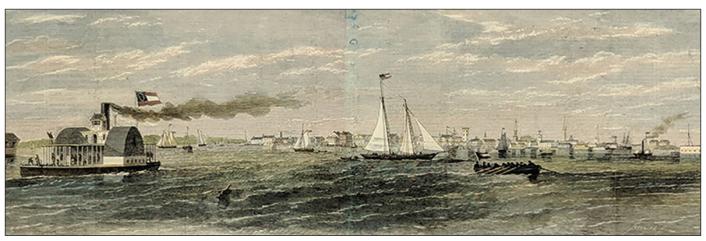
Navy Yards



Line engraving showing the Cooper River waterfront at Charleston, South Carolina, as seen from Fort Johnson, published in the The Illustrated London News, Volume 43, No. 1197, p 372-373, April 4, 1863.

Charleston Naval Station, 1861-1865

By Ron Field

WITH NUMEROUS WHARFS AND SHIPYARDS,

and conflict surrounding the surrender and subsequent siege of Fort Sumter, Charleston, South Carolina was an obvious choice for a Confederate Naval Station during the course of the Civil War. The beginnings of a navy, or "Coast Police," in Charleston occurred a week after the secession of South Carolina on December 20, 1860. On December 27, the U.S. revenue cutter William Aiken was surrendered by her South Carolinian commander, Captain Napoleon L. Coste, who turned her over to the newly created Republic for service in Charleston Harbor.

A special correspondent of the New York Evening Post who was in Charleston at the time, Thomas Butler Gunn, went aboard the Aiken for her first cruise under the Palmetto Flag on December 28. On this occasion, he described Captain Coste as "a small man, with grizzled hair and a terrier-like look, not a lovely person by any means...and made his appearance in a naval cap with a palmetto tree, in silver, upon it and a rifle-gun slung in a belt, as though he were going shooting." Shortly after this, Coste was detached from the Aiken and placed on "special service" under direction of the War Department of the Republic of South Carolina.²

As a further measure to ensure coastal security for the newly formed Republic, Governor Francis Pickens ordered Lieutenant William H. Ryan, of the Irish Volunteers, South Carolina Militia, to take charge of the side-wheel packet steamer, General Clinch, owned by wealthy Charleston shipbuilder Henry L.P. McCormick, on January 5, 1861. With a detail of 20 men picked from the Fourth Brigade, South Carolina Militia, to serve as marines, the *General Clinch* was ordered to patrol every evening from 7 p.m. to daybreak between Cumming's Point and the bar at the entrance to the harbor to ensure that no reinforcement reached the beleaguered Union garrison under Major Robert Anderson, which had been withdrawn from Fort Moultrie to Fort Sumter on December 26, 1860.3 Boarding the General Clinch on the evening of January 8, 1861, these men would have witnessed the Federal relief vessel Star of the West being driven off by the Morris Island Battery the next morning.

During a meeting of the Executive Council of South Carolina on January 16, Governor Pickens gave

Lieutenant Thomas P. Pelot the responsibility for "stationing Steamers and boats, so as to prevent troops entering the harbor to reinforce Fort Sumter..." As a result, the steam tug *Aid* joined the cutter *Aiken* and steamer General Clinch, which became the flagship, on active service in Charleston Harbor.4

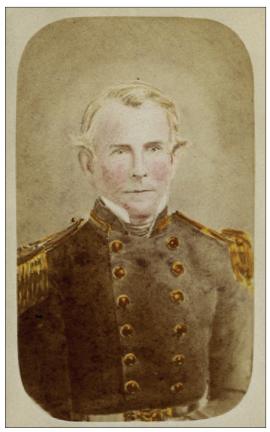
The cadets of the Charleston Marine School aboard the brig *Lodebar*, anchored off White Point Gardens and commanded by Captain Mitchell L. Aimar, provided additional support for the harbor defense force (Point A on Bird's Eye View Map of Charleston, South Carolina, 1872). On March 13, 1861, the Lodebar, armed with two guns, was ordered to take up position at the mouth of Newtown Cut where it entered the Ashley River.5

