# IRON-CLAD STEAMERS.

## Report of the Naval Board on the Stevens Battery.

## A Full, Scientific and Interesting Description of It.

## Half a Million of Dollars Expended by Government.

## The Board Opposed to Its Completion,

&c., &c., &c.

WASHINGTON, Dec. 31, 1861.

The board of naval and scientific gentlemen appointed by the Secretary of the Navy, agreeably to a resolution of Congress, to examine the Stevens Battery, have, after a long and thorough investigation, reported as follows:—

THE REPORT.

NAVY YARD, BROOKLYN, Dec. 24, 1861.

SIR—In obedience to orders from the Navy Department appointing the undersigned members of a board to examine the iron steam battery now building at Hoboken, N. J., and ascertain what will be the cost of completing the same, how soon it can be completed, and the expediency thereof, we met at this place on the 1st ult., and entered upon the above duties by examining so much of the battery as has already been constructed, and by desiring Mr. Stevens to furnish us with plans and descriptions of the vessel as she would be when completed and ready for service.

These latter were received on the 15th inst., previous to which the board had visited the battery frequently; and, having carefully examined the vessel as far as advanced, and the plans submitted for the completion, we beg leave respectfully to report that we found upon the grounds of Mr. Stevens, at Hoboken, situated in an excavation or dock, a long, slender iron vessel, in an unfinished state, evidently intended for high speed in smooth water.

DESCRIPTION OF THE PORTION ALREADY BUILT.

HULL.

The shell of the vessel is completed up to a height of twenty-one feet from the bottom, but without the decks or beams upon which they are to rest. This vessel is 420 feet long by 45 feet extreme breadth. The iron plating, with the exception of a keel plate, which is ten inches wide and one inch thick, and the garboard streaks, which are thirty inches wide and five-eighths of an inch thick, is half-inch thick, riveted to ribs of angle iron six inches deep, three inches wide and one-half inch thick, a similar angle iron, reversed, being riveted to each rib. These ribs are spaced two feet apart throughout the entire length. Extending across the bottom of the vessel, at each rib, are floor timbers two feet deep, formed of plate iron one-half inch thick, along the lower edge of which is riveted the angle iron ribs, and along the top edge of which is riveted the reversed angle iron.

BOILERS.

Upon fore and aft keelsons, of box form, made of plate iron six inches in depth, and fastened to the tops of the floor timbers, are placed two horizontal five tube boilers, with the tubes over the furnaces; the boilers are arranged similarly to those in our large naval vessels—namely, five on each side with one fire room amidships, running fore and aft, common to both sides. These boilers occupy eighty feet of the length of the vessel, commencing one hundred and twenty-four feet from the stern. Within these boilers are thirty furnaces, with tubes of two and a half inches diameter, and ranging from seven feet to eight and a half in length, placed over them. The shells of the boilers are one-quarter of an inch thick, single riveted, with stays one and a quarter inches diameter, placed twelve inches apart, attached to crow feet, the toes of which are six inches apart, thus staying the flat surfaces every six inches. They contain, in the aggregate, 876 square feet of grate surface, and 28,000 square feet of fire surface, as follows:—

| | |
|---|---|
| Tubes, square feet | 23,380 |
| Furnaces | 2,050 |
| Connections | 1,890 |
| Tube sheets | 680 |
| Total | 28,000 |

ENGINES.

Immediately abaft the boilers are the main engines, eight in number, already in a nearly completed state, occupying the whole breadth and depth of the present structure for a length of fifty-three feet. There are two propeller shafts, with four engines upon each, so arranged that each propeller is quite independent of the other. The engines are vertical, overhead beam, condensing engines, having common jet condensers, with vertical air pumps, one condenser and air pump serving for two engines. Each cylinder is forty-five and three-fourths inches diameter by three and one-half feet stroke of piston.

The crank shaft of each engine is forged separately, with cranks and crank pins forged on. These shafts are then connected together by a rigid coupling in such a manner that the entire shafting to each propeller during a length of one hundred and eighty-six feet is rigid throughout. The brasses to these shafts are hollow, so that water may circulate through them and keep the journals cool. The engines are provided with the ordinary slide valve without cut-offs, worked by the ordinary Stephenson link to cut off by lap at about half stroke. All the links upon each side are connected to a receiving gear operated by a pair of reversing engines, very conveniently arranged, so that one man may readily manage, slow down, stop, start or reverse the four engines attached to each propeller.

Forward of the boilers are two pumping engines and pumps for feeding the boilers, also two engines attached to each extremity of the same shaft, which extends across the ship, and upon which there is to be a large fan blower, drawing its supply of air down through bomb-proof gratings in the bomb-proof deck above, creating throughout the lower part of the vessel an excess of pressure. This is to cause in the furnaces of the boilers a powerful draught, independent of the height of the chimney, and throughout other parts a thorough ventilation.

GIRDERS AND ENGINE FRAMES.

In rear of the boilers, attached to the sides of the ship, are strong plate iron beams, running fore and aft, about fourteen feet up from the bottom. To these are attached five plate iron girder frames, extending across the ship, and placed one immediately forward of the forward boilers, and the other four between each pair of boilers. These fore and aft beams and athwart ship girder frames are very strong, and well calculated to strengthen that part of the hull, besides being capable of supporting any superincumbent weight that may be brought upon them amidships. The engine frames are eight in number, formed of plate iron, each extending quite across the vessel, and firmly fastened to the sides, near the bottom, and at a height of about fourteen feet above it. These engine frames are also well calculated to support any required superincumbent weight which it may be desirable to place upon them amidships.

WORK REMAINING TO BE DONE.

It now remains to complete a small portion of the plating near the bow and stern; put in the beams and decks; attach a fore and aft keelson to the the floor timbers amidships throughout the whole length of the vessel; make the flue connections and chimney to the boilers; connect the engines, and add a few wanting pieces; put in floor plates to engine and fire rooms; make and attach the propeller shaft bearers to the outside of the vessel; supply the propellers; put in the required bulk heads; apply the armor and the machinery for loading and working the guns, and to manufacture the guns themselves.

CHANGE OF PLANS.

Before describing the plans proposed for completing the vessel, it is proper to state that the original projector of the vessel was the late Robert L. Stevens, Esq., deceased; and that his brother, Edwin A. Stevens, Esq., who now proposes to complete it, has materially changed the plans from what appears to have been originally intended. Instead of the vertical sides above water, clothed with armor and pierced with gun ports, which seems to have been the design of Robert L. Stevens, the plans presented to us bear date of November, 1861, and resemble the inclined armor plated ships, the designs of which have been patented in England by Captain Adderly Sleigh, in July, 1858, and by Mr. Josiah Jones, in November, 1859, with the important exception that in the English plans the inclined armor is pierced with gun ports, having an ordinary battery, with the guns and gunners protected overhead by a bomb-proof deck; whereas Mr. Stevens places his guns on the top of the upper deck, depending upon the immense size for their own protection, and for the protection of the gunners who aim and fire them, the training and loading of the guns to be accomplished by novel arrangements of steam machinery below the deck, yet to be elaborated; the guns to be trained to a certain position and depressed twenty degrees, to bring the bore in the same straight line with that of a steam cylinder below, to the piston head of which is attached a rammer and sponge.

