M. ALDERMAN. HAND PROPELLED MOTOR BOAT. APPLICATION FILED MAY 28, 1909.

946,711.

Patented Jan. 18, 1910. ^{2 SHEETS-SHEET 1.}





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UNITED STATES PATENT OFFICE.

MAGELLAN ALDERMAN, OF OSPREY, FLORIDA.

HAND-PROPELLED MOTOR-BOAT.

946,711.

Patented Jan. 18, 1910. Specification of Letters Patent.

Application filed May 28, 1909. Serial No. 498,794.

To all whom it may concern:

Be it known that I, MAGELLAN ALDER-MAN, a citizen of the United States, residing at Osprey, in the county of Manatee and State of Florida, have invented certain new and useful Improvements in Hand-Propelled Motor-Boats, of which the following is a specification.

This invention relates to certain new and useful improvements in manually-operated 10 motor boats.

The object of my invention is to provide a simply constructed, effective and readily operated motor, arranged for use in light

15 pleasure boats, enabling the operator to obtain a greater speed than is possible with the use of oars at the expenditure of the same amount of manual power.

With these and other objects in view the 20 invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, and particularly pointed out in the claims, it being understood that changes in the specific structure 25 shown and described may be made within

the scope of the claims without departing from the spirit of the invention.

In the drawings forming a portion of this specification, and in which like characters of

30 reference indicate similar parts in the sev-eral views, Figure 1 is a fragmentary sectional view taken through the stern portion of a boat provided with my propelling mechanism, Fig. 2 is a top plan view there-35 of, Fig. 3 is a detail front view of the rock

lever, Fig. 4 is a front view of the internal gear and connecting shaft.

In the accompanying drawings, 5 represents the stern end of a pleasure boat provided with the usual stern seat 6 and rudder

407. The seat 6 is supported by means of a post 8. Secured to this post 8 is a bearing 9, this bearing supporting a stub shaft 10 which stub shaft in turn carries the beveled 45 gear 11 provided with a wrist pin 12 from

which extends the crank rod 13 as clearly indicated in Fig. 1.

Held to a bearing within the post 8 is the

driving shaft 14 which at its rear end is 50 held within the bearing 15 secured to the stern of the boat. This shaft 14 is provided with an internal gear 15 which is made heavy enough to serve the purposes of a fly wheel. The outer peripheral edge of

55 this internal gear is rounded as is shown at |

16 so as to present a convenient edge to be grasped by the hand of the operator. Extending from and forming a portion of this internal gear 15 is the exteriorly con-nected bevel gear 17 which also serves as the 50 hub of the fly wheel forming gear 15. This gear 17 is in mesh with the bevel gear 11 upon the shaft 10 which is disclosed in Fig. 1.

Held within the bearings 19 and 20 and 65 secured to the stern of the boat, as disclosed in Fig. 1 is the propeller shaft 21 at one end carrying the propeller 22 and at the other end is the pinion 23 meshing with 70 the internal gear 15 as disclosed.

At a suitable point in front of the seat 6 I provide the supporting bracket 25 which near its upper end has the supporting pin 26 carrying the rock lever 27 as disclosed in Fig. 3. This lever at its upper end has the 75 operating handle 28 while the lower end is forked to provide the slot 29 within which the front end of the crank rod 13 is held, the rod being secured by means of the pin 30. The lower forked ends of this operat- 80 ing rock lever are slotted as disclosed at 31 to slidably receive the threaded end 32 of the foot rest 33 as clearly indicated in Fig. 3. By means of suitable nuts 34, these foot rests are secured to the rock lever. The seat 85 6 as disclosed in Fig. 2 is recessed or slotted as shown at x to provide access openings so that the operator can reach down and grasp the outer peripheral edge of the fly wheel 15 in starting the machine, stopping it or re- 90 versing the propeller.

The operator in driving the motor grasps the handle 28 while at the same time placing his feet upon the foot rest 33. Then in imparting a rocking motion to the lever 27, 95 the propeller 22 will be revolved by means of the intermediate gearing as disclosed. The rock lever 27 is provided with a plu-rality of openings 38 within which the pin 30 is adjustably held so as to regulate the 100 stroke of the lever 27. By this arrangement a high speed may be imparted to the propeller 22.

The rounded smooth edge 16 of the fly wheel provides a ready hand-hold for the 105 operator who can thereby not only check the speed of the wheel in stopping the pro-peller but can also instantly reverse the propeller.

And having thus described my said inven- 110

tion, what I claim as new and desire to secure by United States Letters Patent is:

1. The combination with a boat having a stern seat provided with two access open-

5 ings, of a drive shaft beneath said seat, an internal gear serving as a fly wheel and having an exterior connected bevel gear, a propeller shaft extending through the stern of the boat and provided with a pinion mesh10 ing with said internal gear, a bevel gear

bevel gear having a wrist pin, a crank rod extending from said pin, a rock lever pivoted intermediate of its end, said crank rod

15 being adjustably secured to said lever, an adjustably-secured foot rest secured to the lower end of said lever.

2. The combination with a boat having a stern seat provided with two access open-20 ings, of a drive shaft positioned below said seat, an internal gear serving as a fly wheel

and having an exteriorly connected bevel

gear secured to said drive shaft, a propeller shaft mounted below said drive shaft, a pinion carried upon said propeller shaft, and 25 meshing with said internal gear, a bevel gear mounted adjacent to said first mentioned bevel gear having a wrist pin, a crank rod extending from said wrist pin, a rock lever having its end forked, a supporting 30 pin secured to the forked end of said lever, a supporting bracket carrying said pin, said bracket being held between the forked ends of said lever, said crank rod being adjustably secured to said lever, and foot rests 35 adjustably secured to the forked end of said operating lever.

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

MAGELLAN ALDERMAN.

Witnesses:

J. B. CHAPLINE, Jr., P. D. LANE.