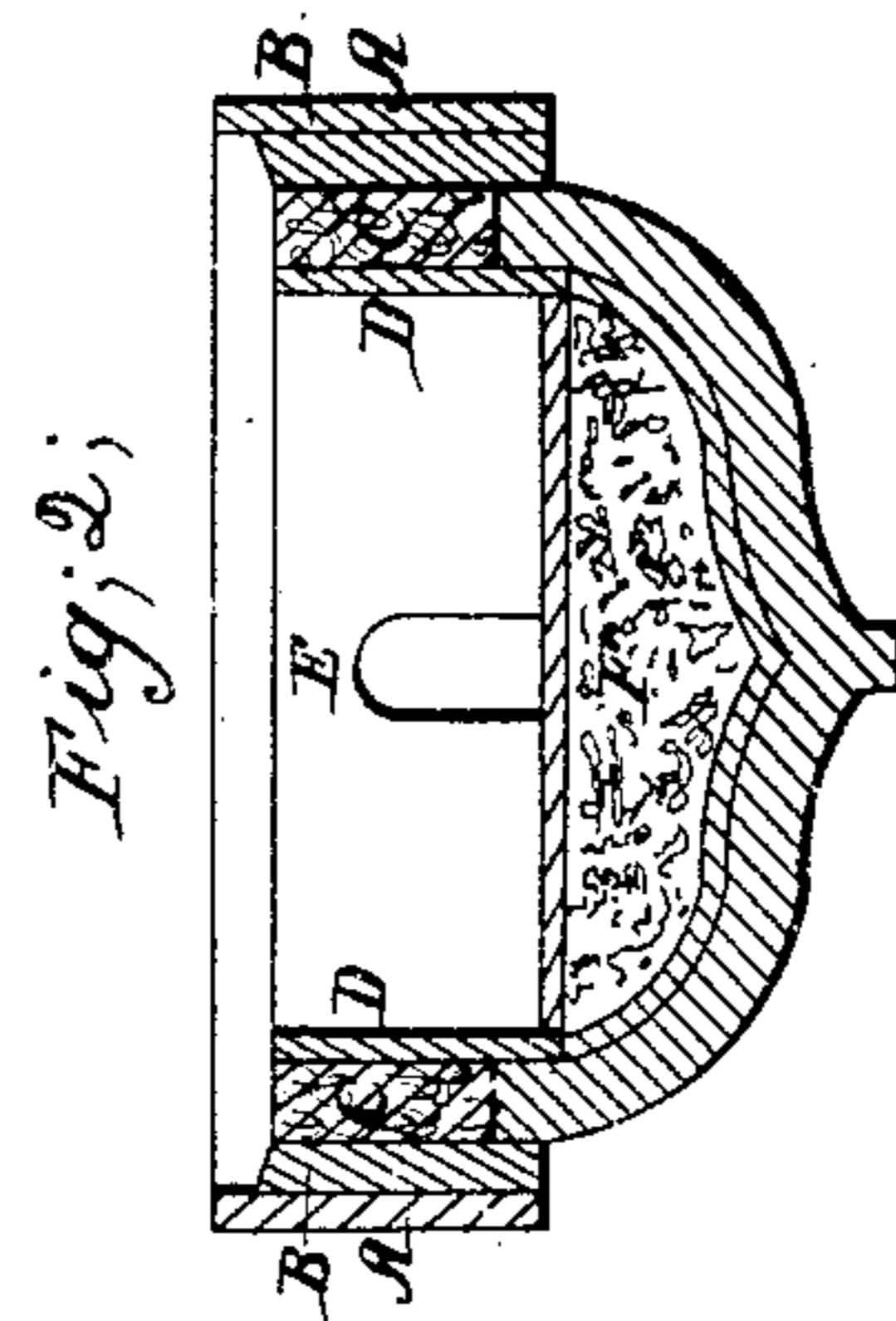
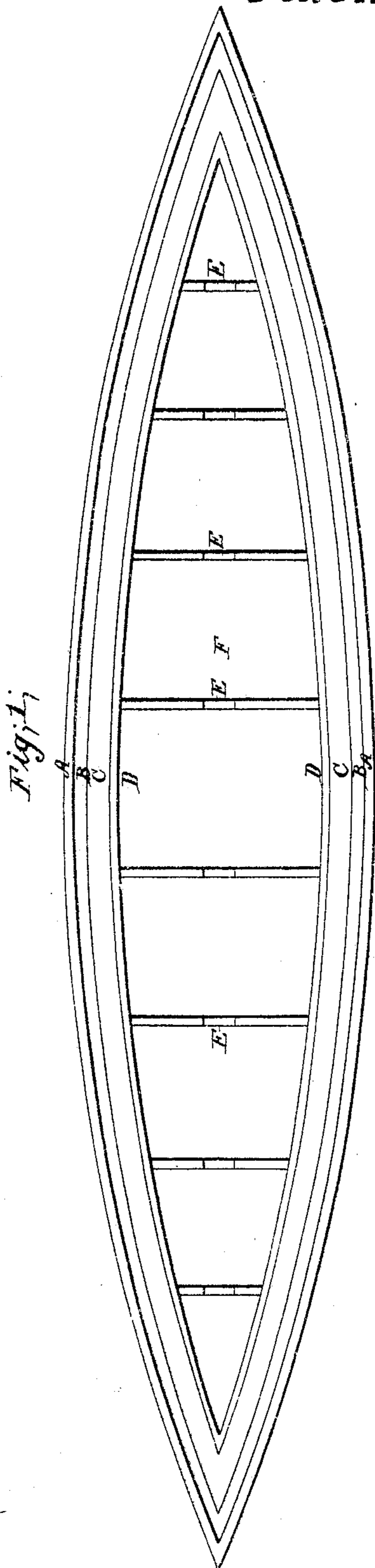


