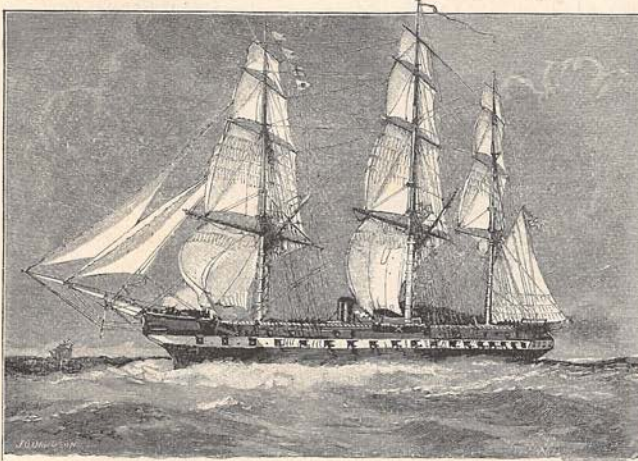


THE FIRST FIGHT OF IRON-CLADS.

MARCH 9, 1862.

THE engagement in Hampton Roads on the 8th of March, 1862, between the Confederate iron-clad *Virginia*, or (as she is known at the North) the *Merrimac*, and the United States wooden fleet, and that next day between the *Virginia* and the *Monitor*, was, in its results, in some respects the most momentous naval conflict ever witnessed. No battle was ever more widely discussed or produced a greater sensation. It revolutionized the navies of the world. Line-of-battle ships, those huge, overgrown craft, carrying from eighty to one hundred and twenty guns and from five hundred to twelve hundred men, which, from the destruction of the Spanish Armada to our time, had done most of the fighting, deciding the fate of empires, were at once universally condemned as out of date. Rams and iron-clads were in future to decide all naval warfare.

In this battle old things passed away, and the experience of a thousand years of battle and breeze was forgotten. The naval supremacy of England vanished in the smoke of this fight, it is true, only to reappear some years later more commanding than ever. The effect of the news was best described by the London "Times," which said: "Whereas we had available for immediate purposes one hundred and forty-nine first-class war-ships: we have now two, these two being the *Warrior* and her sister *Ironsides*. There is not now a ship in the English navy apart from these two that it would not be madness to trust to an engagement with that little *Monitor*." The Admiralty at once proceeded to reconstruct the navy, cutting down a number of their largest ships and converting them into turret or broadside iron-clads. The same results were produced in France, which had but one sea-



THE UNITED STATES FRIGATE "MERRIMAC" BEFORE AND AFTER CONVERSION INTO AN IRON-CLAD.

going iron-clad, *La Gloire*, and this one, like the *Warrior*, was only protected amidships. The Emperor Napoleon promptly appointed a commission to devise plans for rebuilding his navy. And so with all the maritime powers. In this race the United States took the lead, and at the close of the war led all the others in the numbers and efficiency of its iron-clad fleet. It is true that all the great powers had already experimented with vessels partly armored, but very few were convinced of their utility, and none had been tried by the crucial test of battle, if we except a



few floating batteries, thinly clad, used during the Crimean War.

In the spring of 1861 Norfolk and its large naval establishment had been hurriedly abandoned by the Federals, why or wherefore no one could tell. It is within two miles of Fortress Monroe, then held by a large force of regulars. A few companies of these, with a single frigate, could have occupied and commanded the town and navy-yard, and have kept the channel open. However, a year later, it was as quickly evacuated by the Confederates, and almost with as little reason. But of this I will speak later.

The yard was abandoned to a few volunteers, after it was partly destroyed, and a large

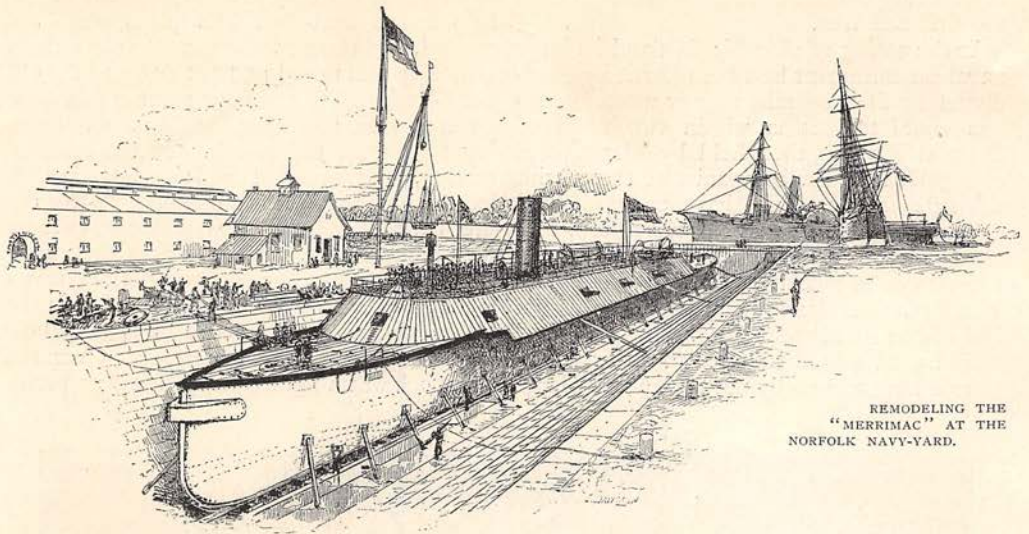
to Secretary Mallory to raise and rebuild this ship as an iron-clad. His plans were approved, and orders were given to carry them out. She was raised and cut down to the old berth-deck. Both ends for seventy feet were covered over, and when the ship was in fighting trim were just awash. On the midship section, one hundred and seventy feet in length, was built at an angle of forty-five degrees a roof of pitch-pine and oak, twenty-four inches thick, extending from the water-line to a height over the gun-deck of seven feet. Both ends of the shield were rounded so that the pivot-guns could be used as bow and stern chasers or quartering. Over the gun-deck was a light grating, making a prom-



BURNING OF THE FRIGATE "MERRIMAC" AND THE NORFOLK NAVY-YARD.

number of ships were burnt. Among the spoils were upward of twelve hundred heavy guns, which were scattered among Confederate fortifications from the Potomac to the Mississippi. Among the ships burnt and sunk was the frigate *Merrimac* of thirty-five hundred tons and forty guns, afterward rechristened the *Virginia*, and so I will call her. During the summer of 1861 Lieutenant George M. Brooke, an accomplished officer of the old navy, who with many others had resigned, proposed

enade about twenty feet wide. The wood backing was covered with iron plates, rolled at the Tredegar works at Richmond, two inches thick and eight wide. The first tier was put on horizontal, the second up and down,—in all four inches, bolted through the wood-work and clinched inside. The prow was of cast-iron, projecting four feet, and badly secured, as events proved. The rudder and propeller were entirely unprotected. The pilot-house was forward of the smoke-stack, and



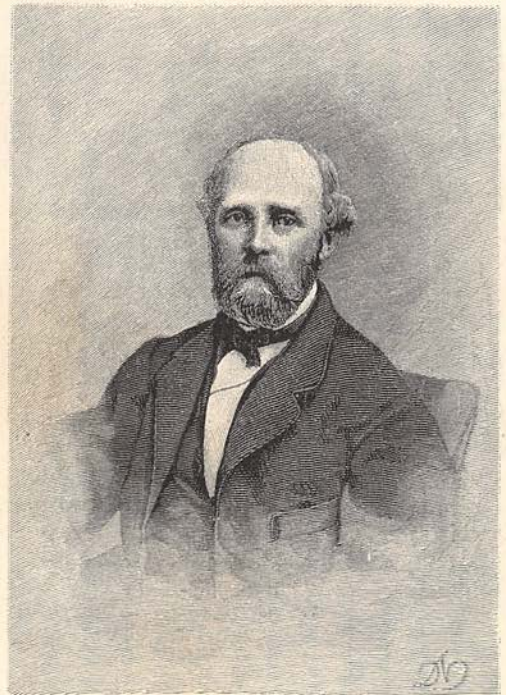
REMODELING THE
"MERRIMAC" AT THE
NORFOLK NAVY-YARD.

covered with the same thickness of iron as the sides. Her motive power was the same that had always been in the ship. Both engines and boilers had been condemned on her return from her last cruise, and were radically defective. Of course, the fire and sinking had not improved them. We could not depend upon them six hours at a time. A more ill-contrived or unreliable pair of engines could only have been found in some vessels of the United States navy.

