(No Model.)

B. B. PEASE.

DEVICE FOR PROPELLING BOATS.

No. 453,704. Patented June 9, 1891.

Fig. 1.

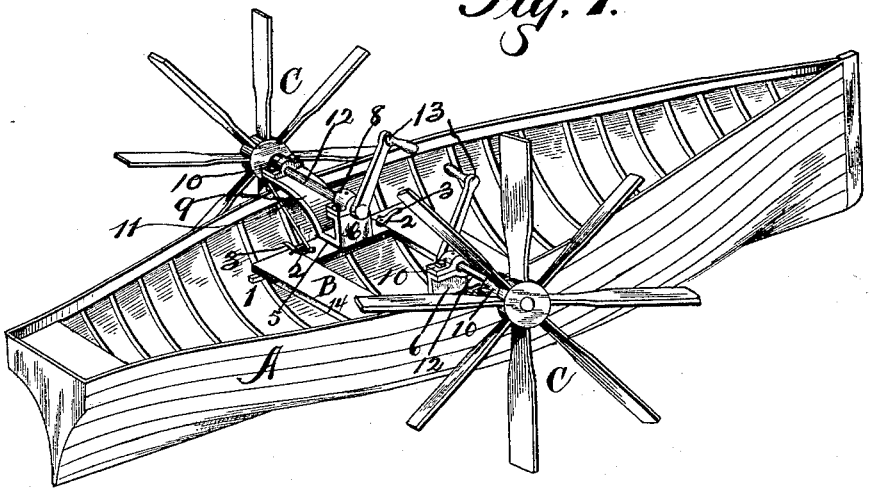


Fig. 2.

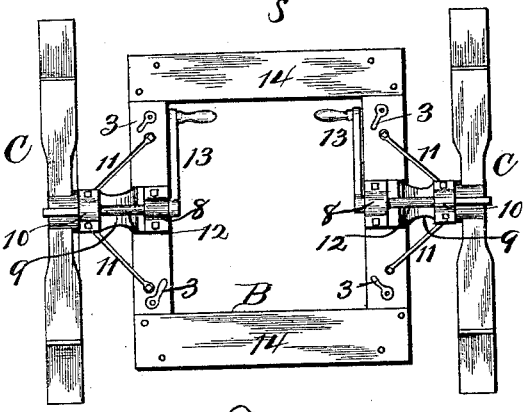
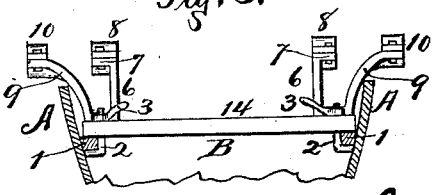


Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

BENJAMIN B. PEASE, OF CASTLE CREEK, NEW YORK.

DEVICE FOR PROPELLING BOATS.

SPECIFICATION forming part of Letters Patent No. 453,704, dated June 9, 1891.

Application filed January 19, 1891. Serial No. 378,250. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN B. PEASE, of Castle Creek, in the county of Broome, in the State of New York, have invented new and useful Improvements in Devices for Propelling Boats, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

My invention relates to the propulsion of boats and mechanisms therefor.

My object is to provide improved crank-driven independently-operating side wheels mounted on separate shafts, being mounted in bearings mounted upon a frame detachably secured within the boat and provided with side extensions arching upward over and projecting beyond the gunwale.

My invention consists in the several novel features of construction and operation hereinafter described, and which are specifically set forth in the claims hereunto annexed.

It is constructed as follows, reference being had to the accompanying drawings, in which—

Figure 1 is an isometrical elevation of a boat with my propelling mechanism in position. Fig. 2 is a top plan of the propelling mechanism detached. Fig. 3 is a sectional elevation of the boat and frame carrying the wheels, the shafts and cranks being omitted.

A is the boat, and 1 1 are risers or horizontal cleats, secured within it on opposite sides between the gunwale and keel.

B is a rectangular frame, supported upon these risers and detachably secured in place by means of the bolts 2, which engage with them, and the hand screw-nuts 3 upon said bolts. Upon the opposite sides of the frame I secure the outriggers, each of which comprises a base 5, a vertical post 6, bent at the top to form the flange 7, said upper end and flange being adapted to form part of the journal or bearing 8, and 9 is an arm arching upward and outward in close proximity to the gunwale and projecting beyond the gunwale like an outrigger, and adapted to form a part of a journal or bearing 10 on top of its outer end. Braces 11, connecting this arm at its outer end to the frame, serve to steady the outrigger against lateral vibration.

C C are the paddle-wheels, each secured upon the outer end of a shaft 12, which is journaled in the bearings 8 and 10, and each shaft is provided upon its inner end with a crank-arm and handle 13. The side bars 14 of the frame B serve as seats for the operators.

It will be seen that the wheels can be operated together though mounted in separate bearings, or separately, both in the same direction or in opposite directions. It will be further seen that the weight of the wheels does not bear upon the gunwales to spring them and rack the boat, and also that all of the lateral strain is borne by the frame and through that by the body of the boat, its planking and ribs, and these are strongly reenforced by the strong risers and the length of their bearing upon them.

By loosening the hand-nuts the whole frame and wheels can be removed from the boat.

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

1. A boat-propeller comprising a frame supported by risers within the boat and detachably secured thereto, outriggers secured to the frame and arching over and projecting beyond the gunwale on both sides of the boat, a journal-bearing upon the outer end of each outrigger, a post erected upon the inner end of each outrigger, a journal-bearing upon each post, a shaft journaled in the bearings on each side of the boat, cranks upon the inner ends of the shafts, and paddle-wheels upon the outer ends of the shafts, in combination, as set forth.

2. A boat-propeller comprising a frame supported by risers within the boat and detachably secured thereto, outriggers secured to the frame and arching over and projecting beyond the gunwales on both sides of the boat, a journal-bearing upon the outer end of each outrigger, a post erected upon the inner end of each outrigger, a journal-bearing upon each post, a shaft journaled in the bearings on each side of the boat, cranks upon the

inner ends of the shafts, paddle-wheels upon the outer ends of the shafts, and side braces secured to the outer ends of the outriggers and to the frame, in combination, as set forth.

3. The combination, with the boat and a frame secured therein, of outriggers secured to the frame and arching upward and outward over the gunwale, and lateral braces secured to the outriggers and to the frame on each side, as set forth.

In witness whereof I have hereunto set my hand on this 13th day of January, 1891.

BENJAMIN B. PEASE.

In presence of—

LEWIS ALLEN,

DARWIN HOWARD.