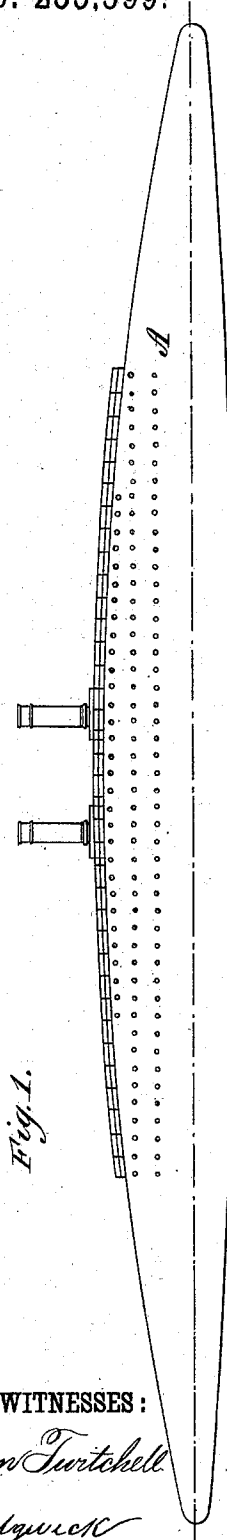
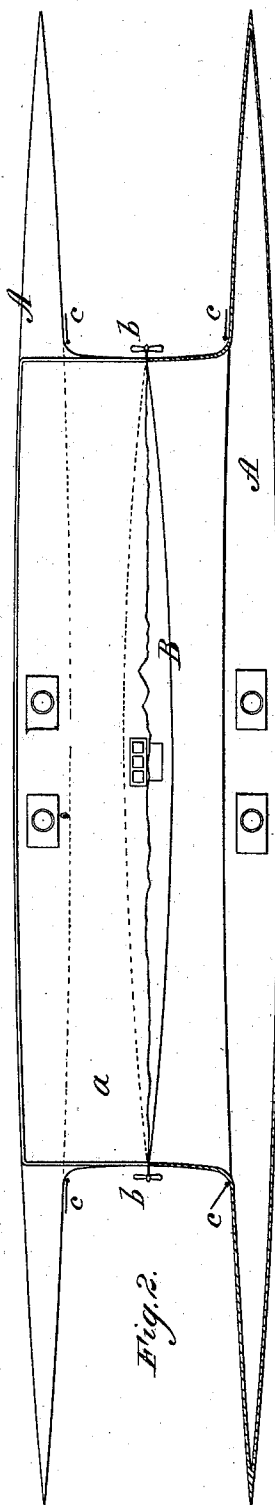
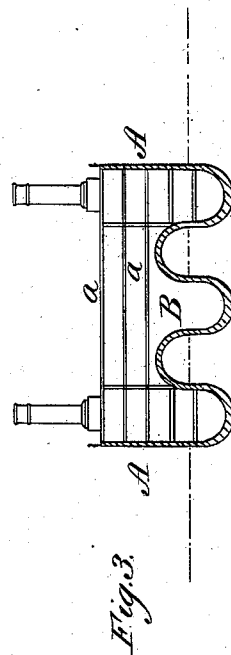


(No Model.)

W. COPPIN.
CONSTRUCTION OF VESSELS.

No. 255,599.

Patented Mar. 28, 1882.



WITNESSES:

Donn Twitchell
C. Sedgwick

INVENTOR:

W. Coppin
BY *Munn Ho*

ATTORNEYS.

UNITED STATES PATENT OFFICE.

WILLIAM COPPIN, OF LONDON, ENGLAND.

CONSTRUCTION OF VESSELS.

SPECIFICATION forming part of Letters Patent No. 255,599, dated March 28, 1882.

Application filed February 8, 1882. (No model.) Patented in England June 16, 1879.

To all whom it may concern:

Be it known that I, WILLIAM COPPIN, of London, England, have invented a new and useful Improvement in the Construction of Ships, of which the following is a full, clear, and exact description.

My improvements relate to ships for ocean and river navigation, and to ships of war, and have the object to secure a greater speed, stability, and safety.

The invention consists in a compound ship composed of three ship-hulls united as one vessel, the two outer hulls being longer than the central hull, and the whole being decked over, all as hereinafter described.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of a ship of my improved construction. Fig. 2 is a sectional plan view, and Fig. 3 is a transverse section.

A A are the outer hulls, of narrow beam and of equal length, and B a hull much shorter and placed in the center space between the two longer vessels. The three hulls are rigidly connected by iron or steel bulk-heads, box-girders, iron or steel decks or frames, in such a way as to form complete platforms or decks *a*, and so as to leave considerable extra spaces between the ships. The center ship, B, is to carry the engines, and is provided with a propeller, *b*, at each end. This arrangement brings the screws well toward the center of the long or outside ships, and prevents the possibility of the pitching motion lifting the propeller out of the water and endangering the machinery, as is the case now with long ships of the usual build. All three hulls are tapered from the center, both vertically and longitudinally, and come to a rounded point at both ends, so as to enter the wave and so reduce the pitching motion to a minimum, the rolling motion being done away with by the extent of water-spaces between the ships. The plat-

forms or decks extend to about three-fifths (more or less) of the whole length of the outside ships in the center, and the remaining portion of the ends, forward and aft, are covered over for passing through the waves; but the space between is not decked over. In ships of this construction for smooth water or river purposes I would carry by preference the decks the entire length of the outside ships nearly horizontal, and in these cases the vessel may be propelled by either a screw or paddle-wheels.

My improvements are specially applicable to war-ships, and enable a large amount of armor-plating to be carried, owing to increased stability. They give extended battery-platform to carry guns of the largest caliber, and turrets of increased thickness of armor-plate can be employed with safety. Complete protection is also given to engines, screw-propeller, and steering apparatus, increased accommodation for a large number of troops and horses, with a speed of at least one-third faster than the present class of transports, and the construction is such that one of the three ships might be completely riddled with shot or damaged by a ram, and yet be supported by the other two. The light draft of water gives greater facilities for maneuvering and for entering harbors.

The two outer vessels, A, are provided with rudders *c* at the inner side and in line with the ends of the inner ship. The three ships will be divided into water-tight compartments.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The compound ship constructed, substantially as shown and described, of three hulls of narrow beam, the two outer hulls being longer than the central hull, and the whole decked over and combined as one vessel.

WILLIAM COPPIN.

Witnesses:

GEO. D. WALKER,
C. SEDGWICK.