Lieutenant Catesby ap R. Jones was ordered to superintend the armament, and no more thoroughly competent officer could have been selected. To his experience and skill as her ordnance and executive officer was due the character of her battery, which proved so efficient. It consisted of two seven-inch rifles, heavily reënforced around the breech with three-inch steel bands, shrunk on; these were the first heavy guns so made, and were the bow and stern pivots; there were also two six-inch rifles of the same make, and six nine-inch smooth-bore broadside, ten guns in all.

During the summer and fall of 1861 I had been stationed at the batteries on the Potomac at Evansport and Acquia Creek, blockading the river as far as possible. In January, 1862, I was ordered to the *Virginia* as one of the lieutenants, reporting to Commodore French Forrest, who then commanded the navy-yard at Norfolk. Commodore Franklin Buchanan was appointed to the command,—an energetic and high-toned officer, who combined with daring courage great professional ability, standing deservedly at the head of his profession. In 1845 he had been selected by Mr. Bancroft, Secretary of the Navy, to locate

and organize the Naval Academy, and he launched that institution upon its successful career. Under him were as capable a set of officers as ever were brought together in one ship. But of man-of-war's men or sailors we had scarcely any. The South was almost without a maritime population. In the old



LIEUTENANT CATESBY AP R. JONES. (FROM A PHOTOGRAPH BY COURRET HERMANOS, LIMA.)

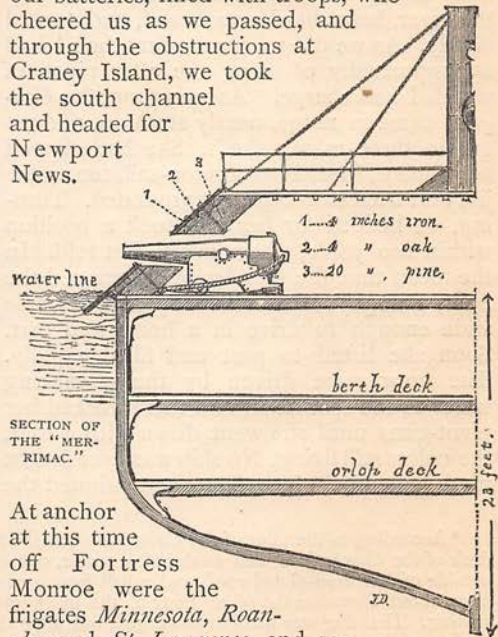
service the majority of officers were from the South, and all the seamen from the North.*

Every one had flocked to the army, and to it we had to look for a crew. Some few seamen were found in Norfolk, who had escaped from the gun-boat flotilla in the waters of North Carolina, on their occupation by Admiral Goldsborough and General Burnside. In hopes of securing some men from the army, I was sent to General Magruder's headquarters at Yorktown, who was known to have under his command two battalions from New Orleans, among whom might be a number of seamen. The general, though pressed for want of men, holding a long line with scarcely a brigade, gave me every facility to secure volunteers. With one of his staff I visited every camp, and the commanding officers were ordered to parade their men, and I explained to them what I wanted. About two hundred volunteered, and of this number I selected eighty who had had some experience as seamen or gunners. Other commands at Richmond and Petersburg were visited, and so our crew of three hundred was made up. They proved themselves to be as gallant and trusty a body of men as any one would wish to command, not only in battle, but in reverse and retreat.

Notwithstanding every exertion to hasten the fitting out of the ship, the work during the winter progressed but slowly, owing to delay in sending the iron sheathing from Richmond. At this time the only establishment in the South capable of rolling iron plates was the Tredegar foundry. Its resources were limited, and the demand for all kinds of war material most pressing. And when we reflect upon the scarcity and inexperience of the workmen, and the great changes necessary in transforming an ordinary iron workshop into an arsenal in which all the necessary machinery and tools had to be improvised, it is astonishing so much was accomplished. The unfinished state of the vessel interfered so with the drills and exercises that we had but little opportunity of getting things into shape. It should be remembered the ship was an experiment in naval architecture, differing in every respect from any then afloat. The officers and crew were strangers to the ship and to each other. Up to the hour of sailing she was crowded with workmen. Not a gun had been fired, hardly a revolution of the engines had been

made, when we cast off from the dock, and started on what many thought was an ordinary trial trip, but which proved to be a trial such as no vessel that ever floated had undergone up to that time. From the start we saw that she was slow, not over five knots; she steered so badly that, with her great length, it took from thirty to forty minutes to turn. She drew twenty-two feet, which confined us to a comparatively narrow channel in the Roads; and, as I have before said, the engines were our weak point. She was as unmanageable as a water-logged vessel.

It was at noon on the 7th of March that we steamed down the Elizabeth River. Passing by our batteries, lined with troops, who cheered us as we passed, and through the obstructions at Craney Island, we took the south channel and headed for Newport News.



At anchor at this time off Fortress Monroe were the frigates *Minnesota*, *Roanoke*, and *St. Lawrence*, and several gun-boats. The first two were sister ships of the *Virginia* before the war; the last was a sailing frigate of fifty guns. Off Newport News, seven miles above, which was strongly fortified, and held by a large Federal garrison, were anchored two frigates, the *Congress*, 50 guns, and the *Cumberland*, 30. The day was calm, and the last two ships were swinging lazily by their anchors, to the young flood. Boats were hanging to the lower booms, washed clothes in the rigging. Nothing indicated that we were expected; but when we came within three-quarters of a

* The officers of the *Merrimac* were: *Flag-Officer*, Franklin Buchanan; *Lieutenants*, Catesby ap R. Jones, executive and ordnance officer—Charles C. Simms—R. D. Minor (flag)—Hunter Davidson—John Taylor Wood—J. R. Eggleston—Walter Butt; *Midshipmen*, Foute, Marmaduke, Littlepage, Craig, Long, and Rootes; *Paymaster*, James Semple; *Surgeon*, Dinwiddie Phillips; *Assistant-Surgeon*, Algernon S. Garnett; *Captain of Marines*, Reuben Thom; *Engineers*, H. A. Ramsey, Acting Chief—*Assistants*, Tynan, Campbell, Herring, Jack, and White; *Boatswain*, Hasker; *Gunner*, Oliver; *Carpenter*, Lindsey; *Clerk*, Arthur Sinclair, Jr.; *Volunteer Aide*, Lieutenant Douglas Forrest, C. S. A.—Captain Kevil, commanding detachment of Norfolk United Artillery; *Signal Corps*, Sergeant Tabb.

mile, the boats were dropped astern, booms got alongside, and the *Cumberland* opened with her heavy pivots, followed by the *Congress*, the gun-boats, and the shore batteries.

We reserved our fire until within easy range, when the forward pivot was pointed and fired by Lieutenant Charles Simms, killing and wounding most of the crew of the after pivot-gun of the *Cumberland*. Passing close to the *Congress*, which received our starboard broadside, and returned it with spirit, we steered direct for the *Cumberland*, striking her almost at right angles, under the fore-rigging on the starboard side. The blow was hardly perceptible on board the *Virginia*. Backing clear of her, we went ahead again, heading up the river, helm hard-a-starboard, and turned slowly. As we did so, for the first time I had an opportunity of using the after pivot, of which I had charge. As we swung, the *Congress* came in range, nearly stern on, and we got in three raking shells. She had slipped her anchor, loosed her foretop-sail, run up the jib, and tried to escape, but grounded. Turning, we headed for her and took a position within 200 yards, where every shot told. In the mean time the *Cumberland* continued the fight, though our ram had opened her side wide enough to drive in a horse and cart. Soon she listed to port and filled rapidly. The crew were driven by the advancing water to the spar-deck, and there worked her pivot-guns until she went down with a roar, the colors still flying. No ship was ever fought more gallantly.* The *Congress* continued the

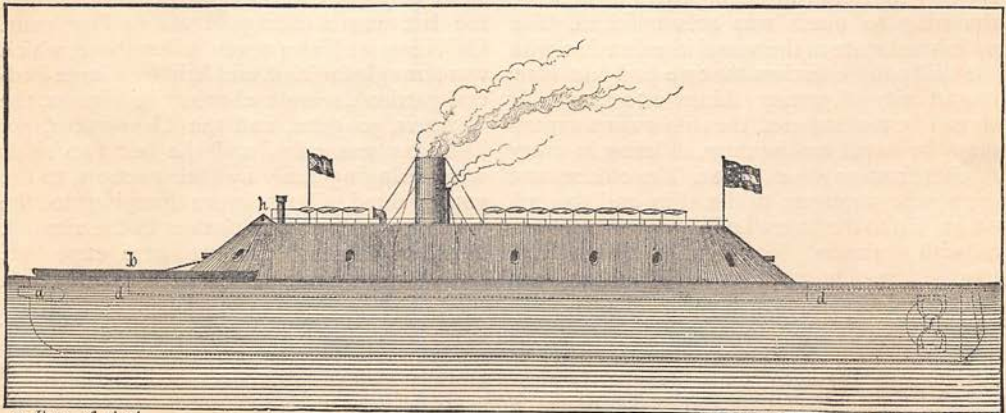
unequal contest for more than an hour after the sinking of the *Cumberland*. Her losses were terrible, and finally she ran up the white flag.

