

S. D. Carpenter
Armor Clad.

N^o 46,074.

Patented Jan. 31, 1865.

Fig. 1.

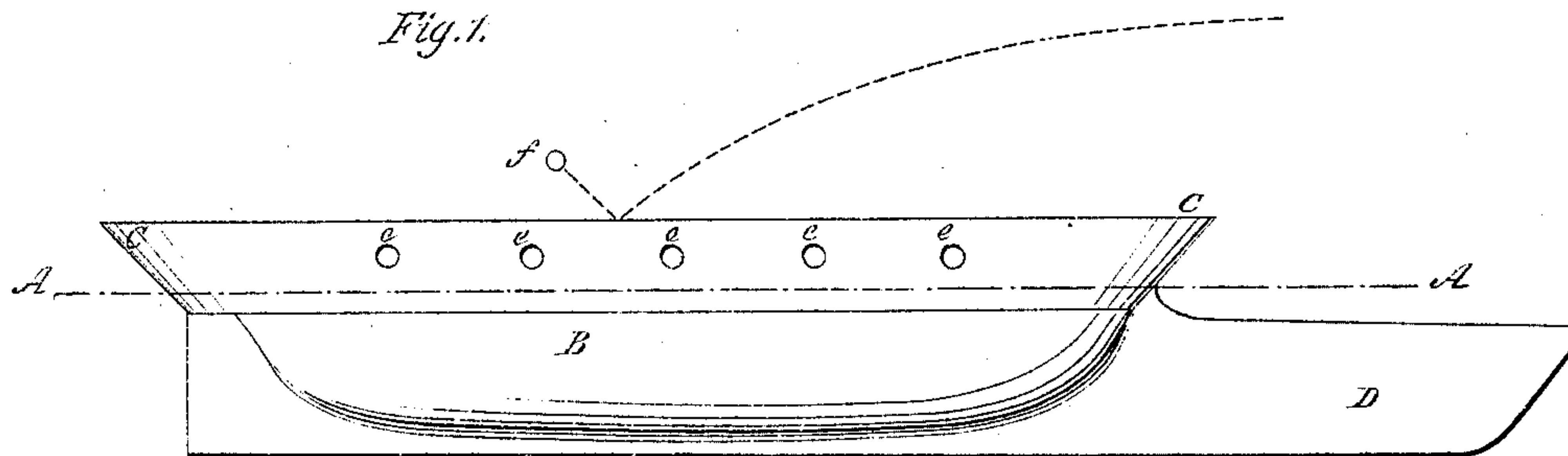
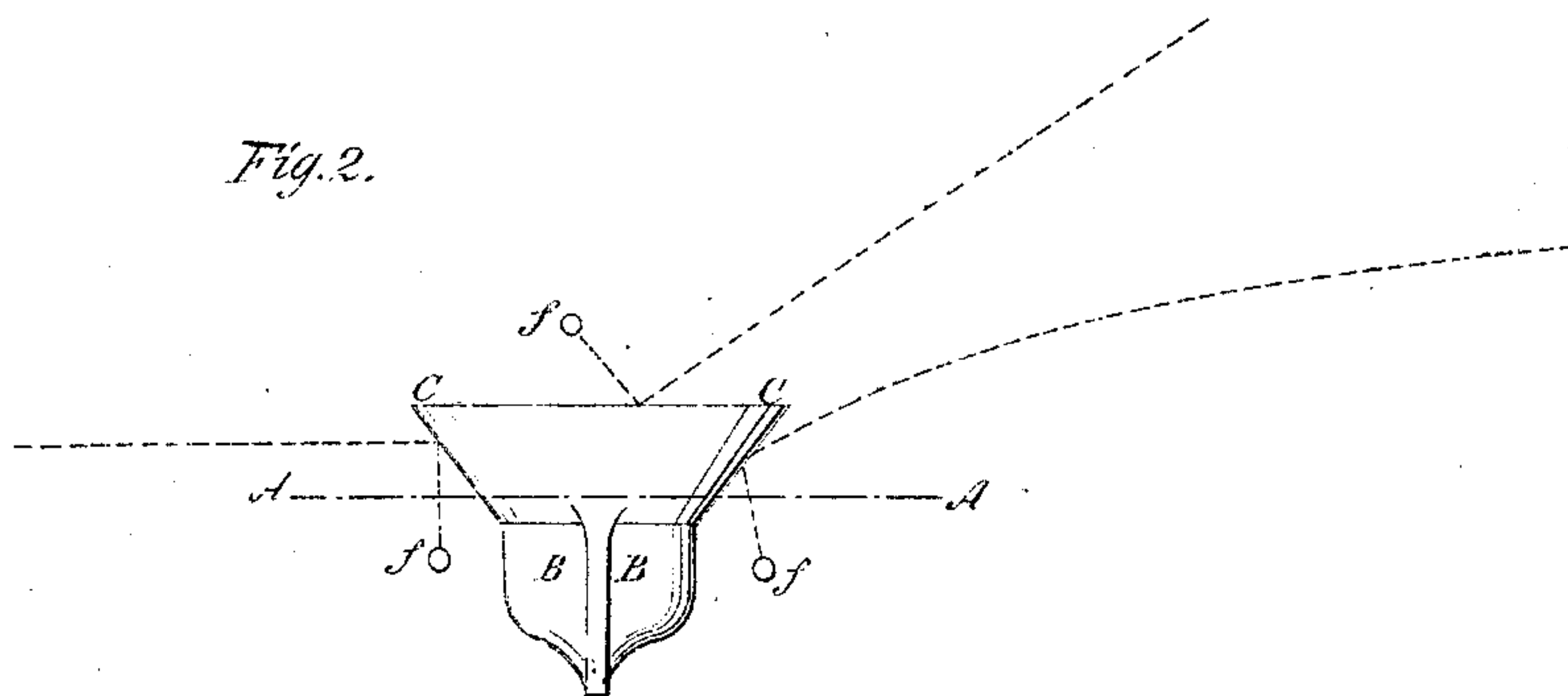


