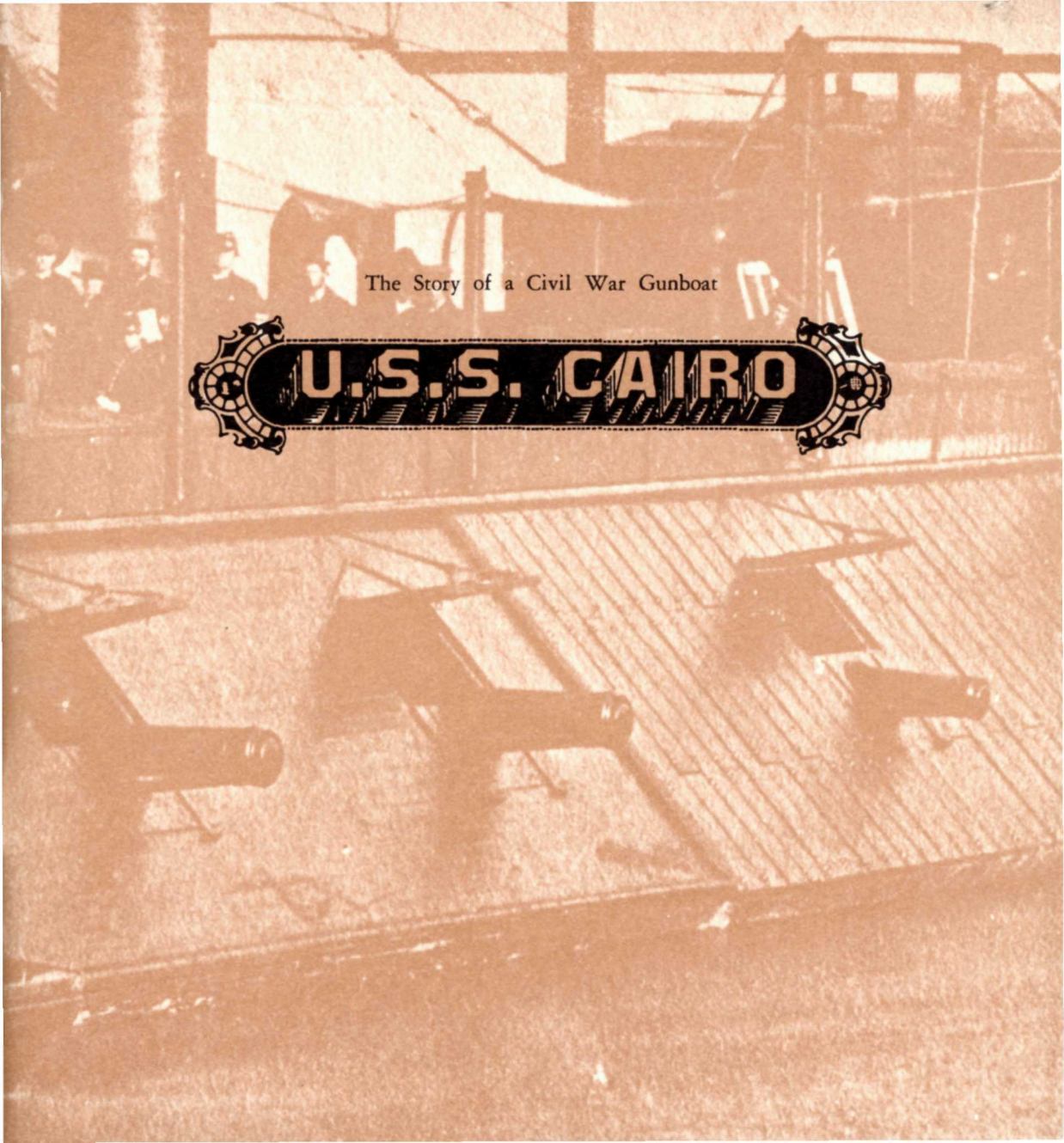


The Story of a Civil War Gunboat



U.S.S. CAIRO





The Story of a Civil War Gunboat



comprising

A Narrative of Her Wartime Adventures by Virgil Carrington Jones

and

An Account of Her Raising in 1964 by Harold L. Peterson

*National Park Service
U.S. Department of the Interior
Washington, D.C. 1971*

*The U.S.S. Cairo was sunk in the Yazoo River
by a Confederate torpedo in December 1862. A century later
she was raised and salvaged along with
thousands of priceless artifacts. The boat was restored by the
National Park Service and can be seen at
Vicksburg National Military Park. Artifacts from
the Cairo are on exhibit at the adjacent Cairo Museum.
This publication is designed to interpret both the boat and the
artifacts to visitors at the park.*

*Inquiries about the Cairo should be addressed
to the Superintendent, Vicksburg National Military Park,
3201 Clay Street, Vicksburg, MS 39180.*

Foreword

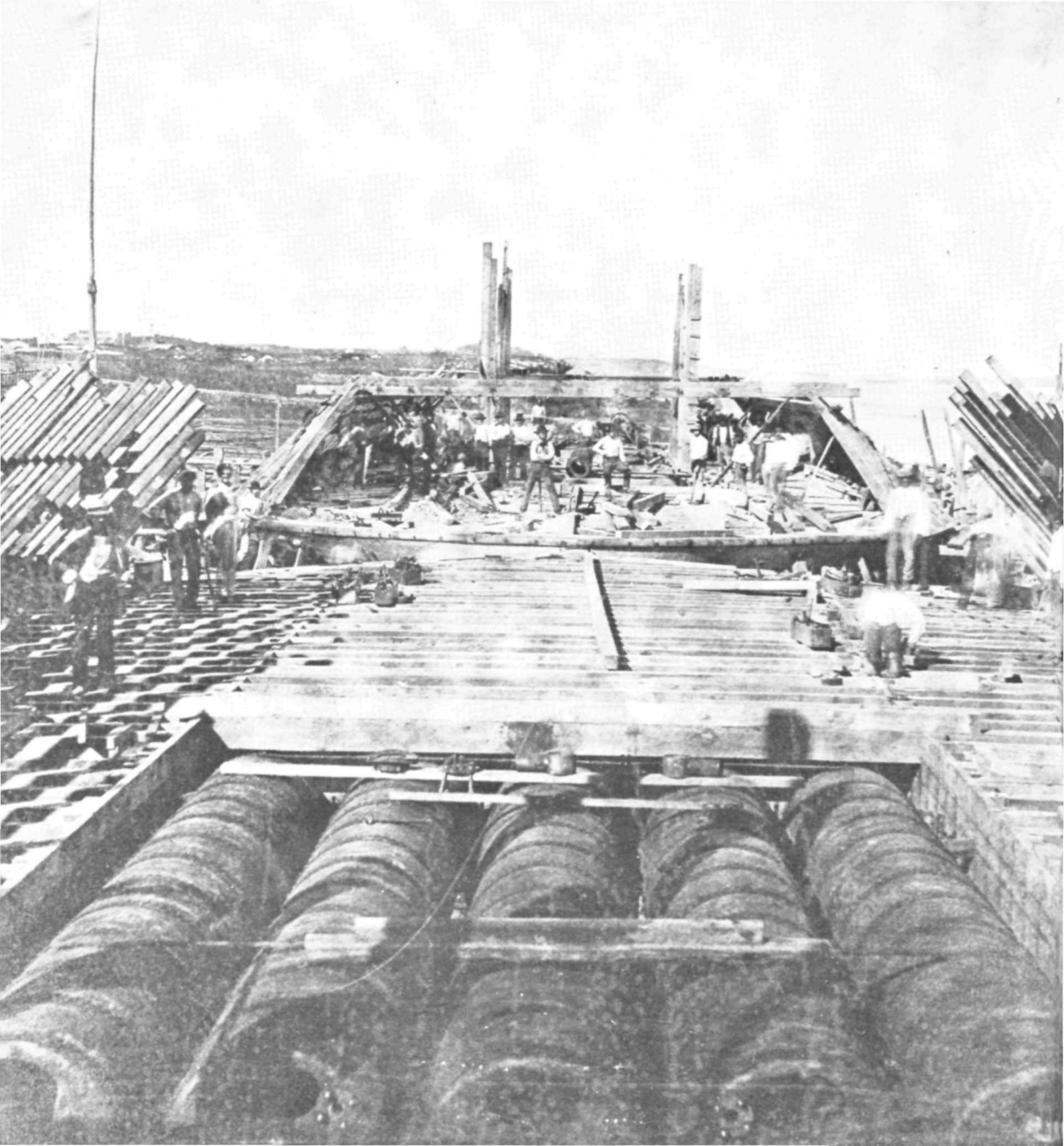
For 11 years, I was closely associated with the *Cairo* project, and I know how difficult it is to place the undertaking in its proper perspective and to dispassionately evaluate its historical significance. I was accordingly delighted to learn that Virgil Carrington Jones, who needs no introduction to readers interested in Civil War partisan operations and action afloat, had agreed to chronicle the story of the *Cairo* and her rendezvous with destiny on the Yazoo in December 1862; and that Harold L. Peterson, whose publications on arms and armament are legion, would survey, describe, and evaluate the thousands of artifacts recovered.

Jones and Peterson, as the readers of this booklet will discover, have written of the *Cairo* and her treasure trove of artifacts with keen insight and understanding. Their accounts will spark the reader's interest, and, in conjunction with the salvaged objects themselves, lead to a better understanding of how bluejackets lived and fought in our Civil War.

—*Edwin C. Bearss*
Chief Historian, National Park Service

The Wartime Adventures of the U.S.S. Cairo





Eads ironclads under construction at the Carondelet boatyard near St. Louis. The Cairo, although not built here, would have looked much the same at this stage.

National Archives

Some men and some ships seem fated for bad luck. It was the Union ironclad *Cairo's* fate to have as her second and last captain a man who, although a hard worker, was a repeated slave to misfortune. Three of the vessels on which he served, their names all beginning with the letter C, went to the bottom in the order named—the *Cumberland*, the *Cairo*, and the *Conestoga*—no matter if he was credited with gallantry and exonerated of blame by some of his superiors.

