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LANTERN HOLDER

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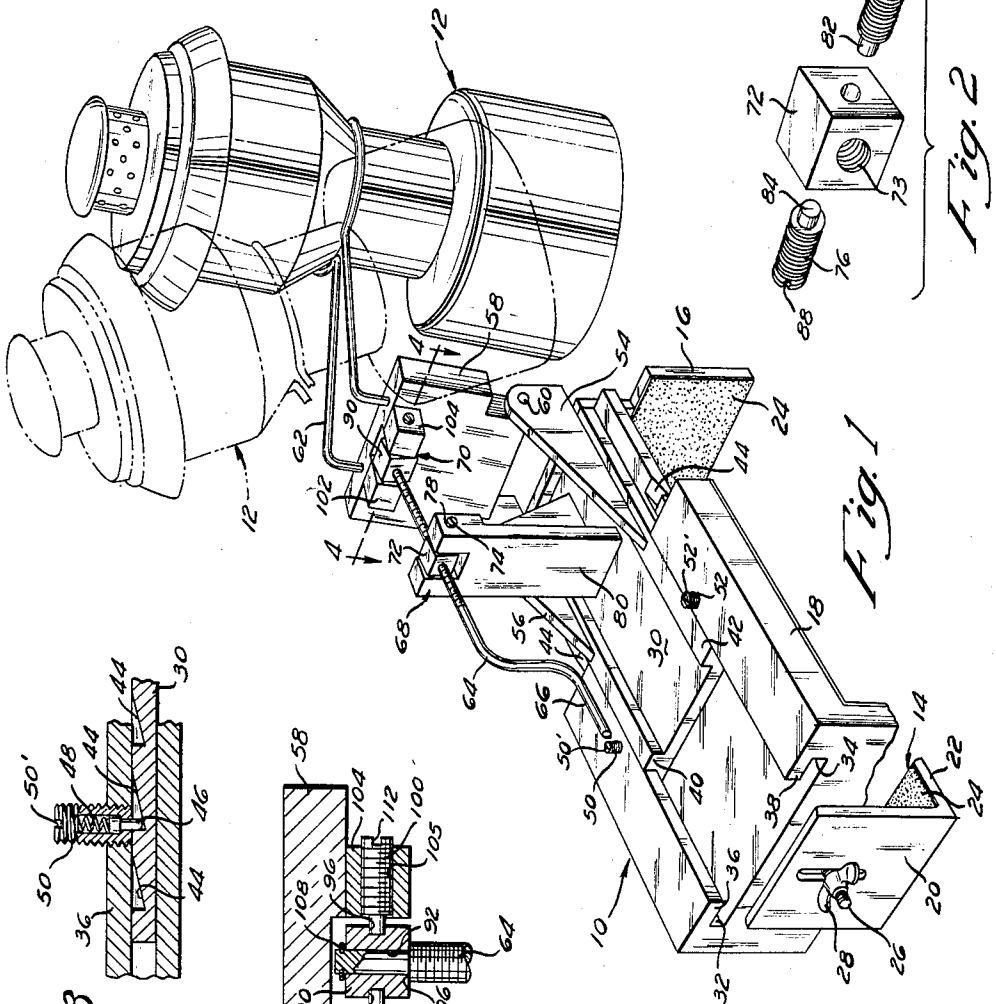

Fig. 1

Fig. 2

Fig. 3

Fig. 4

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LANTERN HOLDER

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This invention relates to a supporting device and more particularly to a lantern mounting bracket.

It is an object of this invention to facilitate the positioning of a lantern with respect to a fixed supporting structure by bracket means, quickly and effectively attachable to and detachable from the supporting structure and adaptable for facile disposition of the lantern angularly with respect to the supporting structure or bracket.

In night fishing, it is expedient and customary to provide illumination above the surface of water and directed toward the water to attract fish to the area. Such illumination is most effectively provided with a lantern of conventional type and depending upon the circumstances, it is found necessary to vary the angle of inclination of the lantern toward the surface of the water.

