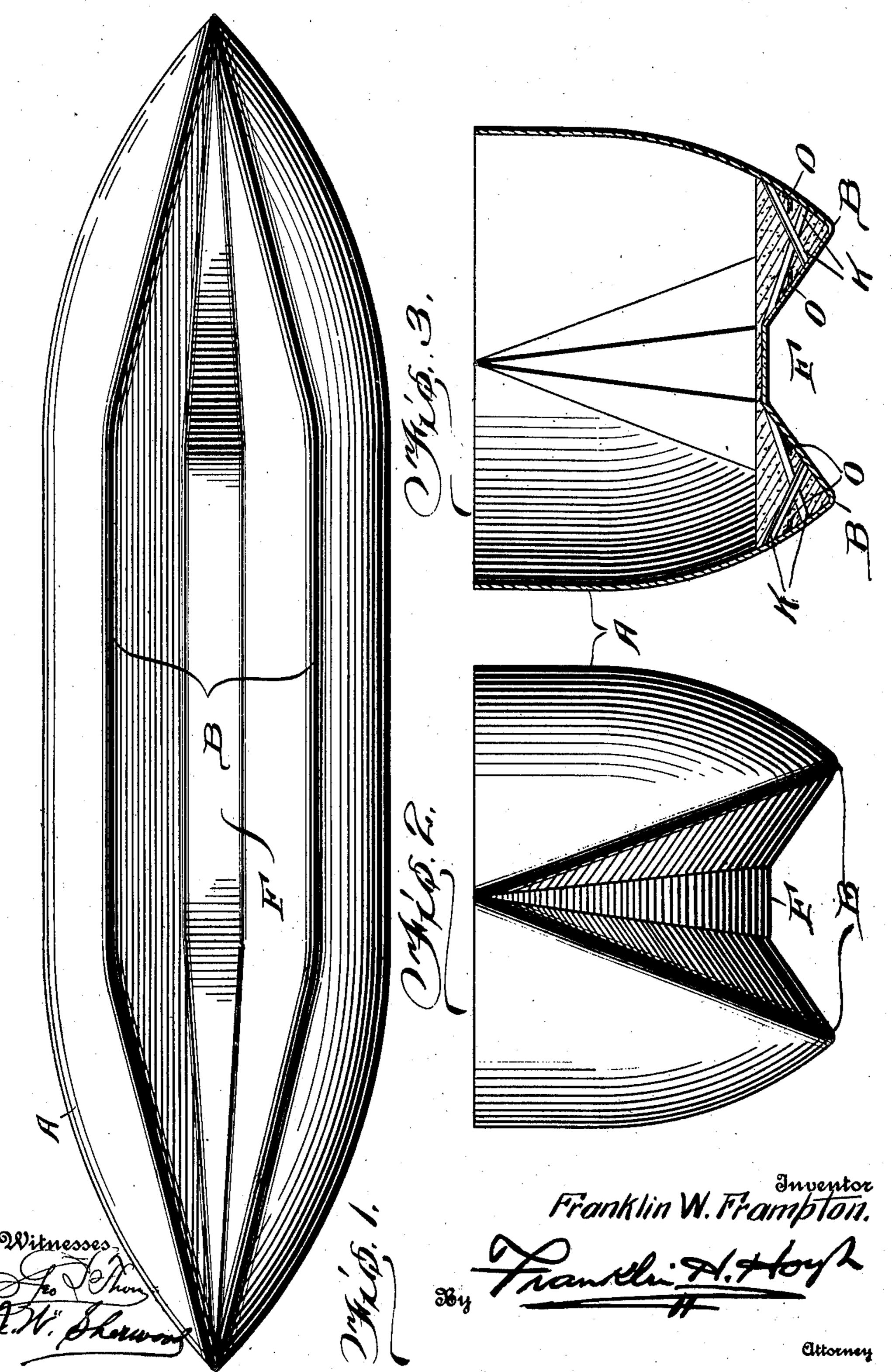
F. W. FRAMPTON.

BOAT HULL AND BALLAST MEANS THEREFOR.

APPLICATION FILED OUT. 10, 1910.

987,059.

Patented Mar. 14, 1911.



## UNITED STATES PATENT OFFICE.

FRANKLIN W. FRAMPTON, OF POMEROY, WASHINGTON,

## BOAT-HULL AND BALLAST MEANS THEREFOR

987,059.

Specification of Letters Patent. Patented Mar. 14, 1911.

Application filed October 10, 1910. Serial No. 586,357.

To all whom it may concern:

Be it known that I, Franklin W. Frampton, a citizen of the United States, residing at Pomeroy, in the county of Garfield and State of Washington, have invented certain new and useful Improvements in Boat-Hulls and Ballast Means Therefor; 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in hulls for boats having peculiar keel construction in which permanent ballast is positioned, consisting of concrete applied in a plastic state to parallel keel portions.

The invention comprises various details of construction and arrangements of parts which will be hereinafter fully described and then specifically defined in the appended claim.

I illustrate my invention in the accompanying drawings, in which:—

Figure 1 is a bottom plan view of a boat made in accordance with my invention.

made in accordance with my invention. Fig. 2 is an end view, and Fig. 3 is a cross sectional view.

Reference now being had to the details of the drawings by letter, A designates the hull of a boat having two parallel keels B which are spaced apart, as shown clearly in the sectional view of the drawings, with

a horizontal flat portion F intermediate said keel portions. The opposite ends of the latter are inclined to conform to the taper 40 of the bow and stern of the hull and the space within each keel portion is hollow, and ribs or braces K are fastened to the opposite walls of the hollow portion of the keel and intersect each other, as shown, ribs O 45 being provided on the inner surfaces of the keels, as shown. After the braces and ribs have been adjusted in place, the space within the keels is filled with concrete while in a plastic condition with the upper surface 50 of the concrete coming up flush with the tops of the keels and forming a floor.

By the provision of a boat having a hull with the double keels as shown and spaced apart with concrete filling, a ballast is afforded which will hold the boat from tilting sidewise and the keels, being spaced apart and parallel to each other, form means for preventing the boat from drifting and cause the same to travel in a true course.

What I claim to be new is:—

A boat having a hull with two parallel keels spaced apart and hollow, intersecting braces within each keel portion, ribs upon the inner faces of each keel, a filling of concrete in which said braces and ribs are embedded, the upper surface of the concrete being continuous from one keel to the other.

In testimony whereof I hereunto affix my signature in the presence of two witnesses. FRANKLIN W. FRAMPTON.

Witnesses:

S. E. BRUCE, P. A. STENTZ.