



THE ARTILLERYMAN

MAGAZINE

Vol. 45, No. 4
Fall 2024 \$10

NSSA 149TH NATIONAL



**Castle Pinckney's Transformation • Two Spanish 24-Pounders
Woodruff Gun Update
By George! The Thilenius Tube • Cape Girardeau Woodruff Tube**

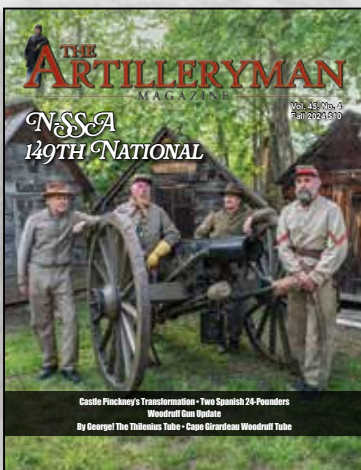
CONTENTS



- 6 THE CIVIL WAR TRANSFORMATION OF CASTLE PINCKNEY
By W. Clifford Roberts & Matthew A.M. Locke
- 18 TWO SPANISH 24-POUNDERS
By Charles H. Bogart
- 24 ARTILLERY: A FAMILY TRADITION. N-SSA 149TH NATIONAL SKIRMISH
By Ericka Curley
- 40 WOODRUFF GUN UPDATE
By Randy Baehr
- 44 BY GEORGE! THE THILENIUS TUBE
By Scott House
- 52 WHY IS THE CAPE GIRARDEAU WOODRUFF TUBE DIFFERENT?
By Randy Baehr
- 58 THE ARTILLERY BOOKSHELF
By Peter Fransden
- 60 NEWS FROM THE U.S. ARMY ARTILLERY MUSEUM
By Gordon A. Blaker

We have moved!

**Our new address is:
Historical Publications LLC
2800 Scenic Drive
Suite 4-304
Blue Ridge, GA 30513**



On the cover:

Hardaway's Alabama Battery members gather around the Tredegar 12-pounder field howitzer owned by Jeffrey Balwin (right) in their camp at the North-South Skirmish Association (N-SSA) range, Fort Shenandoah, near Winchester, Virginia. (Ericka Curley)

Consultants:

Lawrence Babits, Ph.D., Thomas Bailey, Craig D. Bell, Jack Bell, Jim Bender, Col. John Biemeck (Ret.), Leonard Draper, Glenn Dutton, Tom Gersbeck, David Gotter, Les Jensen, Gordon L. Jones, Ph.D., Mike Kent, John L. Morris, Hayes Otoupalik, Bernie Paulson, Bruce Paulson, Carl Sitherwood, Matthew Switlik, Bill Tracy, and Mike Ward.

Publisher: Jack W. Melton Jr.

Founding Publisher: C. Peter Jorgensen

Editor: Larry Babits

Book Reviews: Peter A. Frandsen

Advertising: mail@ArtillerymanMagazine.com

Black Powder Explosive Ordnance Assistance

Contact Jack Melton at
jack@jackmelton.com or
843-696-6385.



Black Powder Explosive Ordnance Assistance (Identification, threat assessment, handling, storage, technical and deactivation assistance) for Government, State and Municipal Agencies.

This service is offered as a courtesy to government agencies by *The Artilleryman* in an effort to preserve antique explosive black powder projectiles for future generations.

Printed proudly and responsibly in the United States of America. All rights reserved under International and Pan-American Copyright Conventions. No part of this magazine may be reproduced in any form or by any electronic, digital or mechanical means, screen shots, phone photos, including information storage and retrieval systems, without permission in writing from the publisher, except by a reviewer who may quote brief passages in a review.

The information contained herein is for the general history and background of our readers and *The Artilleryman* assumes no liability for loading or shooting data which may be published in this magazine. The circumstances surrounding the loading and discharge of firearms mentioned are beyond our control and are unique to the particular instance being described. We hereby disclaim any responsibility for persons attempting to duplicate loading data or shooting conditions referenced herein and specifically recommend against relying solely on this material. Readers are cautioned that black powder varies according to grain size, type, date of manufacture and supplier, and that firing of antique or replica ordnance should not be undertaken without adequate training and experience in procedures and loads.

Articles, Photographs and Image Submittals:

The Author(s), Photographer(s) will indemnify the Publisher against any loss, injury, or damage (including any legal costs or expenses and any compensation costs and disbursements paid by the Publisher) occasioned to the Publisher in connection with or in consequence or any breach of the Author's warranties and which the Publisher is not able to recover. Author agrees to allow Publisher to re-print any work submitted.

Contact Information:

Historical Publications LLC

The Artilleryman

2800 Scenic Drive, Suite 4-304

Blue Ridge, GA 30513

800-777-1862

Email: mail@artillerymanmagazine.com

Website: ArtillerymanMagazine.com

Hours 9-5 EST, Monday-Thursday

The Artilleryman Magazine (ISSN: 088404747) Copyright © 2024, All Rights Reserved, by Historical Publications LLC is published quarterly by Historical Publications LLC, 2800 Scenic Drive, Suite 4-304, Blue Ridge, GA 30513. Quarterly. Business and Editorial Offices: 2800 Scenic Drive, Suite 4-304, Blue Ridge, GA 30513, Accounting and Circulation Offices: Historical Publications LLC, 2800 Scenic Drive, Suite 4-304, Blue Ridge, GA 30513. Call 800-777-1862 to subscribe. Application to mail at Periodicals postage prices at Blue Ridge, GA, and additional mailing offices (if applicable).

POSTMASTER: Send address changes to Historical Publications LLC. 2800 Scenic Dr, Suite 4-304, Blue Ridge, GA 30513.

Contributions of editorial material and photographs are welcomed at the above address.

Subscription rates: \$37.95 for a one-year or \$70 for two-year U.S.A. subscription. International subscriptions are no longer accepted. U.S. bank checks, Paypal, or credit cards accepted.