DESCRIPTION AND PLANS PROPOSED FOR HER COMPLETION.

The present plans of Mr. Stevens for completing the battery, of which the following description is derived from information, with illustrative drawings, furnished us on call of the Board by him, contemplate an ordinary deck forward and abaft the machinery, fourteen feet from the bottom, beneath which will be coal, fresh and salt water tanks, and powder magazines, and upon which will be salt water tanks, provisions and shell rooms. At twenty-one feet from the bottom a deck, which forward and abaft the machinery will be bomb-proof, by having a bottom layer of plate iron one-half inch thick; above this a layer of wooden planking six inches thick, covered with another layer of iron one inch thick. This deck is continued over the machinery, but in this part is of ordinary material and strength.

THE ARMOR ABOVE WATER.

Over this latter part of the twenty-one feet deck is constructed the inclined armor, extending from three feet beyond the present side of the vessel to fourteen feet inboard, and seven feet high, giving an upper deck, upon which the guns are to be placed, of twenty-three feet wide amidships. This inclined armor is formed of plate iron in seven laminae, six of which are one inch thick each, and the seventh three-quarters of an inch, making the thickness of iron six and three quarter inches. Supporting this iron armor are iron beams eight inches deep, filled in between with locust. Under these again are locust planks six inches thick, making in all six and three-quarter inches of iron and fourteen inches of wood, placed at an angle of about twenty-seven degrees with the horizon. The forward and after ends of what may be termed the loading house, within this inclined armor, are enclosed by similar armor, inclined in a fore and aft direction; and it is forward and abaft of this that the twenty-one feet deck is bomb-proof.

The flat deck uniting the upper edges of this inclined armor is one hundred and twenty feet long, and is made bomb-proof by having, first, a layer of plate iron one-half inch thick beneath the beams, between which is laid wooden planking six inches thick, which again receives two layers of iron of three-quarters of an inch thickness each. Through this deck the heated gases from the boilers rise between the bars of a bomb-proof grating, an ordinary smoke pipe rising above the grating, which is to be removed, if desired, on going into action. Forward of the inclined armor upon the twenty-one feet bomb-proof deck are the capstan for weighing the anchors and the quarters for the men. Abaft the armor, upon the same deck, are the quarters for the officers, cabin, ward and steerages. This bomb-proof deck and the inclined sides of the armor are covered with a light deck of two inch planking, supported by wooden beams five inches square and two feet apart, placed at such a height that its upper side is flush with the bomb proof platform upon which the guns rest. The edges of this light deck are supported by light iron sides one-quarter of an inch thick, running up vertically from the outboard edge of the armor.

THE ARMOR BELOW WATER.

From the twenty-one feet line downwards six feet the sides of the vessel are protected by armor composed first of oak timbers placed next to the iron plating of the ship, having a thickness at its upper edge of three feet, with a triangular cross section, such that its outboard side forms a continuation of the slanting side of the vessel, which, up to this point of meeting the armor, has an angle with the perpendicular of about twenty-six degrees. From the twenty-one feet line down the outer side of this oaken armor extends to a depth of three feet iron plating two inches thick, within which, down to a depth of two feet, is iron plating one and one-half inches thick, so that the side armor of the vessel, extending throughout its entire length, consists of iron three and a half inches thick to a depth of two feet, and two inches thick for one foot farther down, backed by solid oak three feet thick at the upper edge amidships, the thickness gradually lessening as it descends, until at six feet depth the iron sides of the vessel itself are depended upon. As the vessel will draw twenty-one feet when loaded with stores, ammunition and coal, the upper edge of this side armor will be on a level with the surface of the water. Near the bow and stern the oaken part of the side armor is not so thick as amidships, being two feet thick at its upper edge at forty feet from the bow and sixty feet from the stern.

MASTS.

There are to be two short masts of hollow plated iron, arranged with hinges near the deck, similar to those in the English steamer Great Western, so that they may be lowered to the deck when going into action.

THE ARMAMENT.

The armament proposed consists of five 15-inch Rodman guns, weighing with their carriages 60,000 pounds each, and two 10-inch rifled guns, weighing with their carriages 40,000 pounds each. These, as before stated, are placed upon the extreme upper deck, over the engines and boilers. The deck upon which they rest is supported by columns of wrought iron, which rest upon the engine frames and the strong plate iron girders before described as rising from the bottom and sides of the ship between the boilers. These guns are mounted upon carriages of a novel construction, so arranged that they may be trained to any point in the horizon by simply revolving a vertical shaft, which passes down through the deck and is attached to steam machinery below. The upper end of the shaft terminates in a T head or horizontal cross bar, whose length is equal to the interior breadth of the gun carriages. Between this head, or cross bar, and the interior ends of the carriage are india rubber springs forty inches long, and when the gun is fired it is expected, from experiments which have been tried with a ten-inch gun of 10,000 pounds weight, and a charge of powder of eighteen and three-quarters pounds, throwing solid shot weighing 124 pounds, and calculations deduced from them, that the gun will recoil at a maximum twenty inches, or one half the length of the springs, and that the reaction of these springs will restore the gun to the position which it occupied before it was fired—similar springs upon the opposite side of the cross bar receiving the shock caused by their reaction.

It is expected there will be one man on this upper deck in time of action to each gun, who will direct by appropriate signals, or indicators, its training to those below, and aim and fire it. It is considered by Mr. Stevens that guns of this size will not be injured even when struck by the enemy's shot. This, however, is to be the subject of experiment before the completion of the vessel, and if an opposite result should be arrived at from these trials they are to be protected by wrought iron armor, in a manner about which he has no doubt, and that when a gunner sees a shot coming he can stand on the friendly side of the gun for his protection, the carriage underneath the gun being made shot-proof by wrought iron armor plates. When the gun is to be loaded, the gunner on deck causes it to be trained to the loading position, which in each case brings the gun nearly in line with the keel; he then depresses it about twenty degrees, bringing its muzzle opposite a bomb-proof opening in the deck corresponding in size and direction to the bore of the gun. Below the deck is a long slender steam cylinder, having upon the outer and upper extremity of its piston rod a compound sponge and rammer. The attendant admits steam to either side of this piston as required and sponges out the gun; then the ammunition, being placed in a position near the muzzle, is rammed home by the steam rammer, after which it is elevated by the gunner above, trained upon the enemy and fired.

PROTECTION BY PARTIAL SINKING.

