The Merrimac and Monitor Naval Engagement Illustrated.
A COMPREHENSIVE SKETCH

OF THE

MERRIMAC AND MONITOR

NAVAL BATTLE

GIVING AN ACCURATE ACCOUNT OF THE MOST IMPORTANT
NAVAL ENGAGEMENT IN THE ANNALS OF WAR

ILLUSTRATED

PUBLISHED BY THE MERRIMAC AND MONITOR
PANORAMA COMPANY

COR. MADISON AVE. & FIFTY-NINTH ST.
NEW YORK
1886
In the above building is a vivid and realistic representation of the great naval battle between the confederate iron-clad Merrimac and its consorts, and the iron-clad Monitor, and several large wooden ships of war of the United States Navy.

More than 20,000 square feet of canvas cover the inner walls of the building, while the floor is covered with natural ground, water, grass, trees and other accessories, so perfectly, that the observer who stands in the centre of all, cannot discern where the real joins the representation, nor can he fail to imagine himself on the very spot, with the actual conflict going on about him.

MERRIMAC AND MONITOR, BY THEO. POILPOT

AUTHOR OF

The Panorama of the Battle of Reischoffen, Paris.
" " Battle of Buzenval, Paris.
" " Charge of Balaclava, London.
" " Passage of the Danube, Russia.
" " Battle of Shiloh, Chicago,

and the Battle of Manassas, or Second Battle of Bull Run, Washington, D. C., which will be completed in February, 1886.

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THE

MERRIMAC AND MONITOR NAVAL BATTLE.

The furious battle in Hampton Roads in the spring of 1862, which began with the sinking of the Cumberland, the burning of the Congress, the setting on fire of the Minnesota, and the rout of the Roanoke and St. Lawrence—all Federal men-of-war—by the great iron-clad Merrimac in a single afternoon, and ended with the gallant attack of the tiny Monitor upon the big floating battery the next morning, is one of the most momentous and remarkable naval engagements known in history. None of the features of war that make battles glorious were wanting in this sanguinary conflict upon the shallow strait which on that spring morning separated the camp of the Northern troops from the white tents and grim batteries of the soldiers of the South. The tale of that day abounds in deeds of valor and heroic achievement from the hour the Cumberland sank with guns roaring and colors flying until the brave commander of the Monitor, with his eyes blinded from the effects of the enemy's shot, gave orders from the couch where he lay to his gallant comrades about him. But the great and lasting issue of the battle between the Merrimac and the Monitor is the fact that it revolutionized the Navies of the world. This was the first fight of iron-clad vessels, and its effect was to pronounce the doom of line-of-battle ships, and to demonstrate that rams and iron-clads were in future to decide all naval warfare. Another remarkable feature of this combat to prove the hardihood and gallantry of the men engaged, is the circumstance that both of the vessels were in a great measure mere experiments, and upon experimental trips when they met and fought, and that to the danger from fire and sword was added to one of them, the Monitor, the peril of foundering at sea.

Before the summer of 1861 had passed, both sides engaged in the fratricidal struggle of North against South had awakened to a realization of the stubbornness of the conflict, and knew that the combat would be long and bitter. All thoughts of an early cessation of hostilities had been put aside, and the entire country was under tribute to furnish brains, men and money for an extended and hazardous campaign. Three years before, naval officers and marine constructors had been much interested in the successful application of armor-plating to the steam-frigate La Gloire of the fleet of Napoleon III., which was immediately followed by the Admiralty of England similarly fitting out the Warrior and Ironsides. None of these iron-clad vessels had been tested in actual warfare, however, and it was therefore as an experiment that Lieutenant George M. Brooke, who had resigned from the United States Navy when the South seceded, suggested to Secretary of War Mallory of the Confederacy, that the frigate Merrimac, which had been burned and sunk at Norfolk when the Federal troops abandoned the Navy Yard, should be raised, re-built and plated with armor to be used against the wooden war vessels of the North in the coming spring.