Subscribe by calling

800-777-1862

or online at

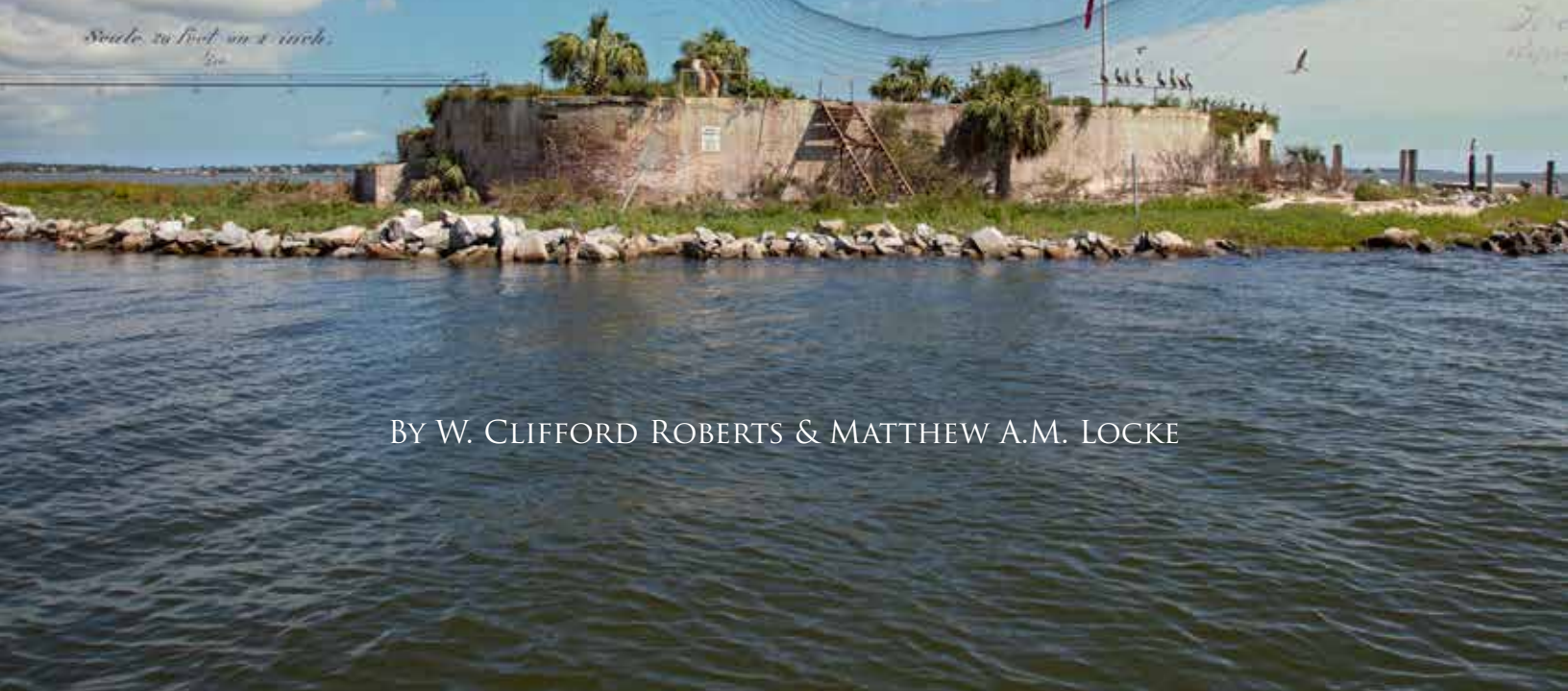
ArtillerymanMagazine.com

Castle Pinckney.

A Historical Perspective.

The Civil War Transformation of Castle Pinckney

Scale: 20 feet on 1 inch.



