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A. GASSMANN
OAR REVERSING DEVICE

2,480,013

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2 Sheets-Sheet 1

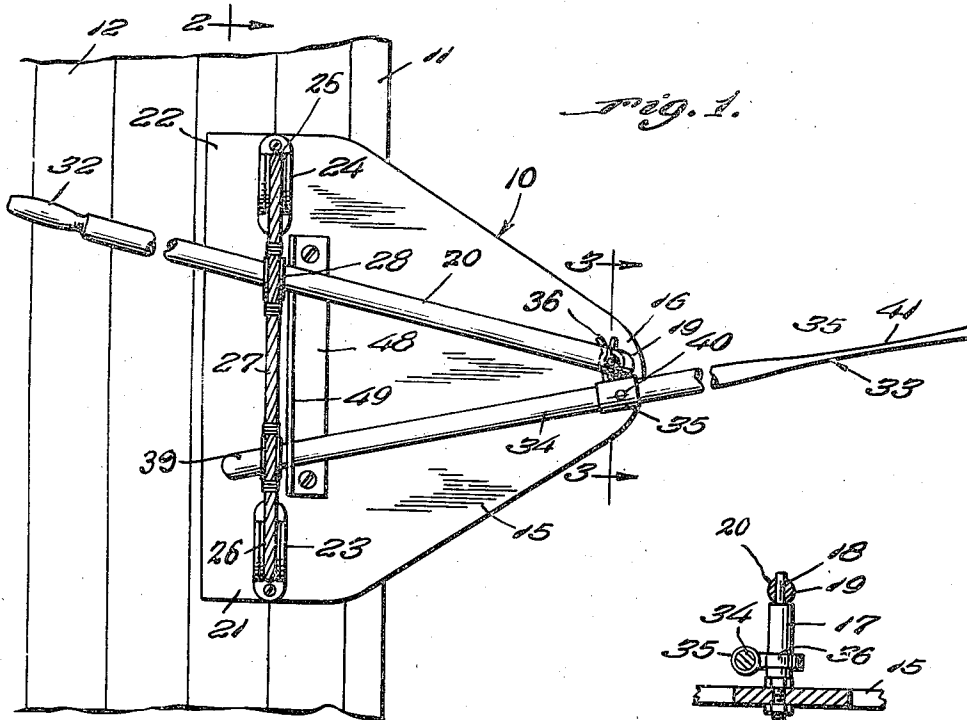


Fig. 1.

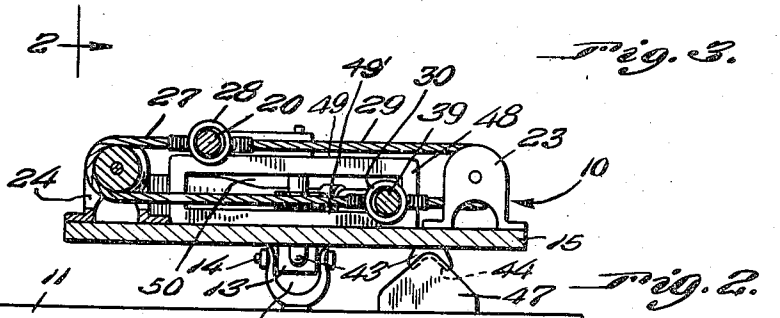


Fig. 2.

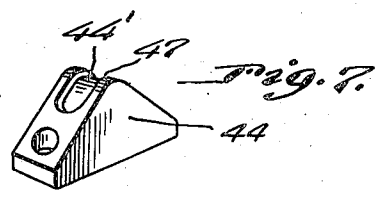
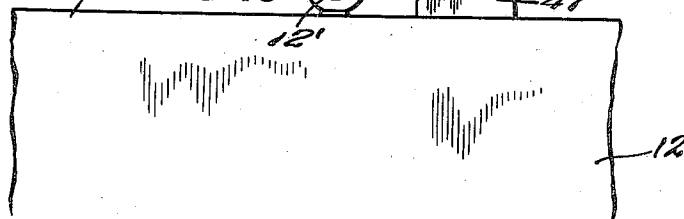


Fig. 7.