As soon as we had hove in sight, coming down the harbor, the *Roanoke*, *St. Lawrence*, and *Minnesota* had got under way, and started up from Old Point to join their consorts, assisted by tugs. They were under fire from the batteries at Sewall's Point, but the distance was too great to effect much. The first two, however, very prudently ran aground not far above Fortress Monroe, and took but little part in the fight. The *Minnesota*, taking the middle or swash channel, steamed up halfway between Old Point and Newport News, when she grounded, but in a position to be actively engaged.

Previous to this we had been joined by the James River squadron, which had been at anchor a few miles above, and came into action most gallantly, passing the shore batteries at Newport News under a heavy fire, and with some loss. It consisted of the *Yorktown*, ten guns, Captain Tucker; *Jamestown*, ten; and *Teaser*, two.

As soon as the *Congress* surrendered, Commander Buchanan ordered the gun-boats *Beaufort* and *Raleigh* to steam alongside, take off her crew, and set fire to the ship. Lieutenant Pendergrast, who had succeeded Lieutenant Smith, who had been killed, surrendered to Lieutenant Parker, of the *Beaufort*. Delivering his sword and colors, he was directed by Lieutenant Parker to return

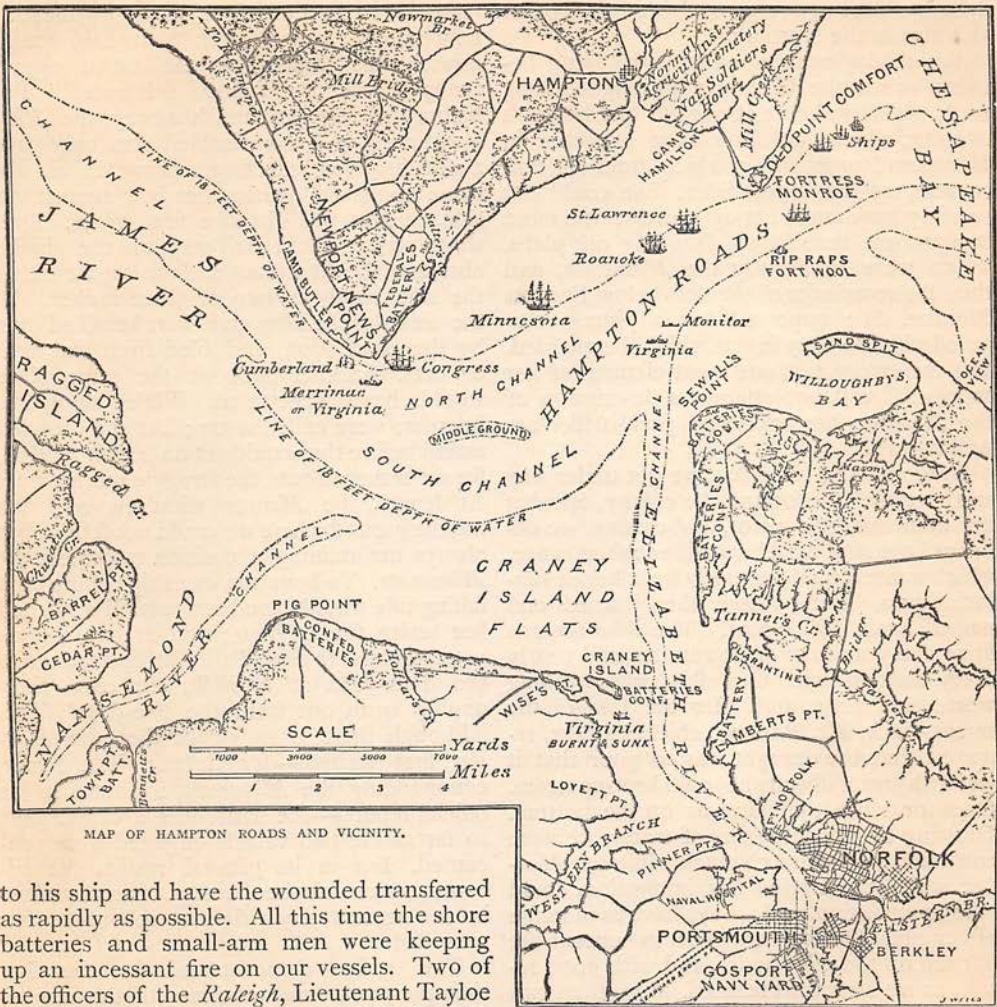
* According to the pilot of the *Cumberland*, A. B. Smith: "Near the middle of the fight, when the berth-deck of the *Cumberland* had sunk below water, one of the crew of the *Merrimac* came out of a port to the outside of her iron-plated roof, and a ball from one of our guns instantly cut him in two. . . . Finally, after about three-fourths of an hour of the most severe fighting, our vessel sank, the Stars and Stripes still waving. That flag was finally submerged, but after the hull grounded on the sands, fifty-four feet below the surface of the water, our pennant was still flying from the topmast above the waves."



a. Prow of steel
b. Wooden Bullwark
h. Pilot House

THE "MERRIMAC," FROM A SKETCH MADE THE DAY BEFORE THE FIGHT.

By H. L. Blackford del. March 7, 1862
a a. Iron under water
f. Propeller



MAP OF HAMPTON ROADS AND VICINITY.

to his ship and have the wounded transferred as rapidly as possible. All this time the shore batteries and small-arm men were keeping up an incessant fire on our vessels. Two of the officers of the *Raleigh*, Lieutenant Tayloe and Midshipman Hutter, were killed while assisting the Union wounded out of the *Congress*. A number of the enemy's men were killed by the same fire. Finally it became so hot that the gun-boats were obliged to haul off with only thirty prisoners, leaving Lieutenant Pendergrast and most of his crew on board, and they all afterward escaped on shore by swimming or in small boats. While this was going on, the white flag was flying at her mainmast-head. Not being able to take possession of his prize, the commodore ordered hot shot to be used, and in a short time she was in flames fore and aft. While directing this, both himself and his flag-lieutenant, Minor, were severely wounded. The command then devolved upon Lieutenant Catesby Jones.

It was now five o'clock, nearly two hours of daylight, and the *Minnesota* only remained. She was aground and at our mercy. But the

pilots would not attempt the middle channel with the ebb tide and approaching night. So we returned by the south channel to Sewall's Point and anchored, the *Minnesota* escaping, as we thought, only until morning.

Our loss in killed and wounded was twenty-one. The armor was hardly damaged, though at one time our ship was the focus on which were directed at least one hundred heavy guns afloat and ashore. But nothing outside escaped. Two guns were disabled by having their muzzles shot off. The ram was left in the side of the *Cumberland*. One anchor, the smoke-stack, and the steam-pipes were shot away. Railings, stanchions, boat-davits, everything was swept clean. The flag-staff was repeatedly knocked over, and finally a boarding-pike was used. Commodore Buchanan and the other wounded were sent to the Naval Hospital, and

after making preparations for the next day's fight, we slept at our guns, dreaming of other victories in the morning.*

But at daybreak we discovered lying between us and the *Minnesota*, a strange-looking craft, which we knew at once to be Ericsson's *Monitor*, which had long been expected in Hampton Roads, and of which, from different sources, we had a good idea. She could not possibly have made her appearance at a more inopportune time for us, changing our plans, which were to destroy the *Minnesota*, and then the remainder of the fleet below Fortress Monroe. She appeared but a pigmy compared with the lofty frigate which she guarded. But in her size was one great element of her success. I will not attempt a description of the *Monitor*; her build and peculiarities are well known.

