Nov. 7, 1950 A. S. TENNER 2,529,432

LOCKING MEANS FOR OUTBOARD MOTORS

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Fig. 1.

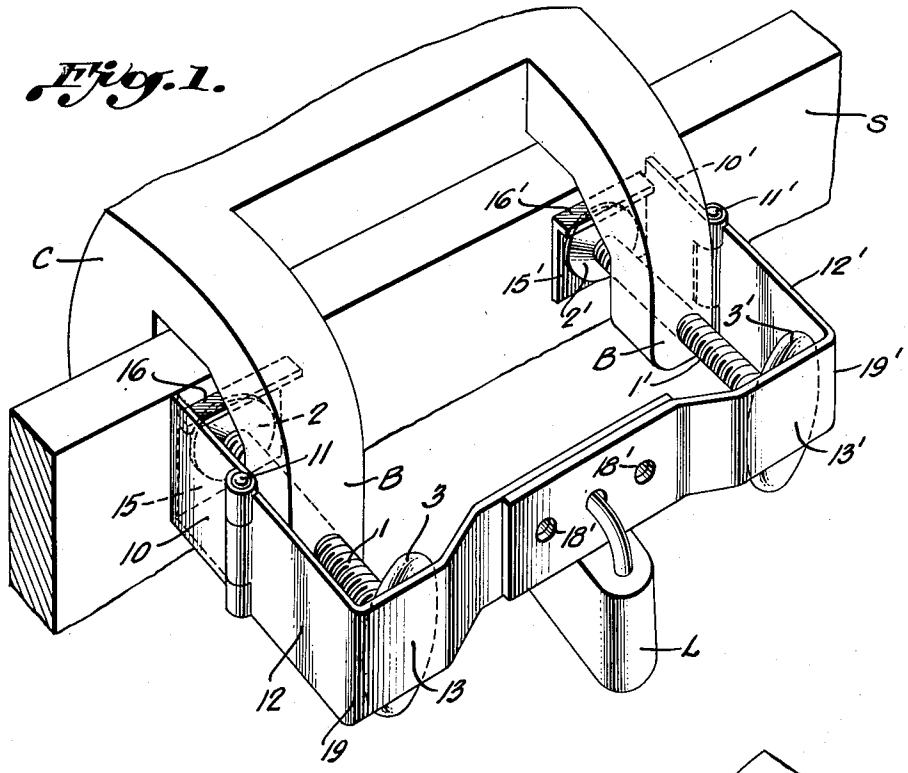


Fig. 2.

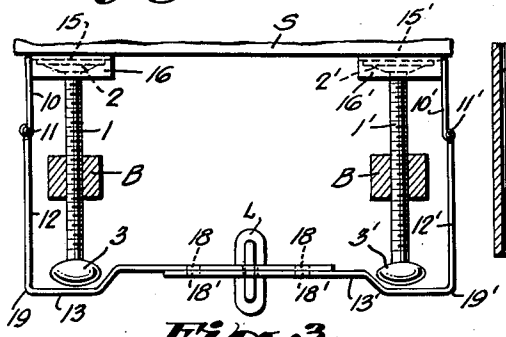


Fig. 3.

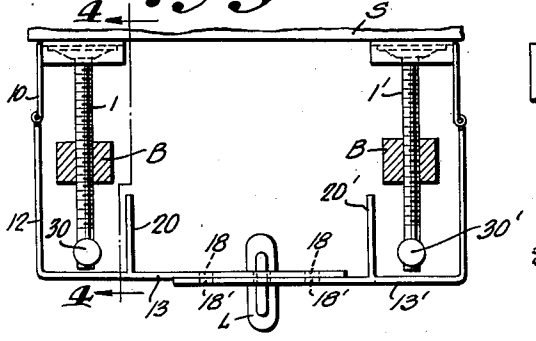
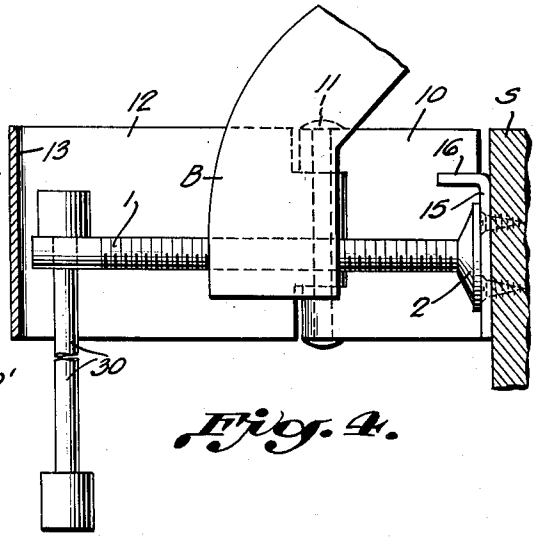


Fig. 4.