His plans were approved, and the work was at once begun in the Norfolk Navy Yard. Great pains were taken to keep all information concerning the fitting out of this iron-clad from the Navy Department of the North, but early in the fall news of the undertaking reached Washington. The Secretary of the Navy and his advisers had already been discussing the project of constructing iron-clad vessels for use against the South, and this news awakened them to a sense of the necessity of taking immediate action in the matter. Then John Ericsson laid the foundation of his fame. He had been studying the subject of armor-plating ever since La Gloire had been thus protected, and he now laid his plans before Secretary of the Navy Gideon Welles. Captain Ericsson's idea was to construct what he called a "fighting machine," on an entirely different plan from that of all other armor-plated vessels. Instead of a great floating fort of unwieldy bulk, he designed an almost impregnable steam battery of light draught, suitable to navigate the shallow rivers and harbors of the Confederate States.
It was necessary that work should be begun at once, in order that the new vessel should be ready to combat the re-constructed Merrimac when navigation opened in the spring, and in October the keel was laid in the Navy Yard at Green Point. She was finished in January and commissioned in February. The name Monitor, which has since become the generic name of all war vessels of her class, was given to the new fighting machine by Captain Ericsson, and he thus explained the origin to Gustavus V. Fox, the Assistant Secretary of the Navy:

NEW YORK, Jan. 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.

But there are other leaders who will also be startled and admonished by the booming of the guns from the impregnable iron turret. "Downing street" will hardly view with indifference this last "Yankee notion," this Monitor. To the Lords of the Admiralty the new craft will be a Monitor suggesting doubts as to the propriety of completing those four steel-clad ships at three-and-a-half millions apiece. On these and many similar grounds I propose to name the new battery, Monitor.

Your obedient servant,

J. Ericsson.
When the Monitor was in trim for battle she resembled—to quote a Confederate officer who saw her assail the Merrimac from Sewall's Point—"a tin can on a shingle." A newspaper correspondent wrote, that at a mile's distance she would be taken for a raft with an army ambulance amidships. She was 172 feet in length, from stem to stern, and her thin, lower hull was protected by an overhanging armor. Her deck was one foot above the water line, and in the centre was a revolving turret containing the guns—two 10-inch smooth bores, firing solid shot weighing 150 pounds. Her speed was between four and five knots per hour. In action, her smokestacks were taken apart and laid flat on deck, the draught to the engines being maintained by powerful blowers. The pilot-house was situated well forward, near the bow. It was built of wrought-iron logs nine inches thick, bolted through the corners, and covered with an iron plate two inches thick, which was not fastened, but kept in place only by its weight, in order to furnish an egress for the crew in case of necessity. The sight-holes were made by inserting quarter-inch plates at the corners between the upper set of logs and those next below. This structure presented a flat surface on all sides and on top. It projected four feet above the deck, and was barely large enough to hold three men standing. The preparations for the departure of the Monitor were so hurried that the mechanics worked upon her night and day until the hour of her departure, so that no opportunity was offered to drill the crew at the guns, to work the revolving turret or to familiarize the crew with the unusual features of the vessel. The Monitor was commanded by Lieutenant J. L. Worden, and her executive officer was Lieutenant S. Dana Greene, a boy of 22 years. Her crew were all volunteers, Lieutenant Worden having been authorized to select his men from the crew of any man-of-war in New York Harbor. The Lieutenant addressed the crews of the North Carolina and the Saline, telling the men of the dangers of a sea-voyage in an untried iron vessel, and the certainty of perilous warfare upon their arrival in Hampton Roads if the trips were accomplished in safety. Scores of sailors responded enthusiastically to this appeal; and when, on Thursday morning, March 6, 1862, the Monitor left New York in tow of a tug-boat, she carried as brave a handful of officers and as bold a crew as ever floated. The other officers besides Worden and Greene were 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, First Assistant Engineer Isaac Newton, Second Assistant Engineer A. B. Campbell, Third Assistant Engineer R. W. Hands, Fourth Assistant Engineer M. T. Sunstrom, Captain's Clerk Daniel Taffey, Quartermaster Peter Williams, Gunner's Mate Joseph Crown and Boatswain's Mate John Stocking. The crew numbered 42 others, a total of 58 men. Such were the gallant mariners who started on a stormy March day,
braving the perils of shipwreck in their iron shell only that they might encounter greater dangers from an enemy's fleet for God and their country.

