

R. Sutton,
Screw Propeller.
No. 107,120. *Patented Sept. 6. 1870.*

Fig. 1

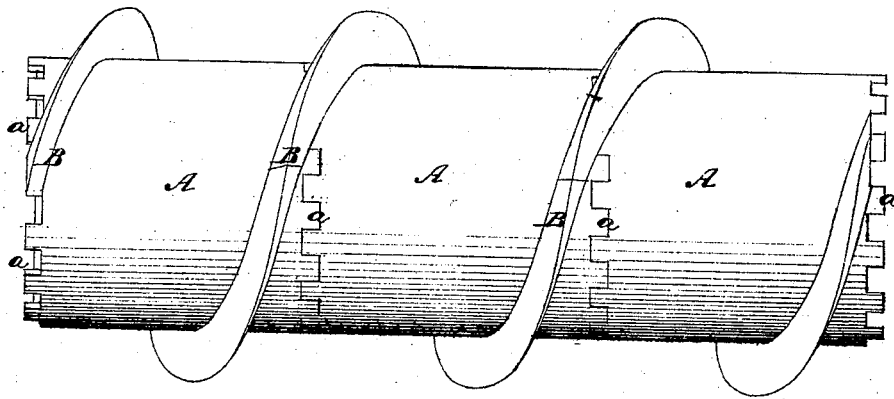


Fig. 2

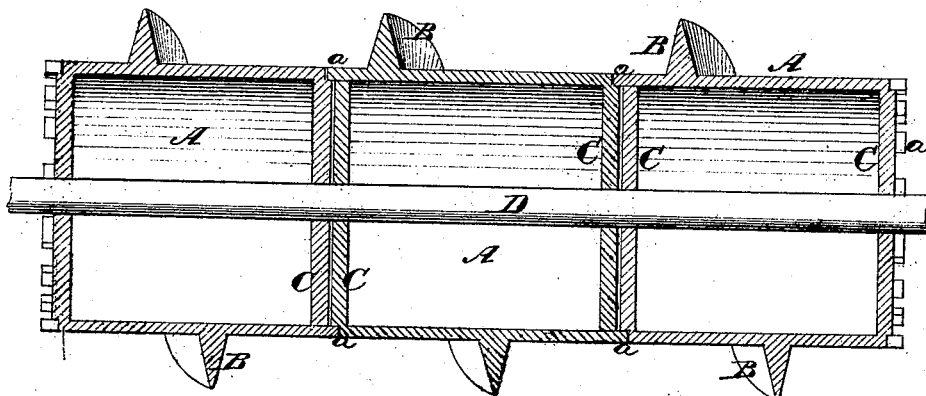
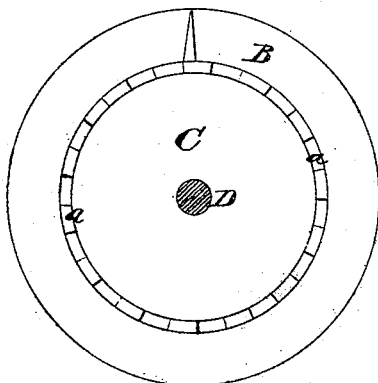


Fig. 3



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by
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Witnesses
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United States Patent Office.

ROBERT SUTTON, OF NEW CASTLE, DELAWARE.

Letters Patent No. 107,120, dated September 6, 1870.

IMPROVEMENT IN PROPELLERS FOR STEAM VESSELS.

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern :

Be it known that I, ROBERT SUTTON, of New Castle, in the county of New Castle and State of Delaware, have invented a new and improved Propeller for Steam-Vessels; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing making part of this specification, in which—

Figure 1 is a side view of the propeller.

Figure 2 is a diametrical section through the same.

Figure 3 is an end view of the propeller.

Similar letters of reference indicate corresponding parts in the several figures.

This invention relates to an improvement on that class of screw-propellers for steam-vessels which are adapted for being arranged beneath the overhanging guards, and on both sides of and parallel with the keel of the boat.

The improvement which I have made on this kind of propeller consists in constructing it of a number of hollow air-tight sections, united by means of interlocking teeth, or other equivalent devices, which will allow the sections to be readily separated from one another in the event of collision or other serious accident, and to be used as life-preservers.

The following description will enable others skilled in the art to understand and carry into effect my invention.

In the accompanying drawing I have represented three sections of the improved propeller, each one of which is cylindrical.

In a complete propeller more than three sections may be employed, and the whole, when put together, will be terminated by pointed or conical sections.

Each one of the sections A consists of a cylindrical shell, with both ends closed by bulk-heads C C, which form a hollow air-tight section, possessing great buoyancy.

The heads C C are centrally perforated to receive through them the shaft D, which perforations will be closed, when a section is used as a floating life-preserver.

The end of each section A has teeth *a* formed on it, which interlock with the teeth on contiguous sections, when the sections are brought together on the shaft D, thus uniting the sections as though they were all made of a single piece.

The teeth *a* are formed on the ends of the cylindrical portions of the sections, as shown in the drawing, and, while I prefer to adopt this mode of connecting the sections together, so that one will not turn without the other, I do not confine myself to teeth, as other equivalent means may be adopted to effect the same result.

B is the flange or propeller-blade, which winds around the sections from one end to the other of the propeller.

Propellers thus constructed are to be applied to boats in such manner that, in the event of a serious accident, requiring the passengers to leave the boat, the propeller-shaft can be readily unshipped from its bearings fore and aft, and the sections A separated from one another and used as floats for preserving life and property.

Having described my invention,

What I claim as new, and desire to secure by Letters Patent, is—

A screw-propeller, made up of hollow air-tight sections, connected together on a shaft by means of interlocking devices, substantially as described.

ROBERT SUTTON.

Witnesses:

ROBERT C. GORDON,
J. H. SWAN.