A. STEVENSON.

Keels for Boats.

No. 167,036. Patented Aug. 24, 1875.

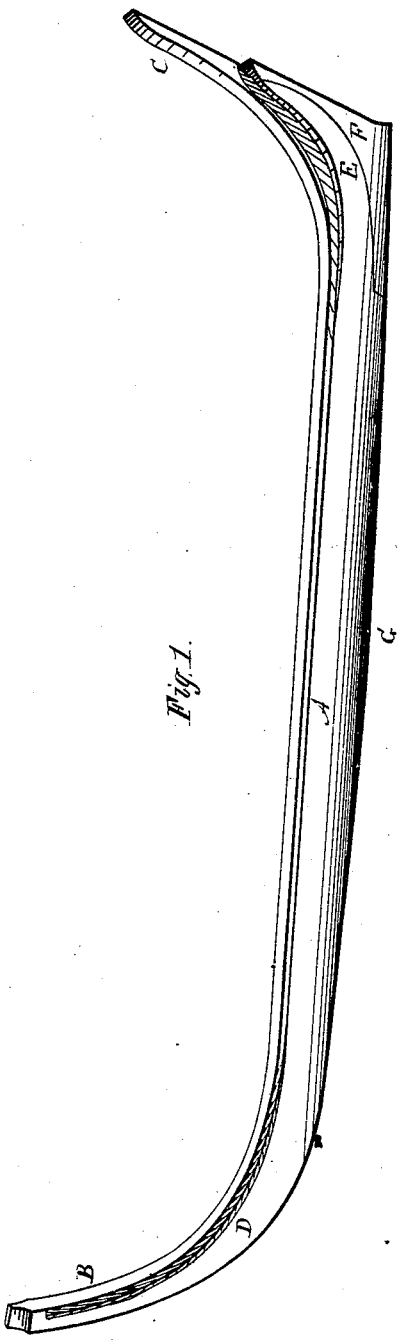

Fig. 1.

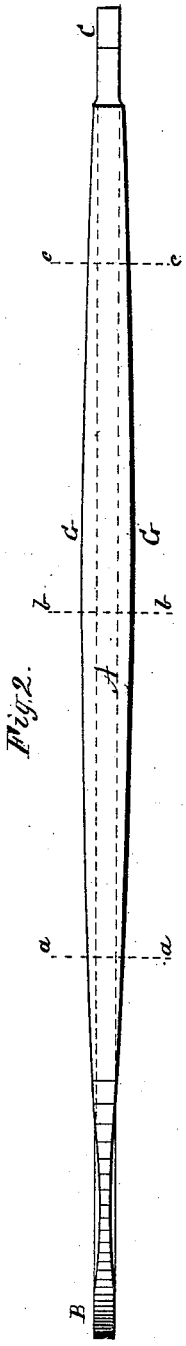

Fig. 2.

Fig. 5.

Fig. 4.

Fig. 3.

Witnesses
Wm. E. Shaffer
Harry Coleman,

Inventor
Augustus Stevenson
By his Atty J. Dennis Jr.

UNITED STATES PATENT OFFICE.

AUGUSTUS STEVENSON, OF KITTERY, MAINE.

IMPROVEMENT IN KEELS FOR BOATS.

Specification forming part of Letters Patent No. **167,036**, dated August 24, 1875; application filed April 19, 1875.

To all whom it may concern:

Be it known that I, AUGUSTUS STEVENSON, of Kittery, York county, in the State of Maine, have invented certain new and useful Improvements in the Keels of Boats and Vessels with stem and stern posts; and I hereby declare the following to be a full and exact description thereof, reference being had to the accompanying drawings forming a part of this specification.

The nature or essence of my invention consists in the keel of a boat or vessel with stem and stern posts all made of a single piece of wood bent in the form required for that purpose; also, in making ribs or flanges on the sides of the keel, at its lower or bottom edge, to hold the water when the boat is tipped or careened to one side, or sailing on the wind.

In the accompanying drawings, Figure 1 is a perspective view of a keel. Fig. 2 is the bottom of the keel, showing the thickness of the upper part in dotted lines. Figs. 3, 4, and 5 are cross-sections of the keel on the dotted lines opposite the several figures.

In the above-mentioned drawings, A is the keel for a boat, with the end B turned up, forming the stem, and the end C also turned up to form the stern-post, all in the form shown in the drawing.

To make my improved keel with stem and stern post, I prepare a straight piece of wood of proper size and length, and bend it into the form required, the wood being first steamed in the manner well known and practiced by ship-builders. After the keel is bent and dried I work it into such form as will suit the purpose for which it is intended to be used, by grooving the stem and stern posts to receive the ends of the planking, as shown at D and E; and a piece of dead-wood, F, may be applied under the stern-post C.

I prefer to make my keels gradually wider on the bottom from the stem toward the center, and gradually narrower as it reaches its termination in the dead-wood at the stern. This increase in the width at the bottom of the keel consists in a rib or flange, G, Fig. 2, on each side of the keel, which may be worked out of the solid wood of the keel or applied in separate pieces, either of wood or metal. The use of these ribs is to hold the water when the boat is sailing on the wind, or tipped, or careened, so as to prevent its careening so far as it would if there were no ribs on the keel; and it is estimated that a keel of four inches in width, with ribs from two to five inches in width, is equal in resistance to a keel seven inches in width without the ribs. Another advantage of the narrow keel is, the boat draws less water, and when sailing on the wind the ribs prevent the boat from falling off or going to leeward so much as it would do if there were no ribs.

My improved keels, with stem and stern posts made of a single piece of wood, are far stronger and made with far less labor, and, consequently, at far less cost, than when the stem and stern post are scarfed and bolted to the keel, and it is far less likely to leak.

In making my improved keels a piece of wood may be prepared wide enough for two or more keels and bent, and sawed apart lengthwise.

I claim—

The new article of manufacture described, to wit, a keel for a boat or vessel with stem and stern post all made of a single piece of wood bent in the form required, substantially as described.

AUGUSTUS STEVENSON.

Witnesses:
TIMO. DANE,
G. W. T. PUTNAM.