On the day after the Monitor left New York Harbor for Hampton Roads the Merrimac steamed away from the Norfolk Navy Yard to try the effects of her armament upon the wooden fleet that the little fighting-machine unknown to them had started out to protect. Had the Monitor started a day earlier, or had the Merrimac waited twenty-four hours longer before leaving Norfolk, the result might have been very different, for the big iron-clad would then
have been compelled to fight the Monitor and the wooden vessels all at once, instead of having the opportunity to disable the latter first.

The Merrimac, before she was sunk at Norfolk, was a frigate of 3,500 tons and forty guns. She was more than three hundred feet in length. When she was raised she was cut down to her old berth deck and both ends for seventy feet was covered over, so that when the vessel was in fighting trim they were just even with the water. On the midship section a roof of pitch-pine and oak, one hundred and seventy feet long, was built at an angle of forty-five degrees. This roof was twenty-four inches thick, and extended from the water line to a height of seven feet above the gun deck. Both ends rounded so that pivot-guns could be used as bow and stern-chasers. This wooden backing was covered with iron plates, two inches thick and eight inches wide, the first tiers being put on horizontally, and the outside tier perpendicularly, and the whole bolted through the woodwork and clinched inside. The prow was of cast iron, projecting four feet, and the pilot-house was forward of the smoke-stack, and covered with four inches of iron, as were the sides. The rudder and propeller were entirely unprotected. The weakest point of the big iron-clad was her motive power. Both engines and boilers had been condemned on her return from her last trip, and were very defective. They could not be depended upon for six hours at a time. When this vast floating battery was completed she was re-christened the Virginia, and was known by that name throughout the South, but in the naval records she has always been known as the Merrimac.

\[\text{HEAVY GUNS IN FORT AT NEWPORT NEWS POINT.}\]

The Merrimac had as gallant a complement of officers and as brave a crew as shipped in the Monitor. Her flag-officer was Commodore Franklin Buchanan, who commanded Lieut. Catesby, Ap R. Jones, the executive officer; Lieut. Charles C. Simons, Lieut. R. D. Minor, Lieut. Hunter Davidson, Lieut. John Taylor Wood, Lieut. J. R. Eggleston, Lieut. Walter Butt; Midshipmen Foute, Marmaduke, Littlepage, Craig, Long and Rootes; Paymaster James Semple, Surgeon Dinwiddie Phillips, Assistant Surgeon Algernon S. Garnett, Chief Engineer H. A. Ramsay, Captain of Marines Reuben Thom, Boatswain Hooker, Gunner Oliver, Captain Kevil, commanding a detachment of the Norfolk United Artillery, and a crew of three hundred men. As was the case with the Monitor, workmen had been on the Merrimac up to the hour of sailing, and there had been no opportunity of drilling the men in the management of the guns or the handling of the floating arsenal. Her officers and crew were strangers to each other and to the ship. She traveled at a slow rate of speed, and steered so badly that, with her great length, it took her from thirty to forty minutes to turn, while her draft of twenty-two feet of water confined her to a comparatively narrow channel in the Roads. Nevertheless she was faster than any wooden sailing vessel, and her great weight, with the iron ram at her prow, would have sunk any vessel that then floated.
THE scene of this poignant and great scene of the war appeared to his eye on the spot at the battle.
It was about eleven o'clock on the morning of Saturday, March 8th, that the great iron-clad steamed out of Norfolk and up the Elizabeth River to Hampton Roads, where the wooden war-ships Cumberland and Congress lay at anchor off Newport News, while seven miles further the war-frigates Minnesota, Roanoke and St. Lawrence were anchored off Fortress Monroe. The Minnesota and Roanoke had been sister-ships of the Merrimac before she was rebuilt as an iron-clad, and carried forty guns each. The St. Lawrence and the Congress carried each fifty guns, and the Cumberland thirty.

MONITOR AND MERRIMAC.