Efforts to create a South Carolina Navy came to fruition as early as January 7, 1861, when the legislature passed "An Act for the establishment of a Coast Police for the State of South Carolina."6 Three days later, Governor Pickens ordered his Secretary of the Interior, General Albert C. Garlington, to "purchase or procure three vessels of light draught, to be propelled by steam or canvas, and to be armed with one or more guns..." for which was appropriated the sum of \$150,000.7

In order to man the vessels of the tiny South Carolina Navy, General Garlington ordered Pelot, plus Lieutenants William G. Dozier and John Grimball, to "proceed immediately to enlisting seamen and armed sailors, for a year, on the best terms possible."8 By April 6, 1861, only 30 enlisted men had been recruited and further efforts were suspended "on account of the action of the Provisional Congress, looking to the establishment of a [Confederate] Navy for the common Government," begun on February 21, 1861. A report in the State Convention stated that the Coast Police had performed a valuable duty by serving "to relieve the detachments of [state militia] volunteers which had been detailed for duty as a night guard in the harbor."9

Following the absorption of the South Carolina Navy into the Confederate States Navy, one of the 30 enlisted men of the former organization, Seaman John Richardson, nicknamed "Double Block Jack," arrived at Norfolk, Virginia, and reported for duty aboard the Confederate States frigate States which had been seized by the Virginia State Navy on April 20, 1861, and turned over for CSN use.10

Failing to find a suitable vessel in Charleston Harbor, General Garlington located the tug James Gray, an "iron-propeller, built for the navigation of the James River" in Virginia, and during March 1861 sent Lieutenant Dozier to Richmond to purchase her for \$30,000. Renamed Lady Davis, in honor of the Confederate first lady, she was



Duncan N. Ingraham resigned his commission in the U.S. Navy on February 4, 1861 to enter the Confederate States Navy with the rank of captain. He commanded the Charleston Naval Station from 1861 until the evacuation of the city in 1865. At the end of the war, he sent this tinted carte de visite to a friend stating "all my papers, letters &c. having been lost in the burning of Columbia by Sherman. I enclose you the only small photograph of myself that I have..." He died in Charleston on October 16, 1891. Courtesy of Raynors' Historical Collectible Auctions, Burlington, North Carolina.

altered for naval service and armed with "two twenty-four pounder howitzers on her decks." The *Lady Davis* was placed under command of First Lieutenant Thomas B. Huger, with orders to prepare for sea on April 5, 1861.11 Also brought into South Carolina Navy service during March-April 1861 were the side-wheel steamers Gordon, William Seabrook, and Catawba.

During the bombardment of Fort Sumter on April 12-13, 1861, the William Seabrook and General Clinch patrolled between Cumming's point and the bar. The boys of the Charleston Marine School manned small boats

Charleston Naval Station, 1861-1865

transporting troops to the battery up Wappoo Cut, following which the *Charleston Daily Courier* commented, "Both teacher and pupils deserve the thanks of the community." On January 12, 1862, a group of boys was assigned to crew the schooner Petrel, which served as a tender for the *Lodebar*. On April 17 of that year, the Lodebar was sold and all remaining boys were transferred to the Petrel.12

The establishment of a Confederate Navy Station in Charleston Harbor began on November 16, 1861, when Captain Duncan N. Ingraham, CSN, was assigned to duty there.13 The wharfs and yards served as a base for the squadron of gunboats and ironclads developed in the harbor. Until March 1863, Ingraham commanded both the station and squadron. After that date, he had charge of the station only, while Commander John R. Tucker had responsibility for the squadron.

During March 1862, a "Soldier's Directory" in the Charleston Daily Courier listed the Navy Department as being situated on the Southern Wharf, off East Bay Street (Point B on Bird's Eye View Map of Charleston, South Carolina, 1872).¹⁴ Before the war this had been the regular departure point for steamers bound along the coast to Port Royal; Savannah, Georgia; and Fernandina, Florida. It was also used by vessels transporting Confederate soldiers around Charleston Harbor during the crisis leading to the bombardment and surrender of Fort Sumter on April 12-13, 1861, and during the Union siege operations which began in earnest in 1863.