Thomas O. Selfridge, Jr., son of the commandant of the Navy Yard at Mare Island, Calif., was a member of seafaring family. He was dedicated and ambitious, but, as fate would have it, he served mostly on doomed vessels and was unable to get along with his men. Perhaps his fellow seamen had reason to be displeased with him, for he seemed always to flirt with disaster, barely escaping further serious mishap early in the war while experimenting with the crude submarine *Alligator* on a trial run from the Washington Navy Yard. So bad was his luck that the *Cairo's* career ended just 3 months to the day after Selfridge first stepped aboard her.

The *Cairo* was one of the weapons designed by the North to wrest the lower Mississippi River away from the South, a move decided on early in the war as part of a program of vigorous action needed to bring victory. One of those who expounded the strategy was James B. Eads of St. Louis, Mo., who had retired at 37 after making a fortune salvaging wrecked craft on the Western rivers. An engineer known to every riverman on the Mississippi, he had had long experience at the business of designing and building boats.

Soon after the fall of Fort Sumter in April 1861, Eads was called to Washington to present his recommendations at a Cabinet meeting. His strategy seemed simple: seize control of the lower Mississippi, the main channel through which flowed the South's food supplies, and leave open as avenues of commerce in the Mississippi basin only the Tennessee and Cumberland Rivers and the railroads from Louisville to Nashville and Chattanooga—all of which could be easily

controlled. The result, as he saw it, would be starvation for the Confederates in less than 6 months. To carry out his plan, he urged the North to build a fleet of river gunboats, an inland navy.

Secretary of the Navy Gideon Welles liked Eads' ideas, but, before they could be acted upon, a brief flareup of jealousy between the War and Navy Departments created interference. At this time the Army had jurisdiction over the inland waters, while the Navy's only responsibility was to furnish guns and crews for the vessels the Army acquired. Secretary of War Simon Cameron had initially thought Eads' proposals absurd, but when it seemed that the Navy Department intended to go ahead with them, he reversed himself and insisted that the fitting out of river gunboats be handled by the Army. Cameron's vacillation created so much confusion that prospects for an early decision in the matter were now remote. Thus stymied, Eads left Washington.

It was mid-summer before Eads noticed advertisements in St. Louis newspapers inviting bids to build the gunboats. According to the specifications, the vessels were to be 175 feet long, with a 50-foot beam, and to draw 6 feet of water. They would have flat bottoms, with three keels, and an oblong casemate sloping up to a flat spardeck, 45° in front and 35° on the side. The forward end was to be pierced for three guns, the port and starboard beams for seven guns each, and the stern for three guns. (As built, however, there were four ports on each side of the casemate, three on the forward face, and two on the after face.)

Each vessel was to be fitted out with a paddle wheel, two engines, five 36-inch boilers 24 feet long with a firebox under each, and two 44-inch chimneys 28 feet high. They would have plain cabins with two staterooms, two messrooms, and eight staterooms for officers, as well as suitable magazines, shell rooms, and shot lockers. Officers' quarters were to be equipped with berths, bureaus, and washstands.

When bids were opened August 5, 1861, Eads' was the lowest of seven. In it he agreed to build four to 16 of the boats, at a price of \$89,600 each, by October 5 of that year. If not delivered on time, he would forfeit on each vessel \$600 per day it was late. The contract Eads signed called for seven gunboats, moved the delivery date to October 10, and reduced the forfeit to \$250 per day. Every 20 days, superintendents appointed by the Government would estimate the amount of work done, and the Treasury would pay Eads 75 percent of the estimate. The Government retained the right to suspend work at any



time, and it was definitely specified that no part of the contract was to be sublet. Government representatives would inspect the material used in constructing the vessels and reject all considered defective. To his benefit, Eads obtained an agreement that the Government would require no change in specifications which might delay completion of the contract as specified.

Eads began work immediately, starting four of the vessels at the Carondelet Marine Ways on the outskirts of St. Louis, and three at the Marine Railway and Ship Yard at Mound City, Ill. Labor troubles set in early. Although wages were comparable with rates prior to the war, workers threatened to strike for more money. The contractor in the meantime advertised for additional boat carpenters, offering to pay \$2 per 10-hour day and 25 cents per hour overtime.

By the end of August, Eads had about 600 men and 12 sawmills at work on the seven hulls. The first estimate of work done, submitted to the Government on August 27, amounted to \$58,315 and was accompanied by a statement that the smallness of the sum did not mean that matters were not being pushed with vigor. In mid-September, when Eads sent in a second estimate, he complained of not having received even \$1 on a contract involving an outlay of nearly \$700,000. He said that, despite the inconvenience brought upon him by the Government, he was still confident he could fulfill his contract. Newspapers came to his defense, reporting that, without any money in advance, he had 800 workmen on the two jobs, as well as one steamboat and four barges engaged in transporting lumber from sawmills in Missouri, Illinois, Ohio, and Kentucky, and along the Missouri River. But even the reporters inspecting the work doubted that the vessels would be ready on schedule.

The first boat was launched October 12, two days late. It came down the runway at Carondelet in the presence of a large crowd and was promptly named the *Carondelet*. It was mid-January before the *Cairo* was commissioned. By that time, the Western Flotilla had come under the command of Andrew H. Foote, formerly commandant of the Brooklyn Navy Yard and a veteran of 40 years' service in the Navy. It was Foote who decided that the ironclads would be named for cities and towns along the Ohio and upper Mississippi Rivers, and not for Union military leaders, as Eads had proposed.

As an aftermath of the campaign to get the ironclads built, Eads made claims against the Government for failing to make prompt payments on estimates, maintaining this had delayed completion of the contract. Moreover, he charged that the numerous changes

Foote had insisted upon had added materially to his costs, for which he wished to be reimbursed, and had delayed the delivery date. In return, the Government made claims against the builder for tardiness in delivering the boats. Finally, a member of the Quartermaster General's staff was assigned to make a study of the contract, and the subsequent report led to a satisfactory settlement without penalty upon either party.

The *Cairo's* first captain was 39-year-old Lt. Nathaniel Bryant, member of a Maine shipbuilding family and formerly assigned to the steam sloop *Richmond*. The commissioning of the new vessel took place on January 16. She was newly painted and her decks had been holystoned (scrubbed) until, as one member of the crew recorded, they were as white as linen sheets. Everything was snug and clean from top to bottom. On board were 14 guns, ranging from rifled 42-pounders to a 12-pounder howitzer.

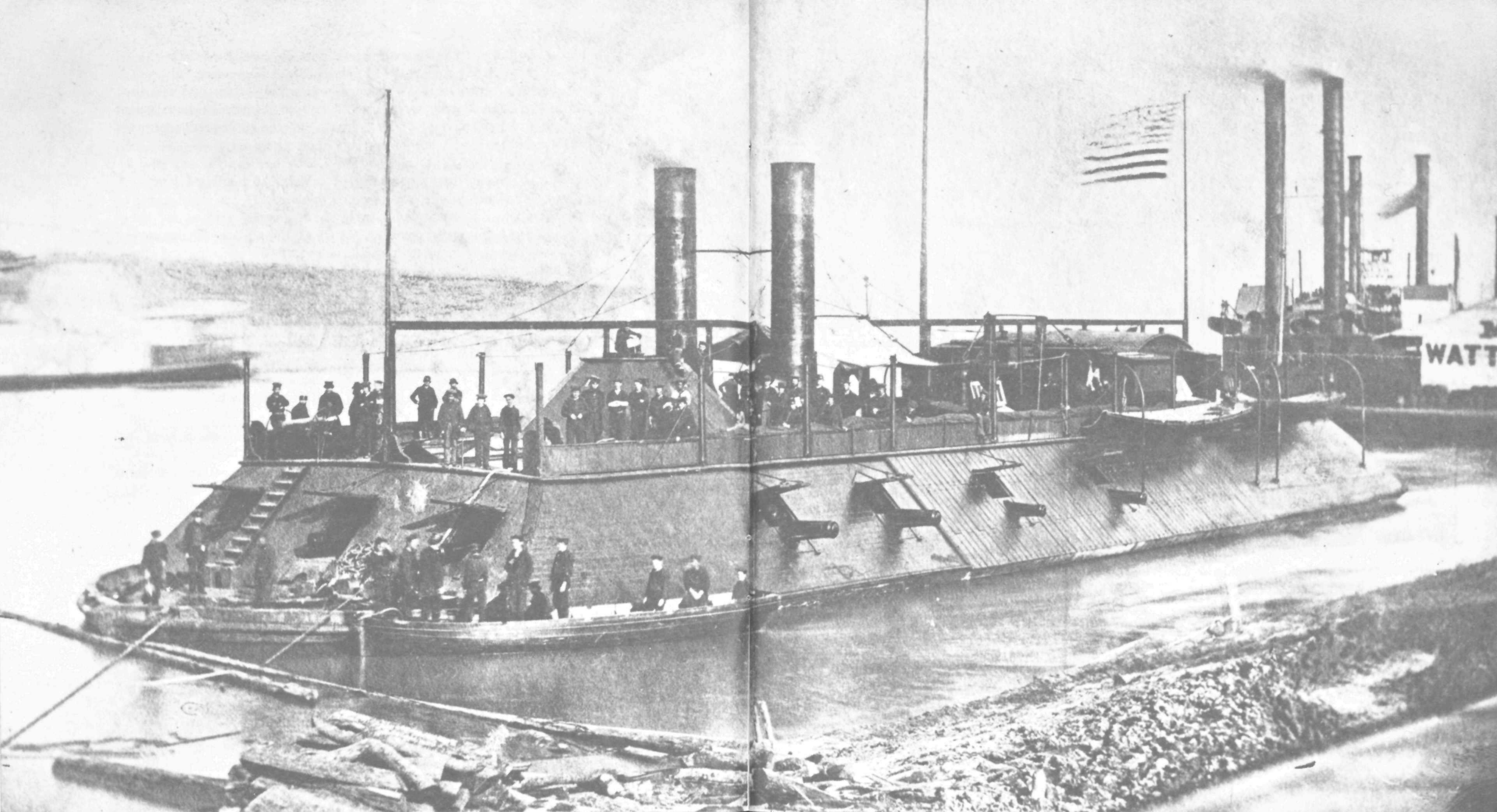
In the beginning, the *Cairo's* engines failed to function properly, and she was taken to an anchorage near Cairo for repairs. While lying there with a skeleton crew, news was received of the Union victory scored by ironclads at Fort Henry. The story was different at Fort Donelson, where Foote's gunboats were mauled by Confederate water batteries, but the *Cairo* men complained because they had been unable to take part in either affair.

