

Images of the Battle of the *Monitor* and the *Merrimac* (Battle of Hampton Roads), March 1862

- pages 2-10: images from *Harper's Weekly*
- pages 11-12: images from *Frank Leslie's Illustrated Newspaper*
- pages 13-14: images from *New York Illustrated News*

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HARPER'S WEEKLY



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LIEUTENANT WORDEN, U.S.N.

We are delighted to be able to present our readers on this page with a portrait of **LIEUTENANT WORDEN, U.S.N.**, the hero of the great **NAVAL BATTLE** at Hampton Roads.

Lieutenant John Lorimer Worden is a native and citizen of New York, from which State he was appointed to the Navy. His original entry as a midshipman into the service bears date from the 10th of January, 1831, and he obtained his present commission on the 30th of November, 1846. His sea service under his present commission to the end of 1860 had been eight years and nine months, his total sea service being to that date nearly seventeen years. His shore or other duty amounted at that time to nearly seven years, and he was over three years unemployed. His total length of service up to the present time exceeds twenty-eight years. He was last at sea in November, 1860, on board the sloop *Savannah*, twenty-two guns, on the blockading squadron, and was granted a short leave of absence on his return; after which he was sent as a special messenger to Fort Pickens, with dispatches to Captain Adams, of the *Sabine*, commanding the fleet off Pensacola, with notice that the fort would be reinforced by two companies of artillery, and instructions to Captain Adams and Colonel Brown as to their conduct in case of an attack by rebels upon the fleet and fort. He went by the land route, and on the way he destroyed his dispatches. As he anticipated, he was arrested at Montgomery, and as no papers were found on his person he was allowed to pass. On his arrival at Pensacola he obtained a pass from the rebel General Bragg, permitting him to carry a verbal message from Secretary Cameron to Captain Adams. He went to him and repeated from memory his dispatches. The fort was reinforced, and as he was returning he was arrested by the rebel General Bragg, under the false pretense of having broken his parole; but the main object was to obtain his dispatches to the Government, if he should have had any in his possession. He was sent to Montgomery, where he was kept for some time as a prisoner of war. There was an intense excitement against him, as the rebel General Bragg had col-



LIEUTENANT WORDEN, U.S.N., COMMANDING THE "MONITOR."

lected a force of 1000 men and intended to attack Fort Pickens the very night it was reinforced. Lieutenant Worden was kept in confinement until the middle of November last, when he was exchanged and went to Fortress Monroe, where he joined the *Minnesota*. He was afterward detached from that vessel and appointed to the command of the *Monitor*.

His gallant performance at the battle at Hampton Roads is recorded in another part of this paper. Under Providence he saved our navy. The correspondent of the Associated Press well says:

"The *Monitor* was handled with unsurpassed skill, decision, and coolness, for which all praise should be given her officers. She has come up to the expectations that were formed of her, and has proved herself impregnable to the heaviest shot at close quarters.

"Lieutenant Worden, who handled the *Monitor* so skillfully, is in Washington, in the hands of a surgeon. He was in the pilot-house of the *Monitor* when the *Merrimac* directed a whole broadside at it, and received his injuries from the minute fragments of powder which were driven through the look-out holes. Lieutenant Worden was stunned by the concussion, and was carried away. On recovering he asked, 'Have I saved the *Minnesota*?' The reply was, 'Yes, and whipped the *Merrimac*.' To which he answered, 'Then I don't care what becomes of me.'

"The injuries of Lieutenant Worden are not supposed to be dangerous."

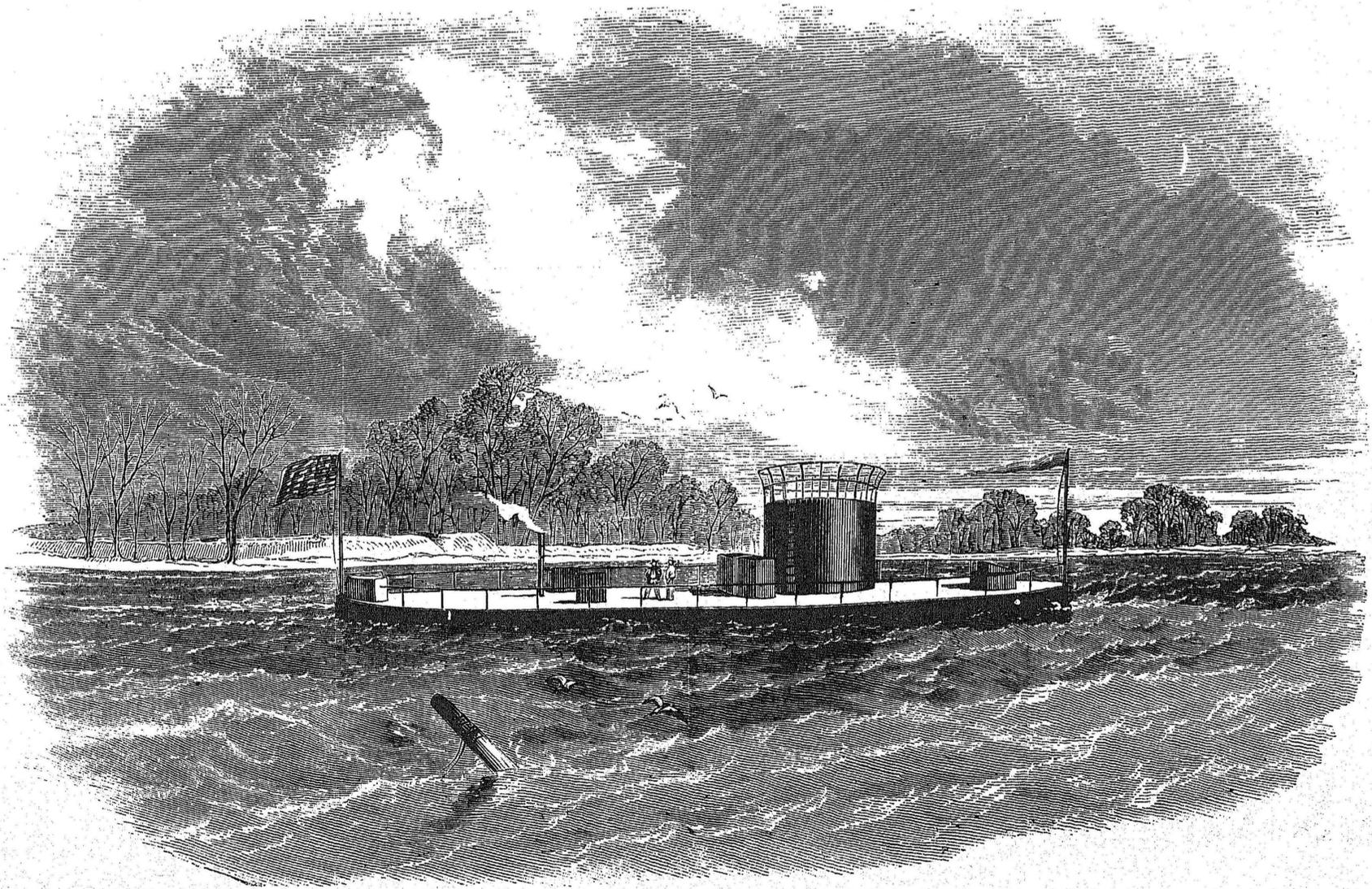
The rebels are, of course, jubilant over the affair. The dispatch says:

The *Merrimac*, or, as it is called by them, the *Virginia*, had received damage, but nothing that was serious.

They admit the loss of four killed and several wounded on board. Captain Buchanan, who commanded her, was seriously wounded on Saturday, and the command devolved upon his First Lieutenant. The officers say little or nothing about the Sunday's fight.

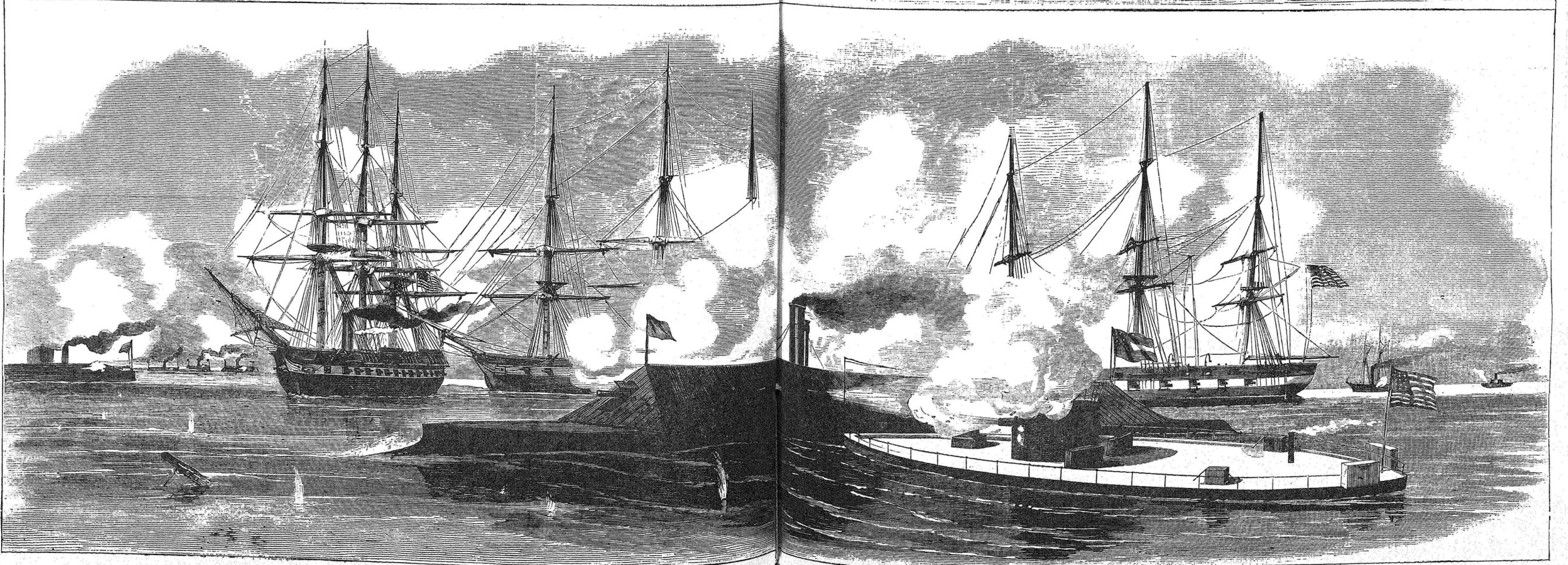
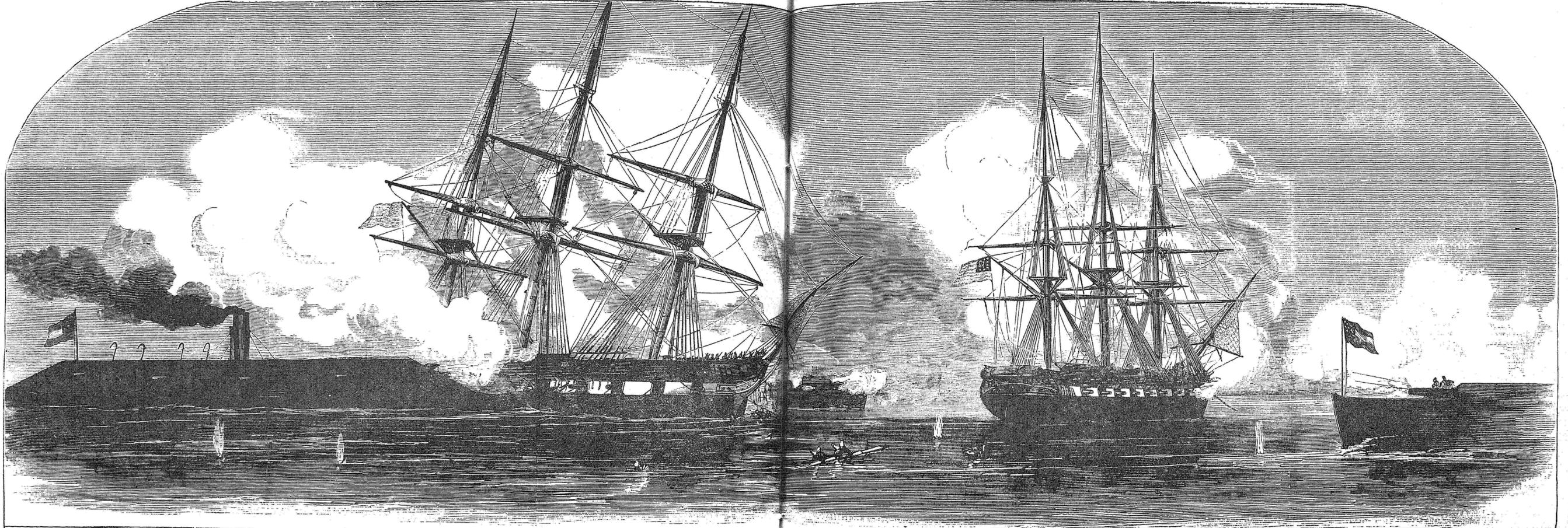
The commander of the *Cumberland* is spoken of as fighting his ship with a gallantry worthy a better cause. The total rebel loss is said to be nine killed and twelve wounded. Twenty-three prisoners arrived at Norfolk on Saturday night from the *Congress*; one died on the passage.

The *Monitor* is said to have been seriously injured by the *Virginia*.



THE ERICSSON STEEL-CLAD BATTERY "MONITOR."—[SEE PAGE 183.]

THE REBEL STEAMER "MERRIMAC" RUNNING DOWN THE FRIGATE "CUMBERLAND" OFF NEWPORT NEWS.