Probably due to the shelling of the southern end of Charleston by Union forces that began on August 22, 1863, Captain Ingraham's office had been moved to King Street, near the junction with Calhoun Street, by December 1863 (Point C on Bird's Eye View Map of Charleston, South Carolina, 1872). At the same time, the office of Naval Paymaster Henry Myers was relocated to Charlotte Street, at the southeast corner of Elizabeth Street (Point D on Bird's Eye View Map of Charleston, South Carolina, 1872). By May 1864, Ingraham had again moved, this time to Wall Street, nearly opposite Minority Street, Charleston (Point E on Bird's Eye View Map of Charleston, South Carolina, 1872).¹⁵

At an Executive Council meeting on February 22, 1862, \$2,000 was advanced to Captain Ingraham and Captain Jack Hamilton to pay for the enlistment of "seamen to man Gun Boats in the harbour and waters about Charleston."16 The Naval Rendezvous was established at the office of public notary A.W. Black, 93 East Bay (Point F on Bird's Eye View Map of Charleston, South Carolina, 1872). Black's life came abruptly to an end on November 21, 1863. Described as "a refugee from Charleston" resident at Greenville in upstate South Carolina by November 1863, he was reported to have died by "visitation from God." By September 1862, Seamen, Ordinary Seamen, Landsmen, Boys, First and Second Class Firemen, and Coal Passers were being promised a bounty of \$50 if they shipped for three years or the end of the war.¹⁸ An old wooden vessel, the *Indian Chief*, commanded by Lieutenant W.G. Dozier, and later by Lieutenant Henry W. Ray, served as a receiving ship for the CSN in Charleston Harbor from September 1862 through February 1865 (Point G on Bird's Eye View Map of Charleston, South Carolina, 1872).19

Construction of the first ironclad gunboat in Charleston began in early 1862 under the supervision of Captain Ingraham. Prominent in this work was James G. Marsh & Son, owners of the Dry Dock Company at the Palmetto Wharf on the Cooper River waterfront (Point H on Bird's Eye View Map of Charleston, South Carolina, 1872).²⁰ As part of the preparations for the bombardment of Fort Sumter in the spring of 1861,

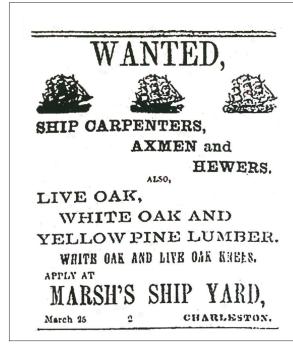


Situated on East Bay Street and nearly opposite Boyce's Wharves, the Naval Rendezvous for the Confederate States Navy was at the office of public notary A.W. Black until 1863. This advertisement was placed in the Charleston Daily Courier on September 20, 1862. Ron Field Collection.



Office of Captain D.N. Ingraham, CSN, from December 1863; (D) Office of Paymaster Henry Myers from December 1863; (E) Office of Captain D.N. Ingraham, CSN, by May 1864; (F) Naval Rendezvous; (G) Receiving Ship CSS Indian Chief; (H) Marsh & Son's Hoating Dry Dock at Palmetto Wharf; (I) Eason & Brother's shipyard at Boyce's Wharf; (J) Bird's Eye View of the City of Charleston, South Carolina, 1872. Drawn and published by C. Drie. (A) Marine School Ship Lodebar; (B) CSN Department, Southern Wharf; (C) Jones & Brothers' shipyard. Library of Congress Geography and Map Division (Control No. 75696567, http://hdl.loc.gov/loc.gmd/g3914c.pm008830),

Charleston Naval Station, 1861-1865



During March 1862, Captain Duncan N. Ingraham placed this advertisement in the Charleston Mercury for a workforce and wood for the construction of the Richmond-class casemate ironclad, Palmetto State. Ron Field Collection.