On February 16, a month after her commissioning, Foote ordered the *Cairo* to the Cumberland River. As she moved up the Ohio, she met a steamboat bringing news that Fort Donelson had surrendered. Her crew did more grumbling, fearing the war would end before they had a chance to fire at the enemy.

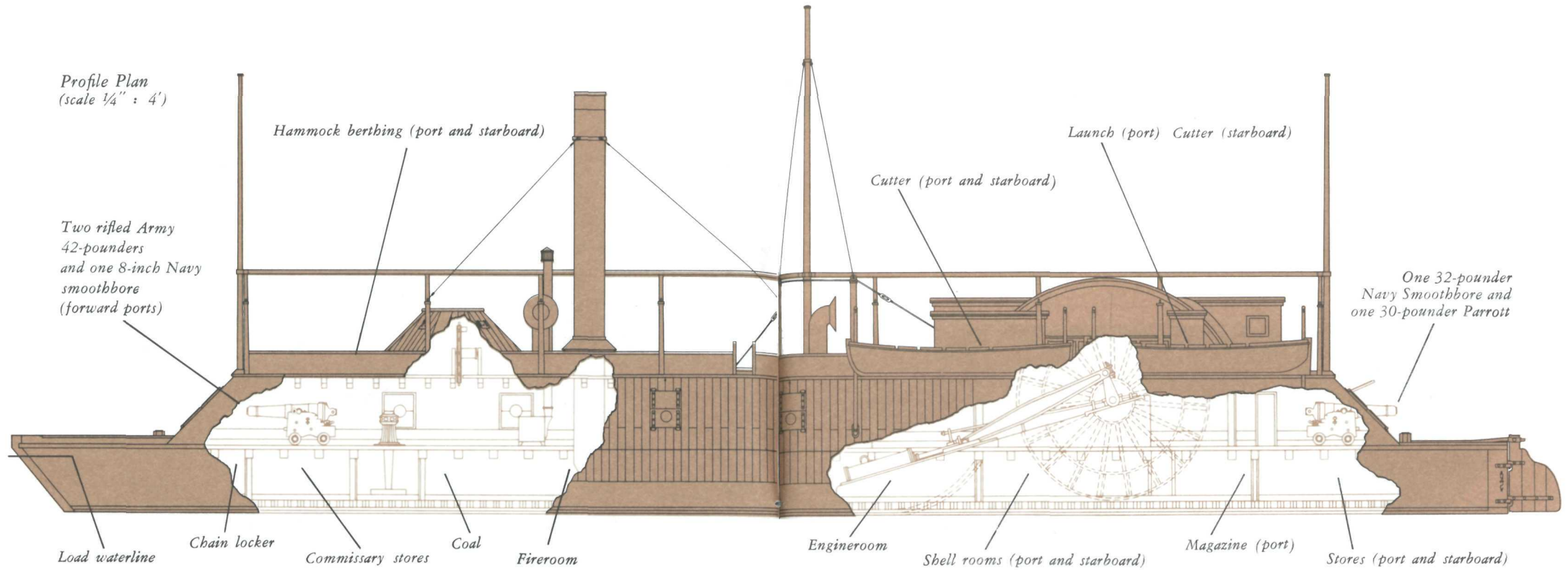
Following a conference between Foote and Gen. Ulysses S. Grant, commanding at Fort Donelson, the *Cairo*, with the *Conestoga*, was ordered on a reconnaissance to Clarksville, Tenn. Along the way they passed Forts Defiance and Clark, both of them abandoned and flying white flags of surrender. At Clarksville they found the Confederates had also evacuated that point.

The *Cairo* remained at Clarksville on a standby basis for several days and then was ordered to Nashville, where she arrived on February 25, again to find that the Confederates had gone. She lay idle in the Cumberland for several weeks; then she was ordered to the Tennessee River, reaching Savannah, Tenn., where Grant had his headquarters, on the evening of March 31.

Overleaf: *Only known photograph of the U.S.S. Cairo, taken early in 1862 while she was being outfitted at Cairo, Ill.*



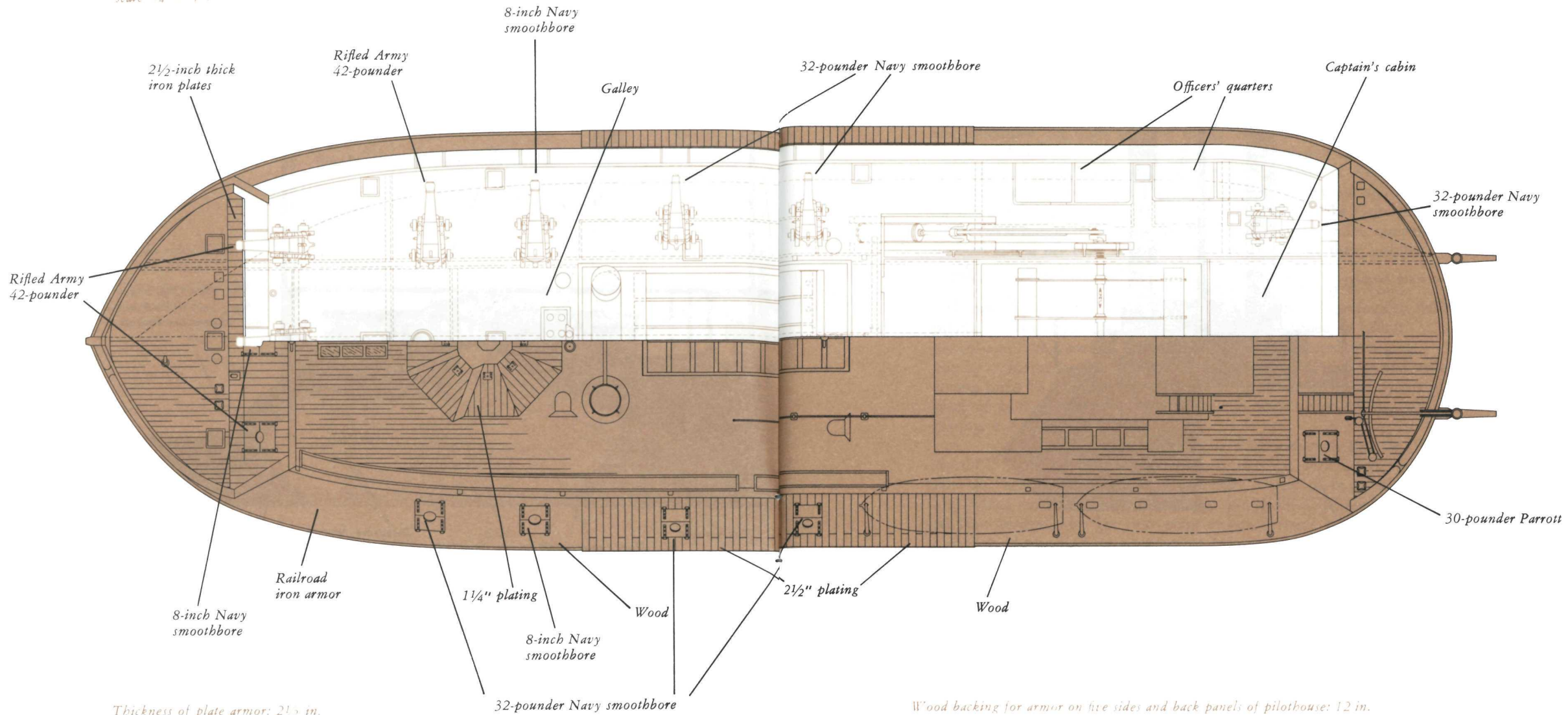
U.S.S. CAIRO



U.S.S. Cairo
 Type and class: Ironclad River Gunboat, City Class
 Length: 175 ft.
 Breadth: about 52 ft.
 Full load keel draft: 6 ft.
 Tonnage: 512
 Number of keels: 3

Armament: 3 rifled Army 42-pounders, 3 8-inch Navy smoothbores, 6 32-pounder Navy smoothbores, and 1 30-pounder Parrott
 Bow ports: 3
 Side ports: 4 each side
 Stern ports: 2
 Paint Colors: Black exterior, whitewashed interior, colored bands for identification on chimneys.

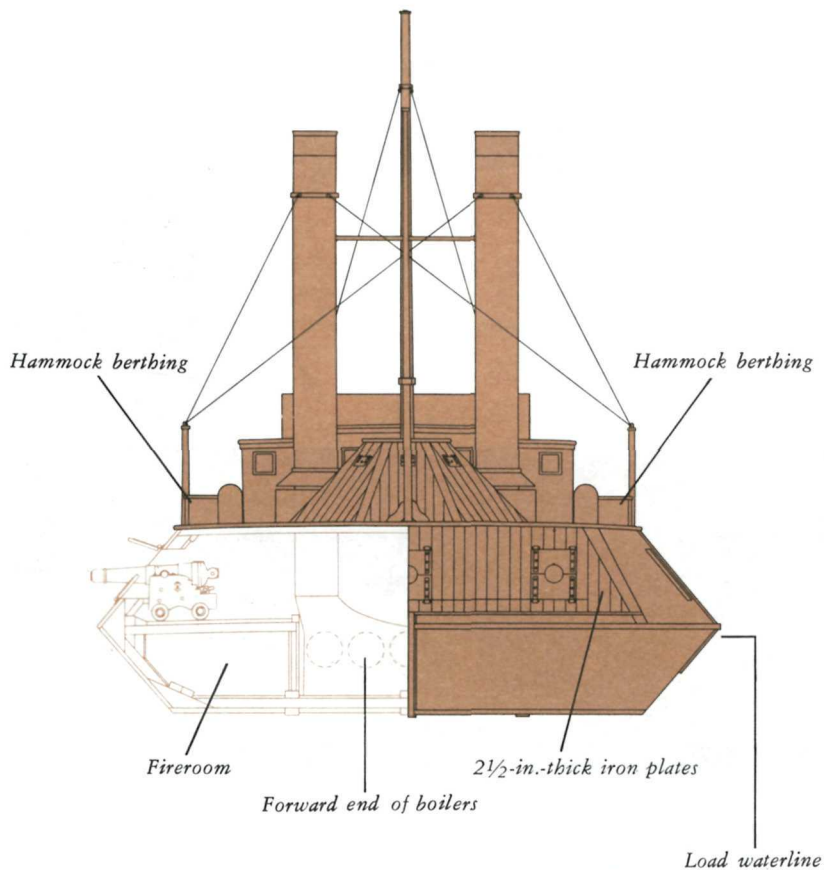
Deck Plan of the Cairo
(scale 1/4" = 4')



Thickness of plate armor: 2 1/2 in.
 Total weight of plate armor: 122 tons
 Plate armor material: Charcoal iron
 Wood backing for armor on three front panels of pilothouse: 19 1/2 in.