BY W. CLIFFORD ROBERTS & MATTHEW A.M. LOCKE

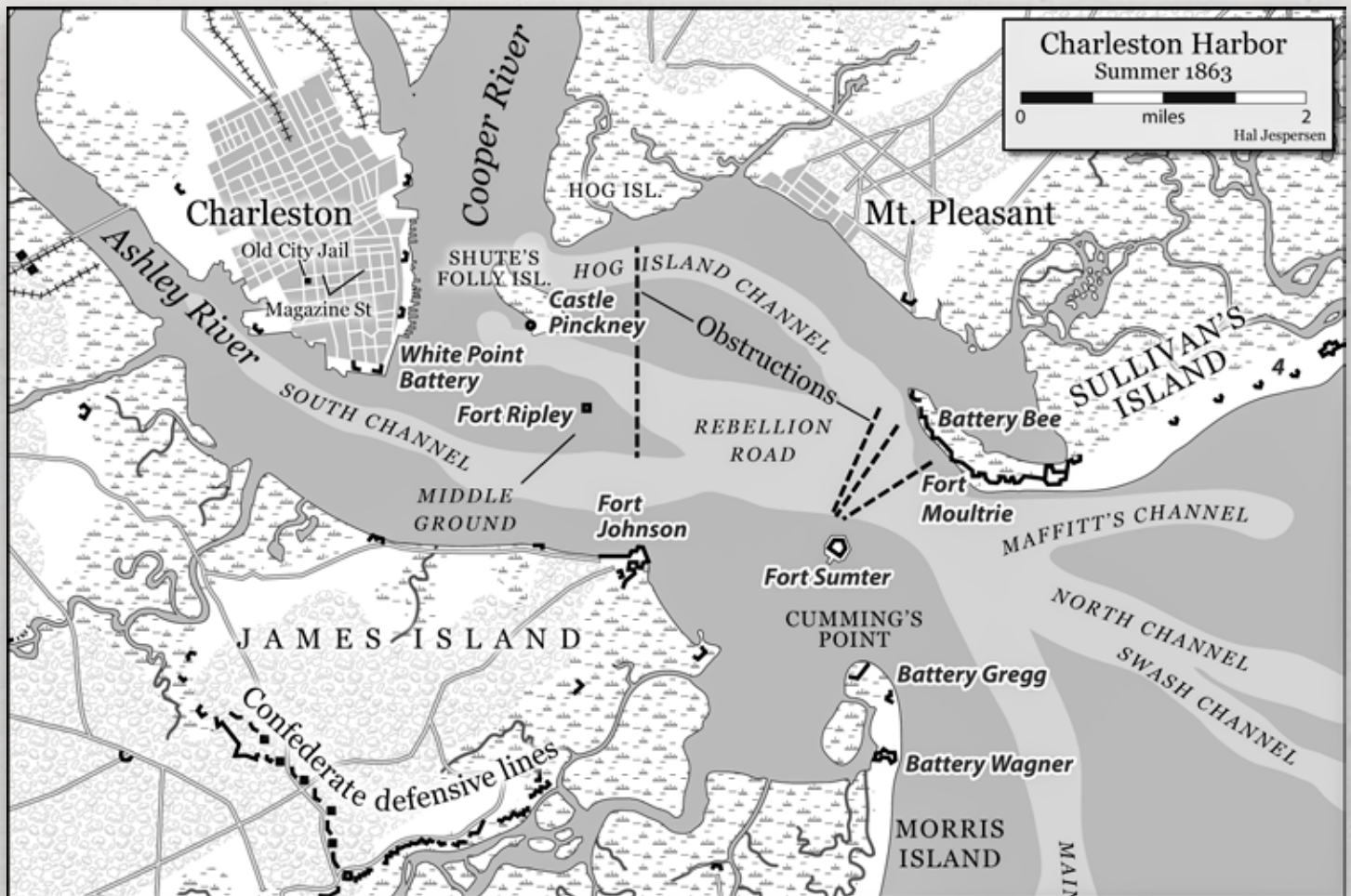
In the first month of Gen. William T. Sherman's audacious 1865 Carolinas Campaign, all seemed quiet in the nearly abandoned city of Charleston. On January 28, 1865, Major General John G. Foster, commander of the Union Army of the South headquartered on Hilton Head Island, wrote Sherman, then at Pocotaligo, that the only observable work Southerners were still performing around Charleston Harbor was at Castle Pinckney. Why Castle Pinckney?¹

Built on the eve of the War of 1812, Castle Pinckney is a horseshoe-shaped masonry fort located on the tip of Shute's Folly, a marsh island only one mile from the wharves along East Bay Street. In late December 1860, for the first time since the 1830s Nullification Crisis, the fortification's name was again prominent in national newspapers. On December 27, 1860, three companies of Charleston militia under the command of Colonel James Johnston Pettigrew scaled the brick walls and seized the fort for the newly independent Palmetto Republic of South Carolina. Pettigrew was acting under the orders of Governor Francis Pickens, who, in turn, was reacting to Major Robert Anderson's clandestine moonlight transfer of his small Federal force from Fort Moultrie to Fort Sumter. The bloodless seizure of Castle Pinckney and Fort Moultrie by the South Carolina forces

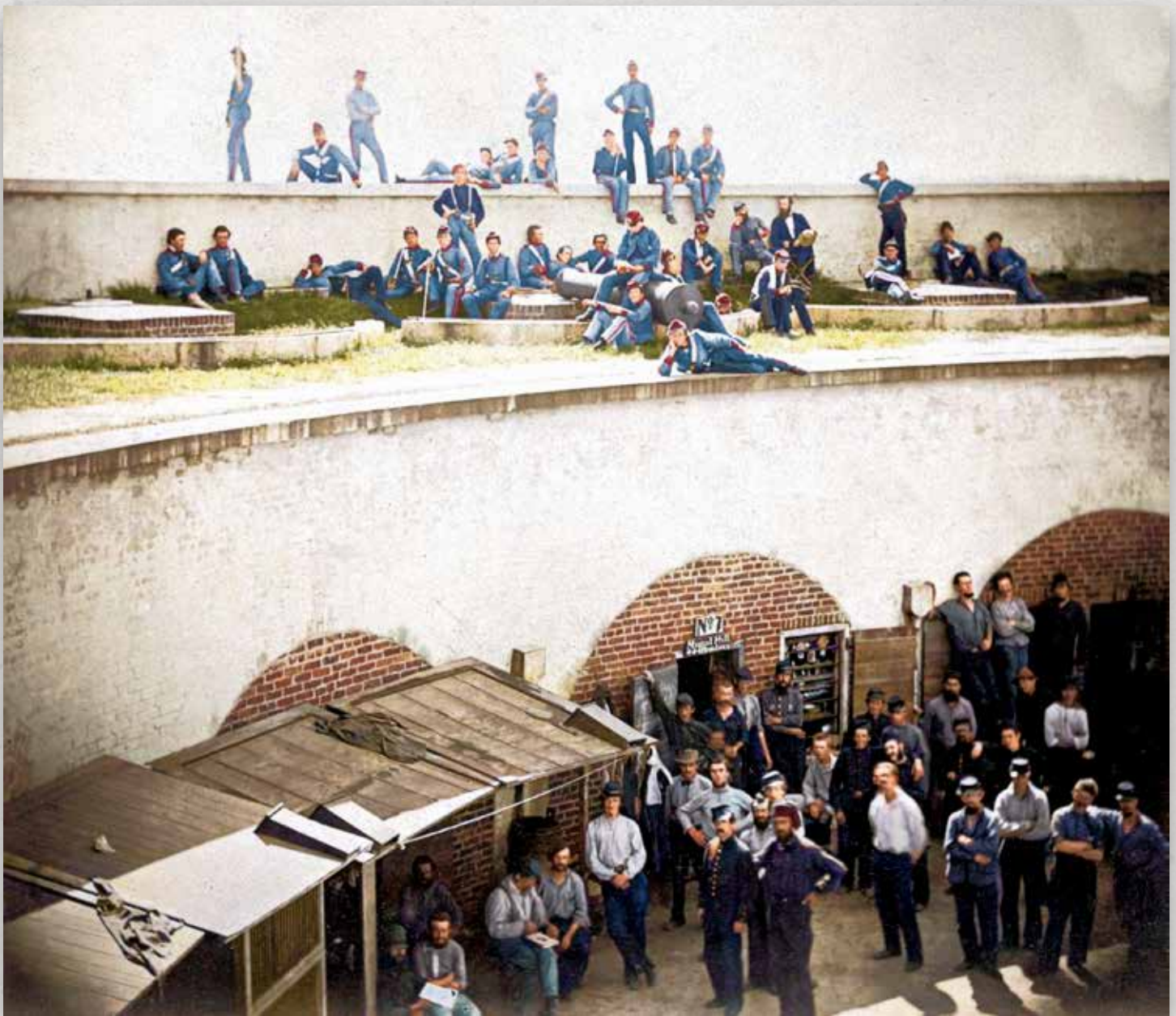
was an important prelude to the bombardment of Fort Sumter on April 12, 1861.