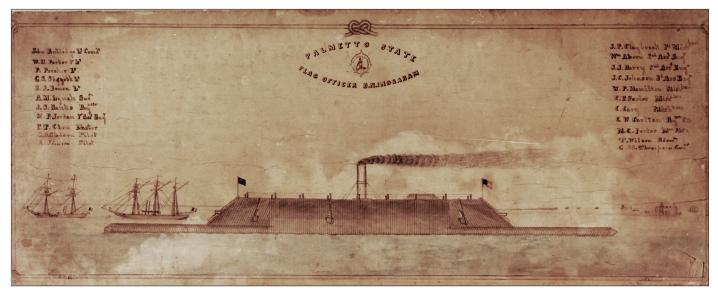
Marsh & Son had built the Floating Battery used by South Carolina forces. Present during its launch on February 25, 1861, a New-York Times reporter writing under the pseudonym "Jasper" recorded, "Arrived at Palmetto Wharf, I saw a small crowd gathering, which each moment increased, as the news spread through the town. By 81/4 o'clock at least 5,000 people were present, and the unknown quantity...rolled heavily and clumsily into her new element...Only the gun-side is plated, and the roof of that part looks very like an old-fashioned rope-walk. The machine fell into the water with a strong list to starboard, as the sailors phrase it, drawing on the gun side full seven feet, while on the other, not more than four!"21

During January 1862, Marsh & Son laid down the keel of the Richmond-class casemate ironclad, Palmetto State. As worked progressed, Ingraham advertised for "ship carpenters, axmen and hewers" on March 25, and during the following month, requested from "Timber Cutters" 100 "ship knees [curved braces]" for the vessel, plus 33,700 feet of "white oak plank."22 Listed as a "car builder" in the 1860 census, Charleston resident David Riker was employed as his agent to acquire the wood.23

Launched on October 11 and commanded by First Lieutenant John Rutledge, the *Palmetto State* was nicknamed "The Ladies' Gunboat," as the womenfolk of the city helped collect over \$30,000 towards its completion.²⁴ On January 31, 1863, she took part in the attack on the Federal blockading fleet disabling the US screw steamer Mercedita and US side-wheel steamer *Keystone State*. She was eventually scuttled to prevent capture when Charleston fell on February 18, 1865.25 A hive of activity, the floating dry dock owned by Marsh & Son was seized by Confederate authorities for one year on November 26, 1862, for "the purpose of docking the transport steamers employed by the Govt." Under Confederate control, the dry dock was temporarily moved to Boyce's Wharf.²⁶

Another Richmond-class ironclad eventually named the Chicora was laid down in the shipyard owned by Eason & Brother at Boyce's Wharf in March 1862 (Point I on Bird's Eye View Map of Charleston, South Carolina, 1872). The Chicora was completed and launched on August 23 as a result of a partnership between James M. Eason and Francis Marion Jones, owner of the Jones & Brothers' shipyard on the Ashley River at the southern most point of Charleston (Point J on Bird's Eye View Map of Charleston, South Carolina, 1872). As the "baptism" ceremony of the Palmetto State concluded on October 11, 1862, the Chicora under Captain John R. Tucker, is reported to have come "steaming up from the lower wharves, and with colors flying, fore and aft, [had] saluted her consort." As the vessel glided by, Eason and a "large number of citizens, could be seen upon her upper deck."27

Built by Eason & Brother, the construction of a larger ironclad ram named the *Charleston* was also partly funded by public subscription. Laid down in December 1862 and launched on July 13, 1863, she was commanded by Commander Isaac N. Brown. Serving as the flagship of the Charleston Squadron, she was burned to prevent capture on February 18, 1865.²⁸ A fourth ironclad named Columbia was produced by Eason & Brother during the fall of 1863 and launched March 10, 1864. Foundering on a sunken wreck on January 12, 1865, the Columbia was salvaged by the U.S. Navy and towed to



This watercolor drawing of the Richmond-class casemate ironclad, Palmetto State, by Charles C. Cawson, circa 1862-1863, features the names of the ship's officers. NH 93044-KN courtesy of Naval History and Heritage Command.