Wood backing for armor on five sides and back panels of pilothouse: 12 in.
 Thickness of casemate timbers and sheathing: 25 in. forward,
 12 1/2 in. port, starboard, and aft
 Location of plate armor: Casemate front, pilothouse, and casemate
 sides abreast machinery

Bow of the Cairo
(scale $\frac{1}{4}' : 4'$)



Number and type of engines: Two reciprocating steam-non-condensing

Number of boilers: 5

Fuel: Coal

Fuel consumption per hour: 18 to 20 bu. (1,980 lb.)

*Crew: 17 officers, 27 petty officers, 111 seamen, 3 landsmen, 1 apprentice,
12 firemen, and 4 coal heavers*

On April 1 the *Cairo*, with the gunboats *Lexington* and *Tyler*, accompanied Brig. Gen. William T. Sherman's command on an expedition against the Confederate batteries at Eastport, Miss., and Chickasaw, Ala. At Eastport, guns were run out and a few rounds fired, but there was no reply. The Confederates had fled. Chickasaw also was found deserted. Although the expedition proved disappointing, it did give the men on the *Cairo* their first chance, except in practice, to exercise their guns.

Upon her return from Eastport and Chickasaw, the *Cairo* received orders to move to the Cairo Naval Station and defend it against a threatened Confederate attack. Foote had learned that the South had completed 13 gunboats at New Orleans, and he feared these would be joined with the ram *Manassas* and run up the Mississippi against the Union fleet and bases. The *Cairo* arrived at the naval station on April 5. The following day the Shiloh campaign opened, giving her crew new cause to complain about their inability to take part in battle action.

While the vessel lay at Cairo, Lieutenant Bryant took advantage of the opportunity to strengthen her pilothouse. His action was based on what had happened to Union gunboats at Fort Donelson (where the Confederates scored damaging hits by centering on the pilothouses, killing and wounding several men, among them Flag Officer Foote, who was struck on the ankle by a piece of iron). Other changes included the addition of timber, iron plating, and flaps.

The work was completed by April 10 and Bryant, following orders, set out the next day for Island No. 10. There he joined a fleet of transports, mortar boats, gunboats, and tugs, which moved down the Mississippi several miles and anchored off New Madrid, Mo. The next point of attack would be Fort Pillow, a stronghold guarding the approach to Memphis, but the *Cairo's* assignment was to wait behind with the unwieldy mortar scows.

By remaining with the mortars, the *Cairo's* crew missed the flurry of action that took place with some Confederate boats at Hale's Point, 50 miles or so below New Madrid. As the Southern craft turned about and fled downstream, the Union fleet followed to within range of the guns at Fort Pillow, then turned about and tied up at Plum Point, a short distance upriver. The *Cairo* drifted in later with the mortar scows and took station the morning of April 14 to hurl 200-pound shells in a bombardment that would last for 7 weeks. Her guns were trained so as to

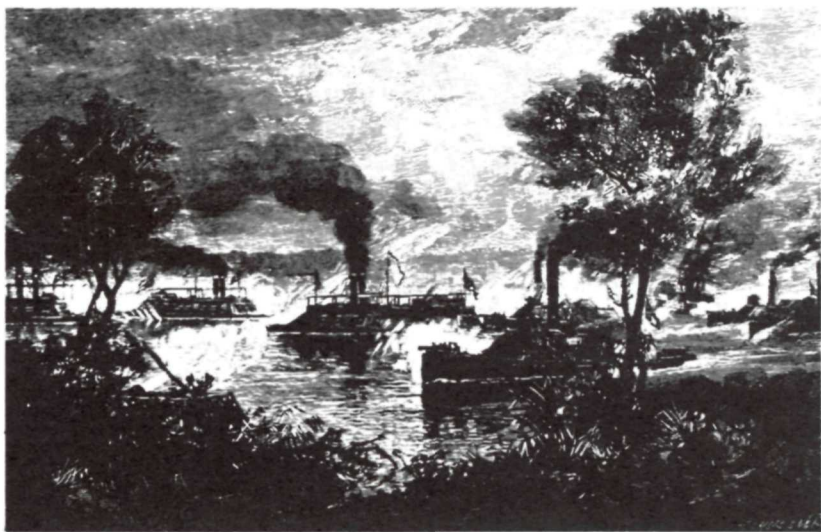
The lower Mississippi River and its tributaries, showing the Cairo's area of operations.



protect the mortar scows from possible interference by Confederate gunboats. Day after day, sometimes at the rate of one a minute, shells were dropped upon the fort; the Southerners fired back, occasionally scoring hits, but never inflicting serious damage.

In the meantime, Foote's wound had become worse and finally reached the stage at which he was forced to retire. On May 9 he turned over command of the Western Flotilla to Capt. Charles H. Davis, a Harvard student who had followed a naval career. (He had been a member of the Office of Detail in Washington at the start of the war and was later stationed with the South Atlantic Blockading Squadron.) That afternoon a Confederate steamer came within range bearing a white flag under the pretense of exchanging two Union surgeons captured at Belmont, Mo. The Federals presumed correctly that the move was one of reconnaissance.

The morning after Davis took command, a Confederate fleet of rams steamed up from Fort Pillow just as Mortar Boat No. 16, guarded by the *Cincinnati*, was being moored at Craighead Point to begin the daily bombardment. This move by the Southerners caught the Union ironclads unprepared, some of them without sufficient steam to hold against the current of the stream.



*Battle of Plum Point, May 10, 1862. From a sketch
by Rear Adm. Henry Walke.*

Battles and Leaders of the Civil War

But their engineers reacted to the emergency, throwing oil, and anything else flammable which was available to them, into the fire-boxes in an effort to raise steam.

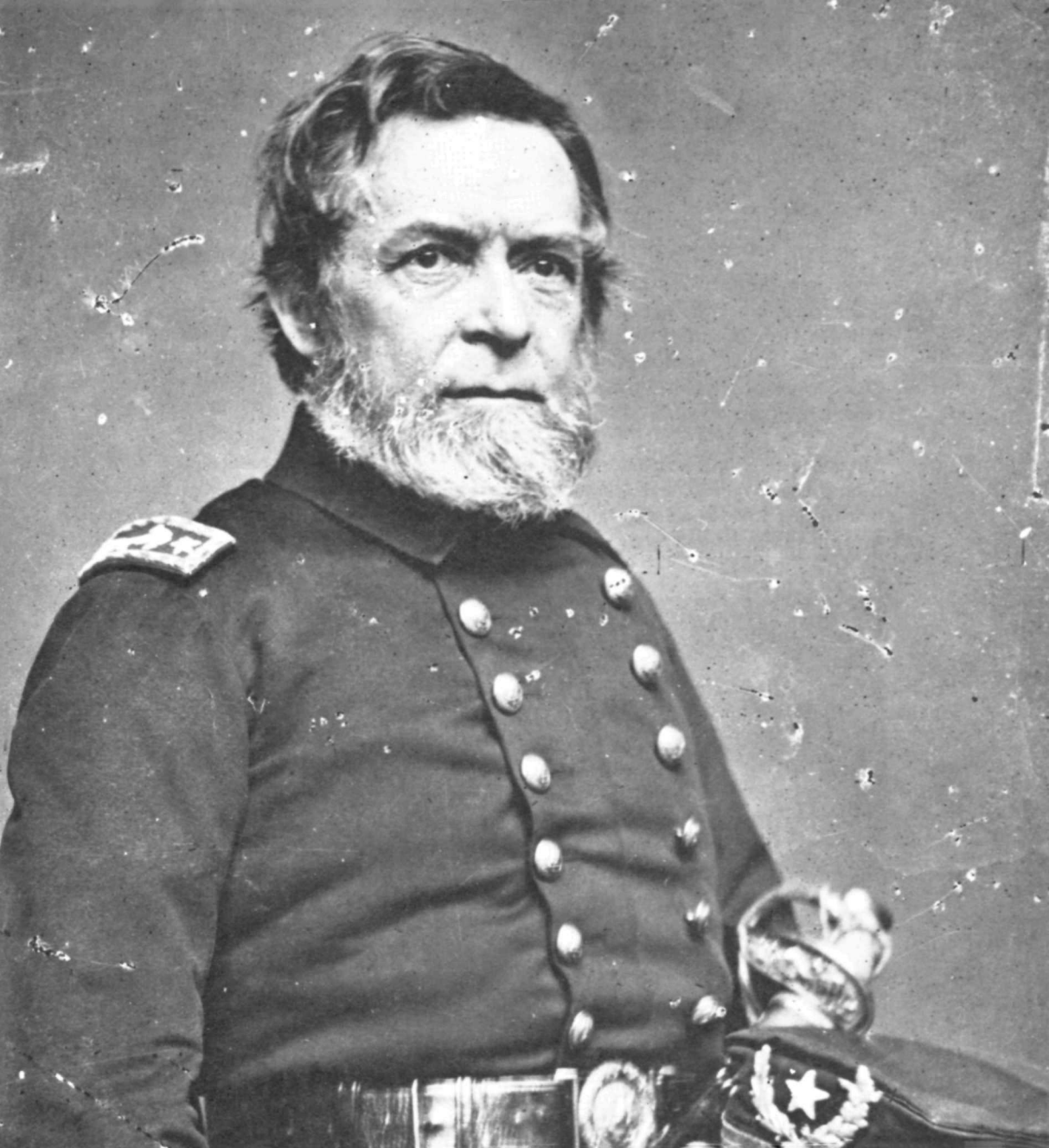
The Confederate attack was opened on *Cincinnati*, farthest downstream. Three rams, first the *General Bragg* and then the *Sterling Price* and the *Sumter*, struck the ironclad, inflicting considerable damage. Other Union vessels came to her rescue as rapidly as they could. The *Cairo* moved from across the river and had her first chance for battle action. As her bow guns were rapidly fired, a ball from the *Van Dorn* struck near the center gunport, but glanced off without doing damage. Then she turned her attention to the *Mound City*, a sister ironclad which had been struck by a ram and had had a hole smashed in her starboard forward quarter, accompanying her until she grounded herself.