When the vessel prepares for action with the enemy she is settled to a greater than ordinary draught by the admission of salt water, as follows:—

| | Tons. |
|---|---|
| Water to be admitted into tanks below two feet line | 213 |
| Do. do. interstices of the coal | 350 |
| Water to be pumped up into tanks on deck | 537 |
| Total water for settling | 1,100 |

Only one half of this water is required when the ship is already down to her deep load line, but the whole amount is provided for, so that she may be brought to the fighting draught when her coal and provisions are nearly out. This settling of the vessel is for the purpose of adding to the armor plates the protection secured by water against shot.

TO BE LIGHTED WITH GAS.

The vessel is to be lighted with gas generated on board by placing the retort in one of the boiler furnaces, in a manner similar to that now in use on board the ferry boat Hoboken.

FLOATATION AND STABILITY.

To determine the floatation and stability of the ship, we have carefully computed the weight of the vessel and all that it is expected to put in it, with their centre of gravity, the displacement of the vessel, the centre of gravity of displacement, and the height of the metacentre. The displacement of the side armor is included in computing that of the vessel, and the extra beam it gives the ship was considered in estimating the height of the metacentre. The weights include those of four hundred men and officers, provisions for three months, ten thousand gallons of fresh water in tanks, one hundred and twenty-five rounds of shot and shell, one hundred and fifty rounds of powder, and eight hundred tons of coal. The result of the calculations is as follows:—

DRAUGHT OF WATER, TWENTY-ONE FEET.

| | |
|---|---|
| Displacement in cubic feet | 188,248 |
| Displacement in tons of 35 cubic feet each, tons | 5,378.5 |
| Add for iron plating | 18.5 |
| Total displacement, tons | 5,397.0 |
| Area of midship sections, square feet | 817.6 |
| Area of load water line | 13,788.0 |
| Displacement per inch at load line, tons | 32.8 |
| Weight of loaded ship by computation | 5,280.0 |
| Add for contingent | 117.0 |
| Total weight provided for, tons | 5,397.0 |
| Depth of centre of gravity of loaded ship, below load water line, feet | 5.49 |
| Depth of centre of gravity of displacement, below load water line | 8.657 |
| Heighth of metacentre above centre of gravity of displacement | 10.535 |

DATA FOR JUDGING OF THE FORM OF THE VESSEL.

| Midship Section. | | Area of Immersion Sec. | |
|---|---|---|---|
| Height from Bottom. Ft. | Breadth. Feet. | Distances from Bow. Feet. | Areas. Square Feet. |
| 21 | 51.0 | 20 | 51.0 |
| 20 | 49.8 | 40 | 136.8 |
| 19 | 48.8 | 60 | 240.0 |
| 18 | 47.8 | 80 | 250.6 |
| 17 | 46.8 | 100 | 466.0 |
| 16 | 45.8 | 120 | 584.6 |
| 15 | 44.8 | 140 | 783.0 |
| 14 | 43.8 | 160 | 748.8 |
| 13 | 42.8 | 180 | 799.8 |
| 12 | 41.8 | 200 | 817.6 |
| 11 | 40.8 | 220 | 803.4 |
| 10 | 39.8 | 240 | 776.4 |
| 9 | 38.8 | 260 | 704.0 |
| 8 | 37.8 | 280 | 617.8 |
| 7 | 36.8 | 300 | 516.4 |
| 6 | 35.8 | 320 | 422.4 |
| 5 | 35.0 | 340 | 323.2 |
| 4 | 33.8 | 360 | 228.2 |
| 3 | 32.2 | 380 | 120.6 |
| 2 | 28.0 | 400 | 33.8 |
| 1 | 17.6 | — | — |

Having thus described the vessel and its appurtenances, it remains to state the cost, time required for its completion and the expediency thereof.

COST.

| | |
|---|---|
| The total cost of the vessel complete (except stores) is estimated to be | $1,283,294 00 |
| Of this amount there has already been paid by the government | 500,000 00 |
| Leaving yet to be provided for | 783,294 00 |
| Of this latter sum Mr. Stevens states, that he has expended from his own resources towards the completion of the ship | 228,435 87 |
| Leaving as a representatives of the amount of work yet to be done | 554,858 13 |

TIME REQUIRED FOR COMPLETION.

The time required for completing the entire structure, ready for service, is estimated by Mr. Stevens at four months from the date of recommencing the work.

EXPEDIENCY OF COMPLETING HER.

The expediency of incurring the above expense in producing such a vessel as described is only determined by examining in detail the many novel characteristics she would possess.

She differs from the ordinary war vessels with which we are acquainted. First, in having long slender ends. Second, in employing two independent propellers with several engines attached to each. Third, in depending entirely upon a force blower for the ventilation of the lower part of the vessel when in action. Fourth, in employing a heavier armament than has ever yet been put afloat, and training and loading these heavy guns by steam machinery below the deck, manipulated by persons who do not see the guns. Five, in having the guns exposed to the direct fire of the enemy upon the top of, instead of within, an iron clad vessel. Six, in settling the vessel when going into action, and in several other respects which will develop themselves in the course of this report.

1. The great length of this vessel, compared with the transverse strength, strikes a nautical man at once, and a careful investigation clearly indicates that it would be the heighth of professional imprudence to send such a vessel to sea. The action of the waves would cause her to writhe and twist to an extent that would soon open the seams of her light iron sides. Her use, if completed, would therefore be confined to the defence of the harbor; her inconvenient length and draught of water, which could not be reduced to much less than nineteen feet, even for this service, when fully equipped, would militate against her usefulness to a certain extent.

2. The employment of two independent propellers instead of one would appear to possess great advantages in effecting great rapidity of manoeuvres when in the presence of the enemy, and would be all the more useful to her for being compelled to confine her operations to the defence of the harbor, the channels of which would be rendered comparatively restricted by her great length and draught of water.

The application of more than two engines to one propeller shaft, arranged, as in the case of this vessel, to occupy a considerable portion of its length, has its advantages and disadvantages. It no doubt distributes over a greater area the reactive strains which the engines bring upon the vessel when they are in operation, but it also adds to the first cost of the machinery, the space occupied and the labor of attendance.

3. In ventilating the lower part of the vessel by artificial means during action, it must not be forgotten that fresh air is a constant necessity to human life, and to maintain it in this vessel there must be always steam up and the fan in operation.

4. One of the most important features of the vessel is that of using very heavy guns. The five fifteen-inch smooth bore and the two ten-inch rifle guns, throw fifty per cent greater weight of metal, per broadside, than our heaviest forty-four gun steam frigates, armed with heavy Dahlgren guns.