After an early breakfast, we got under way and steamed out toward the enemy, opening fire from our bow pivot, and closing, we delivered our starboard broadside at short range, which was returned promptly from her eleven-inch guns. Both vessels then turned and passed again still closer. The *Monitor* was firing every seven or eight minutes, and nearly every shot struck. Our ship was working worse and worse, and after the loss of the smoke-stack, Mr. Ramsay, chief engineer, reported that the draught was so poor that it was with great difficulty he could keep up steam. Once or twice the ship was on the bottom. Drawing twenty-three feet of water, we were confined to a narrow channel, while the *Monitor*, with only twelve feet immersion, could take any position, and always have us in range of her guns. Orders were given to concentrate our fire on the pilot-house, and with good result, as we afterward learned. More than two hours had passed, and we had made no impression on the enemy so far as we could discover, while our wounds were slight. Several times the *Monitor* ceased firing, and we were in hopes she was disabled, but the revolution again of her turret and the heavy blows of her eleven-inch shot on our sides soon undeceived us.

Coming down from the spar-deck and observing a division standing "at ease," Lieutenant Jones observed:

"Why are you not firing, Mr. Eggleston?"

"Why, our powder is very precious," replied the lieutenant; "and after two hours' incessant firing I find that I can do her about as much damage by snapping my thumb at her every two minutes and a half."

Lieutenant Jones now determined to run

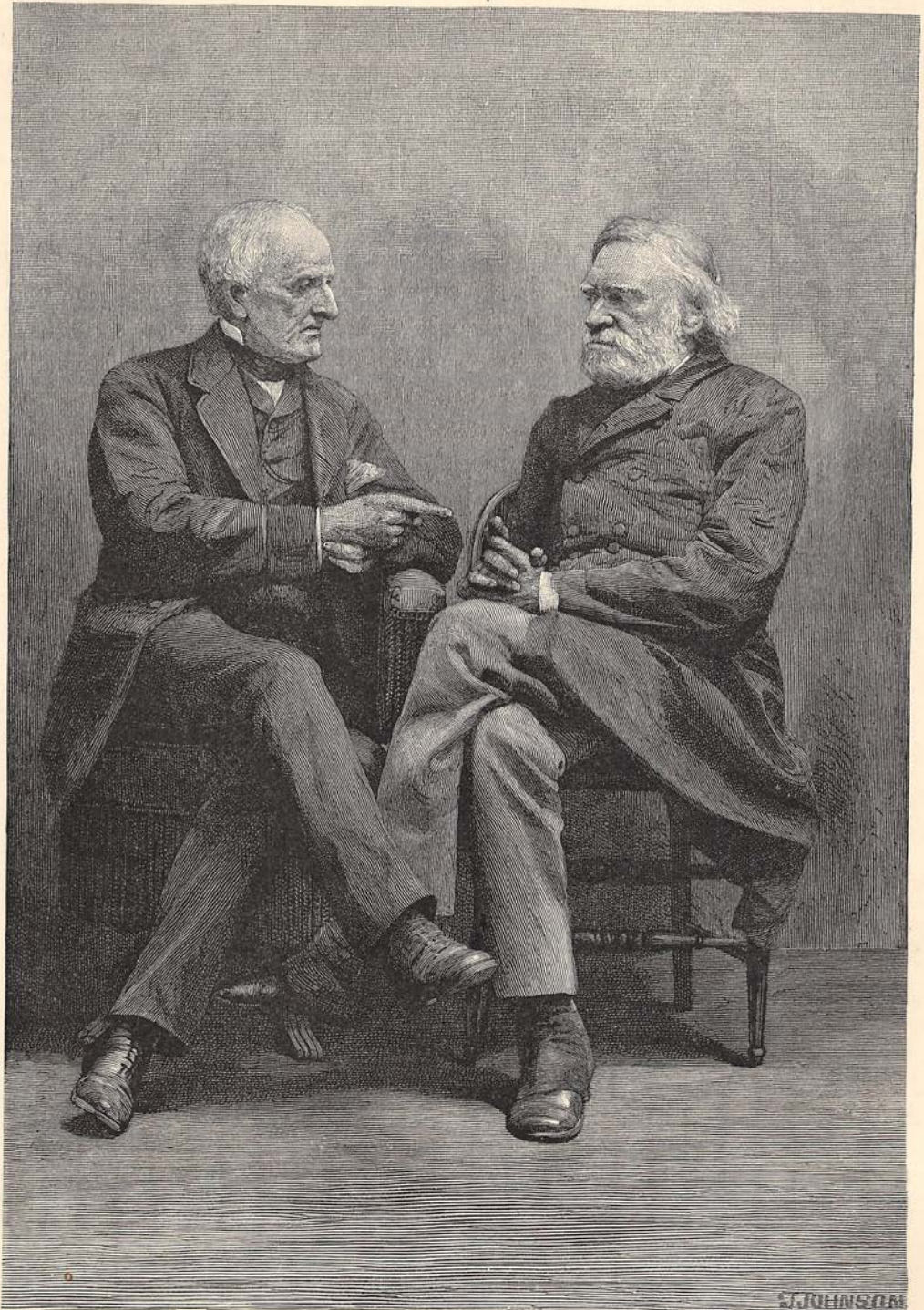
her down or board. For nearly an hour we manœuvred for a position. Now "go ahead"; now "stop"; now "astern"; the ship was as unwieldy as Noah's Ark. At last an opportunity offered. "Go ahead full speed." But before the ship gathered headway, the *Monitor* turned, and our disabled ram only gave a glancing blow, effecting nothing. Again she came up on our quarter, her bow against our side, and at this distance fired twice. Both shots struck about half-way up the shield, abreast of the after pivot, and the impact forced the side bodily in two or three inches. All the crews of the after guns were knocked over by the concussion, and bled from the nose or ears. Another shot at the same place would have penetrated. While alongside, boarders were called away; but she dropped astern before they could get on board. And so, for six or more hours, the struggle was kept up. At length, the *Monitor* withdrew over the middle ground where we could not follow, but always maintaining a position to protect the *Minnesota*. To have run our ship ashore on a falling tide would have been ruin. We awaited her return for an hour; and at two o'clock p. m. steamed to Sewall's Point, and thence to the dock-yard at Norfolk, our crew thoroughly worn out from the two-days' fight. Although there is no doubt that the *Monitor* first retired,—for Captain Van Brunt, commanding the *Minnesota*, so states in his official report,—the battle was a drawn one, so far as the two vessels' engaged were concerned. But in its general results the advantage was with the *Monitor*. Our casualties in the second day's fight were only a few wounded.

This action demonstrated for the first time the power and efficiency of the ram as a means of offense. The side of the *Cumberland* was crushed like an egg-shell. The *Congress* and *Minnesota*, even with our disabled bow, would have shared the same fate but that we could not reach them on account of our great draught.

It also showed the power of resistance of two iron-clads, widely differing in construction, model, and armament, under a fire which would have sunk any other vessel then afloat in a short time.

The *Monitor* was well handled, and saved the *Minnesota* and the remainder of the fleet at Fortress Monroe. But her gunnery was poor. Not a single shot struck us at the water-line, where the ship was utterly unprotected, and where one would have been fatal. Or had the fire been concentrated on any one

* In his report to Captain Buchanan, Lieutenant Jones says: "It was not easy to keep a flag flying. The flag-staffs were repeatedly shot away. The colors were hoisted to the smoke-stack and several times cut down from it."—Ed.



COMMANDERS OF THE "MERRIMAC."

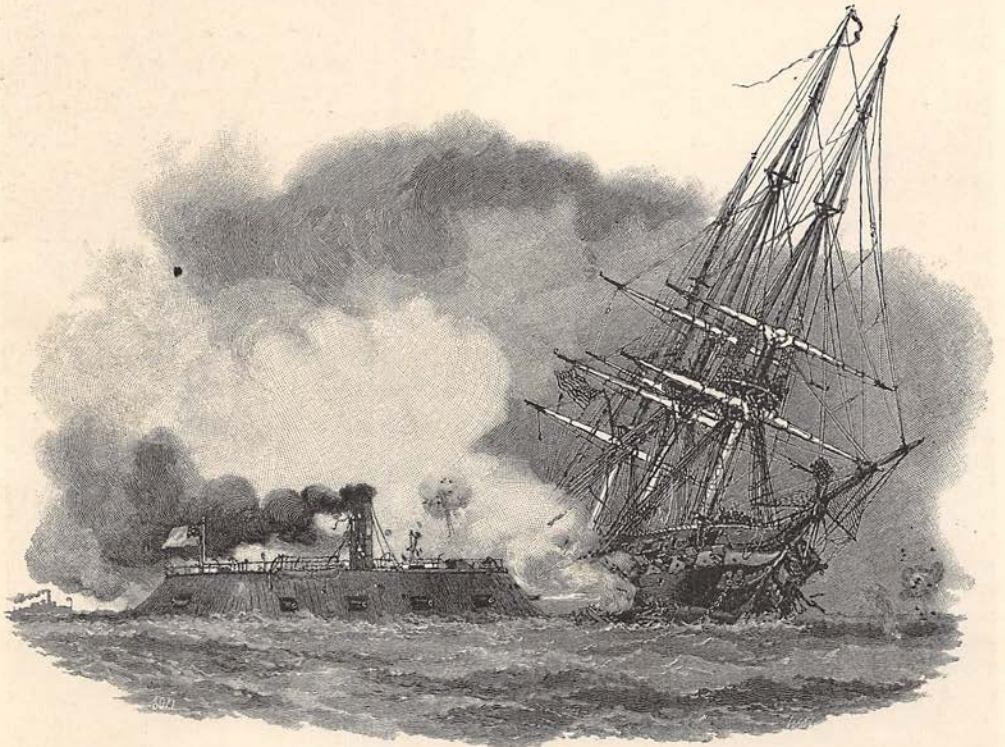
COMMODORE FRANKLIN BUCHANAN.