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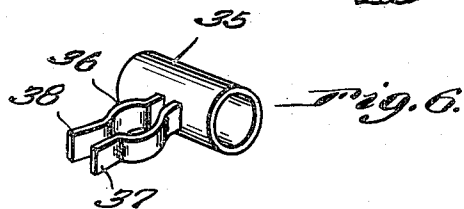
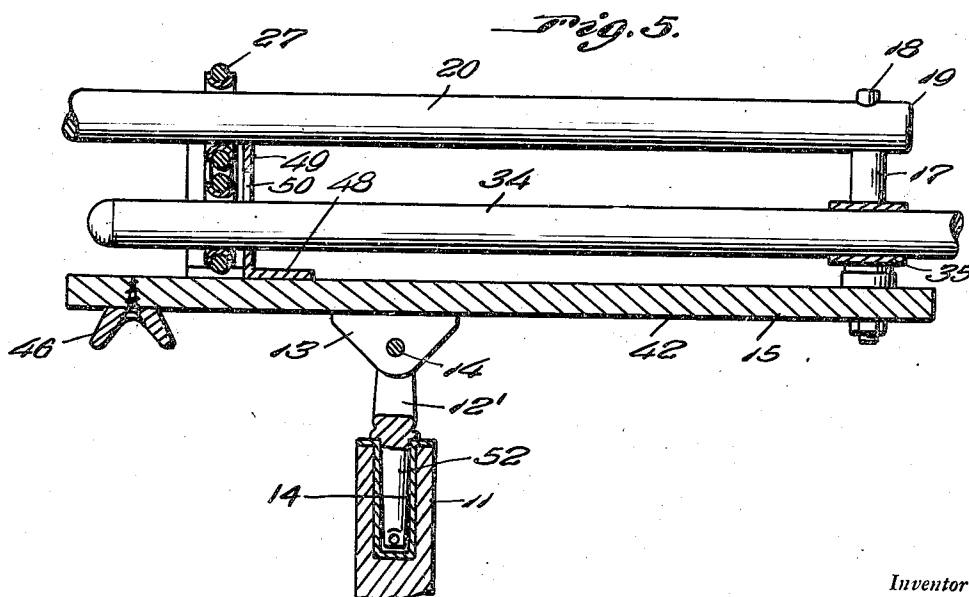
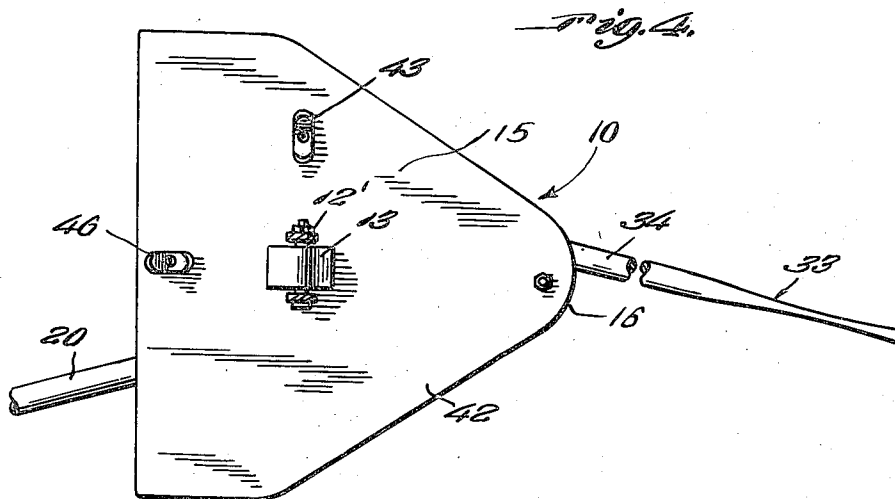
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UNITED STATES PATENT OFFICE

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OAR REVERSING DEVICE

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10 Claims. (Cl. 9—25)

1

The invention as described herein, and illustrated in the accompanying drawings, consists of an oar actuating device, an object of which is to provide means whereby the paddle of an oar may be moved in a direction opposite to that of its actuating means.

