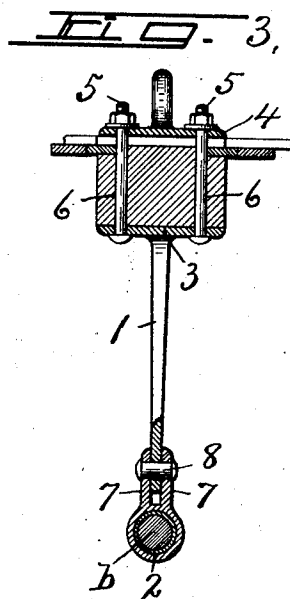
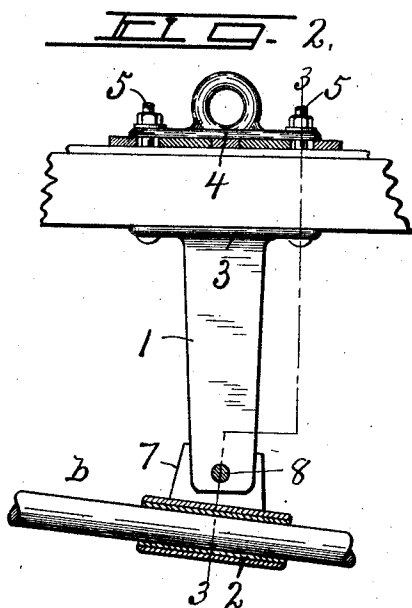
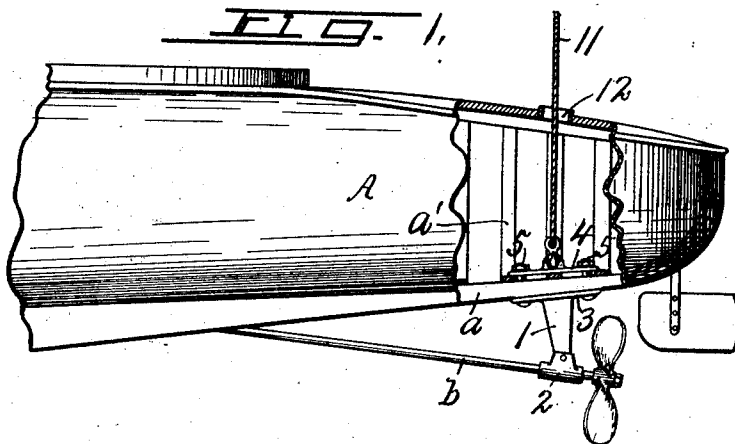


1,034,110.

Patented July 30, 1912.



Witnesses:  
H. H. Hunt.  
W. E. Chase.

Marshall Hammer  
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# UNITED STATES PATENT OFFICE.

MATHEW HEMMER, OF SYRACUSE, NEW YORK.

COMBINED BOAT LIFT AND SHAFT-HANGER.

1,034,110.

Specification of Letters Patent.

Patented July 30, 1912.

Application filed June 14, 1912. Serial No. 703,730.

*To all whom it may concern:*

Be it known that I, MATHEW HEMMER, of Syracuse, in the county of Onondaga, in the State of New York, have invented new and useful Improvements in Combined Boat Lifts and Shaft-Hangers, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

10 This invention relates to certain improvements in a combined boat lift and shaft hanger for motor boats and similar craft and refers more particularly to means for attaching a hoisting device to the shaft  
15 hanger and keel of the boat whereby the stern of the boat may be lifted out of the water for inspection or repairs of the propeller or steering gear without liability of straining or springing the keel or shaft.

20 Another object is to provide a more secure anchorage or fastening for the shaft hanger to relieve as far as possible strain upon the post by which such hanger is secured to the boat.

25 Other objects may be brought out in the following description.

In the drawing, Figure 1 is a side elevation of the rear portion of a boat, partly broken away, illustrating my improved boat  
30 lift and hanger and hoisting cable attached thereto. Fig. 2 is an enlarged side elevation, partly in section, of the same lift and hanger. Fig. 3 is a transverse vertical sectional view taken on line 3—3, Fig. 2, except that both sides of the shaft bearing  
35 are shown.

The device forming the subject matter of this invention may be applied to any motor boat as —A— having a keel —a— and propeller shaft —b— and comprises a hanger  
40 —1— having a shaft bearing —2— and opposed clamping plates —3— and —4—, all of which parts are preferably made of cast metal or drop forging.

45 The hanger —1— is preferably T-shape, the plate —3— being integral therewith and of considerably greater cross sectional area than the pendant portion or stem and is provided with a flat upper face for direct

application to the underside of the keel 50  
—a—.

The sides of the boat are braced in the usual manner by ribs —a'— which extend across and are secured to the upper face of the keel in the usual manner. 55

The clamping plate —4— which is preferably of the same size or area as the lower clamping plate —3— is applied directly to the upper faces of the ribs —a'— just above the keel and in alinement therewith and this  
60 plate together with the plate —3— are provided with a plurality of, in this instance four, bolt openings for receiving a corresponding number of clamping bolts —5— by which the hanger is firmly secured to  
65 the lower and upper faces of the keel over relatively large areas, the bolts —5— being passed through apertures —6— in the keel.

The pendant arm of the hanger —1— is substantially flat and arranged edgewise in  
70 the direction of length of the boat so as to afford as little resistance as possible to the water, and at the same time forming a strong and durable support for the bearing —2—. This bearing —2— is provided  
75 with upwardly projecting lugs —7— forming an intervening slot for receiving the adjacent end of the hanger —1— to which the lugs —7— are pivoted by a pivotal pin —8—, thus permitting the hanger to be used  
80 in connection with shafts which are positioned at different angles.

The ribs of the boat are usually spaced some distance apart and in order that the upper plate may have a continuous bearing,  
85 the spaces between the ribs are filled in with blocks —9—.

The upper clamping plate —4— is provided with an upwardly projecting central eye or loop —10— forming an attaching  
90 member for a suitable hoisting cable —11— which is passed through an opening —12— in the deck, such opening being normally closed by a suitable cap, not necessary to herein illustrate or describe as deck caps  
95 are well known to those skilled in this art.

What I claim is:

A combined boat lift and shaft hanger

having relatively broad flat clamping plates applied respectively to the lower and upper faces of the bottom of the boat near the stern thereof, the lower plate having a pendant arm and a shaft bearing pivoted thereto, the upper plate having an upwardly projecting central eye for attachment to a suitable hoisting cable, and clamping bolts passing through the ends of the plates and ad-

jacent portions of the bottom of the boat for 10 firmly clamping the plates in operative position.

In witness whereof I have hereunto set my hand on this 10th day of June 1912.

MATHEW HEMMER.

Witnesses:

H. E. CHASE,

E. S. TUCKER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."