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LOCKING MEANS FOR OUTBOARD MOTORS

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8 Claims. (Cl. 70—232)

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This invention relates to a locking device for the clamps of outboard motors for the purpose of preventing accidental loss or displacement of the outboard motor when the same is mounted on the stern board of a boat, as well as to prevent the theft of the outboard motor when the same is left unattended.

It is the object of the present invention to provide a simple and rugged clamp lock construction for outboard motors which is economical to produce and to install and which may be adapted for all types of outboard motor clamps of any make and style.

It is a further object of the invention to provide a simple locking device for the clamps of outboard motors having but few operating parts which are not subject to damage or deterioration by the elements and which are in readiness for operation at all times.

The invention proceeds upon the principle of providing bracket supporting means for hinged locking or blocking straps which may be swung behind the handles of the clamping screws of an outboard motor and locked in that position following the tightening of the clamps to prevent accidental or intentional manipulation of the screws while the locking device is in effective position. Alternatively, the locking straps may be swung away from the field of operation of the clamping screws in order to permit the manipulation thereof incidental to the clamping of the outboard motor onto the stern board, or the removal of the outboard motor therefrom. Once the bracket supporting means are affixed to the stern board according to the spacing of the specific bracket construction of the outboard motor being used, the locking device is always at hand for convenient manipulation to block the clamping screws against rotation. By the provision of overlapping locking straps, with a plurality of openings therein, the spacing of the locking straps may be varied to accommodate different bracket structures so that the locking device may be used universally for all types of outboard motor clamps.

Other objects and purposes will appear from the detailed description of the invention following hereinafter, taken in conjunction with the accompanying drawing, wherein

Fig. 1 is a perspective view of the locking device in accordance with the present invention;

Fig. 2 is a plan view thereof;

Fig. 3 is a plan view of another embodiment of the invention; and

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Fig. 4 is a vertical sectional view along line 4—4 of Fig. 3.

Fig. 1 shows a bracket C of an outboard motor assembly which is adapted to overhang the stern board S of a boat, and includes clamping screws 1 and 1' having clamping pads 2 and 2' on the inner ends thereof and handles 3 and 3' on the outer ends thereof, respectively, which operate through threaded bores of the legs B of the bracket to clamp the pads against the stern board.

In order to prevent the accidental loosening of the bracket on the stern board, or the unauthorized removal of the outboard motor from the boat, locking devices have been proposed for such assemblies. The instant invention seeks to simplify such locking arrangements and consists essentially, in the preferred embodiment of the invention, of a pair of cooperating pivoted locking straps which are designed to be alternatively swung into a position behind the handles of the locking screws and locked in that position to prevent the rotation thereof in either direction or to permit a swinging of the locking straps beyond the field of operation of the screws in order to permit their rotation incidental to the mounting or clamping of the bracket onto the stern board or the removal of the bracket from the stern board.

In the simplified construction shown in the drawing, the supporting means for the locking straps or plates consists of a pair of brackets at the right and left sides of the assembly. The bracket 10 has the wall 15 adjoining the inner wall of the stern board S which is affixed to the latter by means of screw fastenings or the like. The locking or blocking strap is formed of rectangular configuration, having the arm 12 pivotally mounted to the bracket mounting 10 along the vertical hinge 11 around which the same is swingable to bring the arm 13 behind the handle 3 of the clamping screw or this arm may be swung outwardly beyond the field of operation of the handle 3 in order to permit the rotation of the clamping screw. In the latter position the right-angled corner 19 strikes against the stern board. A horizontal flange 16, extending from the upper end of the wall 15, prevents a displacement of the locking pad 2 until the screw is given several turns. A corresponding assembly of mounting bracket 10' and hinged locking strap 12' is provided adjacent the other clamping screw 1', corresponding parts being numbered by the same numerals with the addition of primes thereto. The spacing of the overhanging legs B,

characteristic of any outboard motor clamp, determines the location of the bracket mountings 10 and 10' and the walls 15 and 15' affixed to the sternboard. The locking straps 13 and 13' overlap, as shown in the drawing, and are provided with a plurality of openings 18 and 18', respectively, in order to align at least one opening in the strap 13 with another opening in the strap 13' in order that a padlock L may be passed through these aligned openings to effect a locking of the locking straps 13 against pivotal movement around the hinges 11 and 11' while the padlock is in place. This secures the clamping screws 1 and 1' against rotation while the locking device is in effective position. The close proximity of the arms 12 and 12' to the handles 3 and 3' prevents any substantial rotation of the latter relative to said arms.

In order to prevent the manipulation of the handles which are slidable in openings at the ends of the clamping screws, as are shown in Figs. 3 and 4, additional confining walls 20 and 20', respectively, may extend inwardly from locking straps 13 and 13', respectively, as shown in Fig. 3. These walls 20 and 20' block any manipulation which might be possible as a result of the capability of the handles 30 to slide to-and-fro in the ends of the clamping screws.