As the furious action ended and the Confederates ran back down under the protection of Fort Pillow, the *Cairo* assisted in running the *Mound City* onto a shoal opposite Plum Point, where she sank. The *Cincinnati* also went down. (Both would be raised and repaired.)

The *Cairo's* crew at last had something to talk about. They had taken part in what was described as the first strictly "fleet action" of the war, but there was a question as to the glory of the role they played. Some officers were disappointed that the vessel had not participated more prominently.

One result of the Battle of Plum Point, which lasted little more than an hour, was further strengthening of the ironclads. To protect against another attack by rams, railroad iron was placed around the ends of the vessels and other points were buttressed with cypress logs.

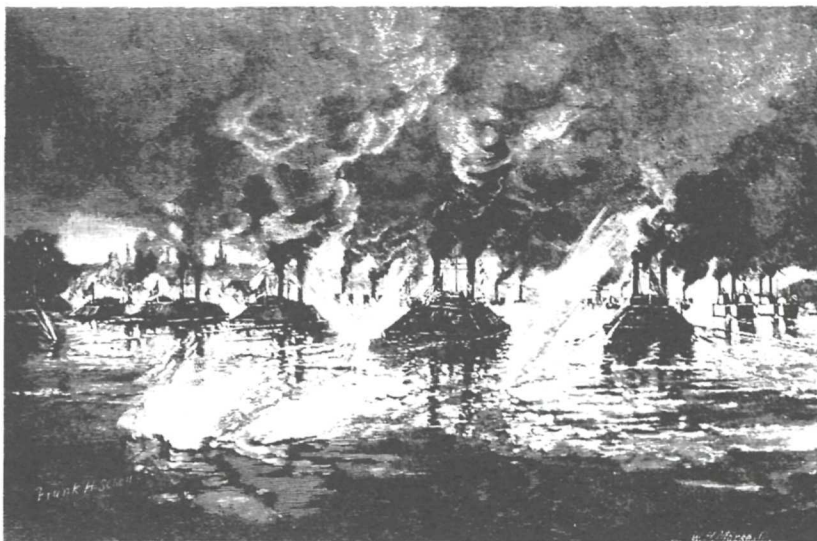
The bombardment of Fort Pillow continued after the action at Plum Point, with two ironclads being assigned daily to guard the mortar boats on duty for the day. May 25 marked the arrival of a fleet of nine rams and two floating batteries under command of Col. Charles Ellet, a civil engineer who had drawn attention to himself by advancing the idea of converting steamboats into rams. At the start, he and Davis disagreed over a plan of joint action, so Ellet, having orders to that effect, prepared to act on his own. He sent men ashore on June 2, and they came back with a report that the Confederates appeared to be evacuating.



Next day two of the Union vessels ran down toward Fort Pillow and sighted a Confederate gunboat, the *Jeff Thompson*, lying under the guns of the fort, but before they could attack, cannoneers opened from above and drove them back. Later in the day, while the *Cairo* was helping guard the mortar boats, the Confederate fleet appeared and exchanged a few shots before withdrawing.

A joint attack on Fort Pillow, with troops moving in from the land side, was planned for June 5, but the Southerners upset the schedule. The fort had been ordered evacuated and was virtually empty on the 3d, while on the evening of the 4th demolition teams began applying the torch. By noon of the next day, the Confederate fleet was at Memphis, a shortage of men for the fort having caused the evacuation.

The Federals now advanced on Memphis, arriving there the evening of the 5th. At dawn, the Confederate fleet, consisting of eight rams and gunboats and facing such a shortage of coal that it was unable to go farther downstream, drew up in line in front of the city to await battle.



Battle of Memphis, June 6, 1862. The Cairo is the fourth boat from the left. From a sketch by Rear Adm. Henry Walke.

Action began at 5:30 a.m. and ended in a running fight 1½ hours later. All of the Confederate vessels were either sunk or captured except the *Van Dorn* and a storeboat, the *Paul Jones*, both of which happened to have coal enough to flee downriver.

In the battle, the *Cairo* was the first of the ironclads to fire, opening with her 42-pounder starboard bow rifle. Throughout the action she kept busy, firing, rescuing men from the water, and finally taking part in the running fight; but her role was not one to cause her to be singled out in the official reports.

For the next 6 days, the *Cairo* lay with the other ironclads at Memphis. On June 12 she was ordered to return to Fort Pillow, where she would remain for 3 months while her crew guarded public property, undertook patrols on each side of the river, and strengthened the boat. From a nearby sawmill and from the Fort Pillow fortifications, lumber and iron were obtained to build a barricade around the engines, steam drums, and boilers.

September brought the *Cairo* a change of command. For months, Lieutenant Bryant had been in failing health and, as he grew steadily worse, a medical board recommended that he be allowed extended sick leave. On orders, he headed his vessel downstream to Helena to rendezvous with the flotilla and there, on September 12, he turned his command over to Lt. Comdr. Thomas O. Selfridge, Jr.

The new captain, more youthful than Bryant, was a man who had seen more service during the war than most other officers. He had appeared briefly in the limelight at Norfolk, Va., in the opening stages. There, as a lieutenant on board the U.S.S. *Cumberland*, he had been interested in stopping some of the Confederate shenanigans that led to the evacuation and destruction by the North of the Gosport Navy Yard. Later, he was assigned the responsibility of finding out what could be done about the blockade running that was going on so successfully along the North Carolina coast, especially at Hatteras. He studied the situation and recommended sending in a fleet of tugboats, steamers, gunboats, and launches to patrol Albemarle and Pamlico Sounds, claiming this would clear up matters in 3 weeks. In effect, he was prescribing the end of a system of signals between ship and shore that the South operated with great results until the fall of Fort Fisher in January 1865.

On March 10, 1862, the day after the famous battle between the *Merrimack* and the *Monitor*, he was ordered to command the latter vessel. This order was counter-



manded by Flag Officer L. M. Goldsborough, who reported plans already had been made to place the ship under Lt. Comdr. W. M. Jeffers.

Selfridge's first assignment after assuming command of the *Cairo* was to guard transports taking prisoners down the Mississippi for exchange at Vicksburg and to return with repatriated Federals. On the run back, he got in an argument with Chief Pilot Oscar B. Jolly, one of the best on the river, who promptly resigned. After this incident, members of the crew began making up their own opinions of the new captain.

The responsibility for the Western Flotilla, which had been under the Army, was assigned by Congress on October 1 to the Navy. Resulting changes caused Captain Davis to be called to Washington as chief of the Bureau of Navigation and to be succeeded as flotilla commander by David Dixon Porter, foster brother of the immortal David G. Farragut, the Navy veteran who had conducted the successful campaign against New Orleans the preceding spring.

Shortly after returning to Helena, the *Cairo* received orders to accompany the ammunition steamer *Judge Torrence* to Memphis. This was an opportunity for which Selfridge had been waiting. The fire linings in his vessel had deteriorated to the point at which they were dangerous, and he had been unable so far to get replacements. He felt confident he could find them at Memphis.

After a 2-day run up the Mississippi, the *Cairo* tied up at Memphis, with instructions to remain there for further orders. This gave Selfridge a chance to make the necessary repairs, and he had them completed by November 7.

The weeks that followed were spent by the *Cairo's* crew in gunnery practice and in patrolling the river above and below Memphis in an effort to break up the smuggling which was so evident at that point. They did an effective job. Meanwhile, Selfridge received notice from Porter that an active campaign on the Mississippi was about to begin.

The campaign was to be another advance on Vicksburg, this time by land as well as by water. The Army of the Tennessee under General Grant was already moving southward from Tennessee. These troops, according to plan, were to advance by way of Granada, down the corridor between the Yazoo and Pearl Rivers, and seize the Confederate base of operations at Jackson.

The Navy was expected to clear the Yazoo of the enemy as far up as Greenwood, where the light-drafts would turn into the Yalobusha and ascend it to Grenada, and there destroy the railroad bridges. An attempt would also be made to capture the large number of steamers the Confederates had secreted in the twisting waterways of The Delta

Porter, on November 22, ordered Selfridge to bring his vessel to Helena. Three days later the *Cairo's* commander sent word that he had been asked by the Army to remain at Memphis and that he thought he would be doing right to fulfill the request. This brought a reply from Porter that was couched in sarcasm: "I would feel better satisfied to dispose of the vessels under my command as it seems best to me." He said he would send a replacement for the *Cairo*, which was needed on the expedition he was planning.

While awaiting the replacement, Selfridge continued to strengthen the *Cairo*. More railroad iron was added to reinforce the casemate protecting the boilers and machinery.

His relief arrived on the morning of December 4, and he set out for the mouth of the Yazoo immediately, arriving on the 8th. The fleet that gathered there ready to go upstream was under the command of Capt. Henry Walke, a Mexican War veteran, a fine artist, and a dauntless fighter.

The next 2 days were spent in recoaling. Then, on the 11th, plans for a reconnaissance up the Yazoo were carried out. This was done by the two tinclads, *Marmora* and *Signal*, light-draft stern-wheelers covered with 1¼ inches of iron that afforded protection against shells but not against heavier projectiles.

They ran up the river some 20 miles and prepared to round to, as the lookouts sighted several suspicious objects floating on the water. A man on board the *Marmora* fired a musket at one of them and touched off a tremendous explosion that shook the boat and threw water over a wide area. Another explosion occurred shortly afterward near the *Signal*. No damage was caused by either. However, it was recognized that contact had been made with some of the vaunted Confederate mines, more commonly referred to as "torpedoes."