THE ERICSSON BATTERY "MONITOR" DRIVING OFF THE "MERRIMAC."—[SEE PAGE 183.]

feet high, and a foot and a half through, in shape as near as can be described to a well-formed pear, with an iron cap fastened by eight screws. Taking off the cap we found grape, canister, and four eight-pound shells, surrounded by about two bushels of coarse powder. On the bottom of the case there was a wooden box containing several batteries, with hollow wires attached to two larger wires, covered with a substance impervious to water, connecting with the cavern before spoken of. A dozen of these iron pots or cases were thus united with this cavern. Half a dozen of these infernal machines are thus buried in the earth, some distance from the enemy's works; and the time to be expended would be when our infantry had driven them inside their works—a sentinel would give the operator inside the cavern a signal, and he would send the electric spark through all the wires, and decamp. The result may be imagined. Whole regiments could thus be blown up and sent to eternity, without even a chance of escape. The sentries, as far as made, are all on the north and north-east portions of their works. Probably other parts of the works are similarly mined. Fortunately their sordid designs were discovered in time, and no damage has been done by soldiers, who are constantly on the look-out for discoveries, and might by accident have set off the train.

Another class of infernal machines, called torpedoes, have been discovered anchored in the river. They are round, about three feet long and a foot and a half in diameter, with one end tapering off to a point. The river is very high, and the number can not be made out. It took three steamers five days to sink what are in the bottom of the river. The very high stage of water has prevented any damage to either gun-boat or transport.

A THRILLING SCENE IN TENNESSEE.

We illustrate on page 193 a thrilling scene which took place in Eastern Tennessee in connection with the recent uprising of Union men in that region of country. We take the following account from the Knoxville Register of February 8.

The facts connected with the burning of the Lick Creek Bridge, as they appeared in the testimony elicited by the Court-martial, have come into our possession from an authentic source, and are as follows:

A man by the name of David Fry, in connection with William B. Carter, both citizens of East Tennessee, but who had lately deserted the land of their birth, fled to Kentucky, and connected themselves with the enemies of their country, returned to East Tennessee after the repulse of General Zollicoffer's command at Rockcastle Hill, for the purpose of inciting a conspiracy with the traitors on this side, which would result in the entire destruction of the railroad facilities here, and then break up and entirely cut off communication between Virginia and the remaining States of the Confederacy, prevent the transportation of troops, provisions, and munitions of war, and thus open the way for the successful invasion of our State. These two men, as is supposed, came first into the county of Anderson, and then, concealed at the house of a Union man, sent, as one of the witnesses heard, for William Pickens, of Sevier, who made the attempt upon Strawberry Plains Bridge, but who, with his gang of fifteen men, was repulsed by Keelan single-handed and alone, Pickens himself falling seriously wounded.

It is known that Fry and Carter passed on into Roane County, and parted at Kingston. At this point we lose sight of Carter, as no evidence has yet appeared of his whereabouts after that time. Fry, however, proceeded on his journey up the country, passing through Loudon (no doubt making every arrangement for the destruction of that bridge), then passing through Blount County, and finally reaching Greene County two days before the burning of Lick Creek Bridge.

Traveling, as he did, at night, and lying by in daylight, stealthily and treacherously creeping from one traitor's house to another, his movements could not be traced until he arrived, on the night of Wednesday, the 6th of November, at the house of Anderson Walker, in Greene County. Here he remained until the night of Thursday, the 7th, when he proceeded to Martin Walker's, arriving about eight o'clock at night. At Martin Walker's he met his wife, and remained until two o'clock in the morning of the 8th, stating to Walker that he was on his way to Kentucky, but wanted to see a friend near Midway (Lick Creek Bridge), and asking if Jacob Harmon was as good a Union man as ever. As appeared from the testimony, Fry made no revelations to Walker of his plan; but starting, as he did, at two o'clock, and not being familiar with the roads, Walker piloted him about three miles in the direction of Midway.

After leaving Walker, Fry stopped at the house of Daniel Smith, a noted Union man, living five or six miles from the bridge, arriving there about one hour before daylight. Immediately Fry laid his plans before Smith, who agreed to act as a messenger from Fry to Jacob Harmon to communicate to Harmon that he (Fry) was at Smith's house; that he had come to destroy the railroad, and that he wanted to see Harmon at Smith's house that morning. This message was communicated by Smith to Jacob Harmon about eight o'clock on the morning of the 8th of November; and accordingly Harmon, who was a leading Union spirit in the neighborhood, repaired to Smith's house, where the plans were unfolded, and the plot and programme agreed upon. Harmon was to go home, circulate the fact throughout the neighborhood, and gather the Unionists, assembling them at his house on that night, while Fry would remain at Smith's until midnight, and then repair to Harmon's house to consummate the conspiracy.

Harmon did his share of the work well, for as early as nine o'clock at night between thirty and forty conspirators had met at his house, ready to be led by their chief on his arrival, and eager for the destruction of the property. At that hour Fry alighted from his horse and bounded into the yard, exclaiming: "Friends, I am Colonel Fry, and am come to share with you." The party immediately assembled in the house, when Fry commenced haranguing the crowd by revealing his plans, and urging them on to deeds of violence, until the crowd were almost unanimous in their expressions of approbation, and with one accord determined that the bridge should be destroyed—that Fry should be their leader, and that they would follow him, if necessary, to death.

Fry drew forth a United States flag, and spreading it upon a table in the centre of the room, called upon his followers to surround that emblem of the Union, and take with him the oath of allegiance. This was late in the night; and after the whole plot had been fully understood, the conspirators surrounded the table in groups, and, by direction of the leader, placed their left hands upon the folds of the flag, raising aloft their right hands, and swearing to support the Constitution of the United States, to sustain the flag there spread before them, and to do that night whatever may be impressed upon them by their chief. This oath was taken by all, except two or three, in solemn earnest, and in silence; the darkness relieved alone by the dim and flickering light of a solitary candle. The scene was impressive—the occasion was full of moment—the hour was fit, and every thing conspired to fill the hearts of the traitors with a fixed determination.

Aroused thus to the highest pitch of malice and revenge, the chief of the conspirators immediately led the way to the bridge, and was followed in eager haste by the willing crowd. The Confederate guard, consisting of five soldiers, watching the bridge, were immediately surrounded by the infuriated mob, and were held in close confinement, while Fry, still leading the way and still followed by the boldest of his clan, hastened to the wooden structure, applied the torch, and the whole was consumed and burned to the ground in an hour.

FORT CLINCH, FLORIDA.

OUR special artist, Mr. Theodore R. Davis, has sent us sketches from the recent expedition under Commodore Dupont, one of which, representing Fort Clinch, Florida, the first of the forts repos-

essed by the United States forces, we reproduce on page 198.

Commodore Dupont reported to the Navy Department regarding Fernandina and its defenses:

The towns of St. Marys and Fernandina are uninjured. I visited the town, Fort Clinch, and the earth-works on the sea face of the island. It is impossible to look at these preparations for a vigorous defense without being surprised that they should have been voluntarily deserted. The batteries on the north and northeast shores are as complete as art can make them. Six are well concealed and protected by ranges of sand hills in front, contain a perfect shelter for the men, and are so small and thoroughly covered by the natural growth and by the varied contours of the land, that to strike them from the water would be the mere result of chance. A battery of six guns, though larger, and affording therefore a better mark, is equally well sheltered and masked. These batteries, and the heavy guns mounted on Fort Clinch, command all the turnings of the main ship channel, and rake an approaching enemy. Besides them there was another battery of four guns mounted on the south end of Cumberland Island, the fire of which would cross the channel inside the bar. The difficulties arising from the indirectness of the channel and from the shoalness of the bar would have added to the defenses by keeping the approaching vessels a long time exposed to fire under great disadvantage; and when the ships of an enemy had passed all these defenses, they would have to encounter a well-constructed and naturally masked battery at the town, which commands the access to the inner anchorage. We are told that General Lee pronounced the place perfectly defensible. We are not surprised at this, if true. We captured Port Royal, but Fernandina and Fort Clinch have been given to us.

THE ADVANCE OF THE GRAND ARMY INTO VIRGINIA.

We devote pages 200, 201, and 204 to illustrations of the ADVANCE OF THE GRAND ARMY OF THE POTOMAC, UNDER GENERAL McCLELLAN, INTO THE REBEL STATE OF VIRGINIA. Our pictures are from sketches by Mr. A. R. Waud, who accompanies the army. One of the sketches on page 200 represents the BRIDGE OVER BELL RUN, near Blackburn's Ford, where some hard fighting took place on 18th July, 1861. It will be well remembered by the three months' troops. The large picture above shows us GENERALS McCLELLAN AND McDOWELL CROSSING BLACKBURN'S FORD with an escort of two thousand cavalry. The correspondent of the Philadelphia Inquirer thus describes the crossing of Blackburn's Ford:

About noon Generals McClellan and McDowell, with their staffs, and two thousand cavalry for an escort, came up and took the road to Manassas. We fell in with them and followed on down to Manassas. All along to the left of the road was one continuous string of huts, tents, and forts, all empty now—not a human being or animal showed themselves—not a sound save the clatter of the horses' hoofs, the shrill tones of the bugles, or the loud orders of the officers.

At Blackburn's Ford we saw the old battle-field of July 18. The Butler House, which was between the two forces, and had been riddled with shot and shell, has been repaired. It was here Beauregard was dining, and made such a narrow escape at the time. The tree tops bear the evidence of the way the shot and shells flew around. Large limbs were cut off, and tree tops twisted in a hundred directions, as though struck by lightning. The woods in which the New York Twelfth, the First and Second Michigan, and the Massachusetts First went down has all been cut away, and we can now see where the rebels had their artillery, upon the bank of Bull Run, behind a breast-work of logs and dirt.

The Washington Artillery of New Orleans and three South Carolina regiments have been encamped near the Butler House for the winter, but started away some time ago. The artillery left a quantity of harness, etc. None of their tents were destroyed. Further down are the tents of a whole division, all pitched, as though the occupants had gone home to recruit and re-enlist, but had not yet returned.

The Plains of Manassas are really what their name implies. The time was when there were objects which obstructed the range of vision, but they are all gone now; for miles around we have an unbroken view. On the hills around are the camps still left, and a column of smoke away off to the right indicated that Manassas was on fire. Our cavalry had gone there during Monday night, and were firing the remaining property. A captain, by whose side we rode, told us of piles of new-sewed clothes, swords, flags, etc.; galloping ahead of the rest, we reached the Junction.

The sight here can not be portrayed; the large machine shops, the station-houses, the Commissary and Quartermaster store-houses, all in ashes. On the track stood the wreck of a locomotive, and not far down the remains of four freight cars which had been burned; to the right, five hundred barrels of flour had been stove in, and two hundred barrels of vinegar and molasses had been allowed to try experiments in chemical combinations. Some fifty barrels of pork and beef had been scattered around in the mud, and a few hundred yards down the track a dense cloud of smoke was arising from the remains of a factory, which had been used for rendering up tallow and boiling bones. About a thousand good hides were stretched in a field close by upon stakes, and remain uninjured.

On the same page a small picture illustrates the

EVACUATION OF MANASSAS JUNCTION BY THE REBELS, and the burning of their huts—a dreary, dismal scene. All the correspondents concur in saying that it was desolation intensified. Every thing the rebels could not readily carry away they destroyed, burning houses, clothes, and stores of all kinds, and rendering the place a perfect wilderness.

On page 204 we illustrate the INTERSECTION OF THE ORANGE AND ALEXANDRIA RAILROAD WITH THE MANASSAS GAP LINE. This is the "Junction" which has given its name to the spot, and which imparted to the place so much military importance. The possession of the Junction gives us command of both roads.

The same page contains a general view of CENTREVILLE, showing the rebel Winter Quarters there, mostly in flames and ashes. On one side will be seen a fort which formed the key of their works. In the distance is the Bull Run battle-field; and further yet may be seen the Blue Ridge, with the fires which mark burning bridges and homesteads in flames. Desolation on every side.

It appears that every thing which the rebels could destroy in their retreat was consumed. The store-houses at Manassas, with a large quantity of flour, were burned, and the Warrenton Station, together with the hotel and five or six dwellings. The bridge over Cedar Creek, two miles north of Warrenton, was burned down, and a freight train of fifty-two cars, loaded with commissary stores worth \$20,000, was set on fire at Thoroughfare Station, twelve miles from Manassas, on the road to Winchester, but were rescued from destruction by our troops before they were consumed.

Mr. Waud will continue to accompany the army under General McClellan, and will illustrate every event of note for Harper's Weekly.

MAP OF THE SOUTHERN STATES.

In order to enable our readers to understand the oft-repeated expression of the "Anaconda" tightening its folds round the rebels, we publish a general Map of the seat of the rebellion on page 199, showing the relative position of the rebel and the Union forces. Sixty days ago these positions were very different. Then the rebels held half of Missouri, nearly half of Kentucky, and Eastern Virginia to the Potomac. Their present retiring line is seen on the Map, whose author writes as follows concerning it:

The Map on page 199 represents the region of SECESSIA, with all its railroad communications and principal rivers; also the present position of the Union and rebel forces. By reference to the Map it will be seen that some railroads are of great importance in concentrating rebel military forces to oppose the progress of the Union armies, and in facilitating the movements of the traitorous soldiers in their retreats from merited chastisement. The railroad through Western Virginia and Eastern Tennessee is a very important one, communicating at Lynchburg with the railroads of Eastern Virginia and North Carolina, and connecting at Chattanooga with the extended railroads of North Alabama, Mississippi, and West Tennessee; while at Dalton it connects with the railroads of Georgia, South Carolina, the railroads and navigable waters of Alabama. With this railroad in the possession of our forces soon to be at Knoxville, the rebel army recently at Manassas can not retreat to the mountainous region of Chattanooga, Stevenson, Cleveland, and Dalton; which region, for defense in a desperate struggle, is the strongest in the southern States. Memphis, Corinth, Mississippi, Knoxville and Chattanooga, Tennessee; Dalton, Atlanta, Augusta, Georgia; Goldsborough, North Carolina; Lynchburg and Richmond, Virginia, may be noted as very important points in the railroad communications of the Southern States. By the Map, on which the line of Union forces is represented, it will be observed how these important places are menaced by the different divisions of our armies in motion.