On March 5, 1861, a day after the inauguration of President Abraham Lincoln, General P.G.T. Beauregard inspected Castle Pinckney. According to ordnance records from December 21, 1860, Castle Pinckney's armament consisted of four 42-pounders, fourteen 24-pounders, and four 8-inch seacoast howitzers. The new commander of Confederate forces around the Charleston Harbor immediately issued orders stripping Castle Pinckney of most its cannon. Many wooden gun carriages were sent to Fort Moultrie to replace those burned by Anderson's artillerymen upon their departure to Fort Sumter. The guns from the Castle were mounted in newly constructed batteries at Cummings Point on Morris Island and reportedly on the newly built "floating battery." This transfer put the guns in range of the Federal garrison, where they would participate in the April cannonading of Fort Sumter.

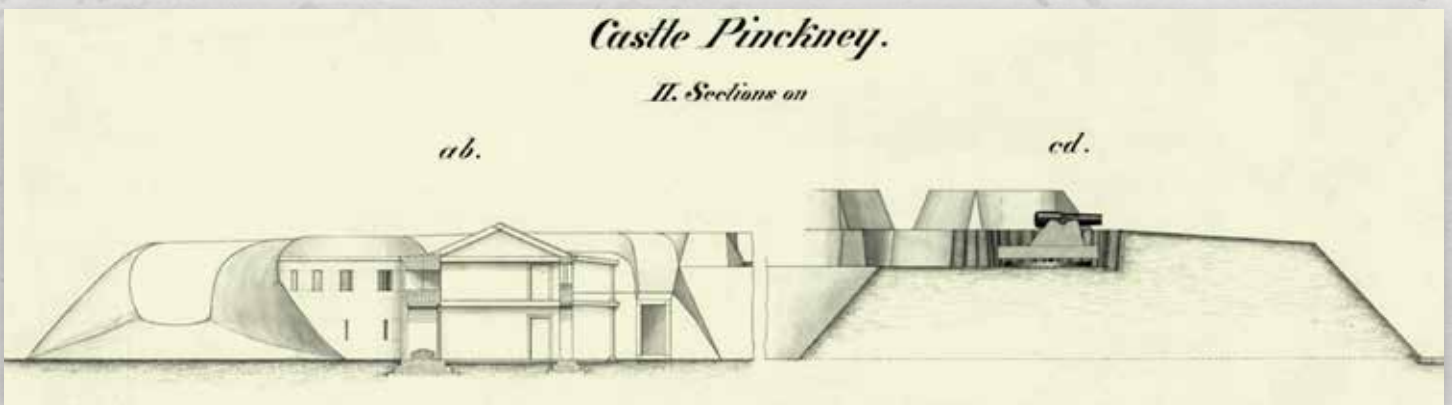
After the battle of First Manassas, the casemates and barracks of Castle Pinckney became a prison for 154 Union officers and men. When Admiral Samuel Du Pont's fleet arrived off the Carolina coast on October 30, 1862, the prisoners were sent to the Charleston city jail, and efforts began to return the Castle to fighting shape. Nine



Map of the Confederate Defenses of Charleston Harbor, 1863. (Hal Jespersen)



