

(No Model.)

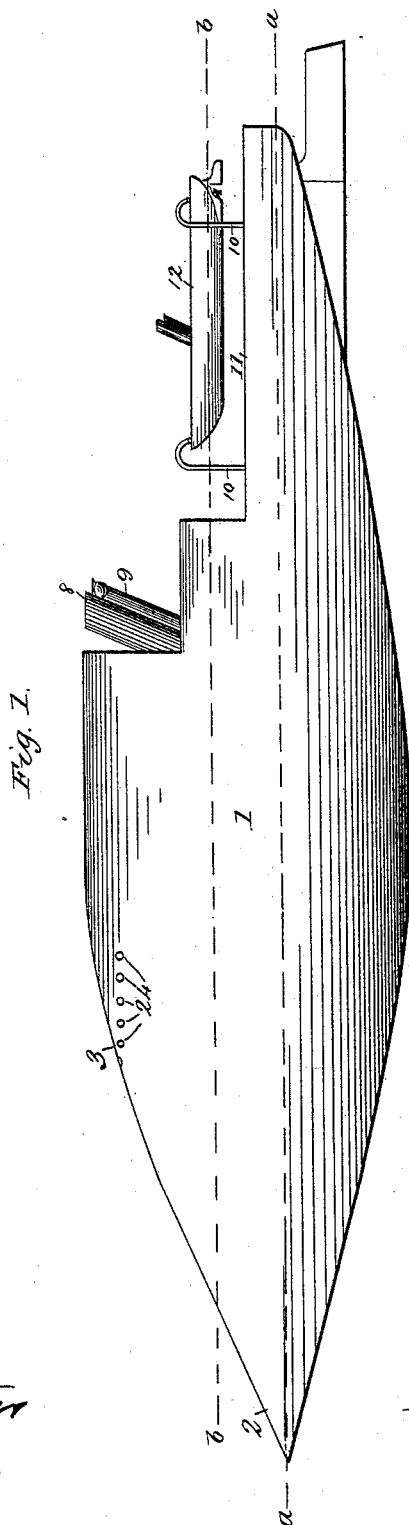
2 Sheets—Sheet 1.

S. BARTON.

SELF DESTRUCTIVE TORPEDO VESSEL.

No. 423,405.

Patented Mar. 11, 1890.



Witnesses:  
T. R. Stuart  
J. J. Munter

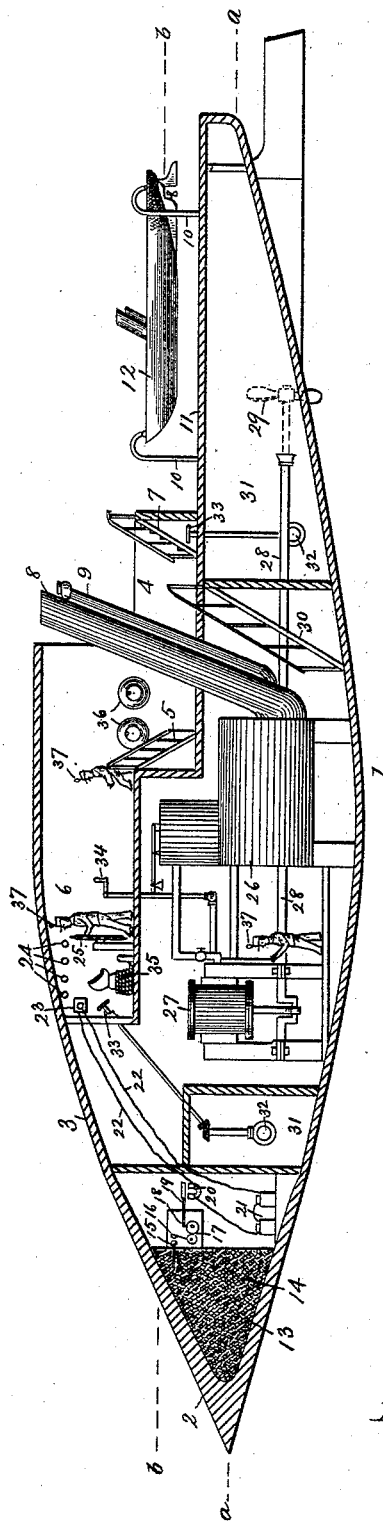
Inventor:  
Samuel Barton.  
By  
Marble & Mason,  
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Fig. 2.