The victorious army under General Curtis having scattered the united rebel forces west of the Mississippi, has command by this time of the navigable rivers of Arkansas. Using the Arkansas River, nature will carry his army to the rear of Memphis, or to unprotected Vicksburg, Natchez, and the Lower Mississippi at the proper time. The victorious General Pope, by the same law of gravitation, can move toward Memphis from the north, at the time General Grant and his heroic troops move up the Tennessee River, and, reducing Savannah, march onward westward to Memphis. General Buell and his powerful army have their front toward Northern Alabama and Northwestern Georgia. General Fremont is preparing to put the army of the Mountain Department in motion as soon as the weather in those elevated regions will allow. General McClellan, with his splendid and disciplined army, is in motion after the retiring army of rebels which expected to have passed the winter in Baltimore and Philadelphia, and to have been paid in New York. As that intention has not been allowed to the accidental victors of Bull Run, they may not speculate on where they will pass the spring and summer, and what pay they will get. General Burnside is at work in the rear of Norfolk, Weldon, and Goldsborough. General Sherman is occupying a strong force of the rebels to protect Savannah and Charleston. Brunswick, Georgia, Fernandina, and Cedar Keys, Florida, Fort Pickens, and Ship Island are ours as bases for our operations; and probably before the next issue of our Weekly something will occur near Ship Island which will make a report to be heard throughout the country, and a shock which will be felt as far north as Richmond.

CAPTAIN ERICSSON.

ON page 205 we give a portrait of CAPTAIN ERICSSON, the inventor and builder of the Monitor,

of which we give below some diagrams. The following is a sketch of his life:

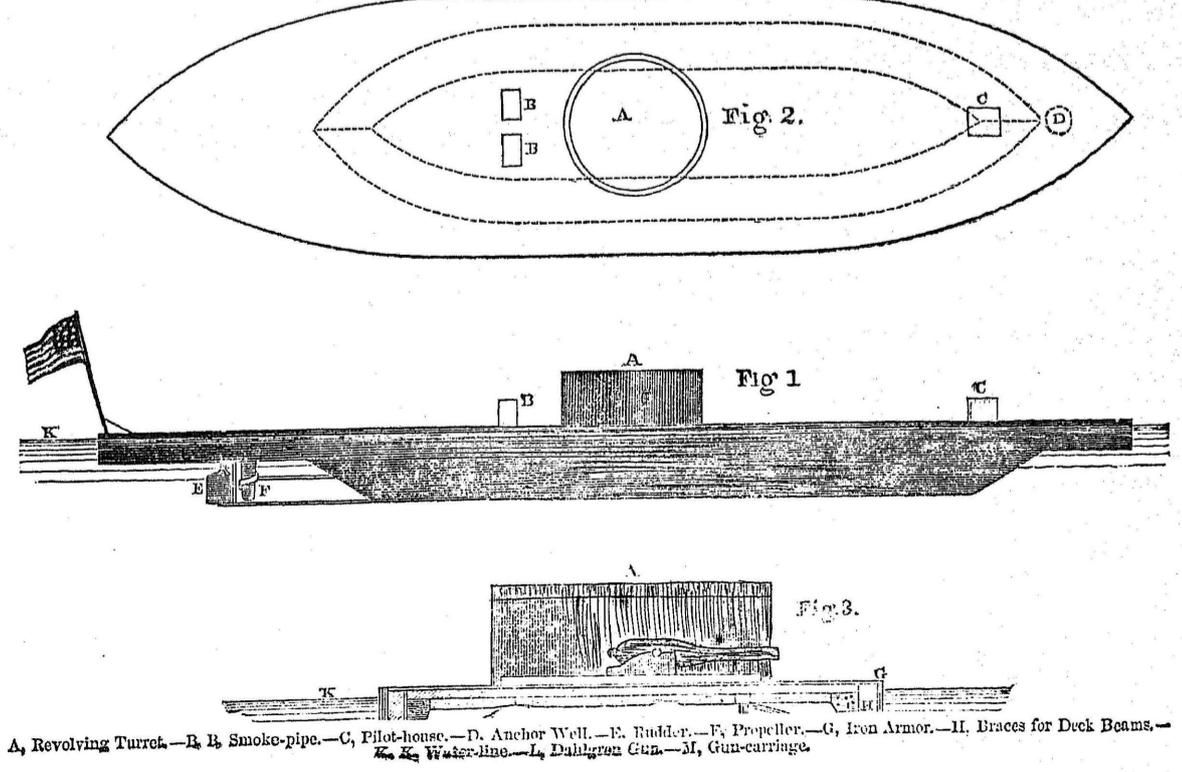
John Ericsson was born in 1803, in the province of Vermeland, among the iron mountains of Sweden. His father was a mining proprietor, so that in his youth he had ample opportunities to watch the operations of the various engines and machinery connected with the mines. In 1814 he attracted the attention of the celebrated Count Platen, who had heard of his boyish efforts, and desired an interview with him. After carefully examining the various plans and drawings which this youth exhibited on this occasion, the Count handed them back to him, simply observing, in an impressive manner, "Continue as you have commenced, and you will one day produce something extraordinary." These few words of kind encouragement from so distinguished a personage sunk deeply into the mind of the young mechanic, and confirmed him in the career on which he had entered. Immediately after this interview young Ericsson was appointed a cadet in the corps of engineers; and after six months' tuition, at the age of twelve years, was appointed *ingenieur* at the Grand Ship Canal of Sweden, which connects the North Sea with the Baltic, under Count Platen. In this capacity, in the year 1816, he was required to set out the work for more than six hundred men, and at that time he was not tall enough to look through the leveling instrument, and in using it he was obliged to mount upon a stool, carried by his attendants for that purpose. As the discipline in the Swedish army required that the soldier should always uncover his head in speaking to his superior, gray-headed men came, cap in hand, to receive their instructions from the can't constructed after drawings made by Ericsson at this early age. At the age of fifteen he was in possession of accurate plans of the whole work, drawn by his own hand. His associations with military men on the canal had given him a tendency for military life, and at the age of seventeen he entered the Swedish army as an ensign. About this time the Government had ordered the northern part of Sweden to be surveyed, and that officers in the army should be employed in this service. Ericsson, whose regiment was stationed in the Northern Highland, was appointed on this survey. There are yet in the archives of Sweden detailed maps of upward of fifty square miles made by his hand.

While thus variously occupied, being on a visit to the house of his Colonel, Ericsson on one occasion showed his best how readily and by what simple means mechanical power may be produced, independently of steam, by condensing flame. On the 15th of May, 1826, he obtained permission from the King to visit England. In the fall of 1829 the Liverpool and Manchester Railway Company offered a prize for the best locomotive engine, to be tested on the small portion of the railway then completed. Ericsson, not willing to allow this occasion to escape him, immediately set to work, planned the engine, executed the working drawings, and caused the patterns to be made, and the whole machine was completed within seven weeks. The day of trial arrived. The competing engines were on the ground, and the novelty of the race had attracted an immense concourse of people. Both sides of the railway, for more than a mile in length, were lined with thousands of spectators, and to the surprise and admiration of the crowd, the novelty steam-engine started, guided by its inventor, Ericsson, assisted by John Brithwaite, and darted along the track at the rate of fifty miles an hour. Mr. Ericsson was the first to apply to marine engines centrifugal blowers, now so common in this country in all boilers using anthracite coal. In the year 1831 he applied such a blower, worked by a separate steam-engine, to the steam-packet *Carroll*, of 120-horse power, plying between Liverpool and Belfast.

Mr. Ericsson emigrated to this country in 1839, then being thirty-six years old. His first great achievement after his arrival was the building of the United States steam-frigate *Porpoise*, the first vessel that steam was ever introduced into with the works below the water-line. She proved a complete success. About the same time he planned the French frigate *Pomone*, fifty guns, which is at present in our waters; she also proving a great success. Captain Ericsson, after the completion of these vessels, gave his whole time to his favorite work, the completion of the calorific engine, which he has since brought to great perfection, though on a small scale. His next undertaking was the planning and invention of the steamer *Ericsson*, which is familiar to all our readers. He did the whole work, from the time her keel was laid to the moment that her paddles were first turned, in the brief space of seven months. Although not answering all that was commercially expected of her, she was an entire mechanical success, speaking more than words of the great genius of the inventor, and as a marine structure she has never been equaled, much less surpassed. The name of Captain Ericsson has been comparatively unheard of for some time past, until the commencement of another new idea of his, as illustrated so satisfactorily in the new noble steam-battery *Monitor*. He signed the contract for her construction on the 5th day of last October, and on the 31st of December—being a period of two months and eight days—her steam, machinery, and propeller were put into operation, and on the one hundred and first working day she was launched. This is a celerity which has never been equaled in this country or in England.

THE "MONITOR."

To the views which we have before given of the *Monitor* we now add three plans. They give a more perfect idea of her construction than any thing which has been published. Figure 1 represents her as launched and ready for action; Figure 2 is a plan of her deck; and Figure 3 is a cross section cut down through the turret. The black line in Figure 1 above the water-line shows precisely how much of her body appears above the water.



A, Revolving Turret.—B, Smoke-pipe.—C, Pilot-house.—D, Anchor Well.—E, Rudder.—F, Propeller.—G, Iron Armor.—H, Braces for Deck Beams.—I, Water-line.—L, Dahlgren Gun.—M, Gun-carriage.



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CAPTAIN JOHN ERICSSON.—PHOTOGRAPHED BY GREY & Co.—[SEE PAGE 203.]

swept up the creek dear old Kit stepped out of his cover, his hands and face black with powder, and his forehead bleeding, but only from the splinter of a bad cap.

"You're welkin, boy!" he said, as we shook hands; "twar getting hot, though I peppered one or two of the varmints. They got on my trail right smart when yew quit; but they ain't got me this time, I reckon."

Prudence forbade our small party from attempting the mountain-passes that night to learn the fate of our comrades, but early the next day we reached Deer Creek.

As we had anticipated, we found the two Germans dead in the creek, where the fatal ambush had been laid for them. Of the artist we could find no traces, but on our return to the ferry we found him there. Though unhurt, his plight was ludicrously doleful. The Indians had discovered him in the cedar, and it would have fared ill with him but that the sketch of the young Indian was found on his person, drawn so accurately that all his captors recognized it. Believing from this circumstance that he was a great "medicine" man whom it would be dangerous to injure, they stripped and released him.

THE BATTLE OF WINCHESTER.

We publish on pages 232 and 233 a large picture of the BATTLE OF WINCHESTER from a sketch drawn by our special artist, Mr. A. R. Waud; and on page 225 a portrait of the hero of the day, General Shields. The *Herald* correspondent furnished that paper with the following graphic account of the battle:

On Saturday afternoon, March 15, at about a quarter past two o'clock, our advanced pickets on the Strasburg road discovered the rebel cavalry under the madcap Ashby about half a mile beyond them, reconnoitering the woods on both sides of the turnpike, and steadily advancing. Our pickets consisted of a few men of the Fourteenth Indiana infantry at that point, and they fell back half a mile to the hamlet of Kernstown, four miles from Winchester. The rebels, observing our pickets fall back, were confirmed in the belief that our forces here did not exceed five thousand men. They then gave chase. Coming up with our men, Ashby cried at the top of his voice, "There they are, boys; now give them hell!" Steadily did the troopers advance as our men wheeled to aim and fire. That first sent many of them reeling from their saddles, and threw the rest into such confusion that before they could again be rallied for a charge our gallant little band of infantry was beyond the reach of their power, without having lost a man killed or wounded. Meanwhile skirmishing progressed on other points along our advanced line, and our pickets were every where rallying on our reserves. General Shields hearing of the advance of the rebel cavalry, supposed it to be a manoeuvre of Ashby alone for the purpose of watching our movements. As they were approaching so boldly and so closely, however, he ordered four advanced companies of infantry, engaged in protecting the supply train, to rally to the support of the more advanced pickets, and try to hold the rebels in check till he could move down the division. These four companies were made up of one from the Maryland First, one from the Twenty-eighth Pennsylvania, one from the Forty-sixth Pennsylvania, and one from the Twenty-eighth New York. Their regiments had already marched under General Williams. A battery of artillery was also ordered forward, and General Shields, after ordering out the division, rode to the front, accompanied by his staff. While engaged directing the fire of the artillery and the defense generally, a shell from the rebel battery of four guns, which now began to play on us, burst near him, and a splinter from it struck him in the left arm, just above the elbow, fracturing the bone and creating a painful wound. His Adjutant-General, Major Armstrong, who was standing near, remarked, "General, you are wounded in the arm." "Yes," replied the gallant Shields, "but say nothing about it." He then gave a fresh order to the artillery, and continued on the field till he satisfied himself that all was right. A man belonging to Captain Robinson's company of Ohio artillery and a horse were killed on this day by the enemy's guns; but these were all the casualties that occurred on our side till the skirmish of the first day was ended. The wound of General Shields caused a pang throughout the entire division, and it is remarkable that he should have been the first man struck on our side. Our division began to arrive in force on the field toward dark, and the rebels perceiving this did not push their advance, but halted about three miles from Winchester for the night, lighted their camp fires and bivouacked, while our army lay between them and the town. It was generally believed that a general engagement would take place on the next day (Sunday), and the expectants were not disappointed. That night was one of terrible suspense on both sides. No one knew what the rebels delayed their advance for, while it was our policy to postpone a battle, in view of the preponderating force of the enemy, in order to allow reinforcements to arrive from the division of General Williams, the rear-guard of which had already advanced ten miles toward the Shenandoah.

