

[54] **OUTBOARD MOTOR LOCK**

[76] Inventor: **George E. Pavek**, 908 Summit Ave.,
St. Paul Park, Minn.

[22] Filed: **Apr. 2, 1971**

[21] Appl. No.: **130,630**

2,798,369	7/1957	Homan	70/58
2,722,822	11/1955	Thomas	70/259 X
3,505,839	4/1970	Pavek	70/230

Primary Examiner—Albert G. Craig, Jr.
Attorney—Edward T. Okubo

[52] U.S. Cl. **70/232, 70/230**
[51] Int. Cl. **F16b 41/00**
[58] Field of Search..... **70/232, 230, 211,**
70/58, 57, 19, DIG. 58

[56]

References Cited

UNITED STATES PATENTS

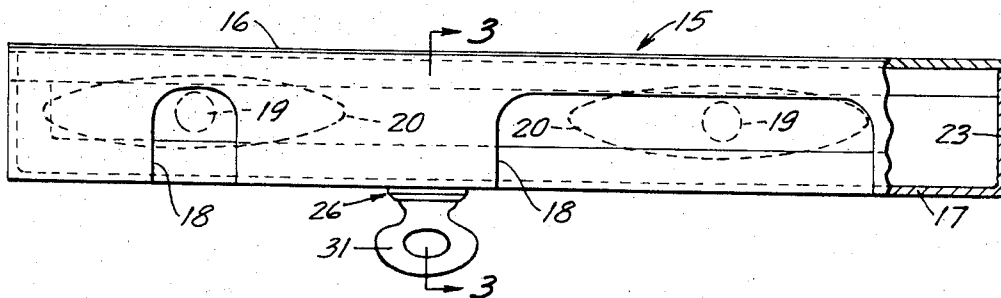
2,279,006	4/1942	McWalters.....	70/232
2,861,463	11/1958	Gilman.....	70/232 UX
1,335,593	3/1920	Moll.....	70/232 UX
2,500,375	3/1950	Parker	70/232

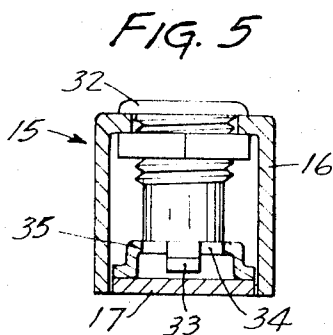
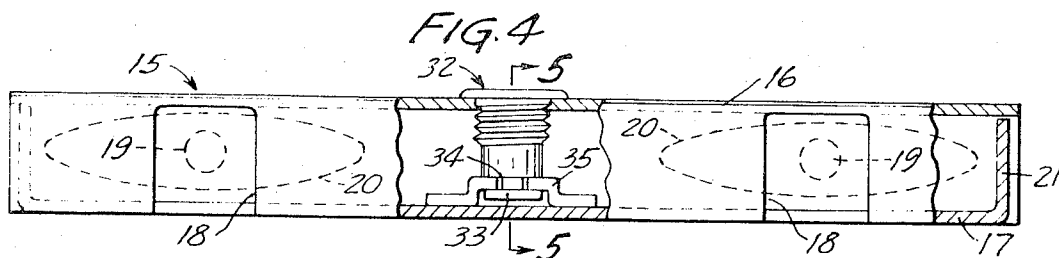
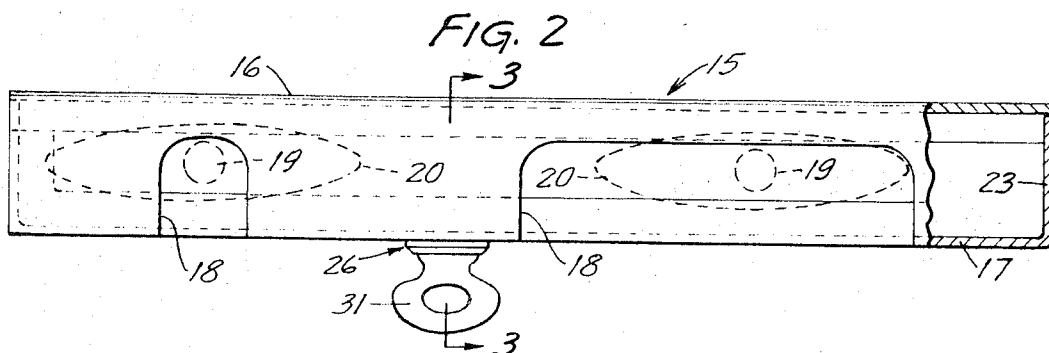
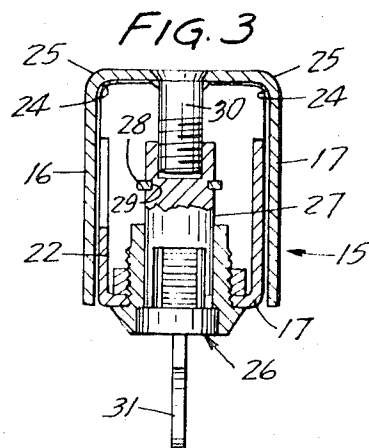
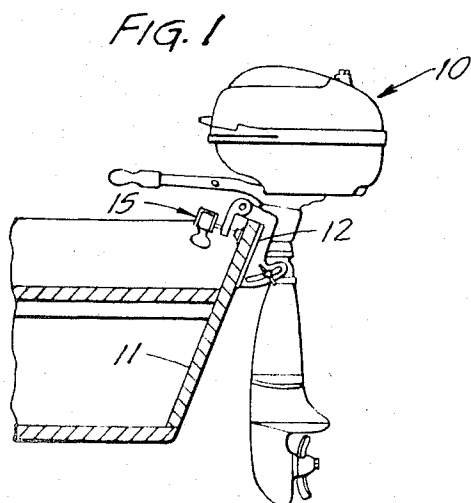
[57]