It was a beautiful spring morning that the Merrimac started upon her murderous cruise. There had been a light rain the night before, and the sails of the Cumberland and Congress were loosed to dry, washed clothes hung in their rigging and the sailors were lounging carelessly about in the sunshine, when the great black monster hove in sight from the South and headed directly toward them, resembling, as the pilot of the Cumberland said in his report, "a huge half-submerged crocodile." Lieutenant George U. Morris was in command of the Cumberland, Captain Radford, her commander, being absent on the Roanoke at a Court of Enquiry. Lieutenant Morris gave orders to prepare for instant action, and the Cumberland was sprung across the channel so that her broadside would bear upon the Merrimac. When the huge intruder had arrived within a mile's distance the Cumberland opened upon her with the pivot-guns and a little later the whole broadside fired upon her; but to the consternation of officers and men, their heavy projectiles bounded from the mailed roof of the Merrimac like balls of India rubber, and the only effect of the volley was to cut off her flag-staff and bring down the Confederate colors. The Congress also opened upon the big ironclad, and the Cumberland fired broadside after broadside with

the effect, finally, of blowing the muzzles off two guns and tearing up the carriage of another, besides riddling the steam pipes and smoke stack, and sweeping away everything outside clean; and killing and wounding twenty-one men. It did not, however, stop her headway. The Merrimac's ram, also, was left in the Cumberland. The black monster advanced steadily until within a few feet of the Cumberland, when she sent a single shell through the port quarter, killing four marines and five seamen, and followed it up with a murderous broadside at point-blank range that mowed down officers, marines, gunners and sailors before it.
The *Merrimac* then steamed a mile up the James River and, turning, came down under full speed, and struck the ill-fated *Cumberland* under the starboard bow, knocking every man on board from his feet, and straightening the heavy cable chain out like a whipcord. It drove a hole in the hull the size of a hogshead, and keeled the ship over so that her yard-arms nearly touched the water, but the force of the resistance was such as to break the projecting ram from the prow of the iron-clad. The *Cumberland* fired broadside after broadside, but the *Merrimac* slowly fell astern, firing as she went, and doing terrible execution.

"Surrender that ship, Morris, or I'll sink her," shouted Lieut. Jones, a former schoolmate of Lieut. Morris, through one of the port holes in the *Merrimac*.

"Sink her and be damned," replied Morris, "I'll go down with her, first."

A moment later the red flag, meaning "No surrender," was run up to the *Cumberland's* fore-truck. Again the *Merrimac* ran down upon her, striking her amidships and doing murderous work with her guns. The decks of the frigate were slippery with blood, and the scuppers ran red, but not a man faltered. As fast as one gun's crew were killed, another took its place, and thus gallantly fighting, the vessel slowly sunk lower and lower in the water, and one after another her guns were submerged. A shell entered the ship's galley, and exploded in the coppers, scattering small fragments in every direction, and killing or wounding every man in the vicinity. In the forward part of the ship, from the galley to the manger, lay heaps of the dead and dying; and mangled, gasping forms crawled helplessly upon the bloody decks. The captain of one gun had both legs shot off below the knee, but he hobbled to his gun and pulled the string, and was crushed to death by the recoil of the piece upon him.

The *Cumberland* settled fast, but her guns were fired after the water was knee-deep upon her decks. Then Lieut. Morris shouted:

"Up, my brave boys, and save yourselves! Every man for himself, and God for us all!"

All of the boats had been shot away but one, and it was filled by those who were fortunate enough to reach it first. The wounded were in the after cock-pit, and the chaplain went down with them, all perishing with the ship. Some of the uninjured sailors who came to the surface of the water were shot, and others who were able to swim reached Newport News in safety. Lieut. Morris sprang overboard as the ship sank and was rescued by his men, and the *Cumberland* went down in fifty-four feet of water, up to her cross-trees, with the flag of the Union still floating from her top-mast. Her commander had made the most desperate resistance against fearful odds known to the annals of naval warfare, for he knew that to surrender his ship, with her valuable armament, would be to turn her over to the Confederates for use against the Federal fleet.

The victorious iron-clad now turned her attention to the *Congress*, pouring in a murderous
fire upon her, and receiving no damage in return from the other's broadsides. The Congress, however, fought gallantly for an hour after the Cumberland went down, but her losses were terrible, and she finally ran up the white flag. The Minnesota, St. Lawrence and Roanoke had all started down from Fortress Monroe when the firing began, but the channel was so shallow that the two latter went aground only a mile or two below the fort, and the Minnesota herself ran aground near the scene of action.