Morning explained the reason of the enemy's halt. About ten o'clock reinforcements of five regiments of infantry and two batteries of artillery were announced ar-

riving from Strasburg, under General Garnett, by the vociferous and prolonged cheers which proceeded from their lines. The attack was not now long delayed. The enemy advanced his army, which now consisted of sixteen regiments of infantry, numbering 11,000 men; five batteries of artillery, with a total of twenty-eight field-pieces, and three battalions of horse, under Ashby and Stewart. His line of battle extended about a mile on the right of the village of Kernstown, and a mile and three-quarters on the left of it, and the village lay on the road between the rebel right and centre. There is a mud road branching from the turnpike a mile or so from Winchester, to the right of the road as you go to Strasburg. This road passed through the left of the enemy's centre, and was one of their points of defense. Beyond that there is a grove of trees, and farther a ridge of hills with a stone wall running along its summit about breast-high. This was the rebel line of offense and defense on the right of our line. Our most advanced regiment was the Eighth Ohio, of General Tyler's brigade, and on it the rebels made a furious onslaught about half past ten o'clock A.M. on Sunday, with the intention of turning our right flank. The Ohio Eighth met them gallantly, withering them like autumn leaves before the breath of winter by their deadly fire of rifles. Five several times did the enemy emerge from the woods and from behind their stone parapet with vastly superior numbers, and try vainly to accomplish their object. Our left wing, consisting of the Thirteenth Indiana, Seventh Ohio, and a battery of the Fourth Regular Artillery, under Captain Jenks, had a feint made on it while the real attack of the enemy was being directed against our right wing. The feint on the left was a heavy fire of artillery posted on both sides of the village and the turnpike, which, however, did trifling damage. Our battery replied, silencing those of the enemy, though the firing was well maintained for a long time on both sides. Our centre consisted of the Fourteenth Indiana, the Eighth and Sixty-seventh Ohio, and the Eighty-fourth Pennsylvania, and two artillery batteries belonging to the First Ohio Artillery, and the cavalry, consisting of the First Michigan and First Ohio, were drawn up in the rear. The whole of our cavalry amounted to no more than 800 men, and this arm played a very unimportant part in the action on either side. Our right wing was made up of the Fifth and Eighth Ohio regiments, and a battery of the First Virginia Regiment. The reserves consisted of the Twelfth Indiana, the Thirty-ninth Illinois, and a squadron of the Michigan Cavalry. General Shields was unable to appear on the field in person, and the command in the field devolved upon Acting Brigadier Kimball, who led our centre; and our right was commanded by Acting Brigadier-General Tyler, while Colonel Sullivan directed the operations on our left. The battle raged along the whole line with great fury from eleven A.M. till half past two P.M., when General Shields, who received accounts of the progress of the fight on his couch, ordered the right, where the contest raged the hottest, to charge upon the enemy. That was an awful charge. The left of the enemy prepared desperately to repel our gallant troops, but their rush was as irresistible as the tide in the Bay of Fundy. Previous to this time our line of battle had been somewhat changed. The Eighty-fourth Pennsylvania reinforced our right, and also a battery of artillery. Our whole force now engaged was about 6000 men, while that of the enemy was at the lowest estimate 8000. The rebels had also changed their line, and extending both their wings, presented a concave front to our army. They had also reinforced their left wing, and the charge to be made by our right was all-important in its consequences. On it at three o'clock depended the fate of the entire battle. The gallant Tyler led the charge, sword in hand, at the head of the line. The rebels fired from the woods with artillery and small-arms, while our men advanced against their murderous showers of lead and iron, returning few shots, and reserving their fire. Up to this time the armies had not been much nearer each other than three hundred yards, unless in some few instances. The wood was soon cleared at the point of the bayonet, our men discharging their pieces at twenty and even five yards' distance from the rebels, and then dashing at them with the bayonet. The rebels fought well, however. They contested the ground foot by foot, and marked every yard of it with blood. Retiring behind their stone wall on the ridge, our men jumped over after them, and drove them along in the greatest confusion and with fearful slaughter upon their centre. The panic communicated. Kimball ordered a charge along the whole line, and for a short time the fighting was most desperate. The roar of the cannon was no longer heard, unless in occasional bursts of fitful explosions, and the rattle of musketry was more boisterous than ever, and sounded like the noise made by a very close thunder-clap, except that it was sharper and continuous. The rout of the rebels had fairly commenced, however, and two of their guns and four caissons were now ours, and though many of them turned and fired again and again at our pursuing host, many more threw away muskets and bayonets without hesitation. Darkness and the extreme fatigue of our troops, however, saved the enemy for the time, and we retired about two miles, and bivouacked till next morning. At daybreak General Shields ordered the rebel position to be attacked, and the enemy, after replying by a few shots from his artillery, continued his retreat. Meantime General Banks, who had been at Harper's Ferry, arrived, and taking command of the troops in person, continued the pursuit with about 10,000 men beyond Strasburg, cutting off many stragglers, and pressing the enemy very sorely.

Our artist thus describes his picture:

The rebel position was a parallelogram, inclosed by a stone wall on two sides and a rail fence and thicket of trees on the other. In the picture the front of the wall is seen crossing the ground from right to left, the thicket being visible in the distance on the rise. In front of this wall our troops had to advance across a field of wheat for 400 yards, exposed to a galling fire, but with invincible courage they carried it, the rebels retreating in a panic as soon as the wall was reached.

One or two was bayoneted, and there was a fist-fight for a moment between one of them and a soldier of the Union force—the rest fled in confusion, hotly pursued by Tyler's brigade; and two guns, hitherto masked, opened upon our men from a small clump of trees seen in the centre of the lot. These were quickly captured by a brave few, headed by Major Schreiber, of Banks's staff, and then the rout was complete, night only saving the rebels from the fierce pursuit to which they were subjected. Most of the men killed at the stone wall were shot in the head, some of the bullets passing through two men before their work of death was over. The precision of the Union men's fire was unprecedented in the annals of modern warfare.

GENERAL JAMES SHIELDS, of the United States Volunteers, the hero of the battle, is a native of Ireland, but a citizen of Illinois, where he lived for many years. At the outbreak of the Mexican War he offered his services to the Government, and rose to the rank of Brigadier-General of Volunteers. He accompanied General Scott on his expedition, and for gallant and meritorious conduct at Cerro Gordo was breveted Major-General of Volunteers. In the Valley of Mexico he commanded a brigade in which the New York and the South Carolina regiments fought side by side. He was severely wounded at the Battle of Chapultepec. After the war General Shields retired into private life; but in 1849 he was elected Senator from Illinois, and filled the post till 1855. He then removed to California, where he was residing when the rebellion broke out. He was offered service in the army and instantly accepted it, and now commands the division which was led by the late General Lander.

The following letter from General Shields, to a friend in Washington, gives the General's informal account of the battle of Winchester:

HEAD-QUARTERS GENERAL SHIELDS'S DIVISION, WINCHESTER, VIRGINIA, March 26, 1862.

I will give you a brief account of our late operations. My reconnoissance beyond Strasburg, on the 18th and 19th inst., discovered Jackson reinforced, in a strong position, near New Market, within supporting distance of the main body of the rebels under Johnston. It was necessary to decoy him from that position. Therefore I fell back rapidly to Winchester on the 20th, as if in retreat, marching my whole command nearly thirty miles in one day. My force was placed at night in a secluded position, two miles from Winchester, on the Martinsburg road. On the 21st the rebel cavalry, under Ashby, showed themselves to our pickets, within sight of Winchester.

On the 22d all of General Banks's command, with the exception of my division, evacuated Winchester, en route for Centreville. This movement and the masked position of my division made an impression upon the inhabitants, some of whom were in secret communication with the enemy, that our army had left, and that nothing remained but a few regiments to garrison this place. Jackson was signaled to this effect. I saw their signals and divined their meaning. About five o'clock on the afternoon of the 22d Ashby, believing that the town was almost evacuated, attacked our pickets and drove them in. This success increased his delusion. It became necessary, however, to repulse them for the time being. I therefore ordered forward a brigade, and placed it in front, between Winchester and the enemy. I only let them see, however, two regiments of infantry, two batteries of artillery, and a small force of cavalry, which he mistook as the whole force left to garrison and protect the place.

In a little skirmish that evening, while placing the artillery in position, I was struck by a fragment of a shell, which broke my arm above the elbow, injured my shoulder, and damaged me otherwise to such an extent that I have lain prostrate ever since. I commenced making preparations for any emergency that might occur that night or the next morning. Under cover of the night I ordered an entire brigade (Kimball's) to take up a strong position in advance. I pushed forward four batteries, having them placed in a strong position to support the infantry. I placed Sullivan's brigade on both flanks, to prevent surprise, and to keep my flanks from being turned; and I held Tyler's brigade in reserve, to operate against any point that might be assailed in front. In this position I awaited and expected the enemy's attack next morning. My advance brigade was two miles from the town, its pickets extending perhaps a mile farther along the turnpike leading to Strasburg.

About eight o'clock in the morning I sent forward two experienced officers to reconnoitre the front and report indications of the enemy. They returned in an hour, reporting no enemy in sight except Ashby's force of cavalry, infantry, and artillery, which by this time had become familiar and contemptible to us. General Banks, who was yet here in person, upon hearing this report, concluded that Jackson could not be in front possibly, or be decoyed away so far from the main body of the rebel army. In this opinion I, too, began to concur, concluding that Jackson was too cautious to be caught in such a trap. General Banks therefore left for Washington. His Staff officers were directed to follow the same day, by way of Centreville. Knowing the crafty enemy, however, I had to deal with I omitted no precaution. My whole force was concentrated, and prepared to support Kimball's brigade, which was in advance.

About half past ten o'clock it became evident we had a considerable force before us; but the enemy still concealed himself so adroitly in the woods that it was impossible to estimate it. I ordered a portion of the artillery forward, to open fire and unmask them. By degrees they began to show themselves. They planted battery after battery in strong position, on the centre and on both flanks. Our

artillery responded, and this continued until about half past three o'clock in the afternoon, when I directed a column of infantry to carry a battery on their left flank and to assail that flank, which was done promptly and splendidly by Tyler's brigade, aided by some regiments from the other brigades. The fire of our infantry was so close and destructive that it made havoc in their ranks. The forcing back of their guns on the left and the in a position to their wing on the centre, thus placing them made about five o'clock by a general attack, which was in driving them in flight from the field.

Night fell upon us at this stage, leaving us in possession of the field of battle, two guns, and four caissons, three hundred prisoners, and about one thousand stand of small-arms. Our killed in this engagement do not exceed one hundred men, wounded two hundred and thirty-three. The enemy's killed and wounded exceed one thousand. The inhabitants of the adjacent villages carried them to their houses as they were removed from the field of battle. Houses between the battle-field and Strasburg, and even far beyond, have since been found filled with the dead and dying of the enemy. Graves have been discovered far removed from the road, where the inhabitants of the country buried them as they died.

General Banks, in his pursuit of the enemy beyond Strasburg afterward, found houses on the road twenty-two miles from the battle-field filled in this manner, and presenting the most ghastly spectacle. The havoc made in the ranks of the rebels has struck this whole region of country with terror. Such a blow had never fallen on them before, and it is more crushing because wholly unexpected. Jackson and his stone-wall brigade, and all the other brigades accompanying him, will never meet this division again in battle.

GENERAL POPE'S ARMY AT NEW MADRID.

We devote page 225 to illustrations of GENERAL POPE'S ARMY AT NEW MADRID together with a portrait of GENERAL POPE—the whole from drawings by our special artist, Mr. Alexander Simplot.

General John Pope was born in Kentucky, about the year 1822. He entered the Military Academy at West Point in 1838, and graduated in 1842 as Second-Lieutenant of Topographical Engineers. He was in the Mexican war, and at Monterey so distinguished himself that he obtained his First-Lieutenancy. Again at Buena Vista he won laurels and the brevet rank of Captain. He was still a Captain when the rebellion broke out, and was one of the officers appointed by the War Department to escort President Lincoln to Washington. He was loyal, and was soon after the inauguration appointed to a command in the Northwest. For some time he served gallantly in Northern Missouri, under Generals Fremont and Hunter. General Halleck gave him command of a separate expedition in December. He started from Commerce, Missouri, with a well-appointed command of some 12,000 men, and marched over to New Madrid, then occupied by the rebels. He took the place, now holds it, and has erected batteries all along the west bank of the river for fifteen miles.

The following extract from his official report will serve to explain our illustrations:

I arrived before New Madrid with the forces under my command on Monday, the 3d inst. I found the place occupied by five regiments of infantry and several companies of artillery. One bastioned earth-work, mounting fourteen heavy guns, about half a mile below the town, and another irregular work at the upper end of the town, mounting seven pieces of heavy artillery, together with lines of intrenchments between them, constituted the defensive works. Six gun-boats, carrying from four to eight heavy guns each, were anchored along the shore, between the upper and lower redoubts.