5. It being a part of the design of this vessel that these guns shall be large enough for their own protection against the shot of the enemy, it would be well to examine the question of how large must be the mass of cast iron to secure it against injury from such a source. The fifteen-inch Rodman gun, now at Fortress Monroe, is four feet diameter at the breech, and two feet one inch at the muzzle, is fifteen feet ten inches long and weighs 49,100 pounds. Experiments were tried at Woolwich, in England, in September, 1857, by firing from a sixty-eight pounder, ninety-five hundred weight gun, with a charge of sixteen pounds of powder, four wrought iron shot, at a distance of six hundred yards, and cast iron shot at a distance of four hundred yards, at a target composed of three cast iron blocks, each eight feet long, two feet high and two and a half feet thick—average weight of each block eight tons. They were placed one above another, a groove being cast on the upper surface of the upper block, three inches deep by fourteen inches wide, to receive a corresponding projection on the under surface of the block above it. This target was supported in rear by a rectangular mass, consisting of six heavy blocks of granite, each block 4½x3x2 feet, leaving four and a half feet of the centre of the target unsupported. This wall of cast iron was struck ten times and entirely destroyed. (*Vide* "Naval Gunnery," by General Sir Howard Douglas; fifth edition, pp. 464 and 465.)

There is no doubt in our minds that the metal of the Rodman gun is much stronger than that of the cast iron blocks forming the target above described—(for reason of which see "Notes on Sea Coast Defence," by Major Barnard, United States Army, p. 36)—but still the results are so remarkable that until further experiments are tried, bearing more immediately upon the case, we cannot consider any cast iron gun as proof against the assaults of heavy ordnance when exposed, as these are, to the direct aim of the enemy, by being placed upon the extreme upper deck of the vessel, with neither bulwarks nor railing to screen them from view, and with the necessity of being trained to a position nearly in line with the keel every time they are loaded. Mr. Stevens has stated to the Board that, if experiment shall establish that the guns are not thus, in themselves, their own protection from the effect of shot, he is prepared to clothe them with angular wrought iron armor, which he considers will be effective.

6. The project of settling the vessel down two feet beyond her deep load draft, when preparing her for action, by admitting water from the sea to different compartments of the vessel, and, after the battle is over, elevating her again to the normal draft, by pumping the water out, is so remarkable a departure from all previous naval practice that the Board has given the subject considerable attention in its various bearings upon practical operations. Firstly, with regard to the compartments within the vessels which are to receive this water. The statement of Mr. Stevens upon this point is that 213 tons are to be admitted into tanks below two feet line. Now, these tanks are neither more nor less than the spaces between the floor timbers of the ship, or, in other words, the bilge, a part of the vessel that every prudent commander keeps as free from water as possible; but, aside from this, it is well known that the bilge water, of steamers especially, is constantly liable to choke the pumps, on account of the debris contained in it, so much so that in all good steamships several different pumps are arranged to pump from the bilge, not so much with the expectation that they will all be required at once as that some of them may certainly be in good pumping order.

The statement of Mr. Stevens further is, that three hundred and fifty tons are to be put into the interstices of the coal. This we regard as highly impracticable. To say nothing of the impossibility of getting coal from the bunkers while they are full of water, the difficulty of again pumping the water out, filled as it would be with small particles and dust of the coal, entirely precludes, in our opinion, the use of that part of the ship for such a purpose. Mr. Stevens proposes to use a kind of pump for this purpose which, it would appear, has worked very well for similar purposes in civil engineering. Its application to vessels-of-war, however, is novel, and it is liable therefore to the objection of all untried projects.

*Secondly*—The quarters for the men and officers are upon the bombproof deck, which is about on a level with the surface of the water at the ordinary deep load draft, and would therefore be about two feet below it when the vessel was in action. The sides above this deck are made of thin iron, easily perforated by the lightest artillery, so that a heavy shot forward or abaft the loading house, making a large perforation near the water line, would flood this entire deck, adding immediately an enormous weight to the vessel for which no provision has been made. But one consequence could follow such a disaster—the ship would sink.

From these considerations it is very clear to us that whatever theoretical excellence there may be in partially sinking the vessel for her better protection in time of action with an enemy, the plans here proposed for putting the project into execution are entirely impracticable, and would never be resorted to by any prudent commander.

HULL NOT SUFFICIENTLY STRONG TO SUPPORT THE ARMOR.

The sides of the vessel above the fourteen feet line have no extra support beyond those usually applied to a merchant steamer; and yet in the proposed plan they are to sustain the weight of the side armor and the upright side, which rises from its outer edge, which amount to 350 tons; added to this is one-half the upper inclined armor, which protects the sides of the loading house under the guns, making together 800 tons to be carried by the upper edges of these light overhanging sides, without any extra provisions being made to carry any extra weight whatever. This strikes us as a remarkable defect, which it would be difficult to remedy in any manner, even if the buoyancy was sufficient to carry the added weight of such remedies.

EFFICIENCY OF THE ARMOR.

Aside from the above defect there can be little doubt but that the loading house is efficiently protected against the heaviest ordnance now afloat in any part of the world. Above water the armor is fifty per cent thicker than that which is applied to the French and English iron clad vessels, and instead of being placed at right angles to the line of direct fire is at an acute angle with it—an immense advantage in attaining impregnability.

The side armor, where it joins this upper loading house portion, is well calculated to protect the vessel, if she be kept at all times down to the loaded draft; but forward of this during a length of 96 feet, and abaft for a length of 136 feet, we regard it as very deficient in having the iron plating placed in an inclined position, while the oaken backing only supports it horizontally. Although the shot comes in a horizontal direction, the pressure upon the plating is at right angles to its surface, and, therefore partially upward, the result would be that the iron would give way for want of proper support in the direction where the support was needed. This would not admit the first shot that strikes this armor to the interior of the vessel below the bomb-proof deck, but there would be very little protection against the next shot which struck near the same place.

POWER AND SPEED OF THE VESSEL.

In designing the power of the vessel, and determining the amount of steam power which should be placed in her, great sacrifices have been made to attain the very important desideratum in a war steamer—high speed.

It is claimed by Mr. Stevens that her machinery is capable of exerting a power of 8,600 horses, and that this will give her a speed of twenty sea miles per hour—greater, it is believed, than that of any war steamer in the world.

Although, for reasons already stated, the sphere of action of the vessel would necessarily be confined to the defence of the harbor, where great speed for any distance would not be required, but where, nevertheless, a high speed, even for a very short distance, might, when manoeuvring against an enemy, be of immense advantage. Indeed, the great power claimed would be of very great advantage simply when applied to the propellers in opposite directions for the purpose of turning around quickly.

To obtain this power of 8,600 horses it is proposed to carry within the boilers a pressure of fifty pounds per square inch, and to run the engines seventy-five revolutions per minute.

With the above pressure and revolutions given the power would be obtained; but prudent engineers would not place the limit of maximum pressure to be at any time carried upon boilers of this description at higher than twenty five pounds per square inch. Not the slightest objection is urged against the use of steam of as high a pressure as fifty pounds per square inch, however, even when, as in this case, salt water is to be used in the boilers, because, as far as the latter condition could be brought as an objection, it is replied that such a pressure and the resulting power would only be required for a short time at probably great intervals; but if high pressure is desired, boilers strong enough to carry it with perfect safety should always be provided.