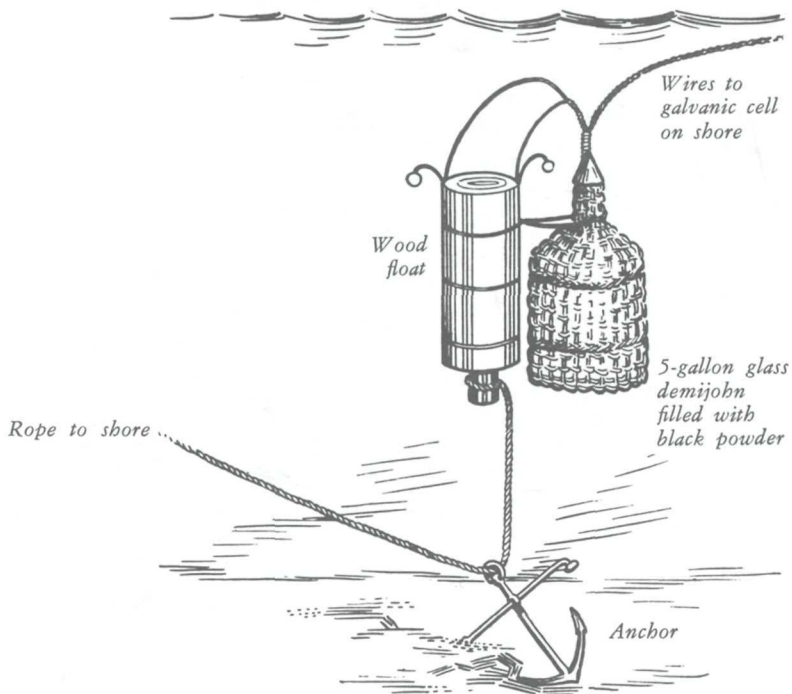
Back at the mouth of the river that night, the captains of the two tinclads told of their experience. They said the number of small scows and stationary floats they saw at the point where they had turned around indicated the presence of other torpedoes, but, if protected by one or two gunboats, they believed they



could safely lift the "infernal machines" from the water and deactivate them.

Selfridge requested permission to use the *Cairo* on such a venture, and Walke consented. He also designated the gunboat *Pittsburg* and the ram *Queen of the West* to go along.

The fleet commander repeated his instructions, addressing his words particularly to Selfridge, who would be in command. The officers were told to avoid the channel where the mines were set. The tinclads were to move close to shore and, by using small boats, haul the infernal machines out and destroy them before proceeding upriver. The ram would follow immediately behind the tinclads, and the two gunboats would bring up the rear, shelling the



The type of torpedo that sank the U.S.S. Cairo. From a sketch in the Official Records of the Union and Confederate Navies.

banks whenever necessary. He concluded by advising that, if there was an apparent danger in the execution of these orders, the project was to be abandoned and they were to return until a better means of carrying it out could be found.

At 7:30 a.m. on December 12, the expedition proceeded up the Yazoo, with the vessels in the order designated. Here and there along the way sharpshooters fired from trees on shore, and an occasional shell was tossed in their direction.

Frequently on the way up, Selfridge displayed impatience. He would peremptorily shout orders to Capt. Edwin W. Sutherland, commander of the *Queen of the West*, moving directly ahead of the *Cairo*, to go faster. Other officers recognized that more speed imperiled the safety of the boats in advance, for, if they had been compelled by some unexpected danger to stop suddenly or to back up in the narrow, tortuous stream, they would have been inevitably run down by the ram.

Sometime after 11:00, the *Marmora*, moving 100 yards or so in advance, came in sight of the torpedoes and stopped, partially hidden by a bend in the river. Selfridge heard a heavy fire of musketry and supposed she was being attacked from shore. As the little fleet closed up, he saw that the firing was coming from the *Marmora*, then backing, and was aimed at a block of wood floating in the river.

"Why don't you go ahead?" shouted Selfridge. Someone on the *Marmora* yelled back, "Here is where the torpedoes are!"

Selfridge ordered the firing stopped and a boat lowered to examine the object. At the same time, he directed that the right shore be bombarded and a boat sent out from his own vessel.

Men in the small boats recovered one infernal machine and debris from the torpedoes exploded the day before. In the meantime, the bow of the *Cairo* had turned toward shore. Selfridge, who seemed to have little fear of the Confederate torpedoes, backed out to proceed upstream and then ordered the *Marmora* to move ahead slowly. The *Cairo* took the lead and advanced into un-reconnoitered waters. Her big wheel had made only a dozen revolutions when there were two explosions in quick succession, one close to her port quarter and the other under her starboard bow.

Opinions varied as to how long it took the *Cairo* to go down—8 to 15 minutes, the estimates ran. However long it was, the vessel was run in toward shore where she sank,

leaving only her chimneys above water. The *Queen of the West* came to the aid of the *Cairo's* crew, all of whom were rescued. Nothing was saved except some small arms and personal items and a few hammocks and bags which floated away from the wreckage.

Before moving downstream, the *Queen* knocked down the chimneys and jackstays to keep the Southerners from finding the sunken ironclad. (This was an act that would have its benefits a century later, when an enterprising group of men, no longer taking sides between the North and South, sounded for the *Cairo* until they located her and then brought her to the surface to be restored.)

The *Cairo's* value to the Union must be estimated in terms of disappointment. At the start, she failed to function properly. In addition, she fired a few shells at the riverbank at Eastport, took her share of guard duty at Fort Pillow, and played a rather inconspicuous part in the battle at Plum Point and later at Memphis. She added little to the North's offensive, and the records gave her very little mention. From a practical standpoint, her major contribution lies in what she took down below the waters with her when she sank in the Yazoo, for therein was preserved for future generations first-hand information on the type of fighting boat that fought along the inland rivers in the Civil War and the sort of life lived by the crewmen on board.

V. C. J.

Raising the Cairo and Her Contents





*The Cairo's bow and casemate break the surface of the Yazoo
for the first time in more than a century.*

Courtesy, Vicksburg Evening Post

For almost 100 years the *Cairo* lay quietly beneath the swift, muddy waters of the Yazoo River. Some of this mud, plus branches and even whole trees, clung to and eventually covered the sunken vessel until only the pilothouse felt the passing water. The survivors of the disaster died, and local residents forgot the location. They remembered the event, however, and in time began to connect it in their minds with the wreckage of a Confederate raft farther upstream.

This was the situation in 1956 when Edwin C. Bearss set in motion the chain of events that rescued the *Cairo* and her contents for history. A thorough student of the Civil War, Bearss was then park historian at Vicksburg National Military Park, Miss. Because of his detailed knowledge of the area and its history, visitors from many parts of the country sought his aid and guidance in their explorations of little-known Civil War sites and their hunts for surviving artifacts. On one such artifact-hunting expedition north of Vicksburg, some local farmers told Bearss that if he were interested and would come back when the water in the Yazoo River was low, he could see, at the foot of Snyder's Bluff, the remains of the *Cairo*, the first warship in history to be sunk by an electrically detonated "torpedo." The wreckage they were talking about was not really the *Cairo*, and Bearss knew it. His study of contemporary documents and maps had told him that the ironclad, if she still existed, must be several miles downstream from the bluff.

But Bearss' interest had been kindled, and he decided to take action. With Warren Grabau, a fellow Civil War buff, and Don Jacks, a Park Service maintenance man who had been born in the area and knew the river and all its moods, he set to work. Armed with their combined knowledge and a small pocket compass, they set off in a small boat one cold November morning in 1956 to find the lost ironclad and prove its identity once and for all. After a number of triangulated probes, their eyes carefully watching the compass needle to catch any deflection when it passed over the mass of

The lower Yazoo and the site of the Cairo's sinking.



iron below, the men pinpointed the wreck. It was just where their study of the historical evidence had convinced them it would be—30 feet from the Yazoo's east bank about 3 miles below Snyder's Bluff, near the site of Benson Blake's lower plantation.

In their own minds the trio of explorers knew they had found the *Cairo*. It was in the right place, and its construction and dimensions matched those in the historical specifications. Still they wanted to be absolutely sure. They worried that another steamer or a barge, sunk here long ago and since forgotten, might have coincidentally met all the same criteria as those of the Civil War gunboat. A long shot, of course, but real scholars must be absolutely sure before reaching any conclusion. They wanted more tests, more data.

For 3 years they waited to confirm their conclusions about the underwater wreckage. Then they got the break they needed. They managed to persuade two scuba divers (Ken Parks and James Hart) from Jackson, Miss., that diving for the old wreck would be fun. In October 1959, Bearss, Jacks, and the divers headed up the Yazoo once more, carrying all the necessary equipment and a host of questions Bearss hoped the underwater men could answer. Finding the answers wasn't easy. The river was so muddy that the divers had to work blind, and the swift current made the operation even trickier. Still, they found that the pilothouse protruded above the mud. They tried to get inside the vessel through the house, but mud completely filled the interior. In the end they had to be satisfied with