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# UNITED STATES PATENT OFFICE.

SAMUEL BARTON, OF NEW YORK, ASSIGNOR OF ONE-HALF TO CHARLES S. HIGGINS, SR., OF BROOKLYN, NEW YORK.

## SELF-DESTRUCTIVE TORPEDO-VESSEL.

SPECIFICATION forming part of Letters Patent No. 423,405, dated March 11, 1890.

Application filed April 11, 1889. Serial No. 306,808. (No model.)

*To all whom it may concern:*

Be it known that I, SAMUEL BARTON, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in War-Vessels; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to a self-destructive torpedo-vessel; and it consists in the improved construction and arrangement of parts hereinafter fully disclosed in the description, drawings, and claims.

The objects of my invention are, first, to provide a self-destructive war-vessel with suitable means for propelling and steering the same, with a stationary self-destroying charge contained and operated within said vessel, and with means for admitting of the crew escaping before the explosion of said charge; second, to provide such a war-vessel with means for propelling and navigating the same, with a stationary self-destroying charge contained and operated within said vessel, and with means for admitting of the crew escaping before the explosion of said charge; third, to provide improved means contained within a self-destroying vessel for controlling the explosion of the stationary charge, which charge is also contained therein, and means for admitting the escape of the crew, and, fourth, to provide such a vessel with the other novel constructions and arrangements of parts hereinafter described and claimed. These objects are attained by the construction of vessel illustrated in the accompanying drawings, forming part of this specification, in which the same reference-numerals indicate the same parts, and in which—

Figure 1 represents a side elevation of my self-destroying torpedo-vessel, and Fig. 2 a longitudinal vertical section of the same.

In the drawings, the numeral 1 indicates the hull of the vessel, which is formed with a pointed bow or ram 2, which is re-enforced with steel or iron. The forward part of the vessel is armored with a curved or vaulted deflecting-roof 3, having the shape of a com-

bined dome and turtle-back, the armor being made of heavy and very strong steel-plates, in order that it will be capable of deflecting any projectile or other object which may come into contact therewith. Amidship the vessel is also supplied with an armored cockpit 4, which is provided with steps 5, leading forward to the pilot-house 6, which is also arranged beneath the armored deflecting-roof 3; also, said cockpit is provided with steps 7, which are placed against the after or rear side thereof. The smoke-stack 8 and the exhaust-steam pipe 9 pass up through said cockpit at the rear of the armored deflecting-roof 3.

The davits 10, which are mounted upon the low after deck 11, support a steam-launch, tender, or life-boat 12, which is preferably supported in such manner that it can float and be easily released from said davits when the vessel is partially submerged and ready for action.

A shell or chamber 13 in the bow of the vessel is provided with a stationary charge 14 of dynamite or similar explosive agent, which may be exploded by a percussion-cap 15, or similar means, which is struck by a hammer 16, operated by the clock-work 17, which is actuated to move said hammer by tilting or rocking a detent 18, which is secured to a lever 19, one arm of which forms the armature of an electro-magnet 20, which is placed in the circuit of a battery 21, the wires 22 of the latter being connected to a button or circuit-closer 23, located in the pilot-house.

In the armored deflecting-roof 3 of the pilot-house are formed suitable peep holes or apertures 24, through which the pilot can have unobstructed vision while standing at the steering-wheel 25.

A part of the space below the deck is occupied by the boilers 26 and engines 27, which may be of any desired or suitable construction, and which drive the shafts 28 of the twin screws 29.

A set of stairs or steps 30 leads to the cockpit from the engine-room; but there is no communication through the latter or any other part below the deck with the after deck, which is water-tight.

The principal portion of the remaining

space below the deck which is not used for coal-bunkers is formed into water-tanks 31, provided with valves 32, which open into them below the water-line and are operated by suitable connecting-rods having handles or hand-wheels 33, located in the pilot-house and cock-pit or either.

A rod having a handle 34 extends into the pilot-house and is connected with suitable mechanism for starting, stopping, and reversing the engines from said pilot-house; also, a lashing of rope 35 or other suitable securing device is provided for holding the steering-wheel 25 in any desired adjustment or position.