From the Federal batteries at Newport News officers and men had watched the defeat of the two frigates in great consternation, but they were powerless to render any assistance, and their fire had no effect upon the iron-clad Merrimac. The iron-clad was followed from Norfolk by the Confederate gun-boats of the James River squad; and as soon as the Congress floated the white flag Commodore Buchanan ordered the Beaufort and Raleigh to steam alongside, take off the men, and set the frigate on fire. Lieut. Smith, commander of the Congress, had been killed, and Lieut. Pendergrast, who succeeded him, delivered his sword and colors to Lieut. Parker of the Beaufort, who ordered him to return to his ship and have the wounded removed as rapidly as possible. Meanwhile the Federal forces at Camp Butler, under command of Gen. Mansfield, kept up a hot fire upon the Confederate gun-boats. The 20th Indiana Regiment and the 1st and 2d Volunteers and 11th Fire Zouaves Regiments of New York, with several other detachments, were lined along the shore, and sharp-shooters from their rifle-pits on the banks picked off officers and men on the decks and in the rigging. Confederate officers cried to Gen. Mansfield to cease firing, and pointed to the white flag of the Congress.

"The ship may float the white flag," shouted the General in return, "but we do n't."

Federal Battery L., of the Fourth United States Artillery, under command of Capt. R. V. W. Howard, Lieut. Joseph P. Sanger, and Lieut. Hasbrouck, also kept up an incessant fire upon the Confederate gun-boats from Newport News. Lieut. Sanger opened upon two tugs that went alongside of the Congress, bursting the steam-chest of one, and driving both away, and at the same time a lucky shot exploded the steam-chest of the Confederate gunboat, Yorktown, which floated off and grounded on Sewall's Point. Lieut. Taylor and Midshipman Hutter, of the Raleigh, were killed, and the fire finally became so hot that the gunboats were driven away with only thirty prisoners.

Finding that he would be unable to take possession of the Congress, Commodore Buchanan ordered that she be fired with hot shot, and in a short time she was in flames fore and aft. Lieut. Pendergrast and most of his men were still on board, but most of them effected their escape through the blazing rigging and sails, and swam to Newport News, where many of the wounded died on shore. Commodore Buchanan had been severely wounded during the last engagement, and the command now devolved upon Lieut. Catesby Jones. The Minnesota was aground and at his mercy; but, as it was five o'clock and darkness was approaching, the pilots
of the Merrimac would not attempt the middle channel with the ebb-tide against them. The Merrimac therefore returned to Sewall's Point, intending to capture or destroy the Minnesota in the morning. The flag-staff had been repeatedly carried away, and during the latter part of the combat the colors were kept flying from the smoke-stack and a boarding-pike. The damage to the Merrimac was all to the exterior of the vessel, and her armor was hardly injured. At Sewall's Point, Commodore Buchanan and the other wounded were sent to the Naval Hospital, and as one of the officers afterward said: "We slept at our guns, dreaming of other victories in the morning."

The Merrimac's crushing victory over the two Federal war ships having taken place within sight of both camps, the news was received in Washington and Richmond before nightfall. In the South the victory was, of course, the occasion of the wildest rejoicing, but in the North the utmost consternation was felt. President Lincoln called a meeting of the Cabinet, upon receiving the news, and each member manifested great depression.

"The Merrimac," said Secretary 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. We may even receive a shell or a cannon-ball from the Merrimac in the White House."

All during that night the Congress burned in Hampton Roads, watched by hundreds of soldiers from Newport News and Sewall's Point, and by the sailors on board the Minnesota, lying aground and expecting to be scuttled in the morning by the remorseless black monster that had destroyed her sister ships. The burning vessel, seen from the shore, was a beautiful sight as the flames crept up the rigging and every mast, spar and rope glittered against the sky in dazzling lines of fire. For hours the flames raged, with hardly a perceptible change in the wondrous picture, and at regular intervals loaded guns and shells, exploding as the fire reached them, sent forth their deep reverberations echoing and re-echoing from every headland of the bay. The masts and rigging were still standing apparently almost intact, when, about two o'clock in the morning, the sky was rent by a tremendous flash and a vast sheet of flame rose high into the air. Blazing fragments filled the sky, and, after a long interval, a deep, deafening report announced the explosion of the ship's powder magazine. The hull of the vessel still remained intact, however, and continued to burn until its brightness was effaced by the morning sun.

