W. GARDNER.

SHEET METAL BOAT OR OTHER VESSEL.

APPLICATION FILED MAR. 27, 1920.

1,340,441. Patented May 18, 1920.

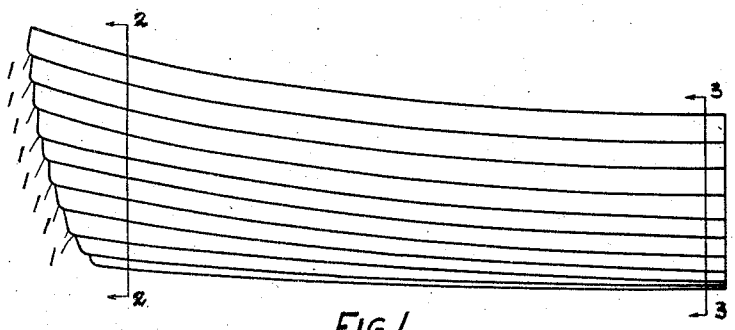


FIG. 1.

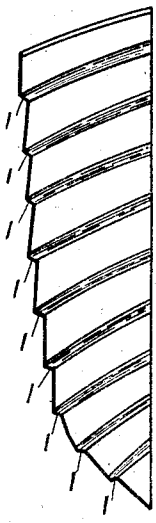


FIG. 2.

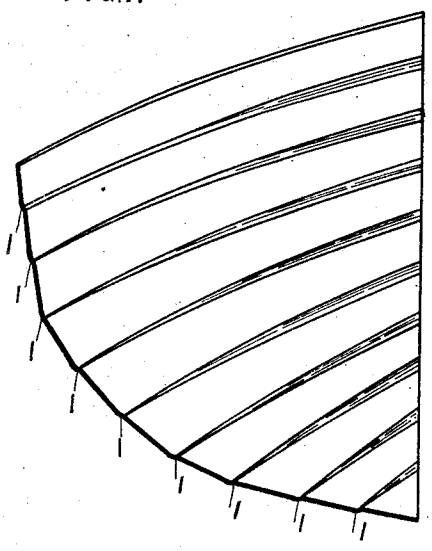


FIG. 3.

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UNITED STATES PATENT OFFICE.

WILLIAM GARDNER, OF BROOMHILL, GLASGOW, SCOTLAND.

SHEET-METAL BOAT OR OTHER VESSEL.

1,340,441. Specification of Letters Patent. Patented May 18, 1920.

Application filed March 27, 1920. Serial No. 369,398.

To all whom it may concern:

Be it known that I, WILLIAM GARDNER, a subject of the King of the United Kingdom of Great Britain and Ireland, and residing at Broomhill, Glasgow, Scotland, have invented a certain new and useful Improvement in Sheet-Metal Boats or other Vessels, of which the following is a specification.

This invention relates to improvements in the manufacture of sheet metal boats or other light vessels.

In boats of this type as ordinarily constructed, the material must be considerably stretched to form the curve of the bilge.

The present invention, which is based on the principle that the amount of stretch necessary is found to be the difference between the length of the curve of the section and the length of the chord of that section, minus the difference between the length of the curve and the length of the chord at either end, provides a construction in which the material is not stretched amidships but is decreased in width at either end of the boat by an amount equal to the aforesaid difference.

To this end, the invention consists in a vessel constructed of sheet metal crimped or joggled in longitudinal steps, each step increasing in depth or inclination toward the bow and stern as required by the shape of the vessel, the number and effective depth of steps being such as to produce an effect equivalent to the usual stretching, so that the vessel may receive the form and appearance of an ordinary clinker built wooden boat.

A sheet metal boat constructed according to the invention is illustrated in the accompanying drawing in which Figure 1 is a fragmentary elevation, Fig. 2 a section on the line 2, 2, of Fig. 1 and Fig. 3 a section on the line 3, 3 of Fig. 1.

The sheet metal forming the vessel shown is crimped or joggled in longitudinal steps 1, each step increasing in effective depth toward the bow and stern as required by the shape of the vessel, the number and depth of such steps causing an effect equivalent to the usual stretching. The product has the form and appearance of an ordinary clinker built wooden boat.

Fig. 2 is an enlarged section, on line 2—2, Fig. 1, near one end of the boat, and Fig. 3 is an enlarged section, on line 3—3, Fig. 1, amidships, or near the middle of the boat.

It will be readily understood that, as the forming may be done without heating, the invention offers the additional advantage that galvanized, tinned, lead-coated, or copper-coated mild steel sheets, or any other material in sheets (plain or coated) may be employed.

I claim:—

A vessel constructed of sheet metal formed in longitudinal steps, each step increasing in effective depth toward the bow and stern as required by the shape of the vessel.

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

WILLIAM GARDNER.

Witnesses:
ISABEL ROLLS,
FLORENCE HOUSTON.