S. Parr.
Armor Clad.

N^o 44,837.

Patented Oct. 25, 1864.



Witnesses;
W. R. Hale Jr
M. E. Sherry

Inventor;
Samuel Parr
by his attorney
R. H. Edley

UNITED STATES PATENT OFFICE.

SAMUEL PARR, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO HIMSELF,
JAMES A. FOX, AND JOHN A. ROBERTSON, OF SAME PLACE.

IMPROVED CONSTRUCTION OF MONITOR-VESSELS.

Specification forming part of Letters Patent No. 44,837, dated October 25, 1864.

To all whom it may concern:

Be it known that I, SAMUEL PARR, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Navigable Vessels; and I do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a horizontal section, and Fig. 2 a transverse section, of the hull of an armored monitor-vessel as provided with my invention, which has particular reference to iron-plated vessels for war purposes.

The main purpose of my invention is to prevent the vessel from sinking by reason of leakage or other cause, and, besides my invention is calculated to be of advantage in other respects.

In the hulls of monitors or flat-bottomed armor-plated vessels there is usually a large space below the flooring, which heretofore has not been utilized. This space I propose to fill with cork, which, in case the vessel may spring a leak, will operate to float her on the water and prevent her from going down. Furthermore, I arrange a layer or thick stratum of cork along in rear of the entire wooden backing of the armor, and against the inner side of this stratum of cork I arrange a stratum or layer of plank or wood.

In the drawings, A denotes the iron plating or armor; B, the wooden backing of such armor; C, the stratum of cork, and D the inner layer of wood. The whole is to be strengthened by transverse partitions E E, &c., carried across the interior of the hull and joined with the inner layers, D D, of wood. The cork

of the stratum C is to be powerfully compressed between the interior wooden lining and the wooden backing B. The body of cork is arranged on the bottom of the hull, and below the flooring thereof, as shown at F. As cork weighs only about one-sixth of what its bulk of water will weigh, it will be seen that in case of leakage of the vessel the body of cork below her flooring must contribute greatly to keep her from sinking. So, also, with respect to the cork arranged along the sides in manner as shown at C. They will not only contribute to prevent sinking of the vessel, but will constitute an elastic medium which will render the armor better able to withstand the effects of projectiles discharged against it.

The great lightness or buoyant property of the cork by contributing so much to the floatable qualities of the vessel enables the iron armor to be made thicker than it could be were only a backing of wood used.

I claim—

The improved monitor or armored vessel as made with the combination of the transverse strengthening-partitions with the opposite layers of wood, the cork and iron arranged together substantially as specified, not meaning to claim the usual applications of cork for giving buoyancy to vessels, but restricting it to vessels constructed and defended substantially as described.

SAMUEL PARR.

Witnesses:

F. P. HALE, Jr.,
JAMES A. FOX.