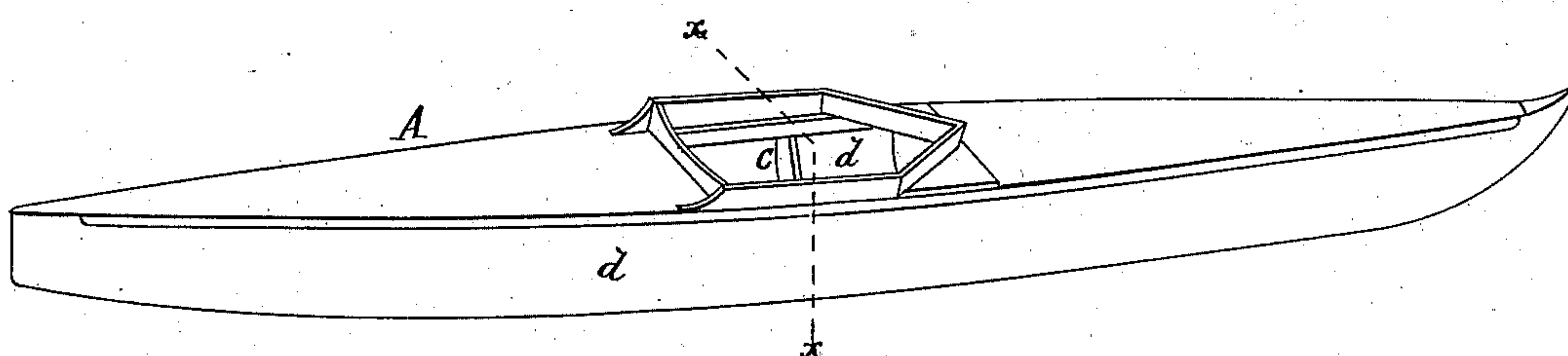


J. T. COUGHLIN & A. P. SCHNEIDER.  
Construction of Boats.

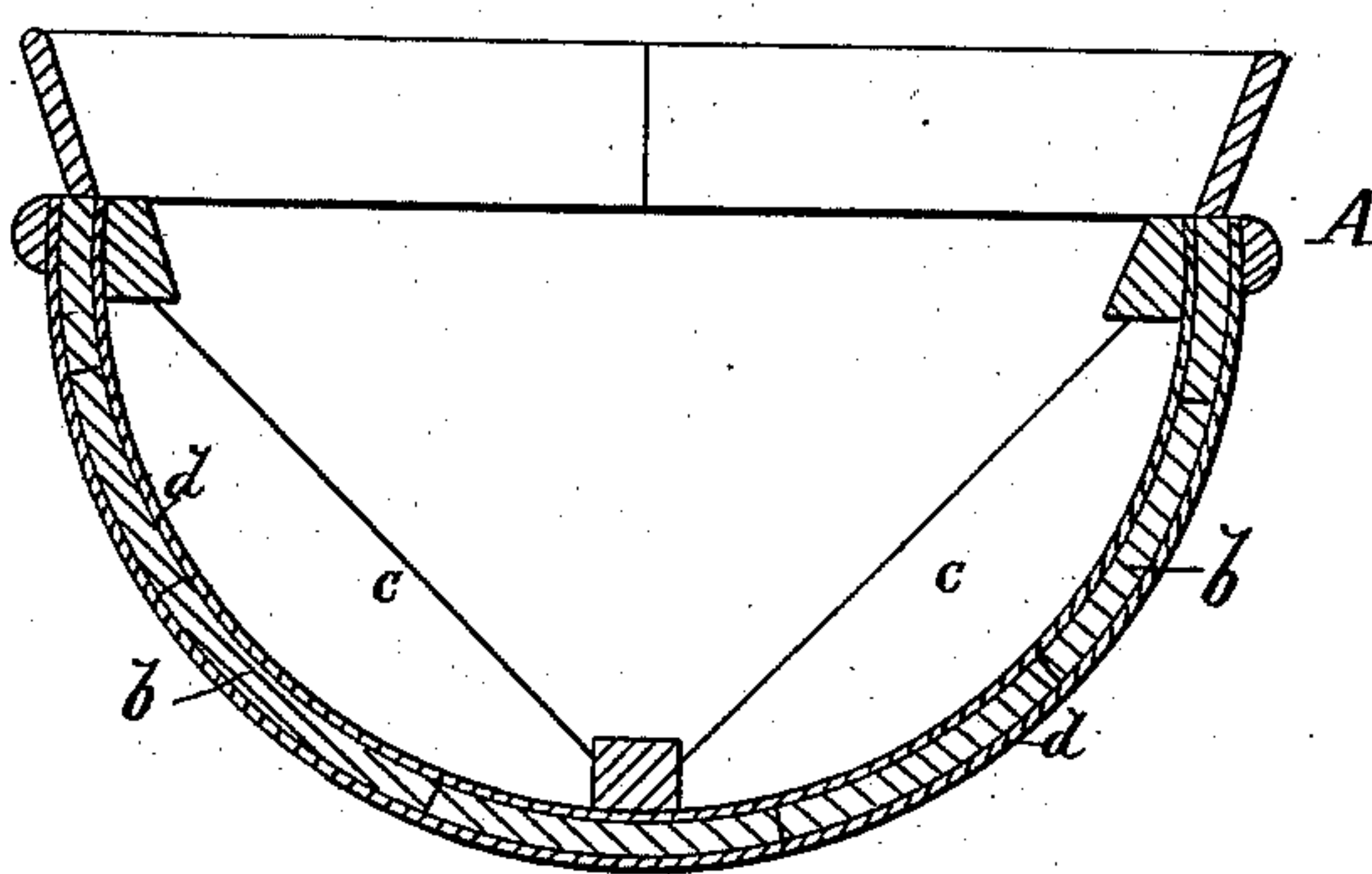
No. 228,040.