Fig. 2.



Witnesses.
J. H. Phillips
E. W. Griffin

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UNITED STATES PATENT OFFICE.

STEPHEN DECATUR CARPENTER, OF MADISON, WISCONSIN.

IMPROVED CONSTRUCTION OF GUN-BOATS.

Specification forming part of Letters Patent No. **46,074**, dated January 31, 1865.

To all whom it may concern:

Be it known that I, STEPHEN DECATUR CARPENTER, of Madison, in the county of Dane and State of Wisconsin, have invented a new and useful mode of Constructing the Outer Surface or Model of Gun-Boats or War Vessels; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a longitudinal elevation. *a a* is the water-line; B, the lower part of the hull; C C show the angles of the upper part, as appear from a side view; D, a ram that may be attached; *e e e e*, the port-holes; F, a ball or projectile; and the red lines show the parabolic-track of said projectile at long range and the parabolic angle at which it would strike and bound from the deck.

Fig. 2 represents an end view. *a a* is the water-line; B B, the lower part of the hull; C C, the angular projecting sides, as seen from this view, the red lines showing the course of projectiles at different ranges and in different relative positions, and *f f f* balls or projectiles at the supposed angles at which such projectiles would bound from the angular surface of the boat.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

I construct the lower part of the hull or boat in any of the known approved methods up to a point some three feet (more or less, as may be found necessary) below the water-line, from which point I project the sides of the vessel outward at an angle, say, of forty-five degrees, (more or less, as may be deemed most practicable,) up to the given height required

for the upper deck, substantially as exhibited in the drawings. The upper deck I construct level with the water-line, and free from obstructions. When thus constructed in its outlines, with the usual backings of timbers, planks, &c., I cover the whole outline surface, including the deck and angular sides, down to a proper point below the water-line to insure safety from projectile objects with mailed armor, adopting any of the approved modes now in use.

The object of the angular outlines herein described and the level deck is to render the boat as nearly invulnerable as possible by presenting no angle to the enemy less than a number of degrees sufficient to ward off the most destructive projectiles.

I do not claim the mode and manner of constructing the lower part of the hull, nor the ram attached, nor the kind of armor, or the mode and manner of putting it on, nor do I claim any of the internal detail arrangements of the boat; but

What I claim as my invention, and desire to secure by Letters Patent, is—

The manner of constructing the portion of gun-boats or war-vessels exposed to shot, shell, or other projectiles with outward projecting angles for the sides and ends, in combination with the level deck, substantially as herein described, and for the purposes set forth in the specifications.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

STEPHEN DECATUR CARPENTER.

Witnesses:

L. J. FARWELL,

JOHN S. HOLINGSHEAD.