

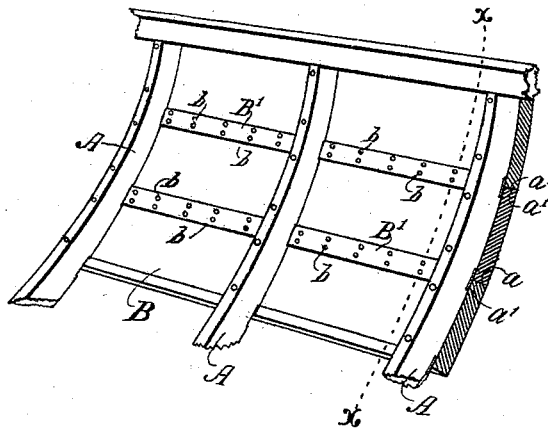
(No Model.)

L. N. TONNS  
MARINE VESSEL.

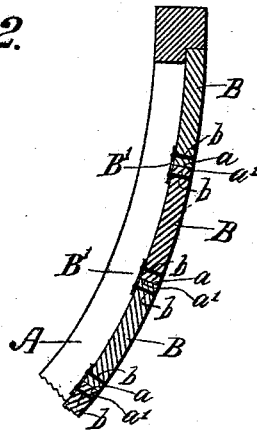
No. 522,630.

Patented July 10, 1894.

*Fig. 1.*



*Fig. 2.*



WITNESSES:

*William A. Pollock*  
*William M. Cliff*

INVENTOR

*Lewis A. Tonns*

BY *Edwin H. Brown*

HIS ATTORNEY

# UNITED STATES PATENT OFFICE.

LEWIS N. TONNS, OF ERIASTINA, ASSIGNOR OF TWO-THIRDS TO EDWARD H. HALL, OF BROOKLYN, AND GEORGE H. ALLEN, OF NEW YORK, N. Y.

## MARINE VESSEL.

SPECIFICATION forming part of Letters Patent No. 522,630, dated July 10, 1894.

Application filed May 4, 1892. Serial No. 431,818. (No model.)

*To all whom it may concern:*

Be it known that I, LEWIS N. TONNS, of Eriastina, county of Richmond, and State of New York, have invented a new and useful  
5 Improvement in Marine Vessels, of which the following is a specification.

This invention relates to marine vessels, and it consists in providing the joined edges  
10 of seams of the sheathing with plates or strips of metal.

I will describe a vessel embodying my improvement, and then point out the novel features in a claim.

In the accompanying drawings, Figure 1 is  
15 a perspective view of a portion of a vessel embodying my invention; and Fig. 2, is a section on the line *x x* of Fig. 1.

Referring by letter to the drawings, A designates the framing or ribs of a vessel, and B  
20 shows the sheathing boards secured thereto in the usual manner.

B' designates a metal strip, such for instance as brass, overlapping the joint or seam formed by the meeting edges *a a'* of adjacent  
25 sheathing boards B. I preferably place these strips B' on the inner surface of the boards B and secure them by means of rivets *b* which pass through the metal strips near their edges and through the sheathing boards. The metal  
30 strips form a solid foundation for the rivets. These strips B' are quite thin so that they oc-

cupy but very little space, but if desired the inner edges of the ribs A may be recessed, as shown, and the strips seated in the recesses.

By employing the strips B', as described, 35 I find it unnecessary to otherwise close the seams such as by overlapping the sheathing boards as is sometimes done in canoes, or by calking.

I am aware that it is not broadly new to 40 place a strip over the seam of the sheathing boards, as wooden strips have been used for this purpose, but such wooden strips are necessarily quite thick and are liable to split or warp, and furthermore they form a very im- 45 perfect foundation for rivets.

Having described my invention, what I claim is—

In a marine vessel, the combination with the sheathing boards and the ribs having re- 50 cesses, of a thin metallic strip passing through said recesses and riveted over the seam between adjacent boards, substantially as described.

In testimony whereof I have signed my 55 name to this specification in the presence of two subscribing witnesses.

LEWIS N. TONNS.

Witnesses:

C. R. FERGUSON,  
WM. M. ILIFF.