It is another object of this invention to provide a supporting bracket that is particularly well adapted for mounting a lantern to a rigid structure such as the gunwale of a boat to attract fish during nocturnal fishing, and that is effective to quickly and simply angularly dispose the lantern relative to the water surface after being so secured. A quick attachment of the bracket is facilitated by a ratchet for allowing rapid closure of gripping portions over the greater portion of their extended length, after which a threaded attachment is effective to close the gripping portions over the remaining proportion of their length of travel and a plate supporting the lantern is quickly and accurately pivotal to dispose the lantern at a desired angle relative to the bracket proper and to the water.

Although this invention is particularly well adapted as a fishing accessory in the manner herein described, it is to be understood that the same is readily adaptable for attachment for a lantern to various structures other than a boat gunwale and for various other purposes. For simplicity, however, the same will be described with respect to its applicability as a fishing accessory.

Other and further objects and advantages of this invention will become apparent from a detailed description thereof considered with the accompanying drawings in which:

Figure 1 illustrates in perspective the complete lantern mounting bracket according to the invention,

Figure 2 is an exploded perspective view of a swivel forming a part of the invention,

Figure 3 is a cross-sectional view of a ratchet assembly facilitating attachment of the bracket of this invention, and

Figure 4 is a cross-sectional side view of a swivel coupling forming a part of the invention.

In the drawings, 10 represents generally the entire lantern bracket of this invention, and 12 represents the lantern which is angularly supported and retained by bracket 10 in the position in which the same is manually adjusted. Bracket 10 is applicable to a rigid structure such as a boat gunwale and the same is so

secured by the action of a pair of opposed clamping jaws 14 and 16 mounted for movement relative to each other and to a main body portion 18 of the bracket 10. The jaws 14 and 16 are movable toward each other to abut a gunwale of sufficient size on respective sides thereof or, if necessary, a suitable block may be inserted between the gunwale and one jaw to enable clamping if the gunwale is too narrow.

For more effective clamping, jaw 14 preferably includes a first planar portion 20 and a second planar portion 22 joining the first planer portion at substantially a right angle and adaptable to extend beneath and grip an overhanging portion of the gunwale. Jaw 16 is preferably planar to conform to the outer portion of the gunwale and boat. Each of the jaws 14 and 16 is provided with a cushioning pad of soft material 24, such as felt, rubber or the like, to prevent scratching or marring of the parts engaged thereby.

To effect forcible clamping movement of jaw 14 toward body portion 18, portion 20 of jaw 14 is provided with a slot through which a threaded bolt or stud 26 extends from its attachment to body portion 18. A wing nut 28 threadedly engages bolt 26 and is adaptable to be manually turned to force jaw 14 toward body portion 18.

For enabling movement of jaw 16 toward body portion 18, the jaw is rigidly secured to an end of a plate 30 which is slidable along body portion 18 in opposed, recessed guideways 32 and 34 having respective overhangs 36 and 38. Additionally guiding the sliding movement of plate 30 are a pair of rails 40 and 42, engageable along their lengths with the facing edges of overhangs 36 and 38. Plate 30 is freely slidable inwardly toward body portion 18 in the absence of any resistance imposed on jaw 16, but a ratchet including a plurality of serrations 44 shown most clearly in Figure 3, forming a ratch along the upper and outer opposed edges of plate 30, and pawl 46 biased by a spring 48, prevents sliding movement of the plate in a reverse direction. The opposed pawls such as pawl 46 are mounted in opposed studs 50 and 52, threaded in bores in overhangs 36 and 38, and have grooves 50′ and 52′ at their outer ends to enable turning by a screwdriver or other suitable tool. For reverse sliding movement, studs 50 and 52 are sufficiently withdrawn from their respective bores in overhands 36 and 38 to also withdraw detent plungers such as 46, from engagement with the uppermost portions of the ratch portion of plate 30.