Norfolk, Virginia.29

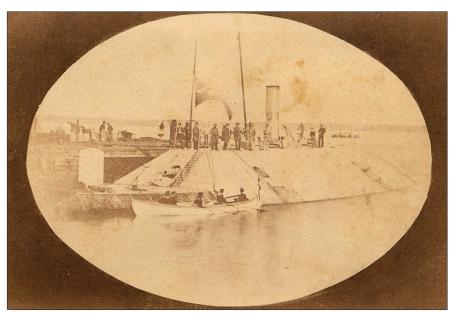
The shipyard of Jones & Brothers constructed a number of other sailing vessels and steamers including the schooner General Ripley and steamer Celt. Built there in 1860, the side-wheel steamer *Planter* had been used as a dispatch boat and transport by both South Carolina forces and the Confederate Navy since the beginning of the war. During the early hours of May 15, 1862, she left the Southern Wharf with a crew of five African Americans, consisting of pilot Robert Smalls, three engineers, and one deckhand, and steamed out passed Fort Sumter to surrender to the blockading fleet. In addition to her own armament consisting of one 32-pounder and one 24-pounder, the Planter had onboard one rifled 42-pounder, two 8-inch Columbiads, and one 32-pounder, all of which had been destined for the harbor defenses.³⁰ Exposed to the possibility of the Federal occupation of James Island, across the mouth of the Ashley River, Jones' Ship Yard fell out of use towards the end of 1862 and was auctioned off on January 12, 1863.31

Developed at Mobile, Alabama, and launched in July 1863, the submarine H.L. Hunley was shipped by rail to Charleston on August 12, 1863. During a test run on August 29, 1863, the *Hunley* sank, killing five members of her crew. During the following months, marine divers Smith & Broadfoot charged the Confederate States Quartermaster Department \$7,000 for raising and salvaging the vessel. On October 15, 1863, Horace L.

Hunley, inventor of the vessel, took charge of several successful test dives under the Indian Chief. Later that day disaster struck and the submarine sank, drowning Hunley and the entire crew. The services of Smith & Broadfoot were once again required and on November 9, they charged a further \$400 for "Removing Bodies of Crew of Submarine Boat & Cleaning Boat."32 On February 17, 1864, Hunley attacked and sank the screw sloop-of-war USS Housatonic, on Union blockade duty in Charleston's outer harbor. The Hunley did not survive the attack and also sank and was lost, taking with her all eight members of her third crew.

Initially designed by Dr. St. Julien Ravenel, son of wealthy Charleston merchant and ship owner John Ravenel, and based on an earlier idea by New Jerseyborn inventor Ross Winans, the first steam-driven torpedo boat was developed and completed in Charleston with the aid of millwright, machinist, and engineer David C. Ebaugh, who served as Assistant Superintendent of the Cooper River Nitre Works, about 35 miles north of Charleston.³³ Funded by Theodore Stoney, partner in merchants and shipping agents Holmes & Stoney at Boyce & Co.'s Wharf, construction of what became known as the David, probably named after David Ebaugh, was completed by the prolific Eason & Brother. On December 13, 1863, this company was paid \$1,230.25 for work on the *David*, including "Bending plates of steel," supplying "365 lb of Boiler plate," and "Making 550 ½ in. Bolts," and "100 ½ in.

Charleston Naval Station, 1861-1865



Possibly photographed by George Cook, this rare view of the Richmond-class ironclad Chicora shows a party of British Royal Navy officers, possibly from either the steamer HMS Petrel or Cadmus, in dark blue uniforms gathered together on the top deck with several CSN officers. Both British vessels were anchored in harbor during December 1862 through January 1863, having brought dispatches for Her Majesties Consul in Charleston. Al Luckenbach Collection.