With regard to running these engines at a speed of seventy-five revolutions per minute, it will be remembered that each system of crank shafts has eight bearings, or one at each engine frame, and that although the part which receives the power of each engine has been forged separately from the others, they are coupled rigidly together, giving what is virtually a single rigid crank-shaft of fifty-three feet in length, with eight bearings. Each of these bearings are so arranged that it may be turned as on a pivot, both in a horizontal and a vertical direction, which would be a very useful quality if there were but two bearings, as then the axis of each could always point towards the other, no matter in what direction the cramping of the ship would move them. But it is clear that where there are more than two, each bearing must remain in a fixed position, or their axis will not be in a straight line. But these bearings, extended over so great a length of the vessel, would, when the full power of the engines were upon them, depart materially from the straight line which perhaps existed when in a state of rest, and the result would be that the journals of the shafts would be cramped in their bearings to an extent that would cause them to heat beyond the power of water to keep them cool, when running at a higher speed than forty revolutions per minute.

There would be little or no difficulty, however, in overcoming this defect by substituting moveable for the rigid couplings between the crank-shafts of each separate engine. With this modification there would be no difficulty, as far as the machinery was concerned, in running them eighty revolutions per minute. The power of 8,600 horses would, therefore, be multiplied as follows:—

The mean effective pressure per square inch upon the piston, when carrying fifty pounds of steam in the boilers, was fifty pounds, in the calculations of Mr. Stevens. When carrying twenty-five pounds in the boilers, this would be twenty-nine pounds, which would therefore give $86,000 \times \frac{80 \times 29}{75 \times 50} = 5,320$ horses power. Even this allowance gives the boilers credit for the excellent performance of producing one horse power for every five and one-fourth square feet of fire surface.

If, therefore, 8,600 horses power would produce a speed of twenty miles an hour, that of 5,320 horses power would give $\sqrt[3]{20^3 \times \frac{5,320}{8,600}} = 17$ miles, nearly.

With regard to having allowed in this modification of the power an increased number of revolutions with a lessened pressure, it may be proper to state that the propellers have not yet been designed, and it will only be necessary to give a less pitch to them than would have been required with the greater pressure.

INABILITY TO FIRE IN A LINE WITH THE KEEL.

One of the important features claimed for this vessel is, that each of her guns may sweep the horizon without changing the direction of the ship; that she would advance upon the foe with her unrivalled speed, firing her enormous guns in a direct line with her keel as she approached. Similarly, that if chased by a superior force, she could retire rapidly at the same time that nearly her whole armament was sending back its destructive shot and shell.

The armament, considered by itself, is certainly as well arranged for firing several guns in a line with the keel as in any other direction; but it will be remembered that, forward of the guns, forming the quarters for the men, and abaft them, forming quarters for the officers, is a light wooden deck made of two inch planking, supported by wooden beams five inches square, placed two feet apart. Every artillerist knows what would become of this deck upon firing the first 410 lb. shell across it a distance of 120 feet. It would be demolished, and so also would the same deck where it extends over the inclined armor, when the guns were fired *en* broadside. But here it would not be of so much importance; the deck and the light sides which support it could be dispensed with, and might well be left out in the construction of the vessel; but the deck forward and abaft are necessities, and would be destroyed by any prudent commander only when driven to the last resort. She would be compelled, therefore, to lay her broadside to the enemy, exposing to his fire the full length of each gun every time it was placed in position for loading.

CONCLUSION.

In conclusion, we beg leave to express our highest appreciation of the objects Mr. Stevens has apparently had in view when planning this vessel—the most powerful battery, the highest speed, and the most thorough protection of any vessel yet produced—and our regret that the plans of the vessel as presented to us would not, in our opinion, accomplish fully and completely the ends proposed. We look with the deepest interest upon every addition to the efficiency of our navy of whatever character, and gladly hail every improvement made to any department of it; but at the same time we cannot recommend the expenditure of important sums of money upon projects of more than doubtful success when put into practical execution, and, therefore, we do not deem it expedient to complete this vessel upon the plans proposed.

All of which is submitted by, very respectfully, your obedient servants,

S. H. STRINGHAM, President of the Board.
WM. INMAN, Commander.
THOS. A. DORNIN, Captain U. S. N.
ALBAN C. STIMERS, Chief Engineer U. S. N.

Hon. GIDEON WELLES, Secretary of the Navy, Washington, D. C.

Attached to the foregoing is the

REPORT OF PROF. HENRY.

I readily concur with the other members of the Board of Commissioners in the statement given in the foregoing report, as to the condition of the vessel, as it now is, and in reference to the general account of the plan proposed by Mr. Stevens for finishing it, as well as in the statement given as to the amount of money and length of time which would be required to complete the vessel in accordance with the plans proposed. I also highly appreciate the objects intended by Mr. Stevens, and the laudable endeavors which he has exhibited to improve the defences of our harbors. But I cannot, with my present knowledge, concur in the decided opinion expressed by the other members of the Board in regard to the expediency of finishing the vessel.

If I rightly understand the design of Mr. Stevens, it is not to confine the operations of the battery to inner harbors, but also to employ it in outer harbors, and especially in the waters immediately beyond, and therefore the important problem to be solved is, whether the vessel can be finished in conformity with the general plan proposed so as to withstand the waves of the sea to which she may thus be subjected. All the material objections which have been brought against the plans of Mr. Stevens are, in my opinion, merged in this one question; and from a due consideration of all the facts which have thus far been presented to me, I am not convinced that it cannot be solved. On the contrary, it appears to me that, although the vessel may not be a convenient or safe ship for long voyages, she might be made of sufficient strength to withstand the exposure to which she would be subjected, and to efficiently perform the service required. If requested to do so, I will furnish the reasons for this opinion at some future time. Respectfully submitted.

JOSEPH HENRY.

# THE NAVY.

## THE BROOKLYN NAVY YARD.

THE TROUBLE AMONG THE WORKMEN—A PORTION OF THEM RETURN TO THEIR DUTIES—NEW VESSELS IN COMMISSION, ETC., ETC.

We published yesterday the fact that a great majority of the workmen employed in the Brooklyn Navy Yard had deserted their work in consequence of the late law passed by Congress relative to increasing the hours, and decreasing the pay of the men employed at the various government yards. The strike, as it may be properly termed, threatened to be a very serious affair at the outset, but from present appearances, it will, probably, end in the men coming to their senses and returning to their duties. Yesterday a great number did so, but many refused to work until the government should agree to their terms—*i. e.*, the old system. Among those who absented themselves at roll call yesterday were a number of caulkers, carpenters, &c. Many of them hung about the gates and in the neighboring taverns, discussing the merits of the case, and working themselves up to a terrible pitch of wroth against those who were, according to their idea, oppressing the poor. Some regarded it as an initiative step to still further decrease the pay of the men. Some few that our reporter conversed with appeared more reasonable in their conclusions, and would, no doubt, return to their work as soon as an example was set them. It is, we understand, the intention of the authorities of the yard to adopt the usual rules of the yard, and if a workman does not answer to his name after three days, his name is stricken from the roll and a new person appointed in his place. This method would no doubt bring the men to their senses quicker than anything else could possibly do. It is a bad policy for men to act so at the present time, and many will have to regret it.

