

(No Model.)

R. S. PEABODY.
BOAT.

No. 563,796.

Patented July 14, 1896.

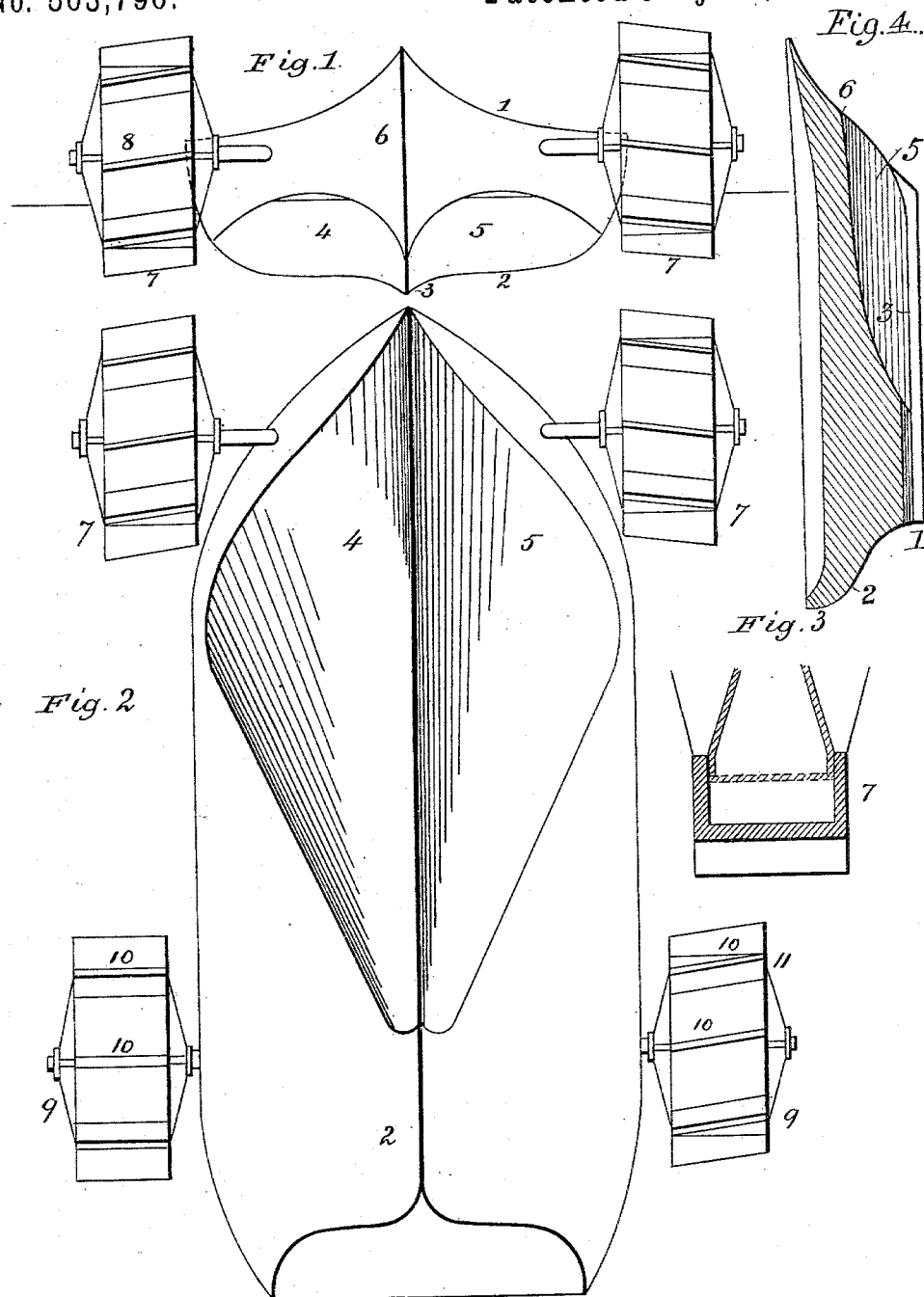


Fig. 2

Fig. 3

Fig. 4

Witnesses:

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UNITED STATES PATENT OFFICE.

