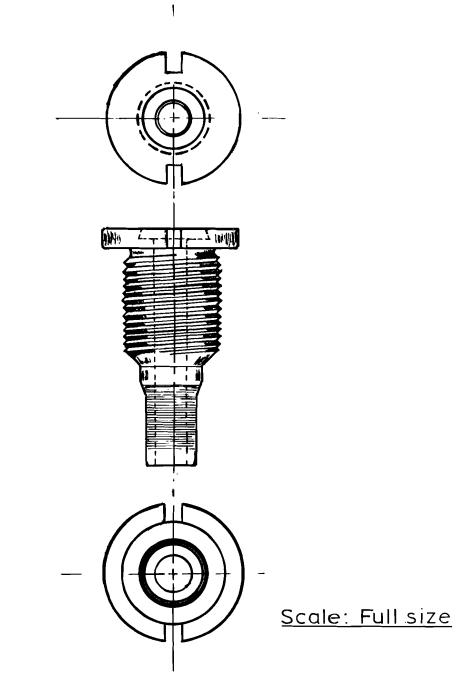
not been reported at any site other than Fort Wade. This is unusual in that all of this ammunition is believed to have been manufactured at Selma, Alabama, one of the South's largest facilities.

Why the 20-pound Reads were left in the magazine when the gun, a 20-pounder Parrott rifle, was not among the captured ordnance at Grand Gulf can only be speculative. In this author's opinion, the "Grand Gulf 20-pound Reads" might have instilled more fear in the Confederate artillerymen than the Union army. Bowen blamed a burst 20-pounder Parrott, which caused almost as many casualties as a year of shelling by the Federal fleet, on this particular shell. It may have been a simple choice of the ammunition or more food Only seven of the 6.4-inch shells for the 100-pounder stores. Blakely rifle and only seven balls for the 8-inch naval gun can be accounted for in the magazine when it blew. Since these guns were abandoned and lost at Fort Wade it is safe to state that ammunition for these guns was almost exhausted. There was no evidence of ammunition for the 32-pounder rifled guns, which were also spiked and abandoned. Did the Confederates take most of the ammunition for the rifled 32, the 100-pounder Blakely, and the 8-inch guns into Vicksburg and leave the suspect 20-pound shells? Not likely.

One thing is perfectly clear. The Confederates left nothing in the magazine that would not explode. Normally, a certain amount of personal items and/or accoutrements are found in all fortifications and camps, but not in the magazine at Fort Wade. Only two small buttons, a small white underwear button and one small three-piece floral design jacket button, were found. The friction primers one would expect to find in a magazine were also absent, but these are relatively light and in all likelihood were among the stores carried into Vicksburg.

Fortunately, the overburden which covered the magazine as a result of its being blown up, the destruction of the parapet walls by the Federals when they occupied the site, and natural humus buildup afforded the magazine protection from unscrupulous relic hunters. Unfortunately, this has not been the case at Fort Cobun, a sister fort of Wade's, and the historical land around these forts, which includes both private and state park land. Much of this area is so isolated that proper protection is nearly impossible. Only strict prosecution of these individuals to the letter of the law for wanton destruction of state property and trespassing to do physical damage to private property will serve as a deterrent.

Protection of Grand Gulf's rich historical evidence is a must if future archaeologists are to have the opportunity to study inground remains of a very important extinct Mississippi river town. Just as overburden sheltered the magazine, alluvial fill from the



## CONFEDERATE FUSE PLUG

Designed for use with Rains' pressure-sensitivefuse in land mines.

Mississippi's overflowing has covered much of the original town. It has also hidden from view the wreckage of the U.S.S. <u>Rattler</u>, which washed ashore and bilged during the storm of December 30, 1864. Hopefully an attempt will be made by organized archaeology to excavate Fort Cobun and try to locate this Civil War vessel before the river reclaims it and the opportunity to study the Rattler is lost forever.

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APPENDIX: LIST OF FINDS FROM FORT WADE

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Table 1. Small finds (not munitions) from Fort Wade Magazine

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Munitions: Shells	Confederate 20-pounder Read shells complete	Sabots/obturator/bases	Body fragments	Ogive fragments	Confederate 6-pounder	Spherical shell	Confederate 6.4 Tennessee	Sabot shell complete	Sabots/obturator/bases	Body fragments	Ogive fragments	United States 30-pounder	Parrott shell complete	United States 5.1-inch	Hochkiss shell	Sabot/obturator/base	Body fragments	Ogive fragments	United States 11-inch	Spherical shell	Body fragments	Fuse orifice

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Table 2. Finds of shells from Fort Wade Magazine

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Miscellaneous Munitions	.58 caliber minie ball, 3-ring, low base common U.S.	.36 caliber revolver ball	.44 caliber revolver ball	.69 caliber ball (case shot)	One-inch ball (cannister)	#6 shot	Friction primer	.69 caliber tompion,	(Enfield pattern)	Brass powder container fragments	8-inch grapeshot retainer plate	Percussion fuse from 6.4	Confederate shell	Parrott paper fuse plug (U.S.)	Confederate land mine fuse plugs	Fuse adapter for 6.4	Confederate shell	8-inch spherical shell:	Body fragments	Fuse orifice