Spikes."34 During interrogation on January 7, 1864, a deserter from the Confederate Navy stated that he "Saw the 'David' hauled up on the wharf, being covered with thin boiler iron. The musket balls from the Ironsides [unsuccessfully attacked by her on October 5, 1863] had pierced her."35

By November 1863, Theodore Stoney had helped form the Southern Torpedo Company which raised about \$40,000 towards building "three to four steel clad torpedo bearing steamers of a class large enough for coast operations, besides a number (from fifteen to twenty) of smaller vessels for service in the harbors" of the Department of South Carolina, Georgia, and Florida.³⁶ Evidence indicates this venture may have met with some success. During interrogation on January 7, 1864, the Confederate deserter further stated that he had "heard that twenty-five [torpedo boats] have been ordered to be built similar to the 'David." He added that he had "seen eight or ten in course of construction at the different ship yards on Cooper River; those near the ironclad No. 3 [Charleston] are most advanced. At this, No. 3, there were four altogether; one just begun, two

ready for their engines, and one nearly ready for launching."37

In line with other Confederate naval installations, the Confederate States Engineering Department in Charleston arranged for the manufacture and deployment of individual torpedoes of various types in the entrance to its harbor and rivers. Jones & Brothers supplied the Engineer Corps with 17 torpedoes during January 1862.³⁸ Commanding a detachment of five enlisted men, Captain N.M. Gray had responsibility for making and laying torpedoes and submarine shells from December 3, 1862.³⁹ The receiving ship *Indian Chief* also served as a tender for the distribution of torpedoes.⁴⁰ The engineering company J.W. & W.A. Rook, on East Bay Street, also built and

supplied four "Large Torpedos" [sic] at \$200 each, and four "Small Torpedos" at \$100 each for the CS Engineering Department during January 1864. Located on the Palmetto Wharf, coppersmith Edmund Bull was paid \$417.60 for making eight copper torpedoes for the Corps of Engineers on June 22, 1863.41

Following the surrender and Federal occupation of Charleston on February 18, 1865, Ensign Ernst J. Dichman, of the Flag-Steamer Philadelphia, reported to Rear-Admiral John A. Dahlgren on March 17, 1865, that torpedoes were found being manufactured at "a Rebel establishment at the foot of Broad Street." This would indicate they had probably also been manufactured by Holmes and Stoney at Boyce & Co.'s Wharf. Found were "Fourteen torpedoes in various states of completion... And over fifty small anchors and shells fitted for anchoring torpedoes..." Dichman added, "At a shop in the city I also found a great number of anchors which were designed for anchoring torpedoes."42

Acknowledgement

The author thanks collector Al Luckenbach and Bob Raynor of Raynors' Historical Collectible Auctions, Burlington, North Carolina, for their kind help in the preparation of this article.