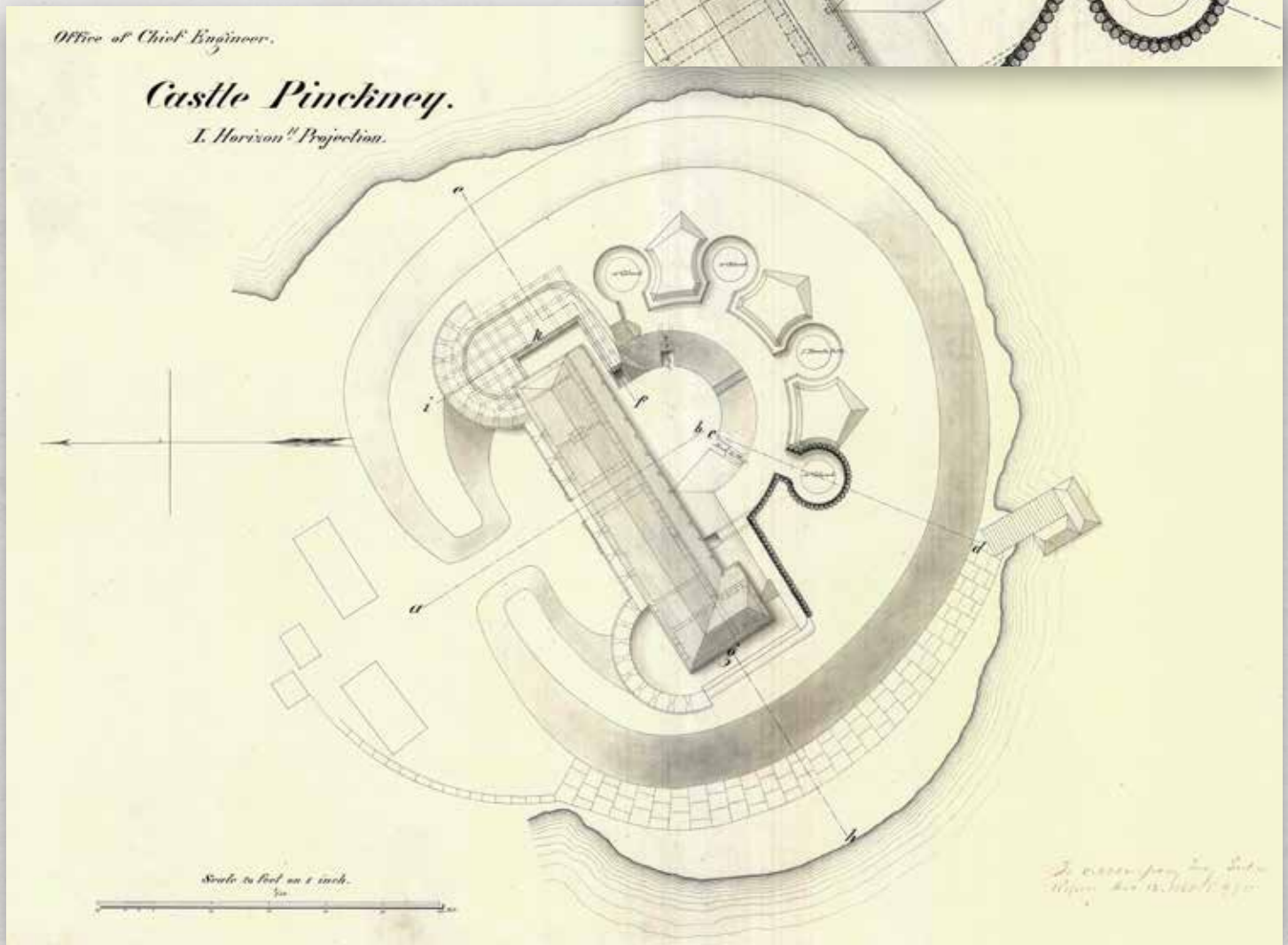
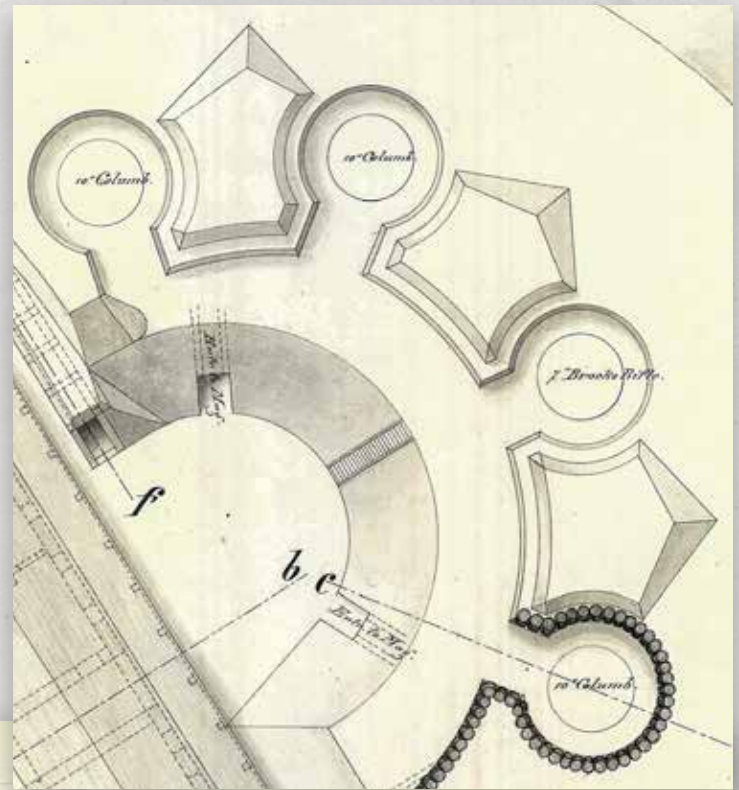
Taken by Charleston photographer George Cook on October 11, 1861, this photographic plate shows the Charleston Zouave Cadets relaxing on the parapets above the Union prisoners, who were housed in the casemates of the Castle. Note that the fort has largely been stripped of its armaments at this early stage of the war. (Valentine Museum, Richmond. Colorized by Lewis Hayes)



An 1865 Federal drawing of Castle Pinckney showing the old brick fort protected by large earthen walls. (National Archives)

24-pounders and one rifled 24-pounder were mounted on the fort's parapets. Pinckney was at this time garrisoned by the Charleston Zouave Cadets under Capt. Charles Chichester. The 27-year-old Chichester had, by this time, moved, with his wife Jane, into the Castle's officer's quarters.

Years later, Jane would tell the story of a new 8-inch Columbiad's arrival. Captain Chichester supervised loading the gun and sighted it on a buoy in the direction of Fort Johnson. Charles had his young wife pull the lanyard for the first shot of the cannon's life, a round that skipped across the water and splashed water over the buoy. "The men set up a cheer," wrote Jane, "waving their hats, and at once gave my name—Jennie—to the gun." Her name was stenciled in red paint on the cascabel of the Columbiad. Jane Chichester may have been the only lady to pull the lanyard on a loaded artillery piece in the Civil War, even it was only a test fire.²



