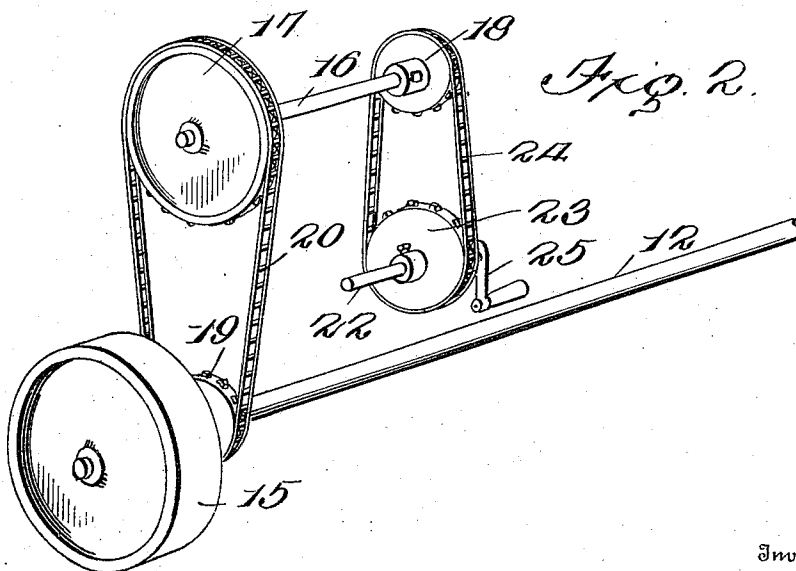
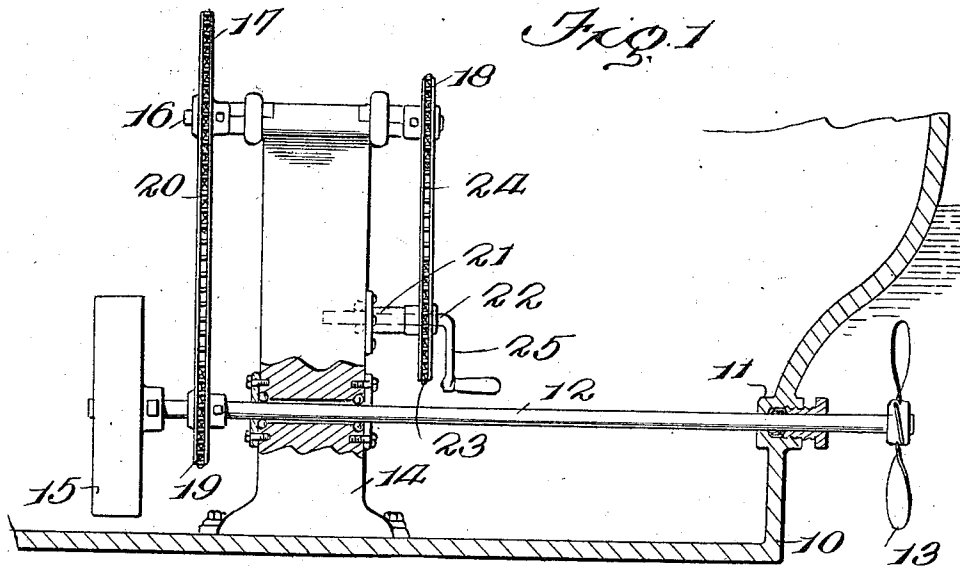


T. MORIARTY.
MARINE PROPELLING MECHANISM.
APPLICATION FILED MAR. 19, 1909.

965,532.

Patented July 26, 1910.



Witnesses

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TIMOTHY MORIARTY, OF QUINCY POINT, MASSACHUSETTS.

MARINE PROPELLING MECHANISM.

965,532.

Specification of Letters Patent.

Patented July 26, 1910.

Application filed March 19, 1909. Serial No. 484,481.

To all whom it may concern:

Be it known that I, TIMOTHY MORIARTY, citizen of the United States, residing at Quincy Point, in the county of Norfolk and State of Massachusetts, have invented certain new and useful Improvements in Marine Propelling Mechanism, of which the following is a specification.

This invention relates to marine propulsion devices and refers particularly to a manually operated device for propelling small craft.