ABSTRACT

Locking devices for outboard motors which are designed to protect the motor from theft or accidental dislodgement through vibration during operation comprise a body member for snugly receiving the head portions of the motor clamps and a closure member enclosing said head portions within the locking device and integral locking means for locking said body and closure members together.

1 Claim, 5 Drawing Figures





INVENTOR.
GEORGE E. PAVEK
 BY
Edward J. Okubo
 ATTORNEY

OUTBOARD MOTOR LOCK

The present invention relates to locking devices for outboard motors and more particularly relates to locking devices designed to prevent the loss of outboard motors either through theft or displacement of the motor from the transom by vibration during operation.

Most outboard motors, regardless of size, are mounted onto the transom of a boat by a C-shaped or U-shaped mounting bracket through which is threaded a pair of clamping members which engage the transom of the boat. Although the outboard motor can be initially securely attached to the transom in this manner, the possibility of the clamping members being loosened by the vibration of the motor during use is real and cannot be discounted. For this reason, most outboard motor owners use a length of cable or chain fastened to the motor and to the boat to insure against the loss of the motor overboard. While this "safety chain" may be reassuring to the owner, a hot operating motor which is suddenly submerged in water is likely to be severely damaged by the sudden thermal shock to which it is thus subjected. It is also highly unlikely that the safety chain will prevent the loss overboard of a large outboard motor weighing several hundred pounds. In fact, if such a large tethered motor were to fall overboard, the boat itself would be in danger of sinking. It is, of course, quite obvious that the aforescribed mounting bracket and safety chain will not prevent the theft of an outboard motor from an unattended boat.

Prior workers have attempted to provide locking devices for outboard motors but all of these known devices have suffered from the disadvantage of requiring apertures to be aligned for insertion of the shackle of a padlock or required the locking device to be permanently attached to the boat. In the cases where apertures must be aligned to attach a padlock to the device, the alignment procedure itself can be an exasperating experience and the device could be quite loosely attached over the clamping members due to the necessity for aligning the apertures. Those devices which must be permanently affixed to the boat, of course, do not provide the flexibility of being easily moved. Certain of the known devices also were provided with hinges which are susceptible to rust especially when exposed to sea water.

It is thus an object of the present invention to provide a locking device for an outboard motor which simply and effectively prevents theft of the motor.

Another object of the present invention is the provision of a locking device which prevents loss overboard of the motor during operation of the motor.

Other objects and advantages of the invention will become more fully apparent from the following detailed description and the accompanying diagrammatic drawings, in which like numerals refer to the corresponding parts in the several views and in which:

FIG. 1 is a side elevational view showing an outboard motor mounted on the transom of a boat with the locking device of the present invention;

FIG. 2 is an elevational view, partly in section, illustrating one embodiment of the locking device;

FIG. 3 is a sectional view taken along the line 3—3 of FIG. 2;

FIG. 4 is an elevational view, partly in section, illustrating another embodiment of the locking device; and

FIG. 5 is a sectional view taken along the line 5—5 of FIG. 4.

Referring now to the drawings, the stern portion of a boat is shown with a conventional outboard motor 10 mounted on the transom 11 by mounting bracket 12 with the locking device 15 of the present invention in place. The locking device 15 generally comprises a body member 16 and a closure member 17.

In the embodiments illustrated in FIGS. 2-5, the body member 16 is generally U-shaped and is provided with a pair of recesses 18 through which the shank portions 19 of the clamping members extend with the wing-shaped or torque applying head portions 20 thereof snugly received within the interior of the body member 16. The closure member 17 of the embodiments shown in FIGS. 2-5 may be a generally flat plate member and may be provided with upturned ends 21, as illustrated in FIG. 4. The upturned ends 21 will serve to completely enclose the locking device 15.

In the specific embodiment shown in FIGS. 2 and 3, closure member 17 is a closed end channel of generally U-shaped cross section. One leg 22 of the channel has a cut-out extending substantially along its entire length, said cut-out providing the necessary clearance through which the shank portions 19 of the clamping members extend. The end pieces 23 of closure member 17, formed with a radius 24 extend beyond the legs 22 to fit flush within the radius 25 of body member 16.