Sources

- 1. Thomas Butler Gunn Diary, Volume 16, p 192, Missouri History Museum, St.
- 2. Charles E. Cauthen, Editor. State Records of South Carolina: Journals of the South Carolina Executive Councils of 1861 and 1862 (Columbia, SC: South Carolina Archives Department, 1956), p 20.
- 3. Cauthen, p 6; and Charleston Daily Courier (Charleston, SC), January 10, 1861, p 1, col 2. The offices of Henry L.P. McCormick were on the Southern Wharf. He also owned the steamers General Ripley, Caldwell, Rebel, and Manigault, plus the schooner James Martin and numerous flat boats and lighters, which he leased to the Confederate Quartermaster Department throughout the war. William H. Ryan was by profession a civil engineer and presumably had some
- 4. Cauthen, p 20. By October 1861, Pelot had been appointed a lieutenant in the Confederate States Navy. Having served in the U.S. Navy for 12 years, he resigned his commission as Lieutenant on January 11, 1861, and immediately made his way south to his native state. While serving as executive officer aboard the Confederate States floating battery Georgia, he was killed during the capture on the side-wheel sloop USS Water Witch on June 3, 1864 (fold3.com. Civil War: Confederate Navy Subject File-Medical-Casualties-CSS Beaufort-Miscellaneous, Digital Images, p 49).
- 5. "Headquarters, Quartermaster-General's Department, Charleston, S.C., March 15, 1861," Charleston Daily Courier (Charleston, SC), March 16, 1861, p 1, col 8.
- 6. "Legislature of South Carolina," Charleston Mercury (Charleston, SC), January 8, 1861, p 1, col 3.
- 7. "Movements Affecting the Great Crisis," Charleston Mercury (Charleston, SC), January 10, 1861, p 2, col 4; and "The State Convention-Tenth Day. April 6, 1861," Charleston Daily Courier (Charleston, SC), April 8, 1861, p 4, col 2.
- 8. Cauthen, p 23.
- 9. "The State Convention-Tenth Day. April 6, 1861," Charleston Daily Courier (Charleston, SC), April 8, 1861, p 4, col 2.
- 10. "Double Block Jack," Alexandria Gazette (Alexandria, VA), May 20, 1861, p 3, col 4.
- 11. "The State Convention-Tenth Day. April 6, 1861," Charleston Daily Courier (Charleston, SC), April 8, 1861, p 4, col 2.
- 12. "Fort Sumter Restored," Charleston Daily Courier (Charleston, SC), April 15, 1861, p 1, col 6; and Records of the Marine School Ship "Lodebar," 1861-1862 (Journal kept by Brutus E. Bedault, aboard the ship), South Caroliniana Library, University of South Carolina, Columbia, South Carolina, Entries for January 12 and April 17, 1862.
- 13. Ingraham was living at the residence of his brother George H. Ingraham by February 9, 1861. See Charleston Daily Courier (Charleston, SC), February 9,
- 14. "Soldiers' Directory," Charleston Daily Courier (Charleston, SC), March 25, 1862, p 4, col 2.
- 15. "Directory of Public Offices," Charleston Daily Courier (Charleston, SC), December 19, 1863, p 2, col 1; and "Soldier's Directory of Public Offices," ibid, May 11, 1864, p 2, col 2.
- 16. Cauthen, p 98.
- 17. "\$50.00 Bounty," Charleston Mercury (Charleston, SC), February 25, 1862, p 2, col 6; and "Sudden Death," ibid, November 24, 1863, p 2, col 1. As the main function of a public notary was to administer oaths and affirmations, Black would have been ideally suited to manage the legal responsibilities expected in the management of a naval rendezvous.
- 18. "Wanted Immediately," Charleston Daily Courier (Charleston, SC), September 20, 1862, p 3, col 2.
- 19. Order of Captain Ingraham, C.S. Navy, to Lieutenant Dozier, C.S. Navy, Charleston, June 11, 1862. Official Records of the Union and Confederate Navies in the War of the Rebellion (ORN hereafter). Series I, Volume 13: South Atlantic Blockading Squadron (May 14, 1862 to April 7, 1863), p 807 (Washington, DC: Government Printing Office, 1901); Order of Captain Ingraham, C.S. Navy, to Lieutenant Dozier, C.S. Navy, regarding a change in command, Charleston, October 22, 1862, Volume 13, p 813.