Table 3. Miscellaneous munitions from Fort Wade Magazine

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 27         - 3/4"       2</td><td>Inte:       Inte:       <t< td=""><td>Inte:       11       12       14       17       86       3       42       61       3       13       10       15       6       9       16       8       7       113       54       26       27         - <math>3/4'''</math>       1       1       1       3       1       1       4       2       2         - <math>3/4'''</math>       1       2       2       2       1       4       2       2         - <math>3/4'''</math>       1       2       2       2       2       3       3       4       2       2         - <math>3/4'''</math>       1       2       2       2       2       2       3       4       2       2         - <math>3/4'''</math>       1       2       2       2       2       3       4       2</td><td>irre:       irre:       <t< td=""><td>Ire:       1       1       1       1       3       1       4       5       2       14       1       3       1       4       56       3       42       61       3       13       10       15       6       9       16       8       7       113       54       26       27         <math>-3/4''</math>       1       1       4       6       2       2       1       4       2       2         <math>-3/4''</math>       1       2       1       4       6       2       2       4       2       2         <math>-3/4''</math>       1       2       1       4       6       2       2       4       2       2         <math>-3/4''</math>       1       2       1       1       4       5       2       2       2         <math>-3/4''</math>       1       1       1       4       5       2       <t< td=""><td>Ite:       11       1       3       12       13       11       1       34       26       3       31       10       15       6       9       16       8       7       113       54       26       27         <math>-3/4''</math>       1       1       1       1       1       1       1       4       2       2         <math>-3/4''</math>       1       1       1       4       6       2       2       1       4       2       2         <math>-3/4''</math>       1       1       1       1       1       1       1       4       2       2         <math>-3/4''</math>       1       1       1       1       1       1       3       1       2<td>Ite:       31       16       18       45       22       14       17       86       3       42       61       3       13       10       15       6       9       16       8       7       113       54       26       27         <math>-3/4''</math>       1       1       1       4       6       2       2       1       4       2       2         <math>-3/4''</math>       1       1       1       4       6       2       2       1       4       2       2         <math>-3/4''</math>       1       1       1       4       6       2       2       4       2       2         <math>-3/4''</math>       1       1       1       4       6       2       2       4       2       2         <math>-3/4''</math>       1       1       1       1       1       3       1       4       2       2         <math>-3/4''</math>       1       1       1       1       1       1       3       1       4       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2</td><td>inte:111131245342613131015691687113542627it spikes111131146221422121111314622142233/4"1111462214221111111114631422111111111111422111111111111422111&lt;</td><td>inte:       31       16       18       45       22       14       17       86       3       42       61       3       13       10       15       6       9       16       8       7       113       54       26       27         -1       2       <td< td=""><td>ite:       31       16       18       45       22       14       17       86       3       42       61       3       13       10       15       6       9       16       8       7       113       54       26       27         t       <math>3/4</math>       1       1       4       5       2       &lt;</td><td><math display="block"> \begin{array}{c ccccccccccccccccccccccccccccccccccc</math></td><td></td><td><math display="block"> \begin{array}{c c c c c c c c c c c c c c c c c c c </math></td></td<></td></td></t<></td></t<></td></t<></td></t<> | vare:       vare: $31$ 16       18       45       22       14       17       86       3       42       61       3       13       10       15       6       9       16       8       7       113       54       26       27         sht spikes       1       1       1       3       1       1       4       2< | are:a | Inte:       31       16       18       45       22       14       17       86       3       42       61       3       13       10       15       6       9       16       8       7       113       54       26       27         - 3/4"       2 | Inte:       Inte: <t< td=""><td>Inte:       11       12       14       17       86       3       42       61       3       13       10       15       6       9       16       8       7       113     
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  1       4       2       2         <math>-3/4''</math>       1       1       1       1       1       1       3       1       4       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2</td><td>inte:111131245342613131015691687113542627it spikes111131146221422121111314622142233/4"1111462214221111111114631422111111111111422111111111111422111&lt;</td><td>inte:       31       16       18       45       22       14       17       86       3       42       61       3       13       10       15       6       9       16       8       7       113       54       26       27         -1       2       <td< td=""><td>ite:       31       16       18       45       22       14       17       86       3       42       61       3       13       10       15       6       9       16       8       7       113       54       26       27         t       <math>3/4</math>       1       1       4       5       2       &lt;</td><td><math 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18       45       22       14       17       86       3       42       61       3       13       10       15       6       9       16       8       7       113       54       26       27         <math>-3/4''</math>       1       1       1       4       6       2       2       1       4       2       2         <math>-3/4''</math>       1       1       1       4       6       2       2       1       4       2       2         <math>-3/4''</math>       1       1       1       4       6       2       2       4       2       2         <math>-3/4''</math>       1       1       1       4       6       2       2       4       2       2         <math>-3/4''</math>       1       1       1       1       1       3       1       4       2       2         <math>-3/4''</math>       1       1       1       1       1       1       3       1       4       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2</td> 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Table 4. Miscellaneous metal fittings from Fort Wade Magazine