COMMODORE JOSIAH TATNALL.

spot, the shield would have been pierced; or had larger charges been used, the result would have been the same. Most of her shot struck us obliquely, breaking the iron of both courses, but not injuring the wood backing. When struck at right angles, the backing would be broken, but not penetrated. We had no solid projectiles, except a few of large windage, to be used as hot shot, and of course made no impression on the turret. But in all this it should be borne in mind that both vessels were on their trial trips, both were experimental, and both receiving their baptism of fire.

On our arrival at Norfolk, Commodore Buchanan sent for me. I found him at the Naval Hospital, badly wounded and suffering greatly. He dictated a short dispatch to Mr.

Mr. Mallory's office and with him went to President Davis's, where we met Mr. Benjamin, Secretary of State, Mr. Seddon, Secretary of War, General Cooper, Adjutant-General, and a number of others. I told at length what had occurred on the previous two days, and what changes and repairs were necessary to the *Virginia*. As to the future, I said that in the *Monitor* we had met our equal, and that the result of another engagement would be very doubtful. Mr. Davis made many inquiries as regarded the ship's draught, speed, and capabilities, and urged the completion of the repairs as early a day as possible. The conversation lasted until near midnight. During the evening the flag of the *Congress*, which was a very large one, was brought in, and to our surprise, in unfolding it, we found it in some places saturated



THE "MERRIMAC" RAMMING THE "CUMBERLAND."

Mallory, Secretary of the Navy, stating the return of the ship and the result of the two-days' fight, and directed me to proceed to Richmond with it and the flag of the *Congress*, and make a verbal report of the action, condition of the *Virginia*, etc.

I took the first train for Petersburg and the Capital. The news had preceded me, and at every station I had an ovation, and to listening crowds was forced to repeat the story of the fight. Arriving at Richmond, I drove to

with blood. On this discovery it was quickly rolled up and sent to the Navy Department, where it remained during the war, and was doubtless burned with that building when Richmond was evacuated.

The news of our victory was received everywhere in the South with the most enthusiastic rejoicing. Coming, as it did, after a number of disasters in the South and West, it was particularly grateful. Then again, under the circumstances, so little was expected from the

navy that this success was entirely unlooked for. So, from one extreme to the other, the most extravagant anticipations were formed of what the ship could do. For instance: the blockade could be raised, Washington leveled to the ground, New York laid under contribution, and so on. At the North, equally groundless alarm was felt. As an example of this, Secretary Welles relates what took place at a cabinet meeting called by Mr. Lincoln on the receipt of the news. "The *Merrimac*," said Stanton, 'will change the whole character of the war; she will destroy, *seriatim*, every naval vessel; she will lay all the cities on the seaboard under contribution. I shall immediately recall Burnside; Port Royal must be abandoned. I will notify the governors and municipal authorities in the North to take instant measures to protect their harbors.' He had no doubt, he said, that the monster was at this moment on her way to Washington; and, looking out of the window which commanded a view of the Potomac for many miles, 'Not unlikely, we shall have a shell or cannon-ball from one of her guns in the White House before we leave this room.' Mr. Seward, usually buoyant and self-reliant, overwhelmed with the intelligence, listened in responsive sympathy to Stanton, and was greatly depressed, as, indeed, were all the members."

I returned the next day to Norfolk, and notified Commodore Buchanan of his promotion to be admiral, and that, owing to his wound, he would be retired from the command of the *Virginia*. Lieutenant Jones should have been promoted and should have succeeded him. He had fitted out the ship, armed her, and commanded during the second day's fight. However, the Department thought otherwise, and selected Commodore Josiah Tatnall; apart from Lieutenant Jones, he was the best man. He had distinguished himself in the wars of 1812 and with Mexico. No one stood higher as an accomplished and chivalrous officer. While in command of the United States squadron in the East Indies, he was present as a neutral at the desperate fight at the Peiho Forts, near Peking, between the English fleet and the Chinese, when the first lost nearly one-half of a force of twelve hundred engaged. Seeing his old friend Sir James Hope hard pressed and in need of assistance, having had four vessels sunk under him, he had his barge manned and with his flag-lieutenant, S. D. Trenchard, pulled alongside the flagship, through the midst of a tremendous fire, in which his coxswain was killed and several of his boat's crew wounded. He found the gallant admiral desperately wounded, and all his crew killed or disabled but six. Offering his ser-



LIEUTENANT GEORGE U. MORRIS, ACTING COMMANDER OF THE "CUMBERLAND."

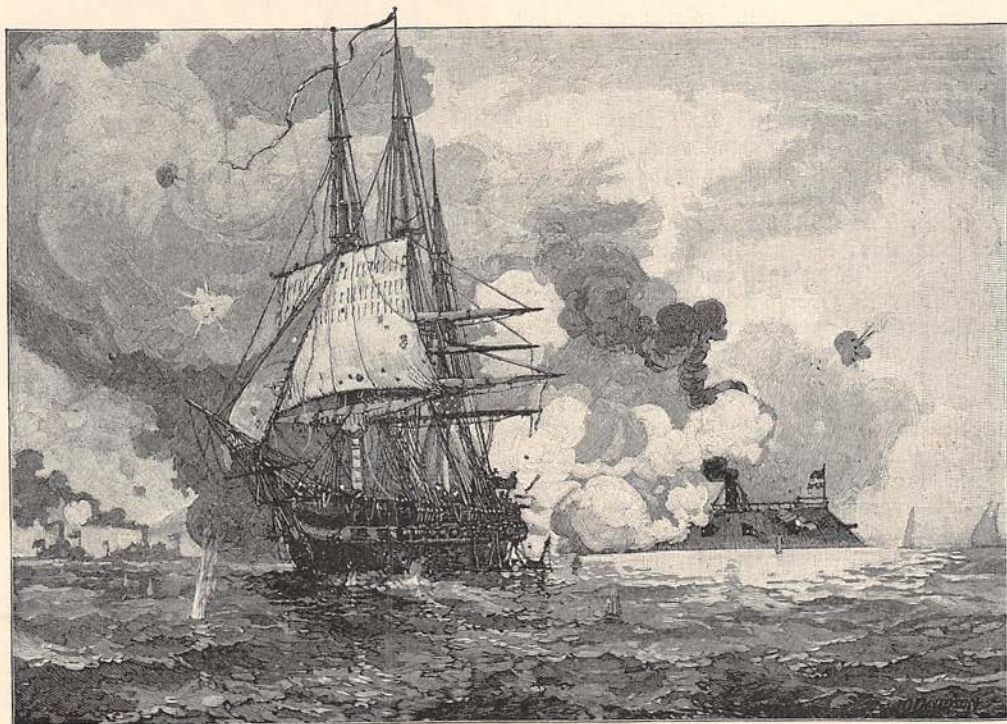
In the absence of Captain Radford, the command of the *Cumberland* devolved upon the executive officer, Lieutenant Morris, from whose official report we quote the following: "At thirty minutes past three the water had gained upon us, notwithstanding the pumps were kept actively employed to a degree that, the forward-magazine being drowned, we had to take powder from the after-magazine for the ten-inch gun. At thirty-five minutes past three the water had risen to the main hatchway, and the ship canted to port, and we delivered a parting fire—each man trying to save himself by jumping overboard. Timely notice was given, and all the wounded who could walk were ordered out of the cockpit; but those of the wounded who had been carried into the sick-bay and on the berth-deck were so mangled that it was impossible to save them. . . . I should judge we have lost upward of one hundred men. I can only say, in conclusion, that all did their duty, and we sank with the American flag flying at the peak." When summoned to surrender Morris replied, "Never, I'll sink alongside!"—ED.

vices, surprise was expressed at his action. His reply was, "Blood is thicker than water."