- 20. fold3.com. Civil War: Confederate Citizens File-Citizen, James G. Marsh, Digital Images, p 3.
- 21. "From Charleston," New-York Times (New York City, NY), March 1, 1861, p 5, col 1.
- 22. "Wanted," Charleston Mercury (Charleston, SC), March 25, 1862, p 2, col 6; and "To Timber Cutters," Charleston Mercury (Charleston, SC), May 9, 1862, p 2, col 6.
- 23. "To the Planters and Owners of Timbered Land...," Charleston Daily Courier (Charleston, SC), April 7, 1862, p 1, col 5.
- 24. "The Baptism of the Ladies' Gunboat, 'Palmetto State,'" Charleston Mercury (Charleston, SC), October 13, 1862, p 2, col 1.
- 25. Paul H. Silverstone. Warships of the Civil War Navies (Annapolis, MD: Naval Institute Press, 1989), p 206.
- 26. fold3.com. Civil War: Confederate Citizens File-Business-Charleston S.C. Dry Dock, Digital Images, p 18, 60; ibid, Civil War: Confederate Citizens File-Citizen, James G. Marsh, Digital Images, p 3; and ibid, Civil War: Confederate Navy Subject File-Naval Bases (Including Navy Yards and Stations), Dry Docks, Charleston-New Orleans, Digital Images, p 6.
- 27. "Launch," Charleston Mercury (Charleston, SC), July 14, 1863, p 1, col 2. A significant industrial presence in Charleston, Eason & Brother also owned an iron foundry on Columbus Street. See Documenting the American South: Census of the City of Charleston, South Carolina, For the Year 1861. Illustrated by Statistical Tables. Prepared under the Authority of the City Council by Frederick A. Ford, Electronic Edition, p 66. https://docsouth.unc.edu/imls/census/census.html.
- 28. fold3.com. Civil War: Confederate Navy Subject File-Engineering-Auxiliary machinery, Charleston-Wilmington, Digital Images, p 4; and Silverstone, p 208.
- 29. Silverstone, p 208.
- 30. "The Steamer Planter," Charleston Daily Courier (Charleston, SC), May 14, 1862, p 1, col 3. As the Planter burned wood, which was scarce where the Union Navy operated, she was soon turned over to the Union Army for use at Fort Pulaski, on the Georgia coast. In 1863, Smalls was appointed captain of this vessel, being the first African American to command a United States ship.
- 31. Charleston Mercury (Charleston, SC), January 10, 1863, p 2, col 5.
- 32. fold3.com. Civil War-Confederate Citizens File-Business-Smith and Broadfoot, Digital Images, p 10, 12.
- 33. "Steam Engines," Charleston Daily Courier (Charleston, SC), August 19, 1865, p 2, col 5. Ebaugh owned property at Monk's Corner, on the Cooper River.
- 34. fold3.com. Civil War: Confederate Navy Subject File-Engineering-Steam boilers, Charleston-Miscellaneous, Digital Images, p 20.
- 35. Information obtained from the examination of deserters from the enemy, January 7, 1864. ORN, Series I, Volume 15: South Atlantic Blockading Squadron (October 1, 1863 to September 30, 1864), p 228 (Washington, DC: Government Printing Office, 1902).
- 36. fold3.com. Civil War: Confederate Citizens File-Citizen, Theodore Stoney, Digital Images, p 6, 7.
- 37. Information obtained from the examination of deserters from the enemy, January 7, 1864. ORN, Series I, Volume 15, p 229.
- 38. fold3.com. Civil War: Confederate Citizens File-Business-Jones and Brothers, Digital Images, p 15.
- 39. fold3.com. Civil War: Civil War Service Records-Confederate Records-Engineers, CSA, G-Hi, N.M. Gray, Digital Images, p 7.
- 40. Order of Flag-Officer Tucker, C.S. Navy, to Lieutenant Dozier, C.S. Navy, regarding the disposition of the steamer Moultrie, Charleston, August 24, 1863. ORN, Series I, Volume 14: South Atlantic Blockading Squadron (April 7 to September 30, 1863), p 763 (Washington, DC: Government Printing Office, 1902).
- 41. fold3.com. Civil War: Confederate Citizens File-Citizen, W.A. Rook, Digital Images, p 5; and Civil War: Confederate Citizens File-Citizen, Edmund Bull, Digital Images, p 5.
- 42. fold3.com. Civil War: Confederate Navy Subject File-Ordnance-Mines and torpedoes—Charleston-Miscellaneous, Digital Images, p 29.



Ron Field is a military historian and author of over 45 books, including Silent Witness: The Civil War Through Photography and Its Photographers (Osprey Publishing, 2017) and Bluejackets: Uniforms of the United States Navy in the Civil War Period, 1852-1865 (Schiffer Publishing Ltd, 2010) plus many magazine articles, and resides in Hazleton, United Kingdom.