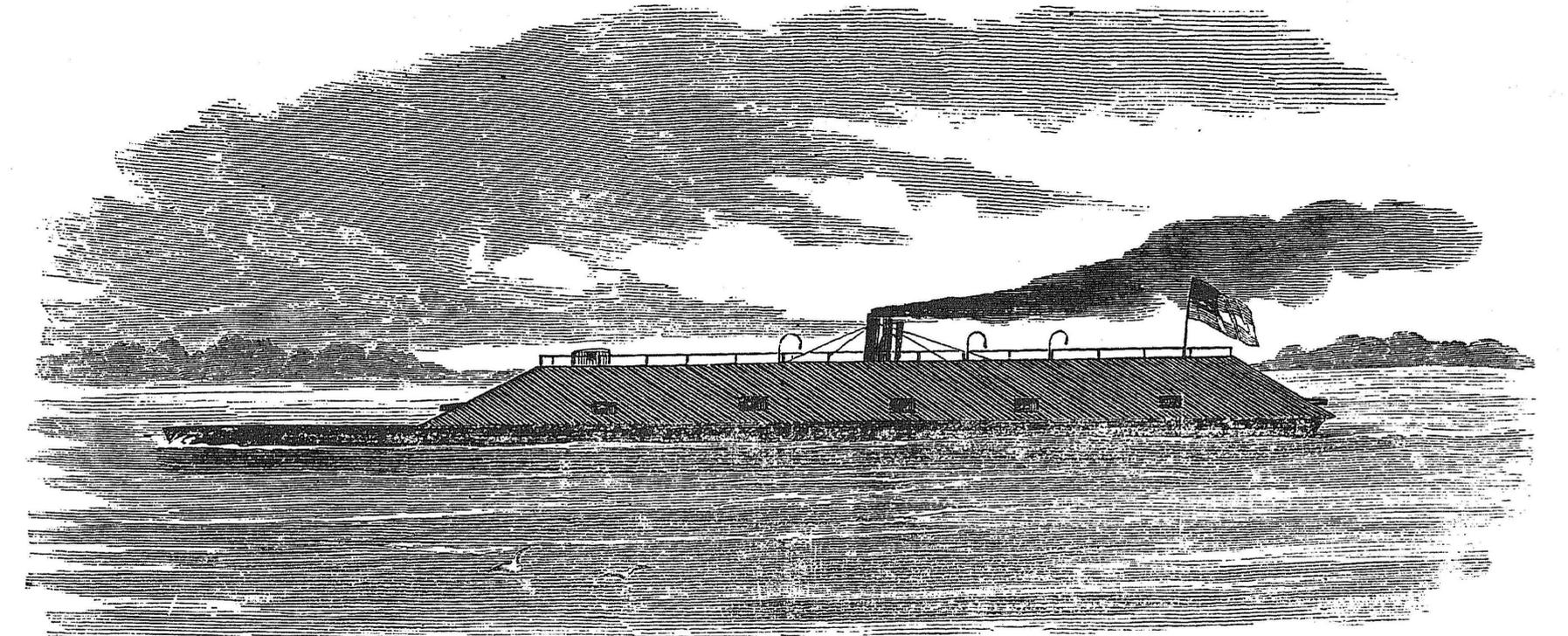
The country is perfectly level for miles around the place, and as the river was so high that the guns of the gun-boats looked directly over the banks, the approaches to the town for several miles were commanded by direct and cross fire from at least sixty guns of heavy calibre.

As soon as I found that it would be necessary to await the arrival of our heavy guns, I determined to occupy some point on the river below, and establish our small guns, if possible, in such position as to blockade the river so far as transports were concerned, and to cut off supplies and reinforcements for the enemy from below.

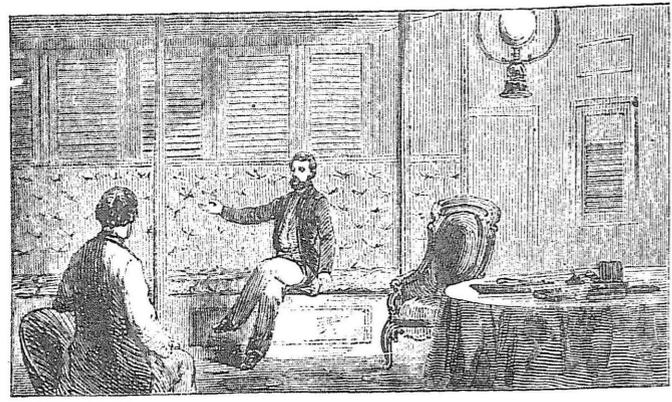
Point Pleasant, twelve miles below, was selected as being a rich agricultural region, and being the terminus of the plank-road from the interior of Arkansas. I accordingly threw forward Colonel Plummer, Eleventh Missouri, to that point, with three regiments of infantry, three companies of cavalry, and a field battery of 10-pound Parrott and rifled guns, with orders to make a lodgment on the river bank, to line the banks with rifle-pits for a thousand men, and to establish his artillery in sunk batteries of single pieces between the rifle-pits.

On 11th the siege guns arrived, and on the night of the 13th the rebels evacuated New Madrid.

General Pope has since been endeavoring to cross the river in order to get in the rear of the rebels.



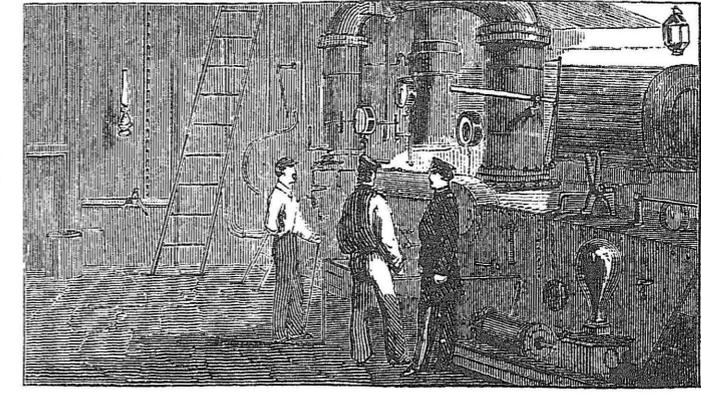
EXACT PICTURE OF THE REBEL STEAMER "VIRGINIA" ("MERRIMAC").—DRAWN BY AN OFFICER OF THE "ROANOKE."—[SEE PAGE 207.]



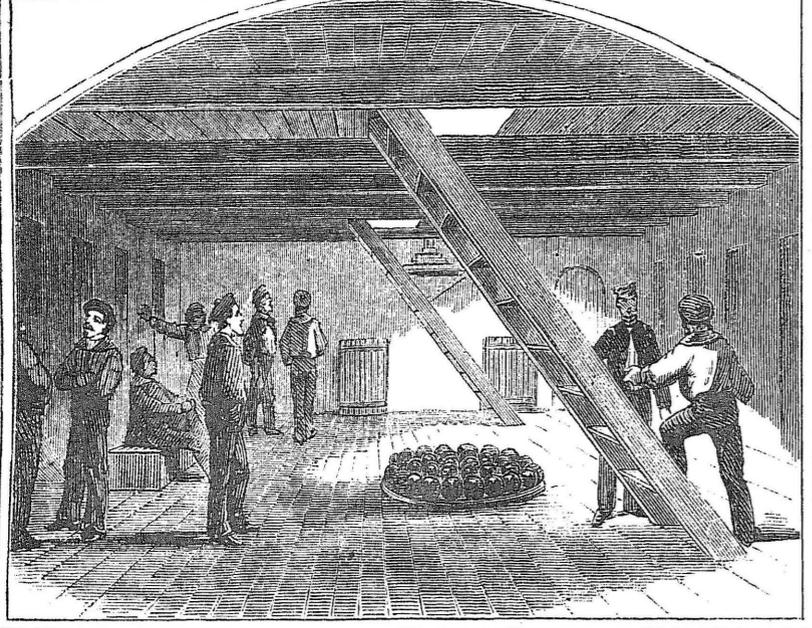
CAPTAIN'S CABIN.



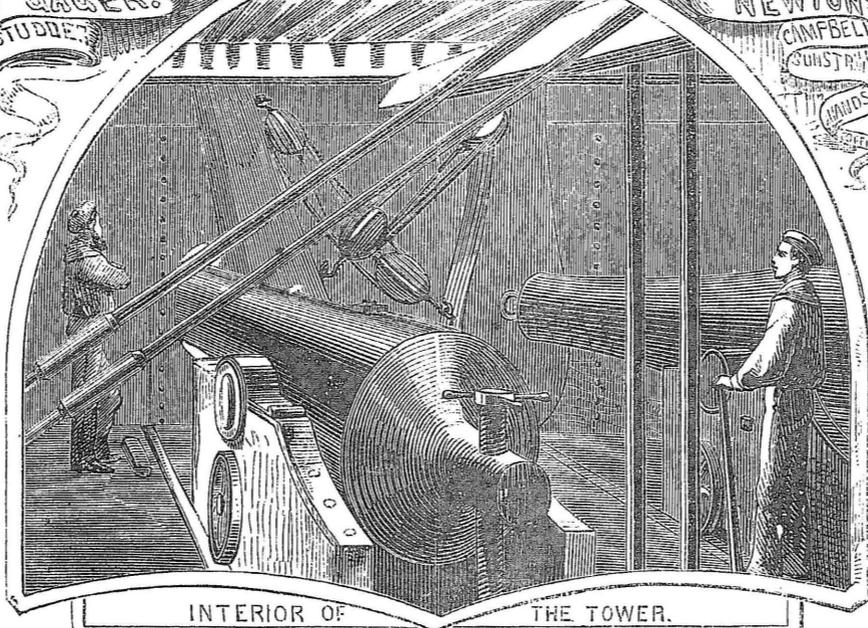
JEFFERS STIMERS THE MONITOR
CAG. CO. STUDDER NEWTON CAMPBELL CONSTRUCTION HANDS



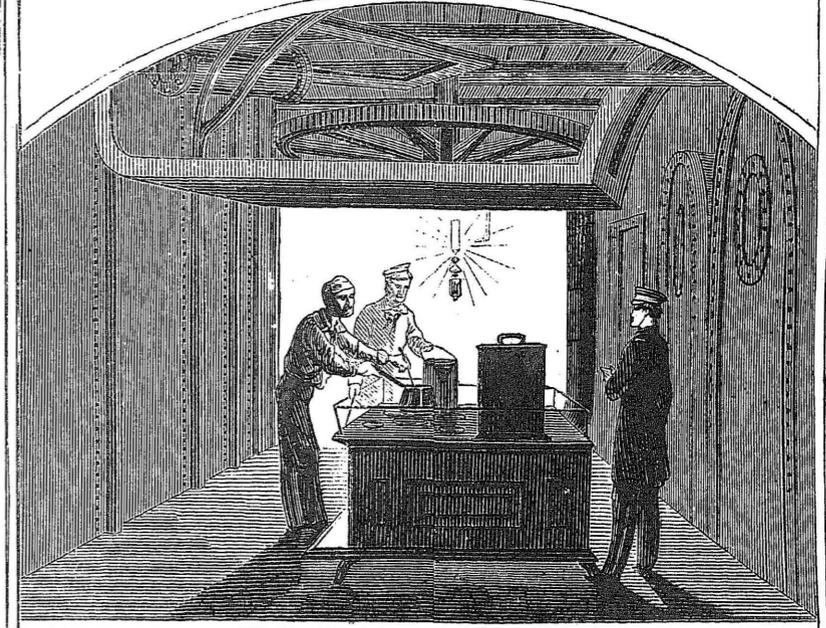
ENGINE-ROOM



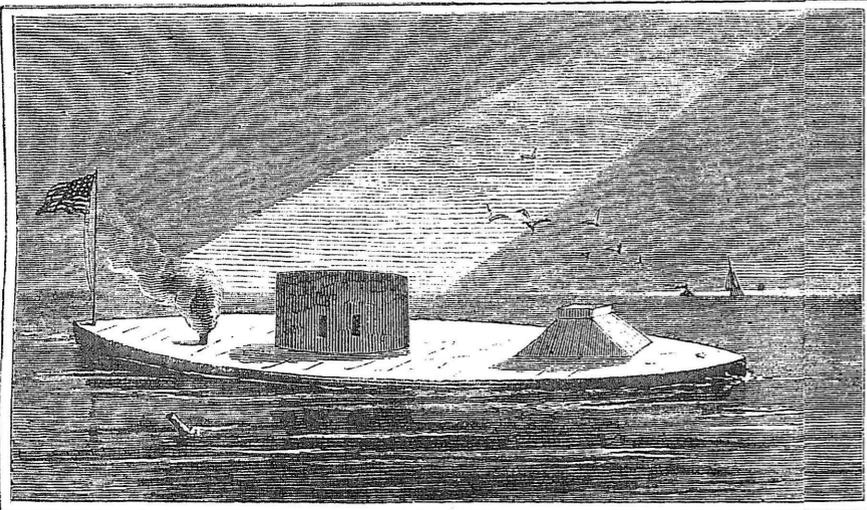
BERTH DECK.



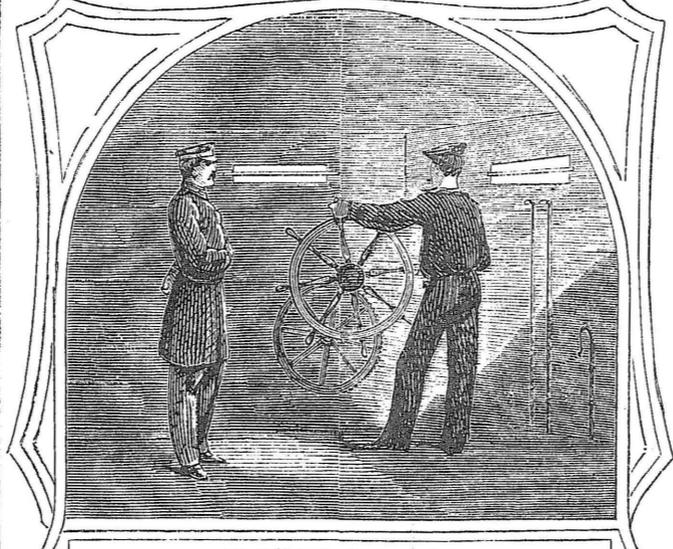
INTERIOR OF THE TOWER.