It is apparent that bracket 10 is quickly and easily applied to a gunwale of a boat. Assuming that the jaws 14 and 16 are in their respective extended positions relative to body portion 18, the bracket is positioned with jaw 16 outside of the gunwale and jaw 16 inside the gunwale. The studs 50 and 52 being fully inserted, jaw 16 and body 18 are pushed inwardly or toward each other until the jaws 14 and 16 engage respective sides of the gunwale, and thereafter are pulled apart to seat the pawls in the bottoms of appropriate serrations 44. Thereafter, wing nut 28 is turned to bring jaw 14 tightly into engagement with the inner side of the gunwale and the reaction of this action brings jaw 16 tightly into engagement with the outer side of the gunwale.

For mounting lantern 12, a pair of generally triangular members 54 and 56 are mounted along the top of portions of rails 40 and 42, and preferably overhang jaw 16 somewhat to enable greater angular movement of lantern 12 as it is pivotal with a rocking plate 58 which is pivotally mounted in members 54 and 56 as by a pin 60 extending through bores in member 54 and in plate 58 and a similar pin extendable through similar

bores at the other side of the bracket. Lantern 12 is directly supported by a resilient spring member 62 extending around a reduced portion of the lantern and having ends fitting in suitable bores in the end of rocking plate 58. As plate 58 is rocked or pivoted in a manner hereinafter described, spring member 62 and lantern 12 are also pivoted relative to the other parts of the bracket whereby lantern 12 may be angularly disposed relative to other parts of the bracket and to water in which a boat may be floating.

For facilitating accurate and simple pivotal movement of the rocking plate 58 a threaded screw 64 bent to provide a handle 66 is mounted in a pair of swivels shown generally at 68 and 70. Swivel 68 includes a swivel block 72 having a bore 73 threadedly engaging screw 64 and is mounted for rotation in a vertical plane by a pair of opposed axles 74 and 76 shown more clearly in Figure 2, threadedly engaging bores such as bore 78 in a pedestal 80 which in turn is fixedly secured to plate 30. Axles 74 and 76 are reduced at their inner ends as shown at 82 and 84 to be loosely received in a complementary bore in the side of block 72 and each axle is grooved at its outer end as at 86 and 88 to be engageable with a screw driver or other appropriate tool for inserting or removing the axle from the pedestal.

As shown more clearly in Figure 4 of the drawings, swivel 70 includes a swivel block 90 having a bore 92 for receiving a reduced end portion of screw 64 and a pair of opposed, recess bores 94 and 96 for receiving reduced ends of a pair of threaded axles 98 and 100 which, in turn, are in threaded engagement with a pair of spaced blocks 102 and 104 secured to rocking plate 58 and having threaded bores 103 and 105 for receiving the axles 98 and 100. Screw 64 is restrained against axial movement relative to block 90 by a shoulder 106 formed at the reduced portion thereof, and in abutment with one side of the block and a snap ring 108 fitting in an annular groove in the end of screw 64 and in abutment with the opposite side of the block from shoulder 106. Axles 98 and 100 are provided with respective end grooves 110 and 112 to receive the end of a screw driver or other appropriate tool for threading the axle along its bore. Rotation of handle 66 of screw 64 is effective to pivot or rock plate 58 about pins such as 60, since swivel block 72 of swivel 68 is restrained from lateral movement whereby reaction of screw 64 against this block is effective to impart a compound movement including a component of linear movement to screw 64. Accordingly, plate 58 rocks while block 90 of swivel 70 pivots.

It is apparent that the lantern 12 is accurately angularly disposable by the mere rotation of screw 64 by handle 66 at any point over a wide range of positions and that such disposition is enabled by a simple rotation of the handle 66.

Having thus described this invention in such full, clear, concise and exact terms as to enable any person skilled in the art to which it pertains to make and use the same, and having set forth the best mode contemplated of carrying out this invention, we state that the subject matter which we regard as being our invention is particularly pointed out and distinctly claimed in what is claimed, it being understood that equivalents or modifications of, or substitutions for, parts of the above specifically described embodiment of the invention may be made without departing from the scope of the invention as set forth in what is claimed.