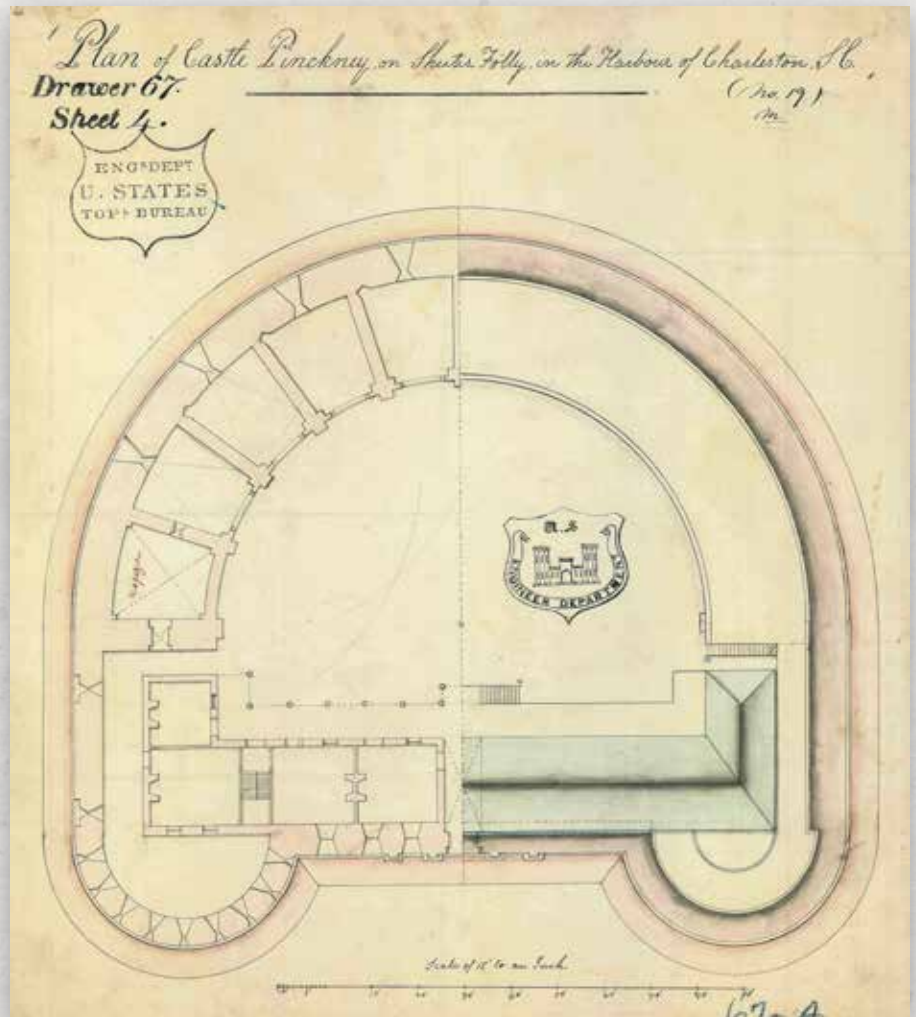
By 1865, Castle Pinckney had been converted into an earthen barbette battery with three giant 10-inch Columbiads and one rifled 7-inch Brooke cannon. From top left to bottom right, the guns were 10-inch Columbiad, 10-inch Columbiad, 7-inch Brooke, and bottom right, 10-inch Columbiad. (National Archives)



A new Columbiad was named after Jane Chichester after she pulled the lanyard on the gun's first test shot in 1862. (Confederate Museum at Market Hall, Charleston)

Until the last 18 months of the war, Castle Pinckney served as a secondary fortification for the Confederates defending Charleston Harbor. According to Confederate Brigadier General Roswell Ripley's plan for defending the harbor, three intersecting "circles of fire" were created where his artillerists were to concentrate their fire. The first circle included the guns on Sullivan's Island and those of Fort Sumter. These cannons were to concentrate their fire on the lead vessel attempting to enter the harbor, while the mortar batteries in Moultrie and Sumter were to aim at the center of the circle. The second circle was the shipping channel in front of Fort Ripley and the focus of the heavy guns at Fort Johnson, Fort Ripley, Castle Pinckney, Battery Bee, and the western face of Fort Sumter. Ripley's strategy worked to perfection on April 7, 1863, when Du Pont's fleet of nine iron-plated ships were soundly beaten back. The ships of the U.S. Navy never made it past Ripley's first circle of fire.³

Plan of Castle Pinckney, on Shutes Folly, in the Harbour of Charleston, SC. (National Archives)



Most Confederate artillerists defending Charleston Harbor were from the 1st South Carolina Artillery. These men became extremely proficient at handling large-caliber coastal guns over the course of the war. The regiment's ten companies were divided among the various forts and batteries that ringed the harbor. One company of approximately 60 men was always assigned to Castle Pinckney with a rotation happening every six to nine months. Companies E, F, G, and H each spent time posted at the Castle. This assignment was viewed as an opportunity to rest and refit after a grueling tenure defending Battery Gregg, Battery Wagner, or Fort Sumter.

The Federal campaign to capture Morris Island over the summer of 1863 succeeded when large Parrott guns placed on Morris Island decimated Fort Sumter and brought a rain of iron down upon the city of Charleston itself. Once the Union army controlled this barrier island, the role and appearance of Castle Pinckney underwent a profound change. As Fort Sumter became a less important participant in protecting the main channel into the harbor, Beauregard and Ripley believed there was an increasing possibility that Yankee ironclads would breach their first circle of fire. Anticipating this, Castle Pinckney was to be