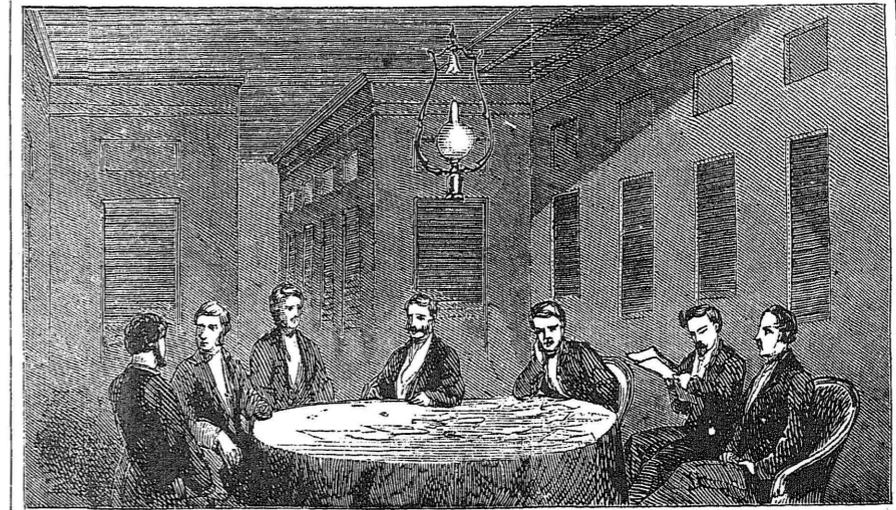
TURRET MACHINERY



READY FOR ACTION.



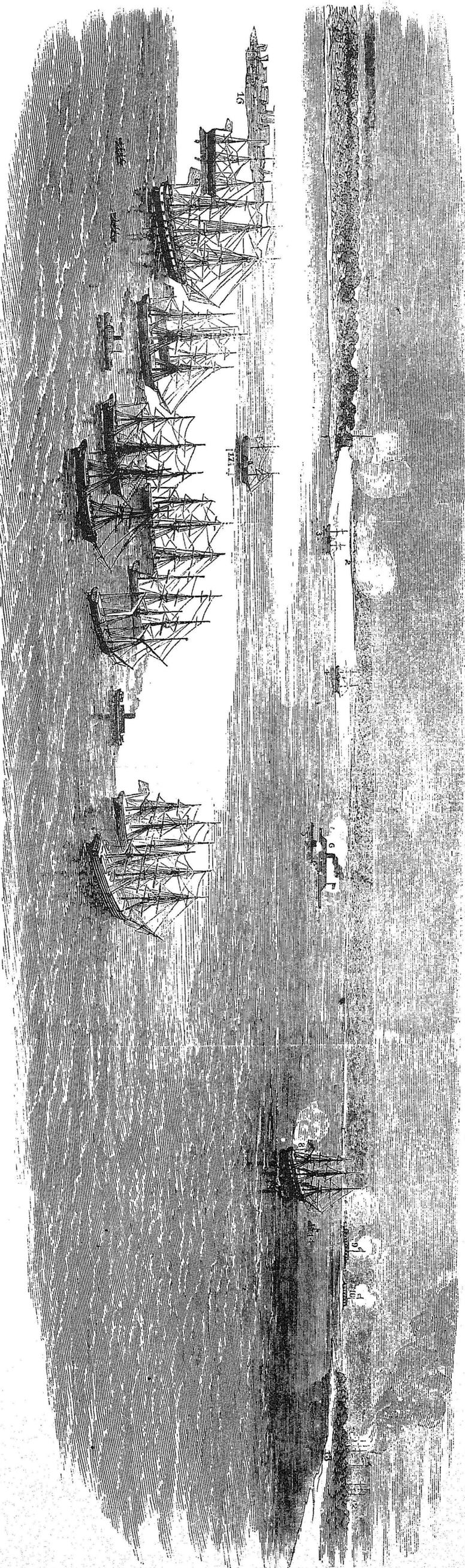
WHEEL HOUSE



WARD-ROOM

THE "MONITOR" AS SHE IS—INTERIOR AND EXTERIOR.—SKETCHED BY OUR SPECIAL ARTIST.—[SEE PAGE 237.]

1. Sewall's Point Battery, 30 Guns.—2. Craney Island Battery, 40 Guns.—3. Yorktown.—4. Jamestown.—5. Monitor.—6. Merrimac.—7. Large Rebel Camp.—8. Minnesota aground.—9. Pig Point Battery.—10. Barral Point Battery.—11. Burning of the Congress.—12. The Cumberland sunk.—13. Newport News Point and Camp.—14. St. Lorenzo.—15. Roanoke.—16. Rip Raps.—17. French Man-of-War.—18. Whitehall. THE BATTLE BETWEEN THE "MONITOR" AND THE "MERRIMAC," IN HAMPTON ROADS, MARCH 9, 1862.—DRAWN BY SERGEANT CHARLES WORRET, TWENTIETH REGIMENT NEW YORK VOLUNTEERS.]



THE FIGHT AT HAMPTON ROADS OF MARCH 9.

For future reference we publish on this page a picture of the BATTLE OF HAMPTON ROADS between the *Monitor* and the *Merrimac*, from a sketch made at the time by Sergeant Worret, of the Topographical Engineers. This sketch was taken at the time the fight was going on, and is accurate in every particular. As a faithful representation of the most remarkable naval fight of modern times, we think our readers will be glad to see it.

On the preceding page we give a page of views of the INTERIOR OF THE "MONITOR," from sketches drawn by our special artist, Mr. Theodore R. Davis. They will be seen with pleasure every where. They were shown by Mr. Davis to the officers of the *Monitor*, and approved by them.

We likewise give, on page 235, an exact picture of the *Merrimac*, drawn very carefully by an officer of the *Roanoke*. It will be seen that the picture differs somewhat from those heretofore published. The beak or prow is not seen, being under water.

[Entered according to Act of Congress, in the Year 1862, by Harper & Brothers, in the Clerk's Office of the District Court for the Southern District of New York.]

NO NAME.

By WILKIE COLLINS,

AUTHOR OF "THE WOMAN IN WHITE," "DEAD SECRET," ETC., ETC.

ILLUSTRATED BY JOHN M'LENAN.

Printed from the Manuscript and early Proof-sheets purchased by the Proprietors of "Harper's Weekly."

CHAPTER IX.

THREE months passed. During that time Frank remained in London, pursuing his new duties, and writing occasionally to report himself to Mr. Vanstone, as he had promised.

His letters were not enthusiastic on the subject of mercantile occupations. He described himself as being still painfully loose in his figures. He was also more firmly persuaded than ever—now when it was unfortunately too late—that he preferred engineering to trade. In spite of this conviction; in spite of headaches, caused by sitting on a high stool and stooping over ledgers in unwholesome air; in spite of want of society, and hasty breakfasts, and had dinners at chop-houses, his attendance at the office was regular, and his diligence at the desk unremitting. The head of the department in which he was working might be referred to, if any corroboration of this statement was desired. Such was the general tenor of the letters, and Frank's correspondent and Frank's father differed over them as widely as usual. Mr. Vanstone accepted them, as proofs of the steady development of industrious principles in the writer. Mr. Clare took his own characteristically opposite view. "These London men," said the philosopher, "are not to be trifled with by louts. They have got Frank by the scruff of the neck—he can't wriggle himself free—and he makes a merit of yielding to sheer necessity."

The three months' interval of Frank's probation in London passed less cheerfully than usual in the household at Combe-Raven.

As the summer came nearer and nearer, Mrs. Vanstone's spirits, in spite of her resolute efforts to control them, became more and more depressed. "I do my best," she said to Miss Garth; "I set an example of cheerfulness to my husband and my children; but I dread July." Norah's secret misgivings on her sister's account rendered her more than usually serious and uncommunicative as the year advanced.



Even Mr. Vanstone, when July drew nearer, lost something of his elasticity of spirit. He kept up appearances in his wife's presence, but on all other occasions there was now a perceptible shade of sadness in his look and manner. Magdalen was so changed since Frank's departure that she helped the general depression instead of relieving it. All her movements had grown languid; all her usual occupations were pursued with the same weary indifference; she spent hours alone in her own room; she lost her interest in being brightly and prettily dressed: her eyes were heavy, her nerves were irritable, her complexion was altered visibly for the worse—in one word, she had become an oppression and a weariness to herself and to all about her. Stoutly as Miss Garth contended with these growing domestic difficulties, her own spirits suffered in the effort. Her memory reverted oftener and oftener to the March morning when the master and mistress of the house had departed for London, and when the first serious change for many a year past had stolen over the family atmosphere. "When was that atmosphere to be clear again? When were the clouds of change to pass off before the returning sunshine of past and happier times?"

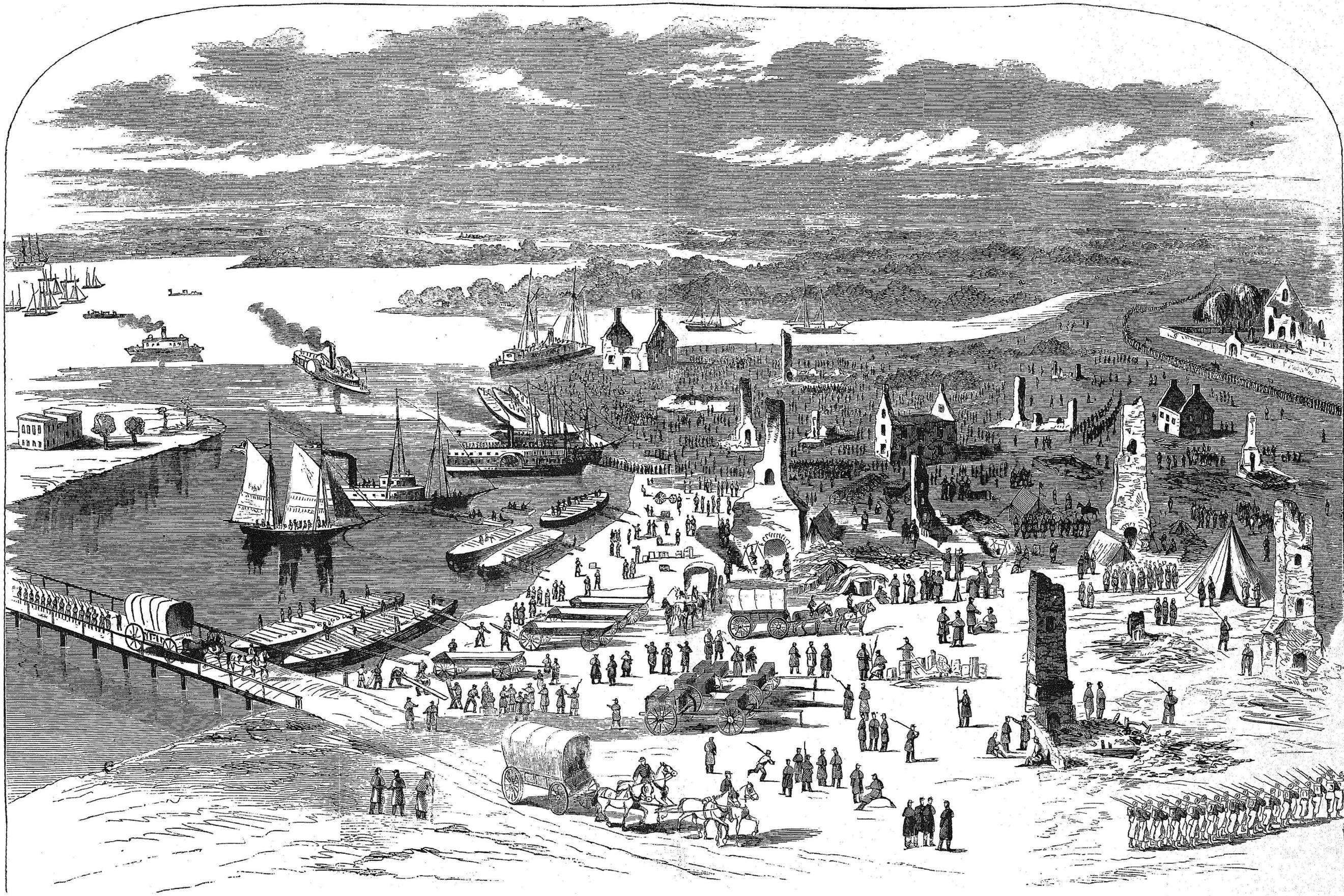
The spring and the early summer wore away. The dreaded month of July came, with its airless nights, its cloudless mornings, and its sultry days.

On the fifteenth of the month an event happened which took every one but Norah by surprise. For the second time, without the slightest apparent reason—for the second time, without a word of warning beforehand—Frank suddenly reappeared at his father's cottage!