Another object of the invention is to provide means whereby a person may row a boat in the direction in which he is facing.

A still further object of the invention is the provision of a rocking plate upon which an oar is pivotally mounted, an actuating handle for the oar having independent connection relative to the oar and operating means through which the oar is actuated.

Other features and advantages will become more readily apparent from the following description and the accompanying illustrative drawing in which:

Figure 1 is a plan view of the invention shown mounted upon a boat gunwale,

Figure 2 is a sectional view taken on line 2—2 of Figure 1,

Figure 3 is a sectional detail of a pivot member taken on line 3—3 of Figure 1,

Figure 4 is a bottom plan view of an oar supporting means,

Figure 5 is an enlarged sectional elevational view thereof,

Figure 6 is a detail perspective view of an oar pivot member, and

Figure 7 is a detail perspective view of a rocker member.

While one embodiment of the invention is illustrated in the above referred to drawings, it is to be understood that they are merely for the purpose of illustration and that various changes in construction may be resorted to in the course of manufacture in order that the invention may be utilized to the best advantage according to circumstances which may arise, without in any way departing from the spirit and intention of the device, which is to be limited only in accordance with the appended claims. And while there is stated the primary field of utility of the invention it remains obvious that it may be employed in any other capacity wherein it may be found applicable.

In the accompanying drawings, and in the following specification, the same reference characters are used to designate the same parts and elements throughout and in which 10 refers to the invention in its entirety and 11 indicates the gunwale of a boat 12 in which is pivotally supported an oar lock 12' on which is reciprocatingly

2

supported a rocker member 13 by means of a bolt 14, said member 13 being fixed to the underside of a substantially triangular plate 15, the apex 16 of which projects beyond the said gunwale.

Projecting up from the said end 16 is a fixed pin 17 having a reduced end 18 upon which is pivotally mounted the outer end 19 of an oar control lever 20.

Mounted upon the opposite sides 21 and 22 of the plate 15 are a pair of bearings 23 and 24 for pulleys 25 and 26 over which operates a cable 27 having a ring or upper stop member 28 set in its upper side 29, and an oppositely located ring or lower stop member 30 set in its under half 31. The lever 20 projects through the ring 28 whereby when the handle 32 of the lever is reciprocated back and forth when rowing the same motion will be transferred to the cable 27.

Mounted upon the plate 15 is an oar 33, the shank 34 of which has a collar 35 thereon, which collar is provided with a right-angularly disposed bearing 36 adapted to engage and pivot upon the pin 17. The flaring jaws 37 and 38 of the bearing 36 may be of sufficient spring tension to hold to the pin 17, or if found necessary they may be connected by a hook (not shown). The end 39 of shank 34 projects through the ring 30 of the lower cable portion 31 whereby upon movement forward and back thereof the oar will be actuated but in a direction opposite to the movement of the actuating lever 20, thus the boat 12 will be moved in a direction in which the oarsman is facing. A pin 40 extends through collar 35 and into shank 34 in order to keep the paddle 41 properly feathered.

Provided on the underside 42 of plate 15 is a V-shaped rest 43 adapted to be seated in the recess 44' formed in the apex of the triangular support 44 mounted on the gunwale of the boat whereby the plate 15 is held to up and down rocking motion only during the rowing operation. There is also provided a V-stop 46 located on said side 42 of the plate 15, the purpose of which is to be engaged over the upper edge 47 of member 44 to hold the plate 15 against pivotal movement when the oars are at rest on the boat. An angle-iron 48 is attached to plate 15 adjacent the said cable 27, the flanges 49 and 49' of which will limit down pressure upon the cable by the members 20 and 34. The said flanges are provided with a longitudinal slot 50 for the shank 34 of the oar.