We claim:

1. A supporting bracket comprising a body having a pair of guideways therein, a plate member having ratch portions receivable in said guideways and a yieldable pawl extending into each of said guideways for restricting movement of said plate relative to said body in one direction, a pair of jaws adjustably secured to said body at opposite ends thereof and being movable relative to said body and to each other for gripping a rigid structure therebetween, a pedestal and a pivotal member mounted at spaced points on said plate member, a swivel secured to said pedestal and to said pivotal member and a screw threadedly engaging the swivel on said pedestal and being axially fixed relative to the swivel on said pivotal member whereby rotation of said screw is effective to pivot and adjust the angular position of said pivotal member and gripping means removably secured to said pivotal member.

2. A lantern supporting bracket comprising a body having a pair of guideways therein, a pair of jaws adjustably secured to opposite ends of said body and being movable relative thereto and to each other, said jaws having cushionable relatively soft clamping faces for engagement with a fixed member, a plate member receivable in said guideways and movable longitudinally therealong, a pivotal member mounted on a transverse pivot on said plate member, means connecting said plate member and said pivotal member for adjustably angularly positioning said pivotal member about its pivot, and gripping means removably secured to said pivotal member for angularly positioning a lantern relative to said body.

3. A supporting bracket comprising a body having a pair of longitudinal guideways therein, a first plate having portions receivable in said guideways for longitudinal sliding movement, a second plate pivotally mounted on said first plate, object supporting means on said second plate, manually adjustable means interconnecting said first and second plates for controlling the angle of said second plate relative to the first plate, jaw means affixed to said body, and second jaw means affixed to said first plate for affixing said bracket to a rigid structure.

4. A supporting bracket comprising a body having a pair of longitudinal guideways therein, a first plate having portions receivable in said guideways for longitudinal sliding movement, a second plate pivotally mounted on said first plate, said second plate shifting about an axis transverse to the guideways on said body, object supporting means on said second plate, manually adjustable means interconnecting said first and second plates for controlling the angle of said second plate relative to the first plate, and jaw means adjustably carried by said body and to said first plate for affixing said bracket to a rigid structure.

5. A supporting bracket comprising a body having a pair of longitudinal guideways therein, a first plate having portions receivable in said guideways for longitudinal sliding movement, a second plate pivotally mounted on said first plate, said second plate shifting about an axis transverse to the guideways on said body, object supporting means on said second plate, manually adjustable means interconnecting said first and second plates for controlling the angle of said second plate relative to the first plate, jaw means affixed to said body, and second jaw means affixed to said first plate for affixing said bracket to a rigid structure.

6. A supporting bracket comprising a body having a pair of longitudinal guideways therein, a first plate having portions receivable in said guideways for longitudinal sliding movement, a second plate pivotally mounted on said first plate, said second plate shifting about an axis transverse to the guideways on said body, object supporting means on said second plate, manually adjustable means interconnecting said first and second plates for controlling the angle of said second plate relative to the first plate, jaw means affixed to said body, second jaw means affixed to said first plate for affixing said bracket to a rigid structure, and cushion means on said first and second jaw means for engagement with the rigid structure.

7. A supporting bracket comprising a body having a pair of longitudinal guide ways therein, a first plate having portions receivable in said guide ways for longitudinal sliding movement, a second plate pivotally mounted on

said first plate, object supporting means on said second plate, manually adjustable means interconnecting said first and second plates for controlling the angle of said second plate relative to the first plate, jaw means affixed to said body, and a jaw affixed to said first plate having a leg adapted for adjustment in a direction normal to said guide ways and a second leg normal to said first leg for engagement with and affixing said bracket to a rigid structure.

8. A supporting bracket comprising a body having a pair of longitudinal guide ways therein, a first plate having portions receivable in said guide ways for longitudinal sliding movement, a second plate pivotally mounted on said first plate, object supporting means on said second plate, manually adjustable means interconnecting said first and second plates for controlling the angle of said second plate relative to the first plate, jaw means affixed to said body, and a jaw affixed to said first plate having a leg adapted for adjustment in a direction normal to said guide ways and a second leg normal to said first leg for engagement with and affixing said bracket to a rigid structure, said jaw means and second jaw having cushion means on the operative faces thereof.

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