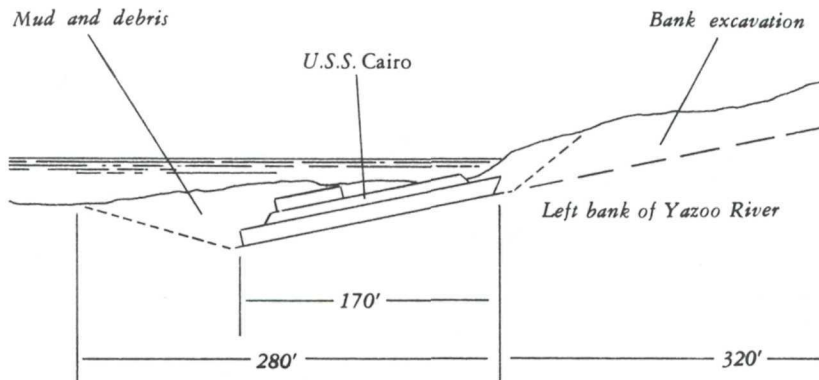
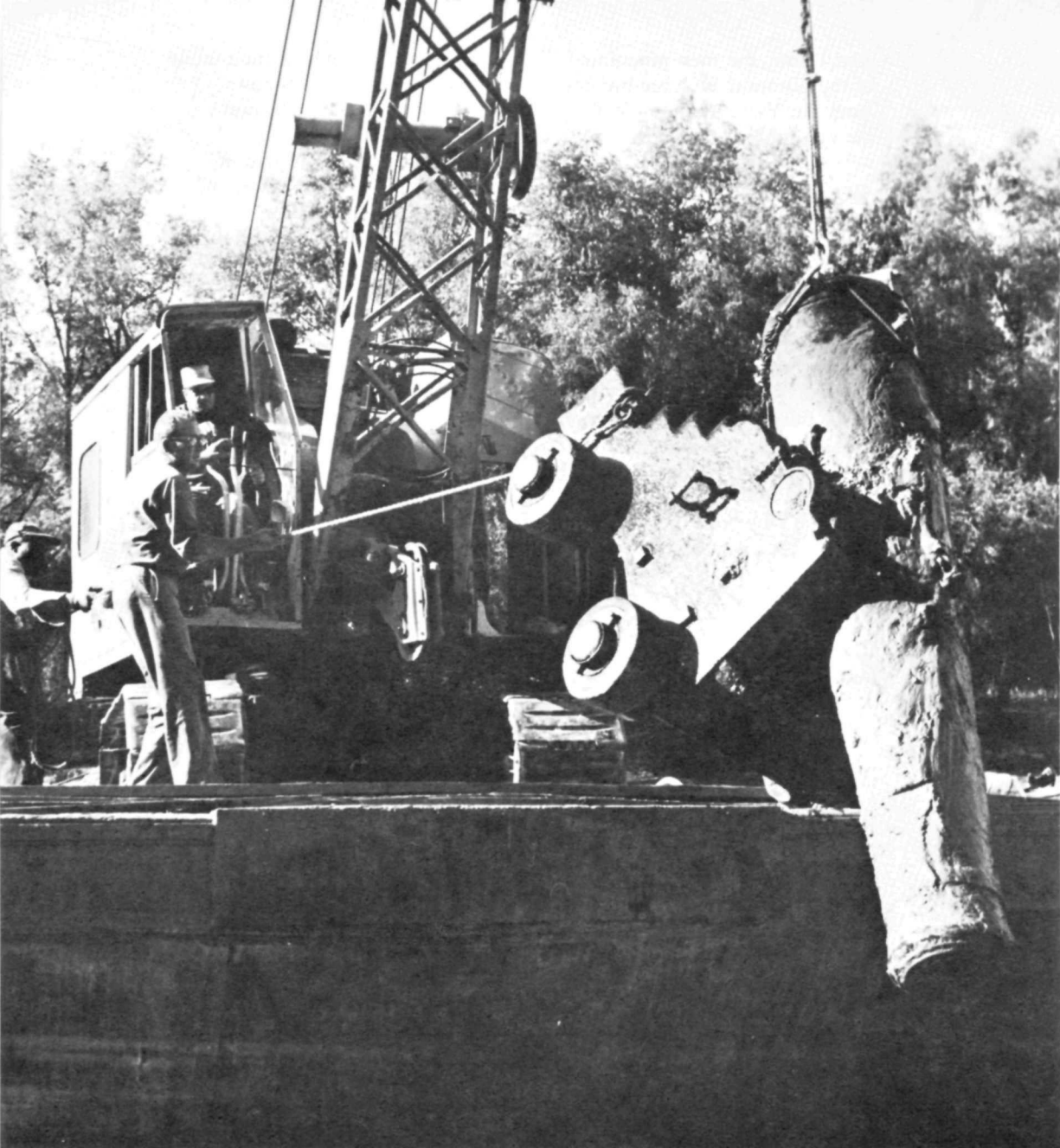


Diagram showing position of Cairo in Yazoo River.



the port covers from the pilothouse and a few planks for testing. But Bearss and the others now knew for certain that the wreck was the *Cairo*. The armored port covers had wiped away all doubt.

Still they were unsatisfied. The port covers made them want more. Visions of raising the whole boat danced enticingly before them. It could be done. It was worth a try. First they needed public support, then money. A spectacular find, the resurrection of a significant fragment, might do it. Local people succumbed to their persuasion. They gave or lent equipment. A lumber company donated the services of a tug and a derrick. The skilled divers spent 10 days sluicing the silt out of the pilothouse with jets from a firehose. Then, working in total blackness, they passed 1-inch cables through four of the ports. The tug pulled the derrick into position, workmen attached the cables, and in a few moments the pilothouse broke water. A significant portion of the historic vessel felt the free air for the first time in almost a century. Buifs and workmen cheered in excited delight. But there was more. After dark, an 8-inch naval gun on its wooden carriage joined the pilothouse on the bank. Both were in excellent condition, almost perfectly preserved. They caught the popular imagination just as the planners hoped. Interest in the project spread far and wide. But the hoped-for money failed to appear.

Seven months passed. Public interest waned without the stimuli of exciting new discoveries. Then Gov. Ross Barnett of Mississippi came to the project's aid. Long interested in history, the governor persuaded several State agencies to provide funds, and assigned the Mississippi Agricultural and Industrial Board to spearhead the effort to raise the ironclad intact. Historian Bearss appeared on a nationwide television quiz program and won the \$10,000 jackpot for his knowledge of the Civil War. This money, too, went into the project.

In the summer of 1962 Bearss, Jacks, Vicksburg National Military Park historian Albert Banton, and scuba divers Parks and Hart began a 30-day survey to determine the condition of the *Cairo's* structural timbers. The New England Naval and Maritime Museum joined them in the effort. Fire hoses cleared the silt from the spardeck, and the divers forced their way inside the casemate to get at the beams. Every one they tested was sound. A mighty gravel dredge sucked the mud and debris away from the hull. Divers, both U.S. and professional, cleared the silt from the gundeck, and workmen pulled all the remaining

A 32-pounder naval gun and carriage are pulled from the mud, October 1963.

Courtesy, William R. Wilson

cannon and carriages to the surface, along with hundreds of other historical objects of all kinds. The treasure trove of Civil War artifacts began to accumulate.

Impressed by the importance of the recoveries and by the favorable publicity attached to them, the Mississippi Legislature in the spring of 1964 appropriated \$50,000 to continue the operations. A group of interested Vicksburgers contacted a New Orleans salvage firm which agreed to raise the *Cairo* on a "no raise, no pay" contract. An experienced diver undertook the diving on the same basis. And the Warren County (Miss.) Board of Supervisors agreed to underwrite the salvage. At long last everything had meshed.

The great adventure began on August 3, 1964. A dredge cleared away the silt that had accumulated since March, and a dragline dug a hole in the river bottom just ahead of the *Cairo's* bows. Logs, some as much as 5 feet in diameter, had to be removed. Then the divers slowly see-sawed huge cables (2½ and 3 inches in diameter) under the hull. By October 17 seven of these cables were in position, and the next day the raising operation commenced. Four derricks with a total lifting capacity of 1,000 tons pitted their strength against the dead weight of the big ironclad. They hauled her out of the hole into which she had settled, but even their combined power could not lift her out of the water. The thick iron armor, the waterlogged timbers, and the mud-filled holds were too much for them. They moved the vessel, still submerged, 70 feet upstream and set her down on a shoal.

New strategy was needed. A giant barge (235 x 40 feet) was towed to the scene and sunk in the hole the *Cairo* had formerly occupied. On October 29 the derricks tugged on the old vessel once more. If they could get her on top of the sunken barge, the engineers felt they could raise both together without difficulty. But Nature refused to cooperate. Water in the Yazoo dropped to a low level, much lower than optimum for the effort. There was no time to wait for rains and a rise in the water level. They had to work now or abandon the project. Cables strained and the casemate broke water. Just 6 inches more and the *Cairo* would slip easily onto the barge. Again the cables strained, and the hulk moved, but, without the buoyancy of the water to help support most of the vessel, the weight on the cables increased drastically. With a sickening noise, two of them cut deeply into the wooden hull. All hope of raising the boat intact was gone.

Now it was a question of saving

as much of the historic vessel as possible—in any way possible. The professionals decided to cut the *Cairo* into three sections: bow, midship, and stern. Finally, on December 12, 1964, the derrick raised the last section and lowered it gently to the deck of the barge. It was 102 years to the day since the gunboat had sunk.

Reminders of the Past

Even in fragments, the *Cairo* proved a treasure. Experts from the Smithsonian Institution and the National Park Service found it a gold mine of information. It was, in fact, a century-old time capsule loaded with the everyday objects of naval life, some of them previously completely unknown. Studied *in situ*, they told of practices and customs no one had even dreamed about before. Even the vessel itself offered new information, for students quickly discovered that it had not been built according to the original specifications in some instances and that assumptions based on incomplete data were totally wrong. Museum models and drawings across the country had to be reworked, old concepts changed, new features added.

Many phases of life and organization on board a naval vessel developed according to tradition. No one ever wrote them down, and knowledge of them died with the veterans. In this field, the *Cairo* helped bring the period back to life in a truly vivid manner.

Take the matter of food and drink, for instance. Evidence from the *Cairo* shows that the sailors ate in messes of about 15 men, and each mess had a special chest to hold its gear: tin plates, cups, spoons, glass condiment bottles, scrub brushes, a washtub, and an earthenware jug of molasses. Every man took care of his own utensils, and he scratched his name or initials on each piece. Those who could not write at least could make an identifying mark. The glass condiment bottles bore embossed labels, "U S NAVY" on one side and "PEPPER" or "MUSTARD" on the other. No one had ever seen such bottles before, but there were more than 300 on board, some still holding their original contents.

The officers dined in a separate mess, and they had finer fare. The dishes were ironstone: the knives, forks, and spoons were made by Rogers and Brothers and the Hartford

Overleaf: The Cairo's bow and stern sections being reassembled at Pascagoula, Miss.

Courtesy, Ingalls Shipbuilding Corporation



Manufacturing Company. Much of the ironstone had been broken, either in the mine explosion or in salvage, but a representative collection survived intact. These show that much of it had been made in England by J. Wedgwood and sold to the Government by J. J. Brown, Importer, New Albany, Ind. Cooks prepared the food for officers and men in big copper and iron pots on an iron cooking range ironically named "Southern Belle" but manufactured by S. A. Burton and Company of Cincinnati, Ohio; and the discovery of a rolling pin suggests that the fare sometimes included biscuits and pastry. The commissary storeroom yielded hundreds of barrels with bones inside—all that remained of the salt beef and pork that formed a major part of all naval diets during that period. Nearby stood the remnants of a butcher block, a two-handed meat cleaver, and several scales. Here, presumably, the boat's butcher stood as he cut and issued the meat for the messes.