Tatnall took command on the 29th March. In the mean time the *Virginia* was in the dry dock under repairs. The hull four feet below the shield was covered with two-inch iron. A new and heavier ram was strongly secured to the bow. The damage to the armor was repaired, wrought-iron port-shutters were fitted, and the rifle-guns supplied with steel-pointed solid shot. These changes, with one hundred tons more of ballast on her fan-tails, increased her draught to twenty-three feet, improving her resisting powers, but correspondingly decreasing her mobility and her speed to four knots. The repairs were not completed until the 4th of April, owing to our want of resources and difficulty of securing workmen. On the 11th we steamed down the harbor to the Roads with six gun-boats, fully expecting to meet the *Monitor* again and other vessels; for we knew their fleet had been largely reënforced,

among others by the *Vanderbilt*, a powerful side-wheel steamer fitted as a ram. We were primed for a desperate tussle; but to our surprise we had the Roads to ourselves. We exchanged a few shots with the Rip-Raps batteries, but the *Monitor* with the other vessels of the fleet remained below Fortress

tenant Barney in the *Jamestown* to go in and bring them out. This was promptly and successfully accomplished, under a fire from the forts. Two were brigs loaded with supplies for the army. The capture of these vessels, within gun-shot of their fleet, did not affect their movements. As the *Jamestown* towed her



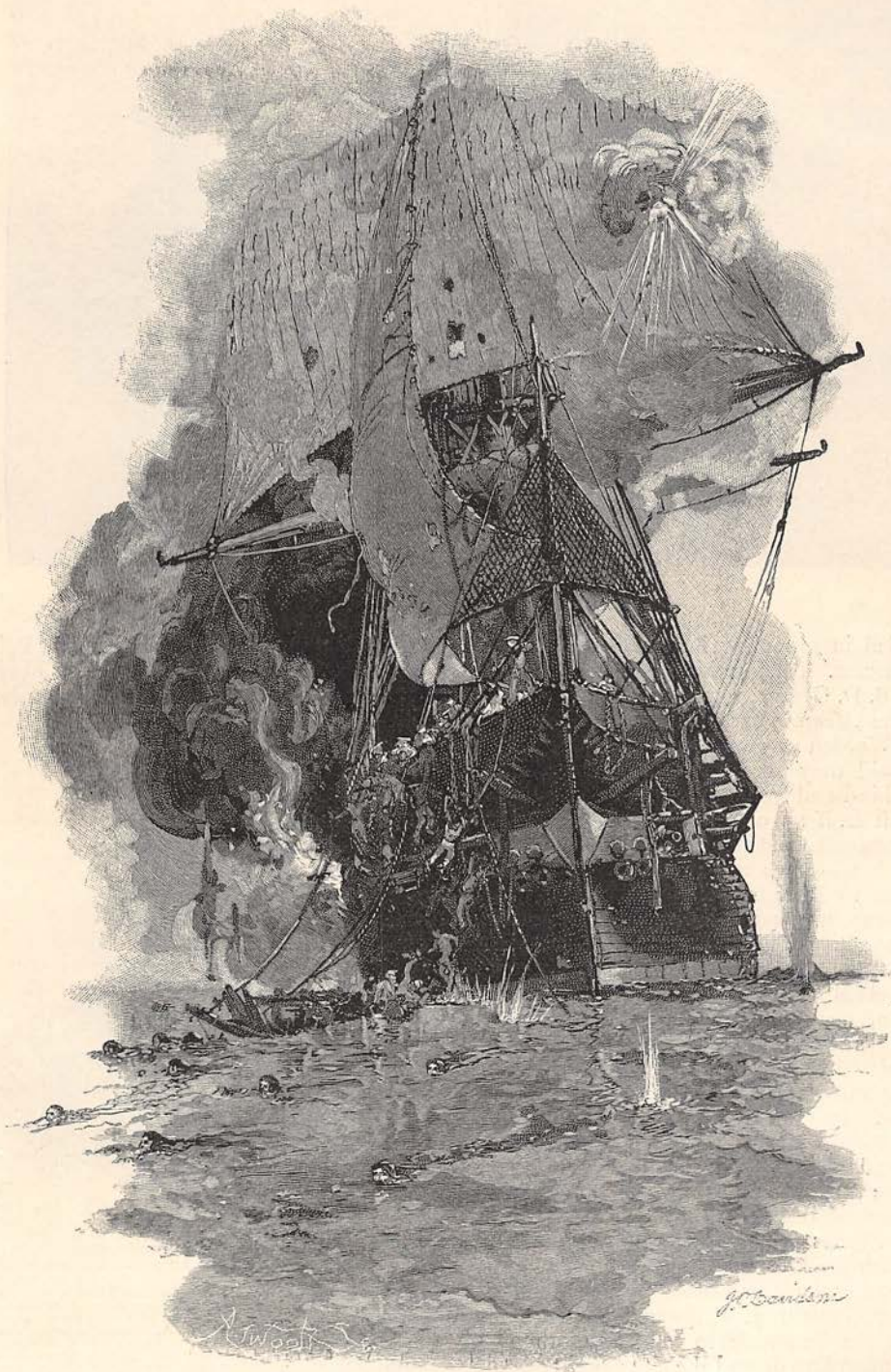
THE "MERRIMAC" DRIVING THE "CONGRESS" FROM HER ANCHORAGE.

Monroe, in Chesapeake Bay, where we could not get at them except by passing between the forts.

The day before going down, Commodore Tatnall had written to Secretary Mallory, "I see no chance for me but to pass the forts and strike elsewhere, and I shall be gratified by your authority to do so." This freedom of action was never granted, and probably wisely, for the result of an action with the *Monitor* and fleet, even if we ran the gauntlet of the fire of the forts successfully, was more than doubtful, and any disaster would have exposed Norfolk and James River, and probably would have resulted in the loss of Richmond. For equally good reasons the *Monitor* acted on the defensive; for if she had been out of the way, General McClellan's base and fleet of transports in York River would have been endangered. Observing three merchant vessels at anchor close in shore and within the bar at Hampton, the commodore ordered Lieu-

prizes under the stern of the English corvette *Rinaldo*, Captain Hewitt (now an admiral commanding the English fleet in the East Indies and Red Sea), then at anchor in the Roads, she was enthusiastically cheered. We remained below all day and at night returned and anchored off Sewall's Point.

A few days later we went down again to within gun-shot of the Rip-Raps, and exchanged a few rounds with the fort, hoping that the *Monitor* would come out from her lair into open water. Had she done so, a determined effort would have been made to carry her by boarding. Four small gun-boats were ready, each of which had its crew divided into parties for the performance of certain duties after getting on board. Some were to try to wedge the turret, some to cover the pilot-house and all the openings with tarpaulins, others to scale with ladders the turret and smoke-stack, using shells, hand-grenades, etc. Even if but two of the gun-boats suc-



ESCAPE OF THE CREW OF THE "CONGRESS."



THE EXPLOSION ON THE BURNING "CONGRESS."

ceeded in grappling her, we were confident of success. Talking this over since with Captain S. D. Greene, who was the first lieutenant of the *Monitor*, and in command after Captain Worden was wounded in the pilot-house, he said they were prepared for anything of this kind and that it would have failed. Certain it is, if an opportunity had been given, the attempt would have been made.

A break-down of the engines forced us to return to Norfolk. Completing our repairs on May 8th, and while returning to our old anchorage, we heard heavy firing, and, going down the harbor, found the *Monitor*, with the iron-clads *Galena*, *Naugatuck*, and a number of heavy ships, shelling our batteries at Sewall's Point. We stood directly for the *Monitor*, but as we approached they all ceased firing and retreated below the forts. We followed close down to the Rip-Raps, whose shot passed over us, striking a mile or more beyond the ship. We remained for some hours in the Roads, and finally the commodore, in a tone of deepest disgust, gave the order: "Mr. Jones, fire a gun to windward, and take the ship back to her buoy."

During the month of April, 1862, our forces, under General J. E. Johnston, had retired from the Peninsula to the neighborhood of Richmond, to defend the city against McClellan's advance by way of the Peninsula, and from time to time rumors of the possible evacuation of Norfolk reached us. On the

9th of May, while at anchor off Sewall's Point, we noticed at sunrise that our flag was not flying over the batteries. A boat was sent ashore



LIEUTENANT JOSEPH B. SMITH, ACTING-COMMANDER OF THE "CONGRESS." (PHOTOGRAPH BY BLACK & BATCHELDER.)