A suitable number of life-preservers 36, cork jackets, or Boyton suits are provided for the crew of the vessel, and have the special purpose hereinafter stated; also, a suitable number of incandescent lamps 37 are provided for the members of the crew, said lamps being adapted to be carried upon their persons, preferably upon their heads, each lamp being provided with a suitable storage-battery or other electrical supply that will be conveniently portable.

Whenever it is desired to bring my self-destroying vessel into action for attacking and destroying another vessel or other object, it is first navigated to a point within range of said other vessel or object. Then it is lowered from its normal water-line *a a* to a submerged water-line *b b* by opening the water-tank valves 32 by the connecting-rods having the handles 33. Then my vessel is ready for action and is steamed at full speed, "head on," toward the vessel or other object to be attacked and destroyed. Then the launch or life-boat, being already afloat upon its davits, owing to the partial submergence of the vessel, is released and manned with all the spare members of the crew, the pilot only, or perhaps the engineer and one or two others, remaining on board the vessel. Then when the latter is within a short distance of the other vessel or object the steering-wheel is lashed to keep the vessel straight on its thus predetermined course. Then the button or circuit-closer is manipulated, whereupon the pilot and any other remaining ones of the crew jump overboard, having previously provided themselves with the cork jackets, Boyton suits, or life-preservers, and also with the lamps if the attack is made by night. Then the pilot and his companions are picked up by the rest of the crew upon the launch, the vessel in the meantime continuing onward toward its object of attack until it strikes the same with its pointed ram, which penetrates said object, explodes and destroys the same, and also destroys itself. It will be obvious that the explosive charge must be of sufficient amount and strength to be beyond question as to its destructive power, (as, for instance, about two tons of dynamite will destroy the strongest-armored

vessel extant, either when exploded at or near the side of or beneath the same,) as the mere penetrating power of the ram is not to be relied upon for destroying the heavily-armored vessels of the present day.

Owing to the peculiar shape of the roof of my vessel, which is that of a combined dome and turtle-back, as stated, and which covers the forward portion of said vessel, it will be obvious that said roof will deflect any projectile which may strike it, especially as the vessel will usually approach head on or toward the opposing vessel, and thus present a surface that is difficult to penetrate; that the pointed bow or ram will pass through torpedo-nets and other obstructions, and also run over or under torpedo-booms, whether they be upon or beneath the surface of the water, as the vessel may remain at its normal water-level or be partially submerged beneath the same; that the button or circuit-closer is to be touched when the vessel is at such a distance from its object of attack (the distance having been previously estimated) that the armature-lever, detent, and clock-work will operate the hammer and explode the charge at the moment the ram strikes said object or immediately thereafter; that the pilot or helmsman can have unobstructed views through the apertures in the peculiarly-shaped and armored roof; that when the time approaches for the crew to leave the main vessel the engineer can leave the engine-room and govern the engines from the pilot-house by means of the rod having the handle located therein, and that the armored cock-pit will admit of the vessel being partially submerged without obstructing passage from the pilot-house down into the vessel below the deck.

As this vessel is not intended to carry a large crew nor to carry more ammunition and coal than is necessary for a short trip, the greater portion of the space beneath the deck of the vessel is set apart for boilers and engines, whereby large power and consequent speed are imparted to a comparatively small vessel.

Life-preservers of the character named will admit such of the crew as jump overboard to be picked up and saved by the crew upon the launch; also, at night the lamps provided will serve the crew of the launch to observe and pick up the men who are overboard.

As this vessel is designed to be self-destroying, no attention need be paid to highly finishing or beautifying the same or its parts, all that is required being strength and power, and consequently a vessel of this construction can be built at a comparatively small expense, at a cost not materially above the expense due to constructing a submarine torpedo or similar destructive device, the management of the latter being also more or less uncertain.

Having thus fully described the construction and arrangement or combination of the

several parts of my improved self-destroying vessel or torpedo-ram, its operation and advantages, what I claim as new is—

1. A self-destructive war-vessel provided with a stationary explosive charge in its bow, with navigating and explosion-controlling mechanisms contained and operated within said vessel, and with means for admitting the escape of the crew, substantially as described.