But the joyful anticipations of the Confederacy were doomed to disappointments as the gloomy forebodings of President Lincoln and his Cabinet were destined not to be realized. During that day of carnage and blood the gallant little Monitor had been bravely buffeting her
way southward to Hampton Roads. The day before she had only avoided foundering with all on board by the herculean efforts of officers and crew. The berth-deck hatch leaked in spite of all that could be done, and the water came down under the turret like a waterfall, and through the narrow eye-holes in the pilot-house with such force as to knock the helmsman completely round from the wheel. The water also came through the blower-pipes in such quantities that the belts of the blower engines slipped; and, the artificial draught upon the engines ceasing, the fires could not get enough air for combustion. To add to their peril, when Engineers Stimers and Newton rushed into the engine-room to repair this difficulty, they were almost suffocated by escaping gas, and it was necessary to carry them to the top of the turret to revive them. The water now poured in through the hawser-hole and down the smoke-stacks and blower-pipes in such quantities as to threaten to sink the vessel. The engine-room was uninhabitable on account of the gas, the steam-pumps could not be operated because the fires had been almost extinguished, and, when the hand-pumps were tried they were found not to have sufficient force to throw the water through the top of the turret, the only opening. Lieut. Greene said that it was only the subsidence of the wind that prevented the vessel from sinking. But toward evening it became calm, and the engines were again put in operation. At midnight rough weather was again encountered, and, to add to the other difficulties, the wheel-ropes were jammed. All night officers and men fought the leaks, and toward morning smooth water was once more reached.

At four o'clock on the afternoon of that day, which proved calm and peaceful, the little Monitor passed Cape Henry and heard the booming of the guns that were then setting fire to

The ill-fated Congress. Steaming into Hampton Roads, unperceived by the enemy's vessels in the darkness, Lieut. Worden found the Minnesota hard aground, expecting to be scuttled in the morning, and learned the extent of the disasters inflicted upon the Congress and Cumberland by the Merrimac. The Congress was then burning brightly, and the men on the Monitor witnessed the final explosion, and by the light of the burning vessel saw the top-masts of the Cumberland rising from the water with the Union flag that had been defended so valorously still flying from the peak. Undaunted by the terrible destruction her huge adversary had accomplished, the little Monitor prepared to attack her in the morning; and when daylight broke on Sunday the Merrimac and her consort were discovered at anchor off Sewall's Point. Lieut. Greene, of the Monitor, has called attention to the fact that the physical condition of the officers and men of the two ships was in striking contrast. "The Merrimac," he said, "had passed the night quietly near Sewall's Point, her people enjoying rest and sleep, elated by the thoughts of the victory they had achieved that day, and cheered by the prospects of another easy victory on the morrow. The Monitor had barely escaped shipwreck twice within the last thirty-six hours, and since Friday morning (forty-eight hours before) few, if any, of those on board had closed their eyes in sleep, or had anything to eat but hard bread, as cooking was impossible."

At half-past seven o'clock the Merrimac left Sewall's Point and steered in the direction of the Minnesota. Her officers had detected the Monitor, and knew that she was the iron-clad that had been building in Greenpoint, but victory had made them confident, and the diminutive aspect
of the little fighting machine provoked their ridicule. The Monitor at once advanced to meet the bulky iron-clad in order to keep her as far away from the helpless Minnesota as possible. Lieut. Worden took his place in the pilot-house, and with him were Pilot Howard and Quartermaster Williams, who steered the vessel throughout the engagement. Lieut. Greene had charge of the guns in the turret, assisted by Acting-Master Stodder, Chief Engineer Stimers and sixteen brawny men. As the Monitor reached the Merrimac the wooden vessels left her, and the next moment the Monitor fired the first shot. The Merrimac retaliated with a broadside, and several heavy shots struck the turret, which remained intact and continued to revolve. This gave the gunners confidence, and broadsides were exchanged as fast as the guns could be served, sometimes at a distance of only two or three yards apart. The little Monitor dodged about her bulky adversary trying to find a vulnerable spot; once a dash was made at the stern to disable the screw, but the vessel missed its mark. The Merrimac aimed most of her shots at the turret of the Monitor, and the iron hail beating upon the iron roof almost deafened the gunners with its terrible detonations. Acting-Master Stodder was disabled by a shot that struck the turret as he was leaning against it, and his work devolved upon Engineer Stimers. The speaking-tube from the pilot-house to the turret was broken early in the action, so that it was impossible for the Commander to communicate with the Executive Officer except by means of messengers, which greatly increased the difficulties of the emergency, since a great many technical communications miscarried. Once the Merrimac tried to ram the Monitor, but the little vessel nimbly dodged the blow, and at the same moment Lieut. Greene planted a one hundred and eighty pound shot upon the forward part of the other's casement.