The locking device in accordance with the invention may be standardized for certain motor bracket mountings, in which case the supporting brackets 10 and 10' may be of unitary construction with a predetermined displacement between them.

The provision of the supporting brackets 10 and 10' also assures the engagement of the clamping pads 2 and 2' with the walls 15 and 15', respectively, whereupon said pads cause no destruction of the stern board by repeated clampings and release of the outboard motor relative thereto.

While I have described my invention as embodied in a specific form and as operating in a specific manner for purpose of illustration, it should be understood that I do not limit my invention thereto, since various modifications will suggest themselves to those skilled in the art without departing from the spirit of my invention, the scope of which is set forth in the annexed claims.

I claim:

1. A lock for the clamps of an outboard motor adapted to be mounted on the stern board of a boat, said clamps embodying a pair of spaced clamping screws with clamping pads at the inner ends thereof for engagement with the stern board and operating handles at the outer ends thereof, comprising supporting means secured to the stern board providing spaced surfaces adapted to be engaged by said clamping pads and spaced blocking means hingedly mounted on said supporting means around vertical axes to selectively bring said blocking means adjacent to said handles to prevent the rotation thereof or remote from said handles to present no hindrance to the rotational movement thereof, and means for locking together said spaced blocking means in said first-mentioned position.

2. A lock for the clamps of an outboard motor adapted to be mounted on the stern board of a boat, said clamps embodying a pair of spaced clamping screws for engagement with the stern board and operating handles therefor, comprising supporting means secured to the stern board providing spaced surfaces adapted to be engaged by the end of said clamping screws and spaced rectangular metallic blocking straps each having one arm hingedly mounted on said supporting means around a vertical axis and the other arm selectively swingable adjacent to said handles to prevent the rotation thereof or remote from said handles to present no hindrance to the rotational movement thereof, and means for locking said blocking strap in said first-mentioned position.

3. A lock for the clamps of an outboard motor adapted to be mounted on the stern board of a boat, said clamps embodying a pair of spaced substantially horizontal clamping screws for engagement with the stern board and operating handles therefor, comprising supporting means secured to the stern board providing spaced surfaces in alignment with the rotational axes of said screws for clamping engagement therewith and spaced locking plates hingedly mounted on said supporting means around vertical axes laterally of the rotational axes of said screws to selectively bring said locking plates adjacent to said handles to prevent the rotation thereof or remote from said handles to present no hindrance to the rotational movement thereof, and means for securing said plates in said first-mentioned position.

4. A lock as set forth in claim 3 wherein said locking plates overlap and are provided with aligned openings for the accommodation of a padlock therethrough.

5. A lock for the clamps of an outboard motor adapted to be mounted on the stern board of a boat, said clamps embodying a pair of spaced clamping screws with clamping pads at the inner ends thereof for engagement with the stern board and operating handles at the outer ends thereof, comprising a bracket plate secured to the stern board adjacent to each of said clamps, and a locking plate hingedly mounted on each bracket plate around a vertical axis to selectively bring the respective locking plates adjacent to said handles to prevent the rotation thereof, or remote from said handles to present no hindrance to the rotational movement thereof, and means for securing said locking plates in said first-mentioned position.

6. A lock as set forth in claim 5 wherein each bracket plate includes a transverse flange extending from the upper end thereof to prevent accidental dislodgement of the clamping pad therebelow.

7. A lock for clamps of an outboard motor adapted to be mounted on the stern board of a boat, said clamps embodying a pair of spaced clamping screws for engagement with the stern board and operating handles therefor, comprising a bracket plate secured to the stern board near each clamping screw, and a rectangular metallic locking strap having one arm hingedly mounted on each bracket plate around a vertical axis and the other arm selectively swingable adjacent to said handles to prevent the rotation thereof or remote from said handles to present no hindrance to the rotational movement thereof, openings in said locking straps, and means engageable in said openings on said locking straps for locking them in said first-mentioned position.

8. A lock for clamps of an outboard motor adapted to be mounted on the stern board of a boat, said clamps embodying a pair of spaced clamping screws with clamping pads at the inner ends thereof for engagement with the stern

board and operating handles at the outer ends thereof comprising a bracket plate secured to the stern board near each clamping screw, and a rectangular metallic locking strap having one arm hingedly mounted on each bracket plate around a vertical axis and the other arm selectively swingable adjacent to said handles to prevent the rotation thereof or remote from said handles to present no hindrance to the rotational movement thereof, a supplemental wall extending inwardly from said last-mentioned arm for confining each operating handle on the inner side thereof, said last-mentioned arms overlapping each other and provided with registering openings, and locking means for engaging a pair of aligned openings.

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