The delegates from the other navy yards who came on here disclaim any intention to create a strike or any trouble, but say that their desire was to create a combined movement on the part of all the yards to protest against the action of Congress. Thus the matter stands, and we hope that everything will be arranged amicably.

The work at the yard yesterday was, of course, affected by this unfortunate strike, but still a good deal of business was transacted. The brig Bohio left the yard and went down the bay. Several schooners are taking on board armament, &c. They are intended to join Porter's expedition. The large mortars they carry are very formidable in their appearance, and will prove a terrible engine of warfare.

The steamers Sumter and Western World went into commission yesterday. The following are the officers, as far as reported:—

THE SUMTER.

| | |
|---|---|
| Lieutenant Commanding | Thos. Pattison. |
| Lieutenant | Henry B. Seely. |
| Acting Master | William Bates. |
| Acting Master | Levi Crowell. |
| Acting Master | John C. Dutch. |
| Acting Assistant Surgeon | Stephen H. Brown. |
| Acting Ast. Pay'r's Clerk | Edward Clarke. |
| Acting Master's Mate | Frank W. Turner. |
| Acting Master's Mate | Robert F. Ross. |
| Acting Master's Mate | William Henry. |

WESTERN WORLD.

| | |
|---|---|
| Acting Master Commanding | Samuel B. Gregory. |
| Acting Master | D. G. Pettingill. |
| Acting Assistant Surgeon | Oswald Warner. |
| Acting Master's Mate | John Ross. |
| Acting Master's Mate | John H. Gilly. |
| Acting Master's Mate | Joseph Gregory, Jr. |
| Acting Second Asst. Engineer | Chas. H. Cheesebro. |
| Acting Third Asst. Engineer | Chas. Sinclair. |
| Acting Third Asst. Engineer | H. Worden. |
| Acting Third Asst. Engineer | Thos. J. Fanont. |

## Contemplated Reception of the Union Prisoners in Baltimore.

BALTIMORE, Jan. 3, 1862.

Arrangements are being made to give the liberated Union prisoners, who are expected to arrive here to-morrow, a grand reception. There will be a military escort, and our Union citizens will also make a demonstration.

# NEWS FROM PORT ROYAL.

## Arrival of the Transports Roanoke and Cahawba.

## THE BRITISH STEAMER FINGAL,

&c., &c., &c.

The United States transport Cahawba, J. B. Baker commander, from Port Royal Dec. 30, at six P. M., arrived here yesterday morning at one o'clock; but, in consequence of the gale, we could not board her until sunrise. She sailed in company with the steamship Roanoke, which also arrived yesterday morning. January 1, at one P. M., lat. 36 14, lon. 75 14, passed sloop-of-war Cumberland, cruising; 2d, at four P. M., off Barnegat, passed steam boat Southfield, bound south.

There is nothing of interest to report from Port Royal. The Cahawba experienced for the last twenty-four hours a heavy gale from north northwest.

The Cahawba brought the following passengers:—

Captain and crew of the Frances Henrietta, one of the stone fleet; J. R. Revere, Martin Schwarts, one officer and six sick seamen of the navy.

The following is a list of the vessels in port:—

United States flagship Wabash, gunboats Florida, Pembina, Ottawa, Unadilla, Isaac Smith, Mercury, O. M. Pettit and Ellen; storeships Courier, Relief, twelve ships of the stone fleet; transport steamers Ocean Queen, Vanderbilt, Ben Deford, Matanzas, Oriental, Cosmopolitan, Boston, Delaware, Mayflower, Winfield Scott, Locust Point, Potomac, N. Sen de Regla; ships Ocean, Express, Golden Eagle, Zenas Coffin; barks Magnolia, Fanny Ealer, Charles Keen, Texas; brigs J. P. Elliott, N. Stowers; schooners Annie E. Martin, T. I. Hill, Belle of the Bay, Shark, J. T. Williams, Helene, J. Satterthwaite, W. G. Audenried, E. Clark, R. Miller, J. M. Vance, R. W. Allen, E. English, Aid, Susan F. Abbott, C. M. Neal, Lewis Chester, Preston, Sarah E. Cullen, Snowflake, J. Frambes, Anna Maria, Moonlight, Fanny Keating, Americus, Alex. Young, R. J. Mercer, D. Hulse, E. C. Knight, Spray, J. G. Stille, Virginia Price, William Mazyck, Bella Peck, Blackbird, A. M. Aldrich.

We are indebted to the kindness of Mr. J. J. Penault, purser of the United States transport Cahawba, from Port Royal, and to Mr. D. McDougal, master's mate of the Ottowa, for papers, memoranda, &c.

## OUR HILTON HEAD CORRESPONDENCE.

HILTON HEAD, S. C., Dec. 30, 1861.

*Movements of the South Atlantic Squadron—Reconnoissance in the South Edisto River—A Small Skirmish with the Enemy—A Negro Colony Organized—The British Steamer Fingal—Military Affairs—A Grand Review—Stone Laden Vessels Sent to Warsaw Inlet, &c.*

The South Atlantic blockading squadron, under Flag Officer S. F. Dupont, continues to manifest the utmost activity and efficiency. Not a single vessel that can in any way be made available is allowed to remain inactive for a day. The gunboats and light draft vessels come in here when it is necessary, and, after accomplishing their objects—generally to coal or take in water and provisions—are immediately despatched by Flag Officer Dupont to different points, where they are to maintain a vigorous blockade or to explore the streams leading into the mainland. Hardly a day elapses that one or more vessels do not come in, bearing most interesting reports of reconnoissances or engagements with the rebels, invariably of the most cheering character.

I have already reported the sloop-of-war Dale, Commander W. T. Truxton, as being at Otter Island, St. Helena Sound, where she is engaged in blockading South Edisto river and supporting our forces in the battery on that island, which, by the way, has been greatly strengthened and rendered almost impregnable by the troops there, under the supervision of Lieutenant O'Rourke, of the United States Engineers.

