

BENJAMIN T. BABBITT.

Improvement in Steam-Ships and Boats.

No. 127,825.

Patented June 11, 1872.

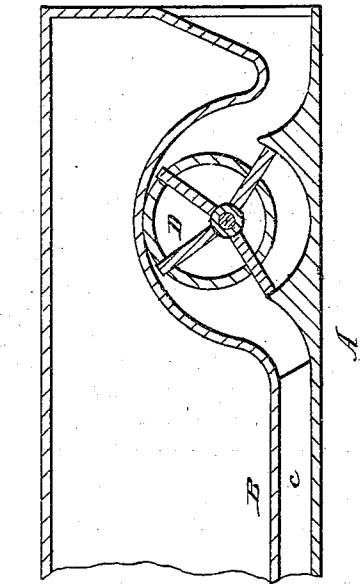


Fig. 1.

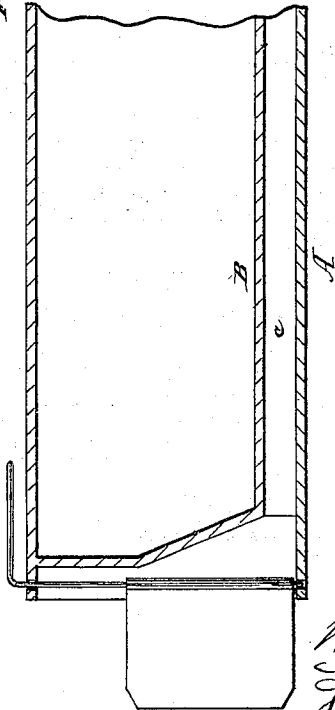


Fig. 3.

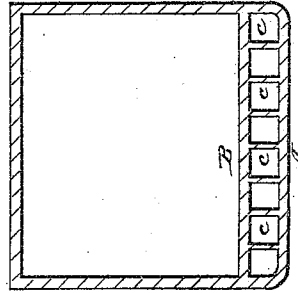
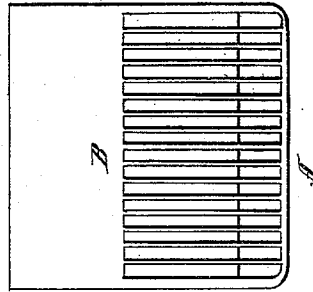


Fig. 2.



WITNESSES:

W. Morris Smith
F. J. E. Smith

INVENTOR:

B. T. Babbitt

UNITED STATES PATENT OFFICE.

BENJAMIN T. BABBITT, OF NEW YORK, N. Y.

IMPROVEMENT IN STEAM SHIPS AND BOATS.

Specification forming part of Letters Patent No. 127,825, dated June 11, 1872.

Specification describing certain Improvements in Navigable Vessels, invented by BENJAMIN T. BABBITT, of the city, county, and State of New York.

This invention relates to a novel construction of steam-vessels with straight sides and bottoms, as contradistinguished from wavelines, as heretofore practiced, and is more particularly adapted to the navigation of still water; and it consists in constructing the hull of parallelogrammic form in its horizontal section, and with its hull proper slanting upwardly at each end, the front or bow being guarded by vertical bars or grating; and below the hull is a series of longitudinal channels for the passage of water from bow to stern, so that the water in front of the vessel may be drawn in by a suitable water-wheel and expelled thereby through said channels, which latter prevent the water from acting as a shifting ballast.

In the accompanying drawing, Figure 1 represents a vertical longitudinal section of a vessel constructed according to my invention; Fig. 2, a front-end view of such vessel; and Fig. 3, a transverse section on the line *x x* on Fig. 1; the same letters indicating like parts in the several figures.

Referring to said drawing, A represents the shell of the vessel, and B its hull proper. The shell is of rectangular form longitudinally, but its sides may be slanting or rounding from top to bottom in a vertical direction in cross-section. While the shell is formed with vertical end-outlines the hull proper is made sloping upward at both ends within the bottom of said shell, to give a downward tendency for the water in front to enter the channels *c* beneath it,

and an upward rather than a lateral direction at its stern. The forward end of the shell is formed of vertical bars, to prevent the entrance of sticks or other floating *débris*; and at a suitable distance within the bow of the hull proper is arranged, on horizontal transverse axis, any suitable rotating water-wheel D, which, being operated by steam or other power, draws the water in from front of the shell A, and expels it at the stern through the channels *c*.

This vessel may be steered by an ordinary rudder or rudders, or by balance-valves applied to the side channels *c*, to direct the flow therethrough to either side, and thus deflect the boat from its course.

It will be evident in a vessel of this construction that the resistance on the bow portion is almost entirely removed, and that a propelling force by the ejection of the water from the bow at the stern is obtained, while the sides and bottom of the vessel, or its shell portion, being straight from end to end, offer no resistance due to displacement of the water, and, if made but slightly tapering toward the stern, little or no resistance by friction of the water thereon.

Claim.

The water-channel under the bottom of the boat, extending the whole width of the latter and having longitudinal divisions to prevent the water from acting as a shifting ballast, as shown and described.

BENJAMIN T. BABBITT.

Witnesses:

W. MORRIS SMITH,
SYDNEY E. SMITH.