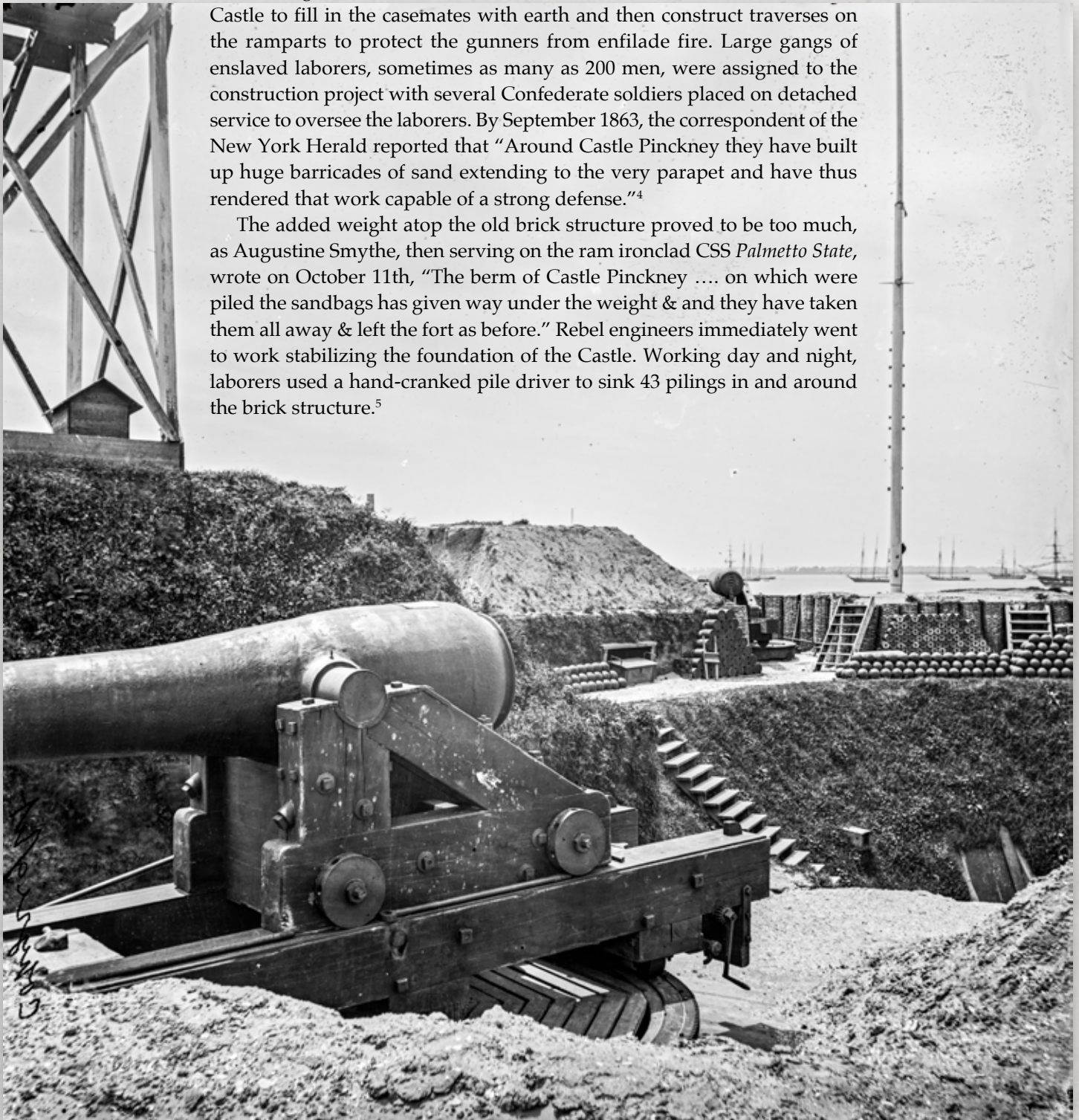
This 1865 glass negative of the interior of Castle Pinckney was taken from underneath the piazza of the barracks and published by E.H.T. Anthony. To the left of the tunnel entrance is a stack of 10-inch spherical shells. The wooden staircase runs up between two rows of 10-inch canister (left) and a pile of 10-inch strapped solid shot. On the upper left is a 10-inch Columbiad and on the right a 7-inch Brooke rifle. (Library of Congress)

Interior of Castle Pinckney showing the barracks, hot shot furnace, and blankets covering an unmounted smoothbore cannon. The hot shot furnace was converted to an oven during this time. (Library of Congress)



transformed from a secondary to a frontline battery capable of absorbing the powerful shells fired from Dahlgren ship cannon or large caliber, rifled coastal guns. Upgrading the Castle involved changing it from a brick fort to an earthwork. Confederate Chief Engineer David Harris directed that all sandbags and material intended for Fort Sumter be redirected to the Castle to fill in the casemates with earth and then construct traverses on the ramparts to protect the gunners from enfilade fire. Large gangs of enslaved laborers, sometimes as many as 200 men, were assigned to the construction project with several Confederate soldiers placed on detached service to oversee the laborers. By September 1863, the correspondent of the New York Herald reported that "Around Castle Pinckney they have built up huge barricades of sand extending to the very parapet and have thus rendered that work capable of a strong defense."⁴

The added weight atop the old brick structure proved to be too much, as Augustine Smythe, then serving on the ram ironclad *CSS Palmetto State*, wrote on October 11th, "The berm of Castle Pinckney on which were piled the sandbags has given way under the weight & and they have taken them all away & left the fort as before." Rebel engineers immediately went to work stabilizing the foundation of the Castle. Working day and night, laborers used a hand-cranked pile driver to sink 43 pilings in and around the brick structure.⁵



Wartime photograph of a 10-inch Columbiad smoothbore gun cast by Tredegar Foundry, dated 1862 on the left trunnion. This gun, firing a spherical solid shot with a service charge of 18 pounds at 10° elevation reached a range of 2,847 yards with a 11 second flight. At 20° elevation with the same service charge, the gun had a range of 3,687 yards and a 21 second flight. The same gun firing a spherical shell with a service charge of 15 pounds at 10° elevation had a range of 2,117 yards with a 11 second flight. At 20° elevation with the same service charge the 10-inch Columbiad had a range of 2,670 yards with a 21 second flight time. Another 10-inch Columbiad is visible in the background. (Library of Congress)

Over the course of 1864 and into 1865, Castle Pinckney grew in scope under the overall direction of Lt. William Hume Jr., a 27-year-old civil engineer from Charleston. After stabilizing the fort's foundation, thousands of pounds of sand and dirt were brought inside the Castle and stacked against the circular brick walls creating something of a Roman amphitheater as the new sandhill descended from the ramparts to the base of the barrack buildings. Postwar Federal engineer records show that three tunnels were dug deep into this giant earthen mound to reach newly constructed magazines and bombproofs for the garrison.