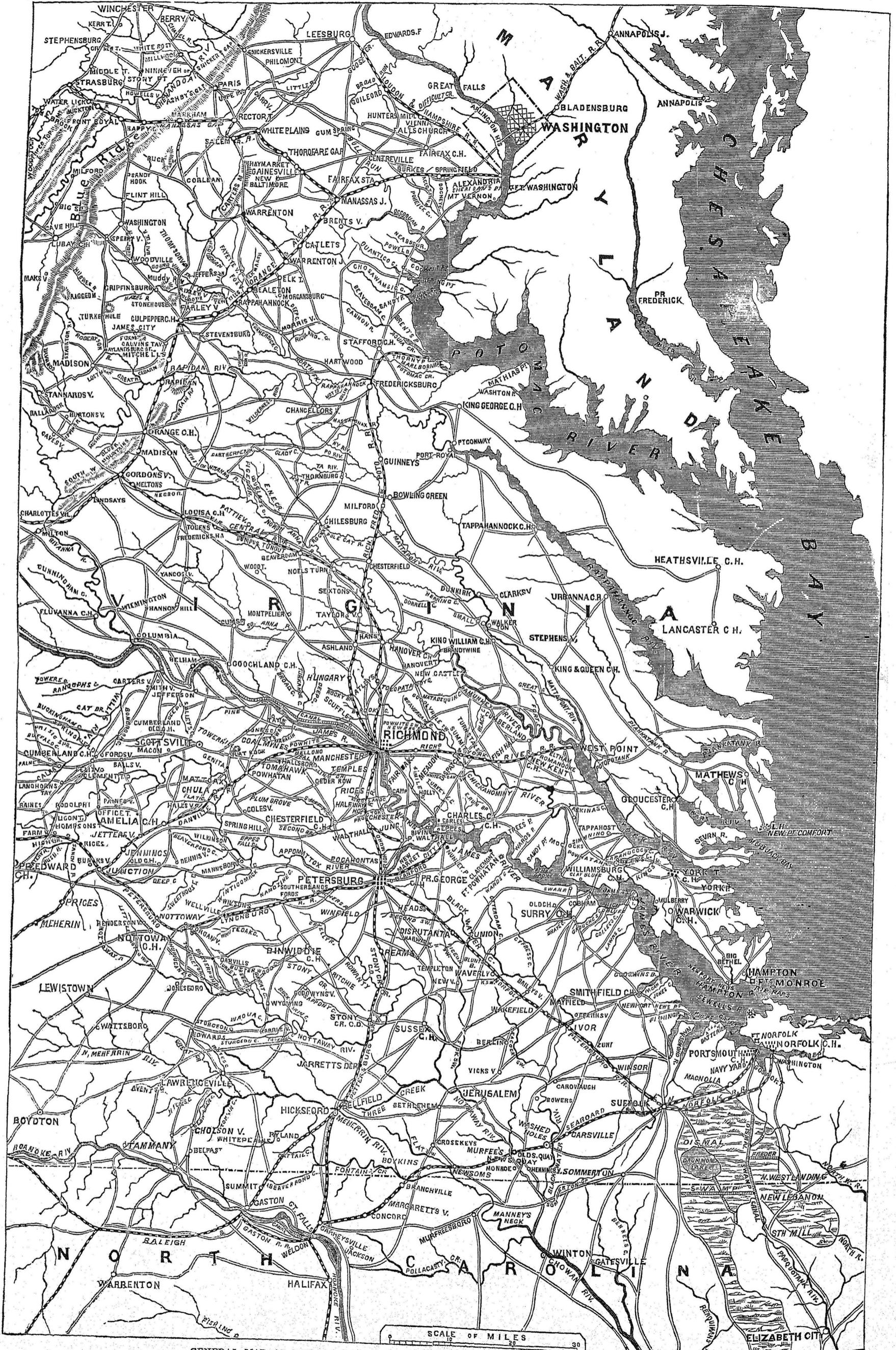
Mr. Clare's lips opened to hail his son's return, in the old character of the "bad shilling;" and closed again without uttering a word. There was a portentous composure in Frank's manner which showed that he had other news to communicate than the news of his dismissal. He



"HE MIGHT MARRY ME."



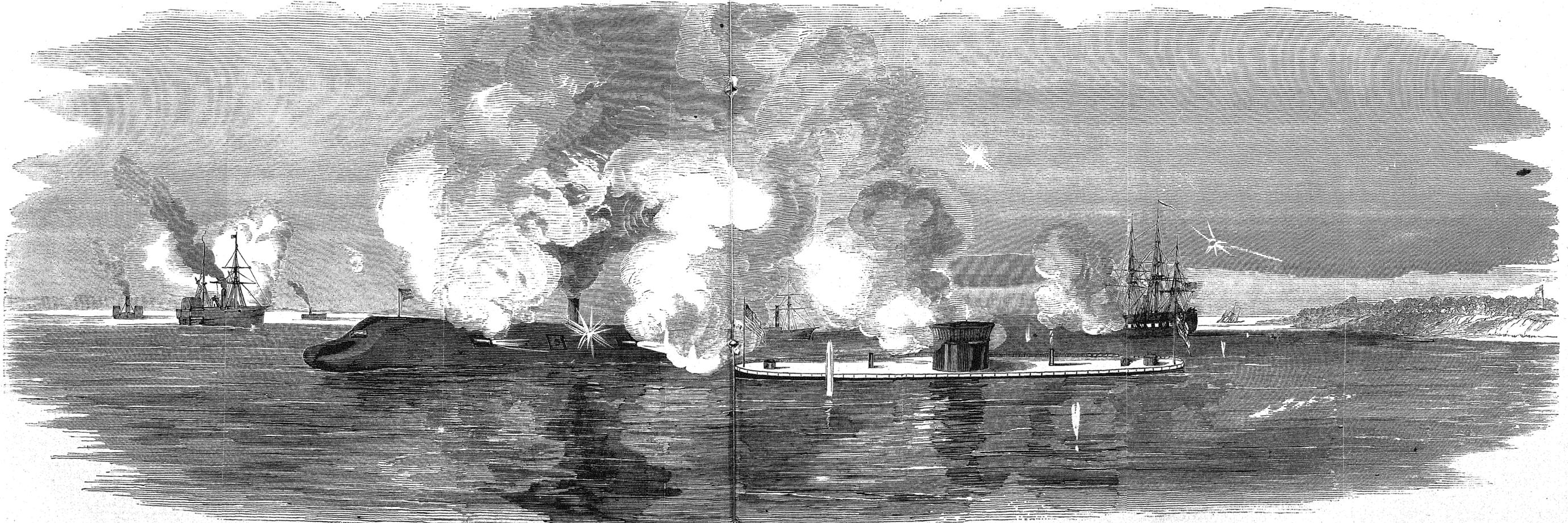
FEDERAL TROOPS AT HAMPTON, VIRGINIA.—SKETCHED BY AN OFFICER OF THE TOPOGRAPHICAL ENGINEERS.—[SEE PAGE 255.]



GENERAL MAP OF THE SEAT OF WAR IN VIRGINIA, SHOWING THE ROAD TO RICHMOND.



Sewell's Point. Crane Island. Rebel Steamer Merrimac. Rebel Steamer Jamestown. Rebel Steamer Yorktown. U. S. Ship Cumberland. U. S. Ship Congress. Newport News.
 THE FIRST NAVAL BATTLE IN HAMPTON ROADS, BETWEEN THE REBEL IRON-PLATED STEAMERS MERRIMAC, YORKTOWN AND JAMESTOWN, AND THE UNITED STATES WOODEN SAILING FRIGATES CUMBERLAND AND CONGRESS—SINKING OF THE CUMBERLAND BY A BLOW FROM THE MERRIMAC, SATURDAY, MARCH 8.
 FROM A SKETCH BY OUR SPECIAL ARTIST AT NEWPORT NEWS.—SEE PAGE 289.



Rebel Tug. James. Merrimac. Yorktown. Monitor. Minnesota. Newport News.
 THE SECOND NAVAL BATTLE IN HAMPTON ROADS—FIGHT BETWEEN THE NATIONAL FLOATING BATTERY MONITOR, OF TWO GUNS, AND THE REBEL IRON-PLATED STEAMERS MERRIMAC, YORKTOWN AND JAMESTOWN, CARRYING TWENTY-FOUR GUNS—DEFEAT OF THE REBEL STEAMERS—THE MERRIMAC CRIPPLED, AND THE FRIGATE MINNESOTA RESCUED, SUNDAY, MARCH 9.—FROM A SKETCH BY OUR SPECIAL ARTIST AT NEWPORT NEWS.—SEE PAGE 289.

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FRANK LESLIE'S ILLUSTRATED NEWS-PAPER



NEWS-PAPER

Entered according to the Act of Congress in the year 1862, by FRANK LESLIE, in the Clerk's Office of the District Court for the Southern District of New York.

No. 332—Vol. XIII.]

NEW YORK, MARCH 29, 1862.

[PRICE 6 CENTS.]



LIEUT. JOHN L. WORDEN, U.S.N., COMMANDING THE ERICSSON FLOATING BATTERY MONITOR, IN HER ENGAGEMENT WITH THE REBEL IRON-CLAD STEAMER MERRIMAC, IN HAMPTON ROADS, MARCH 9. — PAGE 315.

was that improvised by the rebels in their "floating battery" and iron-faced land batteries at Charleston, and improved on in the National flotilla on the Mississippi—viz.: that of presenting an inclined face of 45 degrees to the line of fire. To this was superadded, in the case of the Merrimac, the feature of a "ram" for running down and sinking an enemy.

But vessels like the Merrimac must necessarily be unwieldy; but few of their guns can be used at once, and there are other desiderata besides relative invulnerability (*absolute* invulnerability is perhaps unattainable), which must enter into consideration, in order to produce the most efficient iron-clad steamer or battery possible. Most, if not all, of these are met by Ericsson's novel structure the Monitor. He has secured light draft, strength, effective resistance, and the ability of keeping an enemy immediately under his guns, whatever his change of position. He exposes nothing to the enemy's fire, except his round fort, which, from its form, glances off the shot directed against it, and which, being revolving, enables him to keep his guns steadily bearing on his antagonist. The captain and crew of the Merrimac were astounded on finding, whatever their position, and however much the respective vessels shifted, still the two great, grim guns of the Monitor frowned on them. Their own guns were of equal calibre, and there were ten of them, yet they found their armament matched by that of the Monitor, before which they were compelled to retreat.

It may be questioned whether as a sea-boat, the Monitor, or vessels constructed on its plan, can be made successful. But of their capacity for harbor defence, or of the ability to transfer them from one port to another on our coast, there can be no doubt. And it may be questioned whether all Europe could build a vessel capable of crossing the Atlantic which could stand against the actual Monitor, with her two guns.

Unless we are greatly mistaken, the naval battle of Sun-



LIEUT. HARRY B. HIDDEN, OF THE LINCOLN CAVALRY, KILLED IN A GALLANT AND SUCCESSFUL CHARGE ON A GREATLY SUPERIOR REBEL FORCE, NEAR FAIRFAX COURT-HOUSE, MARCH 9. — SEE PAGE 315.

The "Monitor."

ALTHOUGH the world has been for twenty years discussing the value of iron or iron-clad steamers, and although a number have been built during the past decade, yet it was not until the 8th and 9th of March of this year that their capabilities were ever brought to the test. The attack of the Merrimac on the Congress and Cumberland proved that wooden sailing vessels are impotent against mailed steamers, mere slaughter-houses for their crews; and it seems pretty clear that the only safety of wooden steamers, in a contest with them, would depend upon their speed—i. e., running away. We may consider it settled that the naval architecture of the world, for all purposes of war, must be changed, and iron-plated steamers take the place of all the wooden constructions now in use. The numerical superiority of the respective navies of France and England over ours is now of little consequence; we can start even with them in the race of building up an efficient navy, starting from the advance point of their experience, and with the further advantage of being readier to adopt novel ideas and combinations. When England began to substitute railways for turnpikes she made the car for the former as nearly like the coach for the latter as possible. And in building iron-plated vessels she has stuck as closely as possible to the form and features of her wooden ships, seeking invulnerability only by piling plate on plate of iron, until the new vessel becomes a lumbering mass of iron, instead of adopting a form which should render such heavy coating of metal unnecessary. The consequence is that her iron-clad steamers, with their vertical sides, against which heavy shot would have their full effect, would probably prove no match for the Merrimac, with her relatively light plating, and against which the shot from the heaviest navy guns glanced off like pebbles. The principle embodied in the Merrimac



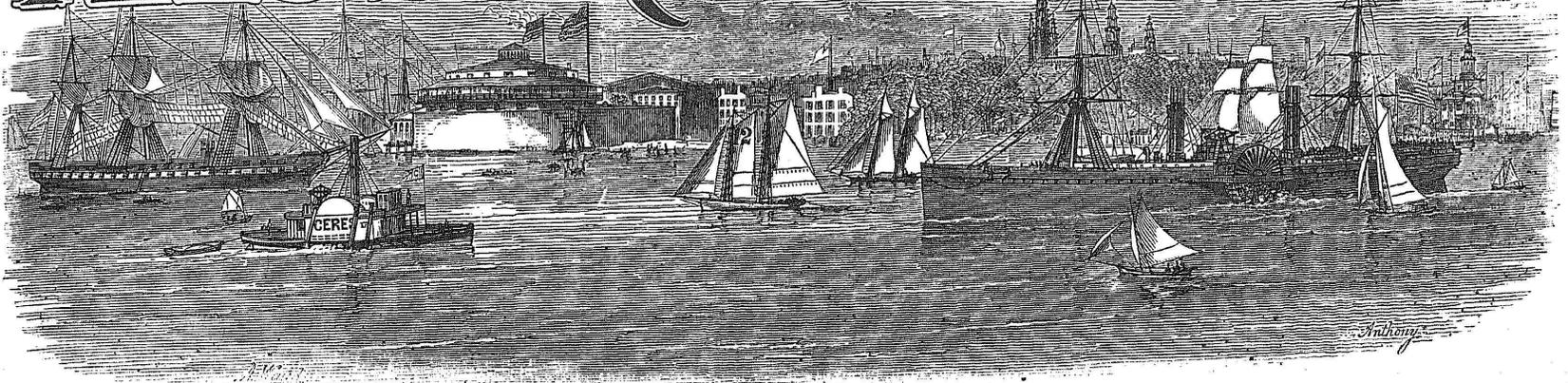
CAPT. JOHN ERICSSON, INVENTOR AND CONSTRUCTOR OF THE STEAM, FLOATING, IRON-BATTERY MONITOR. FROM A PHOTOGRAPH BY GREY.

day, March 9th, in Hampton Roads, has changed the whole aspect of naval warfare and harbor defence. It is evident that the Monitor can sail unharmed into any harbor in the world, however well defended, and laugh at the fire of its forts. She can only be met by vessels of her own class. As observed by a contemporary, "It is now apparent that half a dozen Monitors, three months earlier, would have cleared the Potomac, the James and the York rivers; captured Norfolk and her monitor, and shelled or taken Charleston, Savannah, Pensacola, Mobile and New Orleans. Henceforth either artillery more tremendous than any known to war must be used in the defence of harbors, or iron floating batteries and iron-cased frigates. Even the enormous and expensive plated ships, like the Warrior and La Gloire, must be replaced. They would neither of them be a match for the Merrimac, with her railroad iron plating; and as for the Monitor, our engineers believe she would pierce them through and through with her wrought-iron eleven-inch balls, fired near the water-line."