An object of this invention is to arrange a plurality of gears and shafts so as to produce the rapid rotation of a propeller and which are so arranged as to enable the operation thereof to be effected by hand power.

The invention further contemplates the arrangement of a plurality of gears and shafts so that the same may be disposed within a small craft and which will occupy but small space and which at the same time may be rigidly mounted therein, and which will produce an efficient and durable mechanism.

Other objects and advantages will be set forth in the particular construction, arrangement and combinations of the parts which will be set forth in the specification and appended claim.

For a full understanding of the invention reference is to be had to the following description and accompanying drawings, in which:—

Figure 1 is a side elevation of the mechanism as applied to a boat, the boat being shown in section, and Fig. 2 is a detailed perspective view of the mechanism detached.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

Referring to the drawings the numeral 10 designates the body of a small boat in which the device is installed and which is provided with a stuffing box 11 through which the propeller shaft 12 extends. The propeller shaft 12 protrudes from the boat 10 and supports a propeller 13 of any suitable construction. The forward extremity of the propeller shaft 12 is supported upon a standard 14 and carries a fly-wheel 15 for the purpose of insuring a uniform and steady rotation of the shaft 12. The standard 14 extends upwardly beyond the shaft 12 and supports an arbor 16 which is arranged parallel with the shaft 12 and sup-

ports at its opposite extremities two sprockets 17 and 18, the sprocket 17 being of greater diameter than the sprocket 18, the sprocket 17 being connected to a sprocket 19 which is carried upon the shaft 12 forwardly of the standard 14 by means of a suitable chain 20. The standard 14 is provided with a rearwardly extended sleeve 21 which supports a stub shaft 22 upon which a large sprocket 23 is mounted the sprocket 23 being connected to the sprocket 18 by means of a chain 24. The sprockets 17 and 19 and 18 and 23 are disposed in the same respective planes and are provided for the purpose of transmitting motion from one shaft to another. The stub shaft 22 is provided upon its outer extremity with a crank-arm 25 which may be rotated by the operator in order to actuate the mechanism.

The standard 14 is mounted within the boat 10 in any suitable manner and may be supported rigidly in position by lateral braces or the like.

The standard 14 is provided with ball bearings for the reception of the several shafts which are carried thereby so as to reduce friction incident to the rotation of the shafts therein. This provision of the ball bearing supports furthers the operation of the device and enables the operator to maintain the propeller shaft 12 at a high rate of speed with but little effort after the inertia of the fly-wheel 15 is overcome.

In operation, the crank arm 25 is rotated to turn the sprocket 23, motion being transmitted through the medium of the chain 24 and sprocket 18 to the arbor 16 and from the arbor 16 through the medium of the sprockets 18 and 19 and chain 20 to the shaft 12 to drive the propeller. As the fly-wheel 15 is mounted upon the propeller shaft 12 the same imparts a steady and uniform rotation thereto so as to render the operation of the crank arm 25 uniform.

The stuffing-box 11 is adapted to support the rear end of the shaft 12, although should a shaft of any great length be employed, additional standards may be disposed about the same.

Having thus described the invention, what is claimed as new is:—

The combination with a hull having a stuffing box in the stern thereof, of a standard secured to the bottom of the hull and provided with a transverse bearing disposed in alinement with the stuffing box, a pro-

10 peller shaft journaled in said bearing and having one end thereof extended through the stuffing box and provided with a propeller, a fly wheel carried by the other end of the shaft, a sprocket wheel mounted on the propeller between the fly wheel and standard, an arbor journaled on the upper end of the standard and provided with oppositely disposed sprocket wheels of different diameters, a sprocket chain connecting the large sprocket wheel on the arbor with the sprocket wheel on the propeller shaft, a sleeve secured to the rear face of the stand-

ard above the propeller shaft and in alignment with the arbor, a stub shaft journaled in said sleeve and provided with a terminal crank, a sprocket wheel carried by the stub shaft, and a sprocket chain connecting the sprocket wheel on the stub shaft and the small sprocket wheel on the arbor. 15 20

In testimony whereof I affix my signature in presence of two witnesses.

TIMOTHY MORIARTY. [L. S.]

Witnesses:

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