Patented May 25, 1880.

*Fig. 1.*



*Fig. 2.*



WITNESSES:

*Henry N. Miller*  
*C. Sedgwick*

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*J. T. Coughlin*  
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# UNITED STATES PATENT OFFICE.

JAMES T. COUGHLIN AND AUGUST P. SCHNEIDER, OF NEW YORK, N. Y.

## CONSTRUCTION OF BOATS.

SPECIFICATION forming part of Letters Patent No. 228,040, dated May 25, 1880.

Application filed November 1, 1879.

*To all whom it may concern:*

Be it known that we, JAMES T. COUGHLIN and AUGUST P. SCHNEIDER, of the city, county, and State of New York, have invented a new Improvement in the Construction of Boats, of which the following is a specification.

Our invention relates to the manufacture of boats, especially light shell or race boats; and the invention consists in the use of sheet-cork as a material for the shell of boats, strengthened by sheets of thin cloth or other suitable material, which material is to be secured upon the inner and outer sides of the shell by water-proof varnish.

With boats that are to be rowed by hand lightness is an important requisite, and with race-boats various materials—such as thin wood and paper—have been used to obtain the required buoyancy with sufficient strength; but with such boats the buoyancy is obtained simply by reducing weight of material at a sacrifice of strength. Cork, being the most buoyant of wood, has been used for floats and life-boats, inclosed within canvas bags and between the sides of boats, but has not been used as a material for building boats, as it lacks tenacity and is readily broken.

In carrying out our invention we take sheets of cork, such as are sold as an article of commerce, and cement them together, end to end and side to side, over a suitable form or frame of the size and shape required for the boat, and, if required, strengthen the joints at the angles with metal pins and braces. We then take light strong muslin, silk, or other woven or fibrous material, and cover the inner and outer surface of the shell with such material, attaching it by water-proof varnish, and coat the outside also with paint or varnish. These layers of cloth strengthen the cork, prevent it from cracking, spreading, and breaking, and preserve it from injury by moisture or other-

wise. The seats and outriggers will then be attached in the usual manner, and the frame serve to brace the boat against external pressure.

The thickness of the sheets of cork used will vary according to the size of boats and its intended uses. In light racing-boats they may be quite thin—say an eighth of an inch or less—and a boat made with a shell of that thickness will be of ample strength, and will sustain its full load with but slight displacement of water.

Our invention is illustrated by the accompanying drawings, wherein a boat is represented, in—

Figure 1, by side elevation, and in Fig. 2 by a cross-section.

The boat A is formed with sides *b* of cork, covered with muslin or other suitable material, as at *d*. *c* are the braces.

The boat constructed as described is light, strong, and durable, and may be made of any desired form or size.

We are aware that cork has been used for life-preservers and life-boats, contained loosely within a suitable covering, so as to utilize its buoyant qualities. We do not claim such use; neither do we claim our improved boat as a life-boat.

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

A boat having its shell constructed of sheets of cork cemented at the joints and covered with woven or other thin fibrous material attached by water-proof varnish, substantially as specified.

JAMES T. COUGHLIN.  
A. P. SCHNEIDER.

Witnesses:

GEO. D. WALKER,  
C. SEDGWICK.