Commander Truxton is rapidly becoming acquainted with the rebel positions in the country about him, their strength and the best modes of getting at them with prospects of success. He gains this knowledge through boat expeditions, which have been quite successful thus far, and which frequently develope curious facts. Last Thursday, the 26th, Colonel Thomas Welsh, Forty-fifth Pennsylvania Volunteers, commanding the other island, informed Commander Truxton that a small schooner had been observed cruising about in the South Edisto by his picket guard on Fenwick Island. Commander Truxton despatched, on the following morning, the launch and first cutter with the marine guard, under the command of Acting Master William Ottiwell and Midshipman Silas N. Terry, to hunt up and, if possible, capture her. The boats were gone all day, and made a successful reconnoissance of the banks of the river, besides having quite an interesting and exciting interview with the rebels, although they did not see the schooner. Passing by Raccoon and Bailey's islands, which appeared to be deserted, although in perfect good order, Mr. Ottiwell landed his men at Pine Island to rest them after their long and fatiguing pull. He found a large deserted house there, and immediately occupied it, after throwing out his pickets to guard against surprise. While the men were at dinner a carriage was observed by the guard going through the woods at a rapid rate. Pursuit was immediately given by Mr. Ottiwell at the head of his marines, but without success. A cart partially loaded was found near, with the horse attached, and all about him he saw evidences of a late and hasty flight of the occupants. The negroes had reported to him that Governor Aikin's house was a little further up the river, and he determined to look at that. So, again entering the boats, he proceeded up the river, and soon saw the house referred to by the negroes. Approaching within fifty or sixty yards of the house, a couple of men in the uniform of officers stepped out of the door of the house, and joined a white woman, who was observed standing on the porch. They bore muskets, and evidently had some designs upon our men, as they very coolly placed their weapons upon the railing of the porch, and in a moment after they had been joined by ten or twelve soldiers, also armed, they hailed our boats, and invited Mr. Ottiwell to land. The latter very naturally inquired, "Who are you?" and the reply that they were "pickets of the Fourth South Carolina regiment" not being satisfactory, although the officers again cried out, "Come on shore, I tell you," Mr. Ottiwell not accepting their kind invitation, the whole body poured a volley into the boats, and then took to the trees. They then continued their fire, without damage to us, until the howitzer of the launch was discharged at them, as well as the muskets of the marines and boat crews, when, finding it too warm work, they ran and got behind the house. Mr. Ottiwell put a shell into the house, which exploded, and the chivalry took to their heels, and made a straight line for the negro quarters, a mile distant, followed by canister and shells from the howitzer, which materially accelerated their progress. No more secesh being seen, Mr. Ottiwell returned, without a man or boat touched. It is thought that such visits as that will keep the blood of the rebels in circulation, and prove to them that Commander Truxton is not inclined to lay inactive while they are in his neighborhood. Some very interesting facts were developed by Mr. Ottiwell, which are of interest only to the naval and military authorities.

The gunboat Seneca, under the command of Daniel Ammen, Lieutenant Commanding, has been the few days past in and about the waters of North Edisto harbor and river. Commander Ammen keeps a sharp lookout for rebels, and frequently throws a few shells into the houses on the river, when occupied by the enemy's cavalry, who infest not only the mainland, but Wadmalaw, Johns and North Edisto islands, and seem to be occupied in driving the negroes into the interior. On the 26th Commander Ammen shelled the house of a Mr. King on the river bank, and also a wood on White Point, where there is a cavalry camp. The result of the practice was very happy. The rebels fled from both points in the most rapid manner, with the loss of one man killed and one wounded. The rebels have reinforced the above points, by throwing in nearly a thousand men, and the negroes report that eight heavy guns had been brought from Charleston, two of which had been transferred to an unknown point. No doubt the enemy intend to construct a heavy battery at White Point, which protects in a measure that approach to Charleston. Yesterday White Point and the woods about it were shelled by the Seneca and the Penguin, under command of Lieutenant Commanding Budd, and fifty cavalry put to flight. Commander Ammen has been able to ascend the river to a point which is only a short distance off Charleston. Troops could easily march from it to the city in six hours. More of this hereafter. On Botany Bay Island is the negro settlement, located by us, for the benefit of contrabands; and Lieutenant Budd, of the Penguin, who guards it, has now the care of between seven and nine hundred of men, women and children, who seem to be happy enough in their colony. No commissioners from the so-called Southern confederacy are admitted or recognized by this youthful community, and they don't propose, as yet, to hold diplomatic intercourse with any nation save the United States. The Seneca brought down to-day three prisoners from the Penguin, who were *captured by the negroes on Edisto Island a week since.* The fellows (white) came from the mainland to get furniture, and about fifty negroes surrounded them and made them prisoners. The negroes are loyal, they say, and of course delivered their prisoners to Commander Budd, who took care of them and sent them here. The South Carolina negroes are so true, you know, and would fight for their masters so quickly, as we have all heard; and, to prove it, I adduce the above instance. Certainly they are rapidly learning; and if the war lasts until next June the rebels will be apt to realize the fact in a terrible manner. If the insurrectionary torch is not kindled by that time the negroes must cease acquiring knowledge; and how is it to be prevented? Captain Ammen discovered in the sand, in the deserted works of the enemy on Edisto, one hundred and forty-one 8-inch shells, loaded and with fuses in, ready for action. The fuses will be withdrawn, but the shells are of a poor quality, as are the fuses.

From Warsaw, where the Mary Anderson and Pembina are, there is no news. The Fingal is at Thunderbolt, five miles from Savannah, unable to run the blockade. She can neither get out nor return to the city, unless she unloads for the latter movement. We have her pretty close, and she must be invisible to sharp eyes if she runs out.

In military affairs there is but little transpiring worthy of note. General Sherman has been engaged the past week in reviewing and inspecting the troops in the department, and I believe that he has found them comparatively well disciplined and efficient. As a general thing they have been too much engaged upon the fortifications to allow them time to drill. But, notwithstanding all the drawbacks, they have attained a good deal of efficiency as soldiers and promise great things for the future. Gen. Viele's brigade was inspected and reviewed by General Sherman last week. They evinced a good state of discipline, and went through the movements in a commendable style.

The Forty-seventh New York, under Lieutenant Colonel Fraser, was complimented for its promptness in carrying orders with execution. Certainly the regiment did very well. General Viele is determined to make his brigade the best in the division, and I doubt not, if any man can, that he will.

General Sherman reviewed Colonel Serrell's Engineers yesterday, and was greatly pleased at their proficiency of drill and soldierly bearing. This regiment is the most valuable in the division. It has accomplished wonders here, and could not be spared for a moment by Captain Gilmore, Chief of the Engineers here.

I learn that two old whalers have been sent to-day to Warsaw, to stop up the channel leading from Savannah to the Sound. This will effectually blockade the Fingal.

## OUR NAVAL CORRESPONDENCE.

UNITED STATES GUNBOAT MERCURY, Dec. 30, 1861.

*A New Naval Expedition on the Tapis—Escape of a Rebel Privateer from Charleston Harbor—Health of the South Atlantic Squadron—Officers of the Mercury, &c.*

Our little boat, which has made itself so conspicuous since its advent in these "secesh" waters, more especially at the commencement of the bombardment of Forts Beauregard and Walker, where, it will be remembered, we made the first and most daring reconnoissance of the enemy's position. Since then we have been actively and constantly engaged in the good cause, for which we are ever ready to sacrifice our lives when necessary. Now, however, all is quiet throughout the fleet, with the exception of the preparations attending the fitting out of the launches, first and second cutters of the flagship Wabash, and four light draught gunboats, together with a large number of troops, which are destined for Bull's Island—as near as we can calculate. The expedition leaves here to-morrow at an early hour. The greatest enthusiasm exists among all engaged in the affair.

