

(No Model.)

G. W. HENRY.
PORTABLE FOLDING BOAT.

No. 598,989.

Patented Feb. 15, 1898.

Fig. 1.

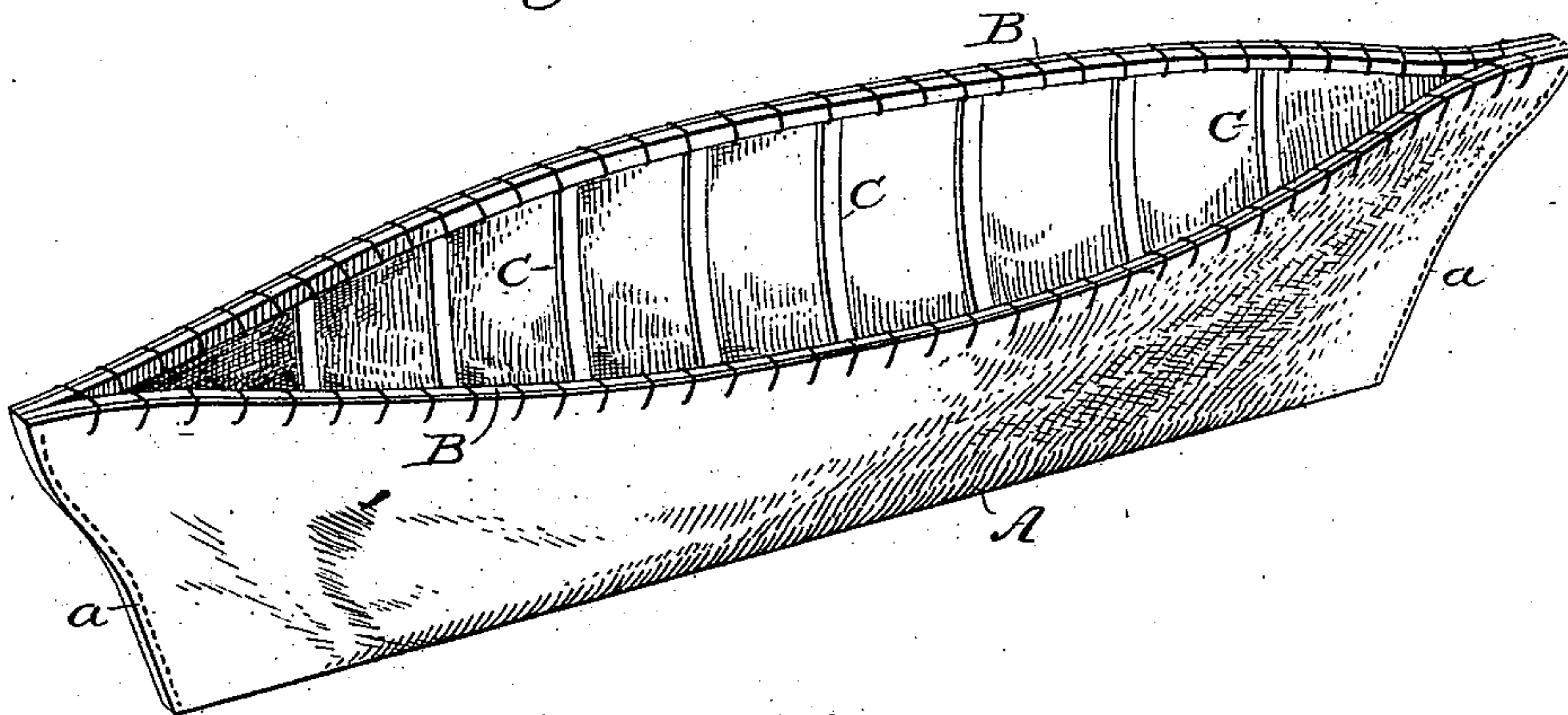
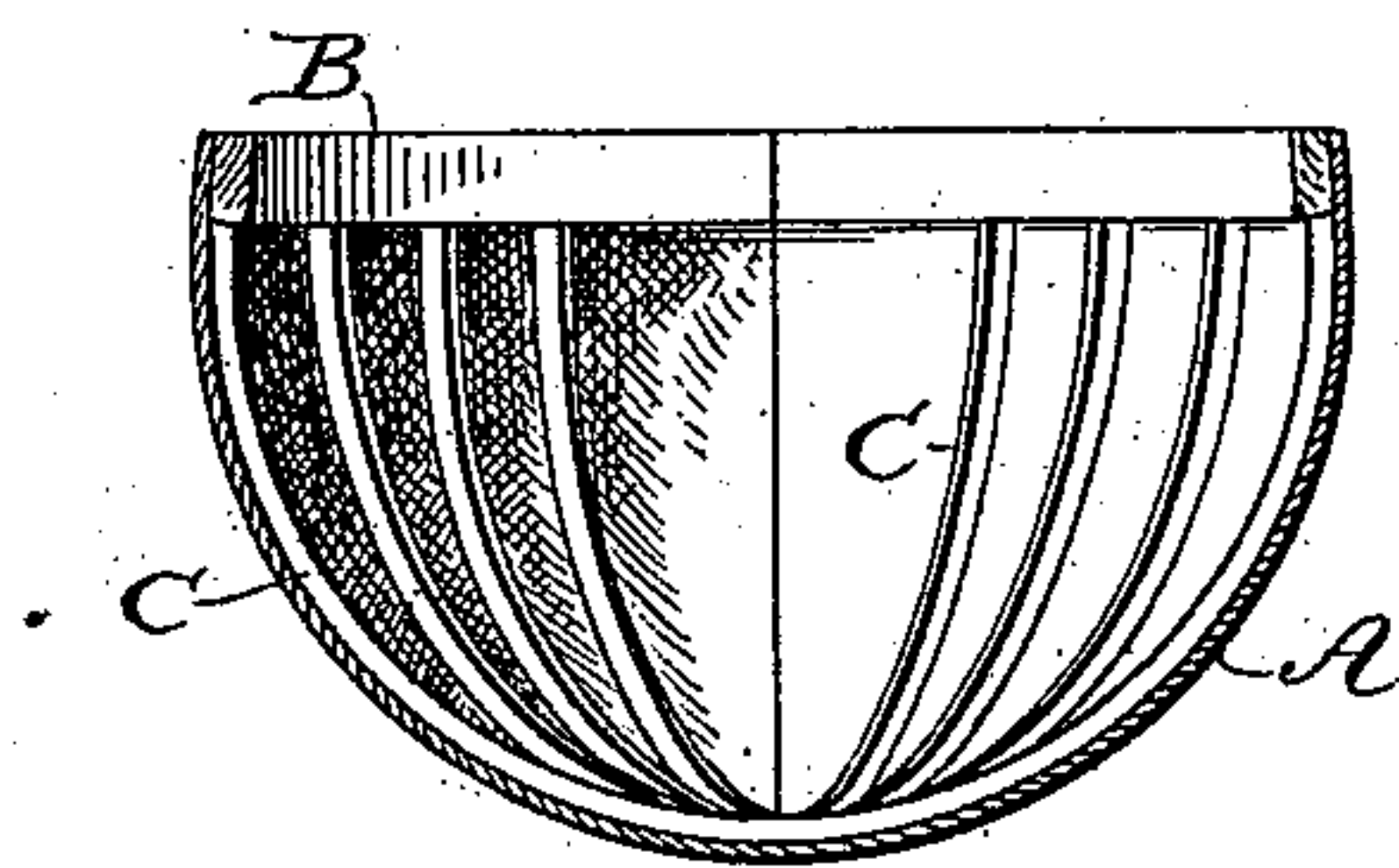


Fig. 2.