A keyed cylinder lock 26 is provided on closure member 17. Internally threaded cylinder 27 is prevented from being pulled out of closure member 17 by a split ring fastener 28 provided in groove 29 of cylinder 27. A threaded locking pin 30 is affixed, as by welding, to body member 16 in alignment with cylinder 27. Locking of the body member 16 and closure member 17 is accomplished by aligning cylinder 27 and locking pin 30 and rotating the cylinder 27 by means of key 31 until cylinder 27 is fully threaded onto locking pin 30 and turning stops; reversing the above procedure unlocks the two members.

It will be observed especially in FIG. 1 that the locking device 15, of the embodiment shown in FIGS. 2 and 3, and especially cylinder lock 26 thereof, is substantially completely protected against the danger of water being splashed thereon since locking device 15 is completely closed by virtue of closure member 17 being in the form of a closed end channel and the location of cylinder lock 26 on the underside of the locking device. This protection against splashing water is especially important when the locking device 26 is used on a boat operating in salt water or in early spring or late fall when splashing water would freeze on the device and in cylinder lock 26 making removal of the motor extremely difficult; with the locking device of FIGS. 2 and 3, these dangers of rust and freezing are substantially minimized.

In the embodiment of FIGS. 4 and 5, body member 16 is provided with a conventional keyed cylinder lock 32. A bayonet stud 33 forms the locking pin of lock 32 and fits within a keyhole recess 34 provided in locking plate 35 affixed to closure member 17. Locking of the body member 16 and the closure member 17 is accomplished by aligning and inserting the bayonet stud 33 into the recess 34 and rotating the locking cylinder until the bayonet stud is positioned perpendicularly to the keyhole recess 34; reversing the procedure unlocks the two members.

In constructing the locking devices of the present invention, 11 to 16 gage cold rolled steel is used for body

member 16. In a typical locking device the interior width between the upstanding legs of the U is 1 inch, the radius of curvature being 0.31 inch. In the device of FIGS. 2 and 3, body member 16 is 11.75 inches long and the length of each of the legs of the U, measured at the interior of the body member 16, is 1.375 inches. One recess 18 is 1 inch wide and 1 inch high, has a radius of curvature of 0.31 inch, and its outside edge is spaced 1 11/16 inches from one end of body member 16. The other recess 18 is 4 5/16 inches wide and 1 inch high also with a radius of curvature of 0.31 inch and its outside edge is spaced 1 9/16 inches from the other end of body member 16. Closed end channel closure member 17 is also formed from 11 to 16 gage cold rolled steel and its outside dimensions are 11.75 inches long by one inch wide. The cut-out on one leg 22 of closure member 17 is 10.75 inches wide by 5/8 inch deep and is centrally located on said leg. In the device of FIGS. 4 and 5, the length of each of the legs of the U, measured at the interior of the body member 16, is 1.12 inches. Recesses 18 are 1 inch wide and 1.12 inches high, have a radius of curvature of 0.31 inch, and are spaced with their centerlines 5.75 inches apart along the 9.5 inch length of body member 16. Recesses 18 may be formed as T-shaped recesses to accommodate variations in spacing of the clamping members. Closure member 17 is formed from 3/16 inch cold rolled steel stock 9.5 inches long by one inch wide.

The dimensions given herein are typical and have been found to provide locking devices which fit many brands of outboard motors. The locking device of FIGS. 2 and 3, with one rectangular recess 18 being elongated is especially suited for use with many different outboard motors. However, since the outboard motor industry has not adopted uniform standards for mounting brackets, size and spacing of clamping members, etc., dimensional changes to accommodate such

variations will be required and are contemplated.

The use of the locking devices of the present invention is extremely simple. An outboard motor 10 is mounted and clamped onto the transom of a boat in the conventional manner. Body member 16 is then placed over the clamping members of the outboard motor with the shank portions 19 centered in recesses 18 with the head portions 20 resting within body member 16. Closure member 17 is then placed between the legs of the U enclosing head portions 20 therewithin and locked by rotating the cylinder lock.

It will be seen that the locking devices of the present invention provide extremely simply constructed and applied devices which effectively prevent theft of an outboard motor and also guard against accidental loss of an outboard motor such as can be experienced by the loosening of the clamping members by vibration during operation of the motor.

I claim:

1. A locking device for outboard motors comprising a U-shaped body member having a longitudinal channel therein for snugly receiving the head portions of the clamping members of said motor, said body member having a pair of spaced recesses for receiving the shank portions of said clamping members, one of said spaced recesses being elongate to accommodate variations in spacing of said clamping members, a closure member fitting within said longitudinal channel and over the head portions of said clamping members, said body member having a threaded locking pin transversely centrally positioned thereon and extending into said longitudinal channel, and said closure member having an internally threaded cylinder lock positioned thereon in alignment with and for engagement with said locking pin.

* * * * *

40

45

50

55

60

65