The rebel privateer Isabel succeeded, after several fruitless attempts, in running the blockade off Charleston on last Thursday night. To make matters more curious, there were eleven war vessels off that harbor at the time. The gunboat Pocahontas was despatched in pursuit, but without success, the Isabel being far the faster of the two. One more hornet let loose. The health of this station is remarkably good, considering the weather. We are all on the *qui vive* as to the result of to-morrow's expedition.

The following are the names of the officers of our little vessel:—

Acting Master in command—S. J. Manton.
Master's Mate and Executive Officer—Lewis J. Kane.
Master's Mate—Jos. Scamill.
Engineers—John Romruder and J. G. Bolander.

# MILITARY MOVEMENTS IN THE CITY.

## DEPARTURE OF THE NINETIETH REGIMENT, NEW YORK VOLUNTEERS.

This regiment will, it is expected, leave for the South at nine o'clock this morning. Their destination will most probably be Key West, Fla. The heavy baggage was sent on board the steam transport Illinois yesterday, and the regiment will embark on board the same vessel at an early hour this morning. For the last two weeks they have been stationed at Castle William, Governor's Island, where they have been daily exercised in all the usual military tactics. Mr. Wm. H. Walker, the Trustee of the regiment, visited the island yesterday and presented the men with two pairs of white gloves for each one of them. The presentation took place in the afternoon, on which occasion Mr. Walker informed the men that he would take charge of all remittances which they should forward for the support of their wives and families. The fine band of the regiment, under the leadership of Bandmaster Boswell, performed several national and patriotic airs, and the men seemed highly pleased with the prospect of being brought in a short time in contact with the would-be destroyers of our glorious Union.

## THE FIRST REGIMENT OF THE IRA HARRIS GUARD CAVALRY, COL. O. DE FOREST.

Captain A. P. Green, Senior Captain of this splendid cavalry regiment, will leave for Anapolis, where the regiment is now encamped, to-day, at two o'clock P. M., and will take on a batch of recruits and some horses. The Captain leaves a sergeant, who will still continue to take good men, of unblemished character (for none others need apply), at No. 10 Centre street.

## IRISH BRIGADE.

Recruiting for the First, Third, Fourth, and the battalion of artillery of the Fifth regiments of this brigade, now in the army of the Potomac, in General Sumner's division, has been going on successfully, and a reinforcement of one hundred men, under the command of Captains Nagle, of the Fourth, and Donovan, of the Fifth, left this city at four P. M. yesterday to join their respective regiments.

## FOURTH REGIMENT SCOTT LIFE GUARD.

This regiment is stationed on the line of the railroad between Havre de Grace and Baltimore. The headquarters of the regiment is at the former place. On New Year's day the citizens of that place had a gala time in raising a liberty pole. The occasion served a double purpose, as the inhabitants took the opportunity of serenading and otherwise complimenting Colonel Taylor, of the Fourth Regiment, than whom there is no more worthy officer in the federal service. This token of regard to Colonel Taylor was in consequence of his gentlemanly conduct in the discharge of his duties since his regiment has been guarding the railroad already mentioned.

The charges recently brought against Colonel Taylor by a clique of malcontent subordinates were recently tried by court martial. The evidence disclosed on the trial placed his accusers in rather a bad light before the Court.

## PRESENTATION OF REGIMENTAL COLORS.

The Warren Rifles, Ninety-fifth regiment New York Volunteers, were presented with a beautiful stand of colors yesterday afternoon by Richard Warren, Esq., whose name the Ninety-fifth have adopted. The ceremony took place in the square opposite Mr. Warren's residence, corner of West Sixteenth street and Fifth avenue. A large and highly respectable assemblage of ladies and gentlemen were in attendance, among whom were Rev. Dr. Osgood, Wm. C. Bryant, Rev. Dr. Morgan, George W. Blunt, Hon. Edward Tracy, Paymaster General Van Buren, Theodore Zeller, United States Army; Col. Van Buren, of the Ninth regiment; Major Alcock, of Gen. Gates' staff; Baron Eglofstein, Colonel of the Seward infantry, and Col. Bliss. Dodworth's Band was also present, together with a strong posse of police, who were drawn up in front of the house.

The presentation speech was made by Mr. Warren, whose discourse was very happy and patriotic. Mr. Warren, in the course of his remarks, alluded to the peace and happiness which existed in the country but a few months since, and contrasted them with the rebellion. He exhorted the regiment to advance fearlessly, telling them that every ball which flew from their rifles should rid the world of a traitor; that every bayonet thrust should send a rebel to his destined place. Whether many or few of them should return to their homes, they must never lose sight of the banner of their country, for it must be handed down to their children's children, so that when the union of the States was fully cemented by freedom each, one of them could say, "I helped to accomplish this result."

A very appropriate response was made by Colonel Biddle, after which the officers and invited guests partook of a bountiful repast provided by Mr. Warren.

The regiment are over seven hundred in number, a fine looking body of men, and are under the command of Col. Biddle, who is said to be a very competent officer.

The colors are of rich banner silk, of the regulation size, with embroidered stars on the blue field, and bears the inscription—

"Warren Rifles, Ninety-fifth Regiment."

## Coroners' Inquests.

THE HOUSTON STREET HOMICIDE.—The inquest in the case of Andrew Jackson Fowler, who was killed in an affray at the saloon No. 80 West Houston street, on New Year's morning, was resumed yesterday at the Eighth precinct station house. A number of witnesses were examined and much testimony was adduced, but nothing was elicited to show who inflicted the fatal wounds. One of the witnesses, Virginia Morris, testified that she lived at No. 70 West Houston street, and that on the morning of the fight, on looking out of her window, she saw deceased on the sidewalk, and a man beating and kicking him. She could not be positive who the assailant was, but she thought he resembled the prisoner, Charles Steiling, in point of size, &c. The assailant entered No. 88 West Houston street after beating deceased, and shut the door after him. That was all the witness knew about the occurrence. Coroner Wildey, who has conducted the inquest thus far, decided upon adjourning the inquest over until Monday morning, with the view of procuring some important witnesses.

THE HARLEM SHOOTING CASE.—The investigation into the circumstances attending the death of Owen Phelan, who was shot dead in an affray with James J. Wall, clerk of the steamboat Sylvan Shore, at the corner of 129th street and Fourth avenue, on Monday evening, was held yesterday, at Bellevue Hospital, by Coroner Rannay. The evidence went to show that there was a quarrel and scuffle between the parties, and that in the midst of the row Wall drew a pistol and shot his adversary in the groin. The assailant, who was present during the inquest, did not deny the shooting, but in extenuation said that he acted solely on the defensive. The jury rendered a verdict charging the prisoner with homicide, and the Coroner thereupon committed him him to the Tombs to await the action of the Grand Jury.

SUICIDE BY TAKING POISON.—Coroner Wildey was notified to hold an inquest yesterday, at No. 6[illegible] West Broadway, upon the body of Catherine Riley, a native of Ireland, aged 18 years, who committed suicide by taking some mineral poison. The inquest will probably be held to-day.