From the above description it will appear obvious that the outfit described will have free universal movement as the plate may rock up and

down upon pin 14 and rotate horizontally through the pivot pin 52 of the oar lock 12.

From the foregoing specification it will become apparent that the invention disclosed will adequately accomplish the functions for which it has been designed and in an economical manner and that its simplicity, accuracy and ease of operation are such as to provide a relatively inexpensive device considering what it will accomplish and that it will find an important place in the art to which it appertains when once placed on the market.

It is thought that persons skilled in the art to which the invention relates will be able to obtain a clear understanding of the invention after considering the description in connection with the drawings. Therefore, a more lengthy description is regarded as unnecessary.

Changes in shape, size and rearrangement of details and parts such as come within the purview of the invention claimed may be resorted to, in actual practice, if desired.

Having now described the invention that which is claimed to be new and desired to be procured by Letters Patent is:

1. The described device comprising a rocking and rotating plate, an oar pivoted thereon, means for actuating the oar, an endless cable providing said means, spaced pulleys over which the cable is trained, a ring on the lower half of the cable to receive the shank of the oar, means for operating the cable, said last means consisting of a lever pivoted on the plate, a ring on the upper part of the cable through which the lever projects to move the cable, means for limiting the pivotal movement of the plate in either direction, and means for stopping pivotal movement of the plate in two positions.

2. The described device comprising a rocking and rotating plate, an oar pivoted thereon, means for actuating the oar, an endless cable providing said means, spaced pulleys over which the cable is trained, means for reciprocating movement of the cable, a ring on the lower half of the cable to receive the shank of the oar, said last means consisting of a lever pivoted on the plate, a ring on the upper part of the cable through which the lever projects to move the cable, means for limiting the pivotal movement of the plate in either direction, and means for stopping pivotal movement of the plate.

3. The described device comprising a rocking and rotating plate, an oar pivoted thereon, means for actuating the oar, an endless cable providing said means, spaced pulleys over which the cable is trained, a ring on the lower half of the cable to receive the shank of the oar, means for operating the cable, said last means consisting of a lever pivoted on the plate, a ring on the upper part of the cable through which the lever projects to move the cable, and means for limiting the pivotal movement of the plate in either direction.

4. The described device comprising a rocking and rotating plate, an oar pivoted thereon, means for actuating the oar, an endless cable providing said means, spaced pulleys over which the cable is trained, means for reciprocating movement of the cable, a ring on the lower half of the cable to receive the shank of the oar, said last means consisting of a lever pivoted on the plate, a ring on the upper part of the cable through which the lever projects to move the cable, and means for limiting the pivotal movement of the plate.

5. The described device comprising a rocking and rotating plate, an oar pivoted thereon, means for actuating the oar, an endless cable providing said means, spaced pulleys over which the cable is trained, means for reciprocating movement of the cable, a ring on the lower half of the cable to receive the shank of the oar, said last means consisting of a lever pivoted on the plate, and a ring on the upper part of the cable through which the lever projects to move the cable.

6. The described device comprising a rocking and rotating plate, an oar pivoted thereon, means for actuating the oar, an endless cable providing said means, spaced pulleys over which the cable is trained, a ring on the lower half of the cable to receive the shank of the oar, and means for operating the cable, said last means consisting of a lever pivoted on the plate and connected to the cable.

7. An oar lock comprising a rockable and rotatable plate, means for supporting said plate for universal movement of the latter relative to a gunwale, an endless cable journaled on the plate, means for guiding said cable, an oar, a lever for actuating the oar, means for guiding the movement of said lever, and stop members carried by said cable and receiving said oar and said lever, said stop members limiting the longitudinal movement of said cable relative to said plate.

8. The combination of claim 7 wherein said means for guiding said cable includes a pair of longitudinally spaced pulleys.

9. The combination of claim 7 wherein said stop members includes a pair of longitudinally spaced rings carried by said cable for contacting said guide means for said cable.

10. The combination of claim 7 wherein said guide means for said lever includes an angle iron provided with a longitudinal slot through which the lever extends.

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The following references are of record in the file of this patent:

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