ROBERT SINGLETON PEABODY, OF PHILADELPHIA, PENNSYLVANIA.

BOAT.

SPECIFICATION forming part of Letters Patent No. 563,796, dated July 14, 1896.

Application filed May 12, 1894. Serial No. 511,013. (No model.)

To all whom it may concern:

Be it known that I, ROBERT SINGLETON PEABODY, a citizen of the United States, residing at the city of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Boats, of which the following is a specification.

The principal object of my present invention is to provide a boat or vessel in which comparatively little of the force exerted to propel it is lost or wasted, whereby the vessel may be propelled rapidly. To this end use is made in my invention of longitudinally-disposed grooves extending from a point aft of midships in upwardly-inclined directions to the opposite sides of the prow and of propelling-wheels whose paddles throw off water into said grooves, all of which is hereinafter more fully described and claimed.

The nature, characteristic features, and scope of my invention will be more fully understood from the following description, taken in connection with the accompanying drawings, forming part hereof, in which—

Figure 1 is a front view of a boat embodying features of my invention, showing grooves disposed on opposite sides of the prow and sloping downwardly therefrom so as to merge with the bottom of the vessel aft of midships, and also showing bow paddle-wheels having inclined paddles and adapted to throw water into said grooves. Fig. 2 is a plan view of the underside of the boat. Fig. 3 is a transverse sectional view taken radially through the rim of one of the wheels and illustrating in dotted lines a sort of circular covering that may be employed therewith; and Fig. 4 is a view drawn upon a smaller scale and illustrating, diagrammatically, a longitudinal section of the vessel, taken through one of the grooves.

Referring to the drawings, the hull 1 is provided with longitudinally-disposed grooves 4 and 5, extending from a point aft of midships in upwardly-inclined directions, Fig. 4, to opposite sides of the prow 6, Fig. 1. The portion 2 of the boat aft of this point is full-bottomed and the keel 3 lies between the

7 are paddle-wheels disposed opposite the entrances of the grooves 4 and 5, and rotated through the intervention of any suitable prime mover, (not shown,) whereby their paddles are caused to throw water into the grooves 4 and 5. As shown in the drawings, the paddles 8 are inclined for the production of this result.

9 are stern paddle-wheels having their paddles 10 inclined as indicated at 11, so as to throw water away from the vessel, or having their paddles 10 disposed straight, as indicated on the left-hand side of Fig. 2.

The paddle-wheels are buoyant and comprise circular internally-channeled structures, Fig. 3, which may have their channeled portion covered by means of a circular covering, as indicated by dotted lines in Fig. 3, so that these wheels constitute in effect circular trough-like structures which float upon the water and add buoyancy to the craft.

In use, means, such as an engine and its complemental gearing, located in the hold of the boat, are provided for rotating the wheels 7 and 9, and the outer ends of the shafts carrying these wheels may be supported and braced by means of suitably-disposed trusses. The vessel is loaded or ballasted in such manner that when it is at rest its bow is slightly more depressed than its stern. However, when the vessel is being propelled forward water enters the grooves 4 and 5, and since these grooves slope downwardly and rearwardly, Fig. 3, this water tends to elevate the bow of the vessel. In this connection it may be stated that the paddles of the wheels 7 throw off water which enters the grooves 4 and 5, in addition to the water which otherwise enters them. The water which traverses the grooves 4 and 5 is discharged from them in rear of the center of gravity of the boat. The bow portion of the boat, by reason of its weight and of the action of gravity, seeks to regain a position of equilibrium and thus acts to tend to move the boat forward.

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

The combination of a boat having longi-

itudinally-disposed grooves extending from
aft of midships and in upwardly-inclined di-
rections to the opposite sides of the prow for
the purpose of elevating the latter, with, pad-
5 dle-wheels having inclined paddles and adapt-
ed to throw water into the entrances of said
grooves, substantially as described.

In testimony whereof I have hereunto signed
my name.

ROBERT SINGLETON PEABODY.

In presence of—

ANDREW B. CAMPBELL,

A. B. STOUGHTON.