All the morning the battle raged at close quarters, but, soon after noon, a shell from the Merrimac struck the sight-hole in the forward side of the pilot house, and exploding lifted the iron plate and completely blinded Lieut. Worden, who was standing immediately behind it. The flood of light rushing into the pilot house caused Worden, in his blinded condition, to believe that the vessel was severely injured; he gave orders to sheer off, and left Lieut. Greene in command. Wounded and suffering as he was, Lieut. Worden's fortitude never forsook him, and when he was told that the Minnesota was saved, he said: "Then I can die happy," Lieut. Greene at once ordered another attack upon the Merrimac, but it was discovered that she was on her way to Sewell's Point. A few shots were fired after her, and she continued on her way to Norfolk. Both the Merrimac and the Monitor claimed the victory in this first contest of iron-clads—the Merrimac on the ground that the Monitor first sheered off; while the Monitor's officers insist that, though they temporarily discontinued hostilities, the Merrimac was the first to retreat. Lieut. Greene says: "It has never been denied that the object of the Merrimac on the 9th of March was to complete the destruction of the Union fleet in Hampton Roads, and that in this she was completely foiled and driven off by the Monitor; nor has it been denied that, at the close of the engagement, the Merrimac retreated to Norfolk, leaving the Monitor in possession of the field."

Both of the vessels that were destined to revolutionize naval warfare were short-lived. The Merrimac, upon arriving at Norfolk, was placed in dry-dock and thoroughly repaired, a much heavier ram being substituted for the one she had lost in the attack upon the Cumberland. Commodore Josiah Tatnall was placed in command when the repairs were completed, and early in April the Merrimac again steamed down to Hampton Roads. No more fighting was done, however; and, when the Confederates evacuated Norfolk, Commodore Tatnall was obliged to burn the Merrimac in James River to prevent her falling into the hands of the Federal troops. In December of the same year the Monitor foundered and sunk with many of her crew in a storm off Cape Hatteras, while on her way to Charleston.
WHAT IS SEEN IN THE PANORAMA.

THE Panorama presents pictures of both day’s battle, bringing in
the action with the Monitor on the second day, and depicting
also the carnage wrought by the Merrimac on the day before.
The burning of the Congress, the sinking of the Cumberland, and the
short range engagement between the Monitor and the Merrimac, are the
principal figures of the naval scene. The land scene represents Camp
Butler at Newport News, whence the Federal troops watched the
overthrow of their own fleet and drove the Confederate gunboats from
the surrendered Congress on one day, and witnessed the engagement of
the great ironclad with the tiny Monitor on the next.

The point of view of the spectator is from Newport News Point. The
gray-bearded officer on the white horse is Gen. Mansfield, and the horse-
men with him are members of his staff, and Col. Brown and Adjt.
Stiles of the 20th Indiana Infantry. Back of them are the white
tents of the camp and the houses of the village. Nearer the blazing
Congress the artillery is being brought into position, and upon the beach
soldiers are running to the rescue of the shipwrecked crew. To the
right of the Congress, in the shallow water, the Minnesota rests aground.
Opposite Camp Butler the Monitor and the Merrimac are raining shot
and shell upon each other’s iron sides, and the two smaller Confederate
vessels, Jamestown and Yorktown, are firing upon the Minnesota further
out the Roads, while the neutral vessels of the British and French fleets
are observing the battle in the distance. At the right of the scene the
gallant Cumberland is sinking with her guns roaring and colors flying,
her crew escaping by the life-boats or attempting to swim ashore. Far
to the east Fortress Monroe is dimly outlined with the rip-raps fortifi-
cation in mid-channel opposite, to the right. The rifle pits and earth-
works of Camp Butler are accurately represented, and the 11th N. Y.
Fire Zouaves are portrayed advancing rapidly between the white tents
to the shore to take part in the conflict.
BURNING OF THE CONGRESS.

Gillies Brothers & Turnure, The Art Age Press, 75-79 Fulton Street, New York.