The construction took place while the Castle was periodically shelled by the 3rd Rhode Island Artillery's 200-pounder Parrott gun located at Fort Putnam on Morris Island. On June 29, 1864, the Castle was "smote" five times by the large gun at a range of 5,510 yards. The *Charleston Courier* described the casualties, all from Company F of the 1st South Carolina Artillery, in almost poetic terms: "Private J. Johnson, mortally; DeHart, severely; Littlefield, painfully; McKenny, slightly. A negro was also slightly wounded." Company F's 400-page guard

book noted the daily arrival of sloops, schooners, and flats carrying rock, enslaved workers, and construction material to the Castle. Included in these deliveries were stones and bricks that had been dug up from Broad Street in the city. On January 13, 1865, Federal observers on Morris Island reported that large working parties were constantly at work on the old fort and that "The Castle at present presents from the outside all the appearances of an earthwork."⁶

Using a wooden gin, a roughly 25 feet tall tripod, three giant 10-inch Columbiads and one 7-inch double-banded Brooke rifle were mounted behind the earthen parapet. The Brooke was placed in the middle of the half-circle palisade with a clear view of the Charleston Harbor. To the left of the gun were two Columbiads that could contest any Federal attempt to use the Hog Island Channel, while the last Columbiad was placed to the right of the Brooke.

According to historian William E. Lockridge, three double-banded Brooke cannons, S-70, S-74, and S-76, were shipped from the Confederate Naval Ordnance Works at Selma, Alabama, to Charleston during the fall of 1864. S76 is currently on display at White Point Garden at the tip of the Charleston peninsula. Another Brooke, which Lockridge surmises to be S-74, is on



This 10-inch Columbiad was located to the right of the gun on the facing page. (Library of Congress)



By the end of the war, Castle Pinckney was encased behind tall, sloped earthen sand and sodded walls. This circa 1865 photograph shows the western wall of the fort. (Matthew Locke Collection)



Foundry number 1687 stamped on the muzzle on another unearthed 10-inch Columbiad.



The second Columbiad number 1676, and nicknamed Abigail was also cast by J.R. Anderson at Tredegar on October 13, 1862. (Matthew Locke)



Publisher Ted Savas sitting between authors Matthew Locke and Cliff Roberts. At their feet is a partially buried 10-inch Columbiad with foundry number 1687.



Aerial view of Castle Pinckney. (Jason Parker)



Aerial view of Castle Pinckney after brush and debris removal. (Jason Parker)

display at the Citadel Military College of South Carolina. The third Brooke is buried at Castle Pinckney and is either S-70 or S-74. Two of the three Columbiads that were mounted at the Castle have been identified. The first has foundry number 1687 and was cast on November 8, 1862, by J.R. Anderson & Co., the firm that owned the Tredegar Iron Works in Richmond. A November 27 receipt shows that the gun had been ordered for General Beauregard, that it weighed 13,365 pounds, and that it cost the Confederate government \$1,069. The second Columbiad, number 1676, and nicknamed "Abigail" by a recent archeology team, was cast by J.R. Anderson & Co. at Tredegar on October 13, 1862.⁷

The four newly placed guns, as part of the second Rebel circle of fire, would never be tested by Federal ironclads. Lt. General William Hardee ordered the withdrawal of Confederate forces from the harbor defenses on the evening of February 17, 1865. The sudden departure left the fort almost completely intact, allowing Federal engineers to diagram the refurbished fort and photographers to capture how an operational Confederate coastal fort appeared.

During Reconstruction, the Castle was used by Federal authorities as a prison for wayward soldiers and men who resisted military rule in South Carolina. Over the next several decades, the Confederate protective earthen walls slowly washed away leaving the original brick fort exposed, while the barracks, bombproofs, and gun carriages fell into disrepair. In 1901, the U.S. Lighthouse Service decided to build its 6th District Supply Depot atop the old fort to protect its equipment from devastating hurricanes. The fort's brick walls were reduced to 13 feet above the high

tide mark, the sally port and embrasures were sealed with brick, and the fort's interior filled with 700 cubic yards of sand and mud. Left buried under the dirt were the four large cannon that had protected the fort in 1865.

Endnotes

1. *OR*, series II, 7:1-1120-1121
2. *OR* 14/1-610; *OR* 28/1-716; Jane Chichester, *A Lady's Experiences Inside the Forts of Charleston During the War*, 1895, U.D.C. pamphlet, 3-8.
3. Roberts and Locke, *Holding Charleston by the Bridle: Castle Pinckney and the Civil War*, 2024, Savis Beatie, 125-126.
4. "Castle Pinckney," *New York Herald*, Sept. 11, 1863, 10; *OR* 28/2-295; CWSR, W.H. Echols, "Sandbag requisition," M258, roll 105, 37-38
5. Roberts and Locke, 142
6. "Guard Report, 1864, Castle Pinckney, Charleston," Confederate States of America Collection, 1850-1876, Rubenstein Library, Duke University; Frederic Denison, *Shot & Shell: The Third Rhode Island Heavy Artillery Regiment in the Rebellion*, 1879, 251-252.
7. William E. Lockridge, *The Untold History of Civil War Selma, Alabama as a Center of Manufacturing, Transportation, Shipbuilding, and Logistics during the War of Northern Aggression*, 2013, p. 173-174.

Cliff Roberts and Matthew Locke are the authors of *Holding Charleston by the Bridle: Castle Pinckney and the Civil War*, published by Savas Beatie in July 2024.





**ACE
PYRO** LLC
Located in Saline • MI
Toll-free: (877) 223-3552
Shop: AcePyro.com



**Fg Sporting Powders
Now Available**



FIRE ART LLC
IGNITE YOUR IMAGINATION
Located in Munson • PA
Phone: (814) 765-5918
Shop: FireArtCorp.com



Schuetzen
Black Powder



WANO

Black Powder

1Fa•2Fa•3Fa•4Fa•7Fa
1Fg•2Fg•3Fg•4Fg