2. A self-destructive war-vessel provided with a stationary explosive charge in its bow, with explosion-controlling mechanism and with engines and steering-gear contained and operated within said vessel, and with means for admitting the escape of the crew, substantially as described.

3. A self-destructive war-vessel provided with a stationary explosive charge in its bow, with mechanisms for controlling the explosion of said charge, for propelling and steering, and for protecting said propelling and steering mechanisms, said mechanisms being contained and operated within said vessel, and with means for admitting the escape of the crew, substantially as described.

4. A self-destructive war-vessel provided with means for partial submergence, with a ram provided with a stationary explosive charge, with means for exploding the same, which means is contained and operated within said vessel, and with means for admitting the escape of the crew, substantially as described.

5. A self-destructive war-vessel provided with propelling and steering mechanisms, with a pointed ram provided with a stationary explosive charge, with means for exploding the same, which is contained and operated within said vessel, and with means for admitting the escape of the crew, substantially as described.

6. A self-destructive war-vessel provided with propelling and steering mechanisms, with means for partial submergence, with a ram at its forward end, with a stationary explosive charge within said ram, with means, which is contained and operated within said vessel, for controlling the explosion of said charge, and with means for admitting the escape of the crew, substantially as described.

7. A self-destructive war-vessel provided with propelling and steering mechanisms, with a ram at its forward end, with a stationary explosive charge within said ram, with means, which is contained and operated within said vessel, for controlling the explosion of said charge, with life-preservers, and with means for the partial submergence of said vessel and for admitting the escape of the crew, substantially as described.

8. A self-destructive war-vessel provided with propelling and steering mechanisms, with a ram at its forward end, with a stationary explosive charge within said ram, with means, which is contained and operated within said vessel, for controlling the explosion of

said charge, with means for partial submergence, with life-preservers, with lamps, and with means for admitting the escape of the crew, substantially as described.

9. A self-destructive war-vessel provided with a hull, a ram at its bow, a curved roof over its forward portion, a stationary explosive charge within said ram, means contained and operated within said vessel for controlling the explosion of said charge, propelling and steering mechanisms, and means for admitting the escape of the crew, substantially as described.

10. A self-destructive war-vessel provided with a hull, a ram at its bow, a curved roof over its forward portion, a stationary explosive charge within said ram, means contained and operated within said vessel for controlling the explosion of said charge, propelling, steering, and partial-submerging mechanisms, and means for admitting the escape of the crew, substantially as described.

11. A self-destructive war-vessel provided with a hull, a ram at its bow, a curved roof over its forward portion, a stationary explosive charge within said ram, means contained and operated within said vessel for controlling the explosion of said charge, propelling, steering, and partial-submerging mechanisms, and a launch or life-boat, substantially as described.

12. A self-destructive war-vessel provided with a hull, a ram at its bow, a curved roof over its forward portion, an armored cockpit, a low after deck, valves and tanks for partially submerging said hull and after deck, propelling and steering mechanisms, a stationary explosive charge within said ram, means contained and operated within said vessel for controlling the explosion of said charge, and a launch or life-boat supported upon said low after deck and adapted to be launched or floated when said hull is partially submerged, substantially as described.

13. A self-destructive war-vessel provided with a hull, a ram at its bow, a low after deck, a pilot-house having a curved or vaulted roof, an armored cockpit, a stationary explosive charge located within said ram, means contained and operated within said vessel for exploding said charge, which are connected with said pilot-house, engines and steering-gear, means for controlling said engines and steering-gear, which are also connected with said pilot-house, valves and tanks for partially submerging said hull, and a launch or life-boat supported above said low after deck and adapted to be launched or floated when said deck is partially submerged, substantially as described.

14. A self-destructive war-vessel provided with the hull 1, the ram 2, the vaulted roof 3, the pilot-house 6, the armored cockpit 4, the low after deck 11, the stationary explosive charge 14, the hammer and clock-work 16, 17,

and 18, the electric devices 19 and 20, the battery 21, the wires 22, the button or circuit-closer 23, the water-tank 31, the valves 32, the connecting-rods having the handles 33, the engines 27, the rod having the controlling-handle 34, the steering-wheel 25, the lashing 35, the davits 10, the launch 12, and the life-preservers 36, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

SAMUEL BARTON.

Witnesses:

W. T. CORNELL,  
A. LANSING BAIRD.