Witnesses

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GEORGE W. HENRY, OF OIL CITY, PENNSYLVANIA.

PORTABLE FOLDING BOAT.

SPECIFICATION forming part of Letters Patent No. 598,989, dated February 15, 1898.

Application filed December 19, 1896. Serial No. 616,323. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. HENRY, a citizen of the United States, residing at Oil City, in the county of Venango and State of Pennsylvania, have invented certain new and useful Improvements in Portable Folding Boats; 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.

This invention relates to improvements in portable "knockdown" boats; and it consists of certain novel constructions, combinations, and arrangements of parts, all of which will be hereinafter more particularly set forth and claimed.

In the accompanying drawings, forming part of this specification, Figure 1 represents a perspective view of my boat in its extended position, and Fig. 2 represents a similar view of said boat in its closed position.

A in the drawings represents the body of the boat, B B the gunwale-strips, and C C the ribs. The body portion A is constructed of any suitable flexible waterproof material, the ends of which are secured together, as at *a*, in any suitable manner to give the desired point of construction to the hull. The gunwale-strips B, which are constructed of some flexible material, are secured along the upper edge of the hull A and are hinged together at their meeting ends, so that they may be spread apart to any desired extent. The ribs C are simple curved segmental strips of flexible material adapted to be forced down into the hull to extend the same, the opposite ends of said ribs catching under the under sides of the gunwale-strips, and thus holding said ribs firmly in position and the gunwale-strips extended.

It will be observed from the foregoing that any size or length of ribs may be employed with a suitable hull, and thus give the boat either greater or less beam. In racing-boats, for instance, it is desirable to use very short ribs, so the hull will easily pass through the water, while in pleasure-boats, in which stability is a desirable character, it is preferable to employ longer ribs, so that the boat will thereby be made wider and less liable to cap-

size. It will also be observed that when the ribs C are removed from the hull the gunwale-strips may be brought together and the whole boat thus be doubled flat, so that it may be easily conveyed from one place to another and occupy very little space while being so conveyed.

The material I prefer to use for the hull A is a composition of rubber and canvas having sufficient body to lie smoothly when extended by the ribs, and thus present an unbroken surface that will offer little obstruction to the water.

The ribs C are formed of bendable material, as specified, and have an inherent resiliency, the said rib decreasing in size from those occupying the waist toward the opposite end of the boat. The ends of the said ribs when applied will give the boat the proper contour to bear against the under edges of the opposite gunwale-strips without any intermediate fastening, the tension exerted by the said strips not only properly distending the body of the boat, but also sustaining an engagement of the ends thereof with the under edges of the said gunwale-strips. The said ribs are also shaped to give a gradually-tapered form to the opposite ends of the boat to produce a canoe contour, and to secure the said gunwale-strips to the edges of the material of which the body of the boat is formed closely-arranged ribs of flexible material are provided, which pass over the said gunwale-strips and through the edges of the said material.

It will be observed from the foregoing that with the exception of the hinges connecting the gunwale-strips no metallic trimmings or attachments are employed, which lightens the construction of the boat and also provides a simple and inexpensive arrangement.

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

A collapsible boat, the hull of which is formed of a flexible composition of canvas and rubber, flexible gunwale-strips permanently secured along the upper edges of said hull by means of loops surrounding the said strips and passing through the said hull at this point, the said strips being hinged together at their

opposite ends, and a plurality of flexible detachable ribs having an inherent resiliency adapted to be applied to the said hull with their ends abutting and held against the under edges of the said gunwale-strips by the
5 said inherent resiliency alone to hold the hull distended and said ribs firmly in position, the said ribs decreasing in size from the waist to the opposite ends of the boat to provide a
10 canoe shape for the latter, and also continu-

ous and unbroken from end to end, substantially as described.

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

GEORGE W. HENRY.

Witnesses:

J. T. FRANZ,
P. H. SMITH.