CAPTAIN JOHN ERICSSON, INVENTOR and Constructor of the Monitor.

CAPTAIN JOHN ERICSSON, whose name, already familiar to the world in connection with numerous inventions and mechanical improvements, has again been brought forward with increased *éclat*, as that of the inventor and constructor of the floating steam iron battery Monitor, was born in Wermeland, Sweden, in the year 1803. He early became cadet of engineers, and was engaged on various public works in his native country. In 1820 he entered the Swedish army as Ensign. While in the service, in 1826, he invented a "flame engine," which he obtained leave to carry to England, with a view to its introduction. In this he was not successful, and encountered heavy expenditures, which induced him to resign his commission and devote himself to mechanical pursuits. One of the successful results of his mechanical application was that of steam boilers with artificial draft, which was introduced on the Liver-

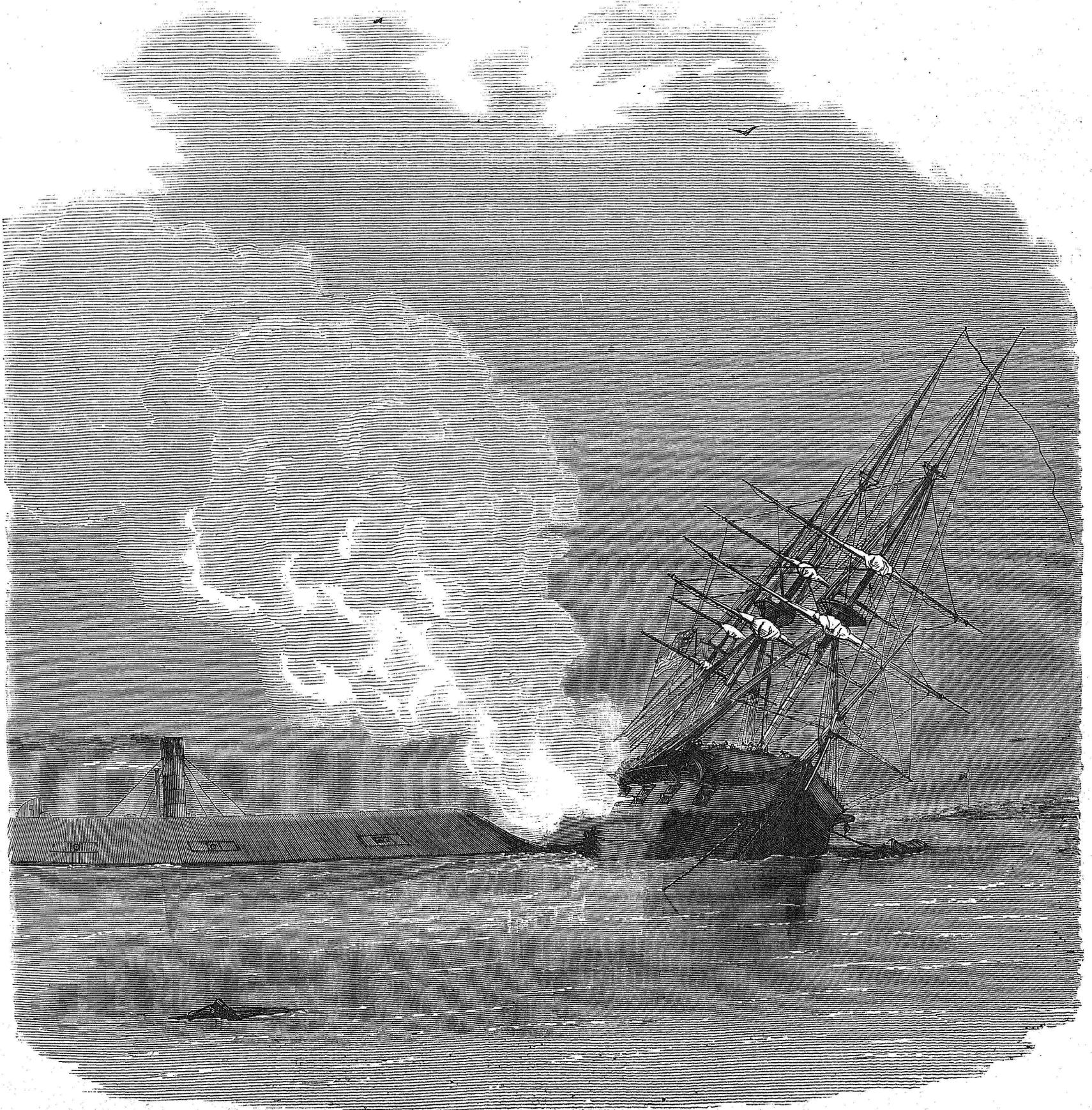
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SINKING OF THE UNITED STATES SAILING FRIGATE CUMBERLAND BY THE REBEL IRON-CLAD MONSTER MERRIMAC.—THE CREW OF THE CUMBERLAND FIGHTING TO THE LAST. SKETCHED BY OUR SPECIAL ARTIST. See page 380.

CAPT. JOHN ERICSSON, THE DESIGNER AND BUILDER OF THE IRON-CLAD BATTERY MONITOR.

FROM A PHOTOGRAPH.

John Ericsson was born in 1803, in the Province of Vermeland, among the iron mountains of Sweden. His father was a mining proprietor, so that in his youth he had ample opportunities to watch the operations of the various engines and machinery connected with the mines. At the age of ten years he constructed with his own hands, and after his own plans, a miniature sawmill, and also made numerous drawings of complicated mechanical contrivances, with instruments of his own invention and manufacture.

In 1814 he attracted the attention of the celebrated Count Platen, who had heard of his boyish efforts, and desired an interview with him. After carefully examining the various plans and drawings which this youth exhibited on this occasion, the Count handed them back to him, simply observing, in an impressive manner, "Continue as you have commenced, and you will one day produce something extraordinary." These few words of kind encouragement from so distinguished a personage sunk deeply into the mind of the young mechanic, and confirmed him in the career on which he had entered. Immediately after this interview young Ericsson was appointed a cadet in the corps of engineers, and after six months' tuition, at the age of twelve years, was appointed *nivelleur* at the Grand Ship Canal of Sweden, which connects the North Sea with the Baltic, under Count Platen. In this capacity, in the year 1816, he was required to set out the work for more than six hundred men, and at that time he was not tall enough to look through the leveling instruments, and in using it he was obliged to mount upon a stool, carried by his attendants for that purpose. As the discipline in the Swedish army required that the soldier should always uncover his head in speaking to his superior, gray headed men came up, cap in hand, to receive their instructions from this mere child. There are now many important works on the canal constructed after drawings made by Ericsson at this early age. At the age of fifteen he was in possession of accurate plans of the whole work, drawn by his own hand. His associations with military men on the canal had given him a tendency for military life, and at the age of seventeen he entered the Swedish army as an ensign, without the knowledge of his friend and patron, Count Platen. This step excited the indignation of the Count, who tried to prevail on him to change his resolution; but, finding all his arguments useless, he terminated an angry interview by bidding the young ensign "Go to the devil." The affectionate regard which he entertained for the Count caused the circumstances of this interview to make a deep impression upon young Ericsson.

Soon after the young ensign had entered upon his regimental duties a matter occurred which threatened to obscure his hitherto bright prospects. His Colonel, Baron Koskull, had been disgraced by the King about the time that he had recommended Ericsson for promotion. This circumstance induced the King to reject the recommendation. Prince Oscar, however, interceded for the young man with the King, who yielded to the persuasions of the Prince and promoted Ericsson to the lieutenantancy for which he had been recommended. About this time the government had ordered the northern part of Sweden to be surveyed, and that officers in the army should be employed in this service. Ericsson, whose regiment was stationed in the Northern highland, proceeded to Stockholm, for the purpose of submitting himself to the severe examination then requisite to precede the appointment of government surveyor. The mathematical education which he had received under Count Platen now proved very serviceable. He passed the examination with great distinction, and in the course of it, to the surprise of the examiners, showed that he could repeat Euclid *verbatim*; not by the exercise of the memory, but from his perfect mastery of geometrical science. There are yet in the archives of Sweden detailed maps of upwards of fifty square miles made by his hand.

While thus variously occupied, being on a visit to the house of his Colonel, Ericsson on one occasion showed his host how readily and by what simple means mechanical power may be produced, independently of steam, by condensing flame. On the 18th of May, 1826, he obtained permission from the King to visit England. He here proceeded to construct a number of engines of new inventions, which were attended with no trifling expenditure, and to meet the demands then made upon him, the young adventurer was compelled to draw on his mechanical resources.

Invention now followed invention in rapid succession, until the records of the Patent Office in London were enriched by the drawings of the remarkable steam boiler on the principle of artificial draft. In bringing this invention before the public, he thought it advisable to join some old and established mechanical house in London, and accordingly, he associated



CAPTAIN JOHN ERICSSON, THE DESIGNER AND BUILDER OF THE IRON-CLAD BATTERY MONITOR. FROM A PHOTOGRAPH.

himself with John Braithwaite. In the Fall of 1829 the Liverpool and Manchester Railway Company offered a prize for the best locomotive engine, to be tested on the small portion of the railway then completed. Ericsson, not willing to allow this occasion to

ground, and the novelty of the race had attracted an immense concourse of people. Both sides of the railway, for more than a mile in length, were lined with thousands of spectators, and to the surprise and admiration of the crowd, the Novelty steam carriage started, guided by its inventor, Ericsson, assisted by John Braithwaite, darted along the track at the rate of fifty miles an hour. In a short time afterwards he constructed a steam fire engine, which excited much interest in London at the time the Argyle Rooms were on fire. He subsequently constructed a similar engine for the King of Prussia, which was mainly instrumental in saving several valuable buildings at a great fire some years ago at Berlin. For this invention Ericsson received, in 1842, the large gold medal offered by the Mechanics' Institute of New York, for the best plan of a steam fire engine. Mr Ericsson was the first to apply to marine engines centrifugal blowers, now so common in this country in all boilers using anthracite coal. In the year 1831 he applied such a blower, worked by a separate small steam engine, to the steam packet Corsair of one hundred and twenty horse power, plying between Liverpool and Belfast.

Mr. Ericsson emigrated to this country in 1839, then being thirty-six years old. His first great achievement after his arrival was the building of the United States steam frigate Princeton, the first vessel that steam was ever introduced into with the works below the water line. She proved a complete success. About the same time he planned the French frigate Pomone, fifty guns, which is at present in our waters; she also proving a great success. Captain Ericsson after the completion of these vessels, gave the whole time to his favorite work, the completion of the calorific engine, which he has since brought to great perfection, though on a small scale. His next undertaking was the planning and invention of the steamer Ericsson, which is familiar to all our readers. He did the whole work, from the time her keel was laid to the moment that her paddles were first turned, in the brief space of seven months. Although not answering all that was commercially expected of her, she was an entire mechanical success, speaking more than words of the great genius of the inventor, and as a marine structure she has never been equalled, much less surpassed. The name of Captain Ericsson has been comparatively unheard of for some time past, until the commencement of another new idea of his, as illustrated satisfactorily in the new noble steam battery Monitor. He signed the contract for her construction on the 5th day of last October, and on the 31st of December—being a period of two months and eight days—her steam, machinery and propeller were put into operation, and on the one hundredth and first working day she was launched. This is a celerity which has never been equalled in this country or in England.

[From the Providence Press.]

LANDER.

A warrior to his boyhood's home
Is coming back to-day—
Ring out the merry joy-bells wide,
Bring flowers to grace his way!
Let the cannon's throat and the martial note
Send forth a glad acclaim,
And the loyal chieftain welcome home
Be worthy of his fame!

Hang out the dear old banner where
'Twill meet his flashing eye—
Whose very breast hath sheltered it
When rang the battle-cry;
Whose valiant sword and stout right arm,
With many a timely blow,
Have wrought new glory for its stars,
And crushed the haughty foe!

Alas! alas! the Warrior comes,
But not on prancing steed—
He neversmore the cannon's roar,
Nor bugle blast will heed;
No glow lights up his marble cheek,
No smile his soulless eye,
That stout right arm is nerveless now,
His good sword sheathed must lie!

So shouts of welcome rend the air
No sound the breezes swell,
But the minute gun and the muffled drum,
And the mournful tolling bell,
The Warrior to his boyhood home
Comes back in state to-day—
But they who gloried in his name
Can only weep and pray.

Nor rose nor laurel wreath bring now,
But pale flowers for his bed,
The hero hath been vanquished once!
The lion heart lies dead!
The soldier's warfare all is done—
Life's wandering marches o'er,
God give him rest, among the blest,
In Heaven forevermore!

High on the world's heroic list
Shall Lander's name be seen,
And Time, among "the cherished dead,"
Shall keep his memory green!
The patriot's heart shall warmer glow
When standing by his grave,
And dearer still shall be the flag
That Lander died to save.

L. D. B.



THE LATE BRIGADIER-GENERAL F. W. LANDER. FROM A PHOTOGRAPH. See page 331.

THEY DO NOT EXPECT TO MEET THE YANKEES—Among the letters found by our soldiers in the rebel camp on Roanoke Island, was one from a young lady in the South to her lover in the rebel army, in which she says: "I hope we shall see each other again here; but if we do not, I hope we shall meet in heaven, where there will be no Yankees."