According to the pilot of the *Cumberland*, Lieutenant Smith was killed by a shot. His death was fixed at 4:20 P. M. by Lieutenant Pendergrast, next in command, who did not hear of it until ten minutes later. When his father, Commodore Joseph Smith, who was on duty at Washington, saw by the first dispatch from Fortress Monroe that the *Congress* had shown the white flag, he said, quietly, "Joe's dead!" After speaking of the death of Lieutenant Smith, Lieutenant Pendergrast says, in his official report: "Seeing that our men were being killed without the prospect of any relief from the *Minnesota*, . . . not being able to get a single gun to bear upon the enemy, and the ship being on fire in several places, upon consultation with Commander William Smith we deemed it proper to haul down our colors." Lieutenant Smith's sword was sent to his father by the enemy under a flag of truce.—ED.

and found them abandoned. Lieutenant Pembroke Jones was then dispatched to Norfolk, some miles distant, to call upon General Huger, who was in command, and learn the condition of affairs. He returned during the afternoon, reporting, to our great surprise, the town deserted by our troops and the navy-yard on fire. This precipitate retreat was entirely unnecessary, for while the *Virginia* remained afloat, Norfolk was safe, or, at all events, not tenable by the enemy, and James River was partly guarded, for we could have retired behind the obstructions in the channel at Craney Island, and, with the batteries at that point, could have held the place, certainly until all the valuable stores and machinery had been removed from the navy-yard. Moreover, had the *Virginia* been afloat at the time of the battles around Richmond, General McClellan would hardly have retreated to James River; for, had he done so, we could at any time have closed it, and rendered any position on it untenable.

However, Norfolk evacuated, our occupation was gone, and the next thing to be decided was what should be done with the ship. Two courses of action were open to us: we might have run the blockade of the forts and done some damage to the shipping there and at the mouth of the York River, provided they did not get out of our way,—for, with our great draught and low rate of speed, the enemy's transports would have gone where we could not follow them; and the *Monitor* and other iron-clads would engage us with every advantage, playing around us as rabbits around a sloth, and the end would have been the certain loss of the vessel. On the other hand, the pilots said repeatedly, if the ship were lightened to eighteen feet, they could take her up James River to Harrison's Landing or City Point, where she could have been put in fighting trim again, and be in a position to assist in the defense of Richmond. The commodore decided upon this course. Calling all hands on deck, he told them what he wished done. Sharp and quick work was necessary; for, to be successful, the ship must be lightened five feet, and we must pass the batteries at Newport News and the fleet below before daylight next morning. The crew gave three cheers, and went to work with a will, throwing overboard the ballast from the fan-tails, as well as that below, all spare stores, water, indeed everything but our powder and shot. By midnight the ship had lightened three feet, when, to our amazement, the pilots said it was useless to do more, that with the westerly wind blowing, the tide would be cut down so that the ship would not go up even to Jamestown Flats; indeed, they would not take the respon-

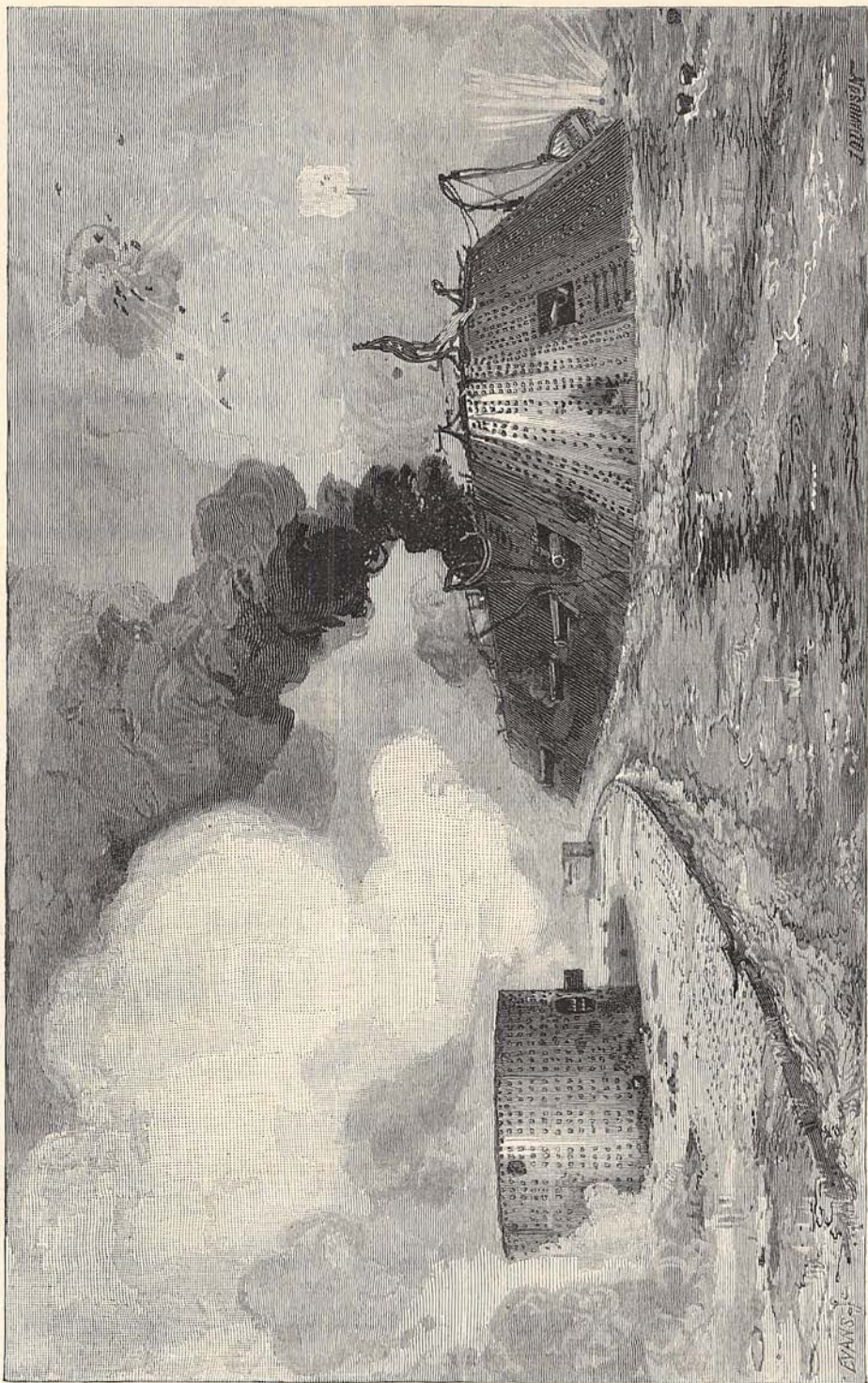


CAPTAIN VAN BRUNT, COMMANDER OF THE "MINNESOTA."

In his official report, Captain Van Brunt says of the fight, as viewed from the *Minnesota*: "At 6 A. M. the enemy again appeared, . . . and I beat to quarters; but they ran past my ship and were heading for Fortress Monroe, and the retreat was beaten to enable my men to get something to eat. The *Merrimac* ran down near the Rip-Raps and then turned into the channel through which I had come. Again all hands were called to quarters, and opened upon her with my stern-guns, and made signal to the *Monitor* to attack the enemy. She immediately ran down in my wake, right within the range of the *Merrimac*, completely covering my ship, as far as was possible with her diminutive dimensions, and, much to my astonishment, laid herself right alongside of the *Merrimac*, and the contrast was that of a pigmy to a giant. Gun after gun was fired by the *Monitor*, which was returned with whole broadsides from the Rebels, with no more effect, apparently, than so many pebble-stones thrown by a child. . . . The *Merrimac*, finding that she could make nothing of the *Monitor*, turned her attention once more to me. In the morning she had put one eleven-inch shot under my counter, near the water-line, and now, on her second approach, I opened upon her with all my broadside-guns and ten-inch pivot—a broadside which would have blown out of water any timber-built ship in the world. She returned my fire with her rifled bow-gun with a shell which passed through the chief engineer's state-room, through the engineers' mess-room amidships, and burst in the boatswain's room, tearing four rooms all into one, in its passage exploding two charges of powder, which set the ship on fire, but it was promptly extinguished by a party headed by my first lieutenant."

sibility of taking her up the river at all. This extraordinary conduct of the pilots rendered some other plan immediately necessary. Moral: All officers, as far as possible, should learn to do their own piloting.