Officers overcame the monotony of their diet with the help of spirits as well as condiments. From their section came bottles for whiskey, rum, still wines, and champagne, some of them unopened.

Other bottles offered evidence on medical care, for many contained the remains of their original contents. These included potassium chlorate (a drug prescribed for many complaints of the period), blue mass for syphilis, quinine, rhubarb, ammonia, sulphur, zinc chloride (used as an antiseptic and astringent), and ferric chloride, often prescribed as an iron tonic. Most of these bottles required professional analysis for identification, but others are so familiar that a smell was enough to know that they held iodine, castor oil, camphor, turpentine, or linseed oil.

Only a few surgical items remained. Some may have been carried off the sinking vessel and others may have been lost in salvage. Among those that remained were silver ear syringes, buckles for tourniquets, a metal bedpan, and rubberbands for suturing arteries. These bands still retained their elasticity after 100 years of submersion!

Students of ordnance and weapons had a field day with the *Cairo's* contents. Apparently the vessel carried no cutlasses, for none was found. Instead there were Army foot artillery swords of the "Roman" model of 1832 with their handsome cast brass hilts reflecting the cultural interest in classical objects that

*The Cairo's "Southern Belle" cooking range is brought ashore.
In the background are the ironclad's boilers.*

Courtesy, Vicksburg Evening Post





had been so popular when they were adopted. Perhaps the use of Army swords instead of Navy patterns reflected the conflict over control of the river gunboats, or perhaps it meant that weapons were scarce just then and any usable type was welcome. The latter is the more probable explanation, for the muskets found on board were smoothbore model 1842's instead of the rifled models of 1855 and 1861.

But the discoveries related to the cannon told much, much more. All the guns had been ready for action when the ironclad went down. They came up the same way—fully loaded, sights in place, and percussion locks mounted for firing. Here military historians noted the first significant new information. Each cannon had a white sighting line painted down the top of its barrel. No surviving ordnance manual or document mentions this practice. Yet it was an obviously sensible thing to do. It gave the gunner a quick visual line that he could pick up easily in the dark casemate. It would have been just as helpful in the enclosed gundecks of traditional warships, so now scholars wonder how long it had been done.

All guns boasted two sets of sights: the new adjustable and precise brass patterns and the older strap-on tubes for quick point-blank firing. Further discoveries showed that the Civil War ordnance men had anticipated at least one modern efficiency technique. They had color-coded the wooden boxes that held the artillery projectiles—blue for those fuzed to explode in 15 seconds, white for those timed to explode in 10 seconds, and red for 5 seconds—so that the proper round could be identified quickly.

For the non-specialist, however, the most fascinating items were those that told about the sailors' everyday lives. Such things as the packets called "housewives" that held their needles, thread, and scissors; hard-rubber combs marked "U.S. NAVY" on one side and "IR GOODYEAR 1851" on the other; toothbrushes very much like modern types; and straight razors made by the same firm of Wade & Butcher who still produces them for barbers today. And there were yet other personal items—Captain Selfridge's saddle that he used whenever he could get ashore and indulge his fondness for riding, officers' buttons of gilt brass, enlisted men's peajacket buttons of hard rubber decorated with an anchor and "U.S.N." made by the Novelty Rubber Company, both Army and Navy regulation uniform brass buttons, and even bone buttons for shirts and underwear. Insignia from such varied branches of service as artillery, cavalry, and infantry showed that some of the *Cairo's* complement had worn their old uniforms

The Cairo's bell.

Courtesy, Vicksburg Evening Post

on board as they mixed with the Navy personnel. Government-issue pocketknives with square-ended blades proved that these had come into use well before scholars thought. There was a profusion of leather objects (boots, shoes, belts, cartridge-boxes, cap-pouches, book covers, and powder buckets), many still in excellent condition. The list of such valuable discoveries is almost endless, but perhaps the most poignant are the photographs of loved ones that survived their watery burial—and the pencils the men had used to write home to them. Some of the pencils were marked "A. W. FABER NO. 2," just like those that modern sailors and soldiers sometimes still use for the same purpose.

Almost anyone who looks at these historic objects can find something that makes this ancient ship and its long-dead crew alive and meaningful to him. Even if he is not a student or specialist of the Civil War, the familiar forms and objects, even the common brand names, bring the period vividly to life. They form a national treasure of the greatest importance. The *Cairo* itself, after resting for about a dozen years at the Ingalls Shipyard in Pascagoula, Mississippi, was returned to Vicksburg in 1977 under custody of the National Park Service. Following extensive research, restoration of the ironclad's remains was completed in 1984 and the boat placed on exhibit at Vicksburg National Military Park. A large selection of the artifacts removed from the gunboat are on display at the *Cairo* Museum in the park for all who want to see and experience this significant link with a historic era.

H. L. P.

*The Cairo contained a wealth of fascinating artifacts.
Among them was this photograph of an
unidentified woman and child, probably the wife and
daughter of one of the ironclad's crewmen.*

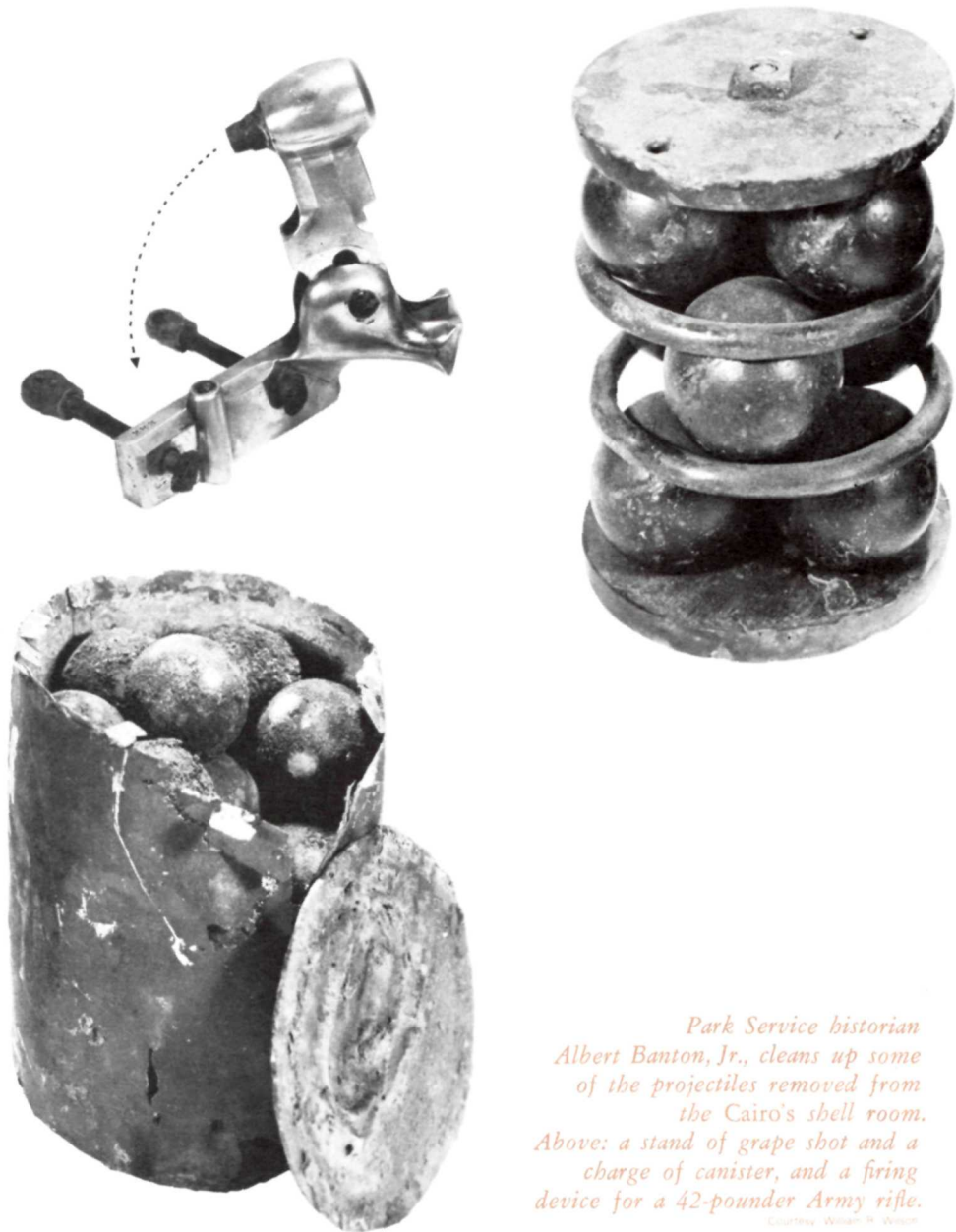
Courtesy, William R. Wilson



Other objects recovered from the sunken gunboat were front and rear sights for a 30-pounder Parrott rifle; comb, watch, pocket-knife, dish, spoon, and cup, each marked with the owner's name or initials; a brace of Colt .44 Army pistols; and a coffee pot.

Courtesy, William R. Wilson





*Park Service historian
Albert Banton, Jr., cleans up some
of the projectiles removed from
the Cairo's shell room.
Above: a stand of grape shot and a
charge of canister, and a firing
device for a 42-pounder Army rifle.*

Courtesy, William H. Wood





Leg and wrist irons, and mess gear were remarkably preserved despite being underwater for more than a century. So, too, were boots, shoes and other leather objects, which became pliable again after treatment with a special preservative.

Courtesy, William R. Wilson





As the Nation's principal conservation agency, the Department of the Interior has basic responsibilities for water, fish, wildlife, mineral, land, park, and recreational resources. Indian and Territorial affairs are other major concerns of America's "Department of Natural Resources." The Department works to assure the wisest choice in managing all our resources so each will make its full contribution to a better United States—now and in the future.

*U.S. Department of the Interior
National Park Service*