The ship had been so lifted as to be unfit for action; two feet of her hull below the shield was exposed. She could not be sunk again by letting in water without putting out the furnace fires and flooding the magazines. Never was a commander forced by circumstances over which he had no control into a more painful position than was Commodore Tatnall. But coolly and calmly he decided, and gave orders to destroy the ship; determining if he could not save his vessel, at all events not to sacrifice three hundred brave and faithful men. That he acted wisely, the fight at Drury's Bluff, which was the salvation of Richmond, soon after proved. She was run ashore near Craney Island and the crew landed with their small-arms and two days' provisions.



THE ENCOUNTER AT SHORT RANGE.

Having only two boats, it took three hours to disembark. Lieutenant Catesby Jones and myself were the last to leave. Setting her on fire fore and aft, she was soon in a blaze, and by the light of our burning ship we pulled for the shore, landing at daybreak. We marched 22 miles to Suffolk and took the cars for Richmond.

The news of the destruction of the *Virginia* caused a most profound feeling of disappointment and indignation throughout the South, particularly as so much was expected of the ship after our first success. On Commodore Tatnall the most unsparing and cruel aspersions were cast. He promptly demanded a court of inquiry, and, not satisfied with this, a court-martial, whose unanimous finding after considering the facts and circumstances was: "Being thus situated, the only alternative, in the opinion of the court, was to abandon and burn the ship then and there; which, in the judgment of the court, was deliberately and wisely done by order of the accused. Wherefore, the court do award the said Captain Josiah Tatnall an honorable acquittal."

It only remains now to speak of our last meeting with the *Monitor*. Arriving at Richmond, we heard that the enemy's fleet were ascending James River, and the result was great alarm; for, relying upon the *Virginia*, not a gun had been mounted to protect the city from a water attack. We were hurried to Drury's Bluff, the first high ground below the city, seven miles distant. [See map of the Peninsula on page 774.—ED.] Here, for two days, exposed to constant rain, in bottomless mud and without shelter, on scant provisions, we worked unceasingly, mounting guns and obstructing the river. In this we were aided by the crews of small vessels which had escaped up the river before Norfolk was abandoned. The *Jamestown* and some small sailing-vessels were sunk in the channel, but owing to the high water occasioned by a freshet the obstructions were only partial. We had only succeeded in getting into position three thirty-twos and two sixty-fours (shell guns) and were without sufficient supply of ammunition, when on the 15th of May the iron-clad *Galena*, followed by the *Monitor* and three others, hove in sight. We opened fire as soon as they came within range, directing most of it on the *Galena*. This vessel was handled very skillfully. Coming up within six hundred yards of the battery, she anchored, and, with a spring from her quarter, presented her broadside; this under a heavy fire, and in a narrow river, with a strong current. The *Monitor* and others anchored just below, answering our fire deliberately; but, owing to the great elevation of the battery, their fire was in a great measure ineffectual, though two guns were dismounted

and several men were killed and wounded. While this was going on, our sharpshooters were at work on both banks. Lieutenant Catesby Jones, in his report, speaks of this service: "Lieutenant Wood, with a portion of the men, did good service as sharpshooters. The enemy were excessively annoyed by their fire. His position was well chosen and gallantly maintained in spite of the shell, shrapnel, grape and canister fired at them."



THE LATE COMMANDER SAMUEL DANA GREENE, EXECUTIVE OFFICER OF THE "MONITOR." (FROM A PHOTOGRAPH DURING THE WAR BY HALLECK.) [SEE PAGE 763.]

Finding they could make no impression on our works, the *Galena*, after an action of four hours, returned down the river with her consorts. Her loss was about forty killed and wounded.

This was one of the boldest and best-conducted operations of the war, and one of which very little notice has been taken. Had Commodore Rodgers been supported by a few brigades, landed at City Point or above on the south side, Richmond would have been evacuated. The *Virginia's* crew alone barred his way to Richmond; otherwise the obstructions would not have prevented his steaming up to the city, which would have been as much at his mercy as was New Orleans before the fleet of Farragut.

It should be remembered that as spring opened General McClellan was urged by the administration and the press to make a forward movement. Anticipating this, General J. E. Johnston, better to cover Richmond and to shorten his lines, retired to the Rappahannock and later to the James. General McClellan wisely determined to use the navi-

gable waters either of the James or the York River to approach Richmond; and as the James was closed by the *Virginia* in a manner he could not have foreseen, he was forced to use the York as his base of action against Richmond—a circumstance that saved that city from capture for three years.

The engagement at Drury's Bluff, or Fort

Darling, as it is sometimes called, was the last service of the *Virginia's* crew as a body; soon after they were scattered among the different vessels at Southern ports. The *Monitor*, too, disappeared from sight a few months later, foundering off Cape Hatteras while on a voyage to Charleston. So short-lived were the two vessels that revolutionized the navies of the world.

John Taylor Wood.

IN THE "MONITOR" TURRET.*

MARCH 9, 1862.



CAPTAIN JOHN ERICSSON, INVENTOR OF THE "MONITOR." (FROM A PHOTOGRAPH BY BRADY.)

THE keel of the most famous vessel of modern times, Captain Ericsson's first iron-clad,† was laid in the shipyard of Thomas F. Rowland, at Greenpoint, Brooklyn, in October, 1861, and on the 30th of January, 1862, the novel craft was launched. On the 25th of February she was commissioned and turned over to the Government, and nine days later left New York for Hampton Roads, where, on the 9th of March, occurred the memorable contest with the *Merrimac*. On her next venture on the open sea she foundered off Cape Hatteras in a gale of wind (December 29). During her career of less than a year, she had no fewer than five different commanders; but it was the fortune of the writer to serve as her only executive officer, standing upon her deck when she was launched, and leaving it but a few minutes before she sank.

So hurried was the preparation of the *Monitor* that the mechanics worked upon her night and day up to the hour of her departure, and little opportunity was offered to drill the crew at the guns, to work the turret, and to become familiar with the other unusual features of the vessel. The crew was, in fact, composed of volunteers. Lieutenant Worden, having been authorized by the Navy Department to select his men from any ship-of-war in New York harbor, addressed the crews of the *North Carolina* and *Sabine*, stating fully

* The general features of the *Monitor* are well known. The vessel was an iron-clad steam battery. The thin lower hull was protected by an overhanging armor. A revolving turret, containing the guns, was situated over all, 41 feet 6 inches; draught of water, 11 feet; inside diameter of turret, 20 feet; height of turret, 9 feet; thickness of turret, 8 inches; thickness of side armor, 5 inches; thickness of deck-plates, 1 inch; thickness of pilot-house, 9 inches. Her deck was one foot above the water-line. She carried two 11-inch smooth-bore guns, firing solid shot weighing 180 pounds. Her speed was between four and five knots. A novel feature was the absence of smoke-stacks in action; they and the pipes over the blowers were taken apart and laid flat on deck, which gave an all-round fire abaft. The draught to the furnaces was maintained by powerful blowers. The tops of the smoke-stacks were six feet above the deck, and the blower-pipes four and a half feet. These openings in the deck were covered by iron gratings. Her people were: Lieutenant J. L. Worden, commanding; Lieutenant S. D. Greene, executive officer; Acting Master, L. N. Stodder; Acting Master, J. N. Webber; Acting Master's Mate, George Frederickson; Acting Assistant Surgeon, D. C. Logue; Acting Assistant Paymaster, W. F. Keeler; Chief Engineer, A. C. Stimers, inspector; First Assistant Engineer, Isaac Newton, in charge of steam machinery; Second Assistant Engineer, A. B. Campbell; Third Assistant Engineer, R. W. Hands; Fourth Assistant Engineer, M. T. Sunstrom; Captain's Clerk, Daniel Toffey; Quartermaster, Peter Williams; Gunner's Mate, Joseph Crown; Boatswain's Mate, John Stocking; and forty-two others—a total of fifty-eight souls.—S. D. G.

† For details respecting the invention of the *Monitor*, the reader is referred to a biographical paper on Captain Ericsson by Colonel W. C. Church in this magazine for April, 1879. The origin of the name *Monitor* is given in the following letter to Gustavus V. Fox, Assistant Secretary of the Navy. [ED.]—

NEW YORK, January 20th, 1862.

SIR:

In accordance with your request, I now submit for your approbation a name for the floating battery at Green Point.

The impregnable and aggressive character of this structure will admonish the leaders of the Southern Rebellion that the batteries on the banks of their rivers will no longer present barriers to the entrance of the Union forces. The iron-clad intruder will thus prove a severe monitor to those leaders.