Feb. 3, 1959 C. KLAWITTER 2,871,813

BOAT MOORING APPARATUS

Filed June 14, 1956

Fig. 1.

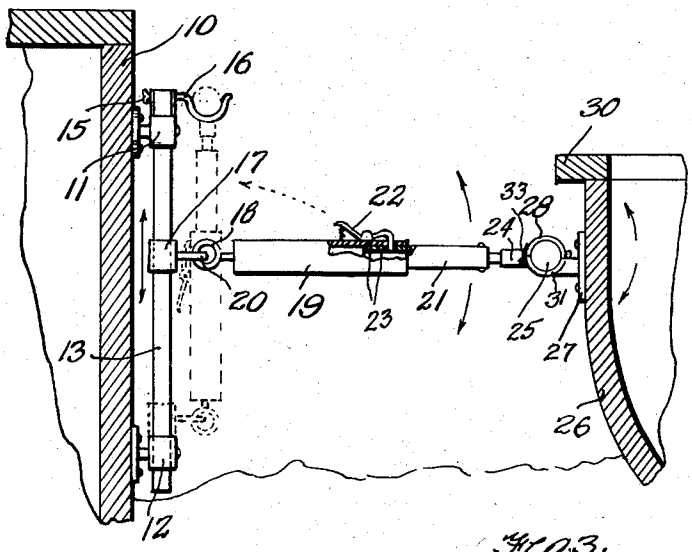


Fig. 4.

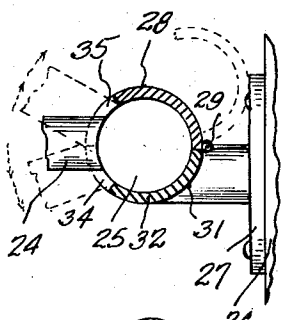


Fig. 3.

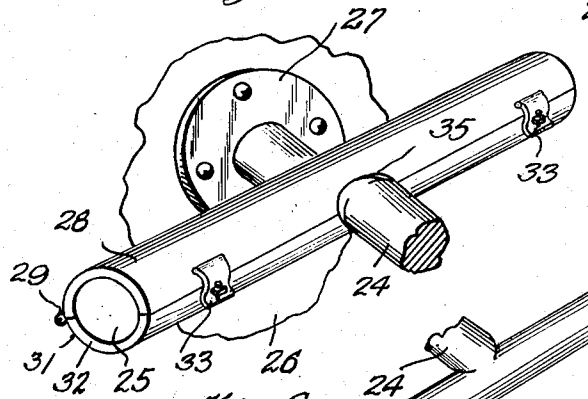


Fig. 2.

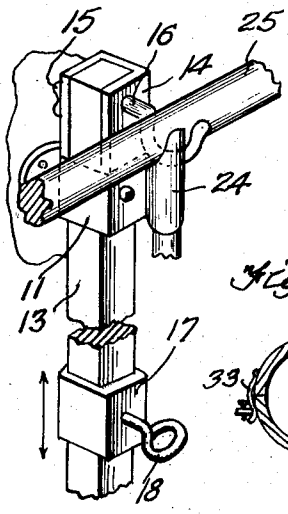


Fig. 5.

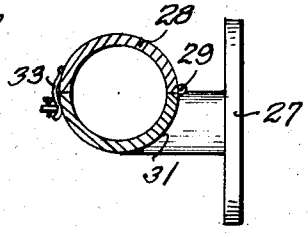
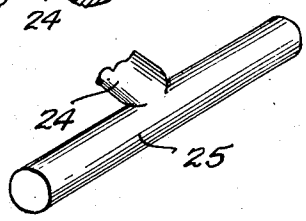


Fig. 6.



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BOAT MOORING APPARATUS

Charles Klawitter, Toledo, Ohio

Application June 14, 1956, Serial No. 591,430

1 Claim. (Cl. 114—230)

This invention relates to a boat mooring apparatus and has for one of its objects the production of a simple and efficient means for easily and quickly attaching the moring apparatus to a boat below the deck of a boat and upon the outside of the hull to permit the boat to ride freely and move up and down as well as to rock toward and away from the dock without danger of breaking the boat away from the mooring.

A further object of this invention is the production of an efficient connecting means for detachably securing the mooring apparatus to the outer side of a boat below the deck so that a free up and down rocking motion is facilitated by the detachable securing means itself.

Other objects and advantages of the present invention will appear throughout the following specification and claim.

In the drawing:

Figure 1 is a fragmentary vertical sectional view through a boat and pier or dock, and showing the manner of connecting the mooring apparatus to the pier or dock and to the boat, the mooring apparatus being shown mainly in elevation with certain parts being shown in section;

Figure 2 is a fragmentary perspective view of the pier or dock connecting means of the boat mooring apparatus;

Figure 3 is a fragmentary perspective view of the boat connecting means of the mooring apparatus;

Figure 4 is a fragmentary central transverse sectional view of the channel socket member which is secured to the boat, and showing how the connecting shank of the mooring apparatus swings upwardly and downwardly relative to the channel socket member;

Figure 5 is a fragmentary central transverse sectional view of the channel socket member showing the latching means for holding the socket member in a closed position;

Figure 6 is a perspective view of the T-shaped head of the connecting shank, a portion of the shank being shown broken away.

By referring to the drawing in detail, it will be seen that 10 designates a pier or wharf to which is secured a pair of anchoring brackets 11 and 12, arranged in vertical alignment. A vertical anchoring or supporting bar 13, preferably square or rectangular in cross section is fixed near its respective ends within the brackets 11 and 12. A yoke or clamp 14 is fixed to the upper end of the bar 13 above the bracket 11, and is preferably secured to the bar 13 by means of a conventional thumb screw 15. A supporting hook 16 is carried by the yoke or clamp 14 and projects outwardly away from the pier or wharf 10.

A vertically slidable sleeve 17 is carried by the bar 13 and is so mounted to freely slide upwardly and downwardly upon the bar 13. This sleeve 17 carries an outwardly protruding eye 18 in substantially vertical alignment with the hook 16, as is shown in the drawing. An extensible boat connecting shank 19 is connected or linked to the eye 18 by means of a second eye 20 to provide a substantially universal connection between the sleeve 17 and the shank 19. The shank 19 carries an extension member 21 which is longitudinally slidable within the shank 19 and is secured in an adjusted position by means

of a conventional spring latch 22 which is carried by the shank 19, and detachably engages one of the selected apertures 23 of the extension member 21.

The extension member 21 carries a neck shank 24 which is provided with a T-shaped head 25. This head 25 extends transversely relative to the shank 24 or longitudinally of the hull of the boat 26, shown in Figure 1. The head 25 is provided with an elongated horizontal portion which is circular in cross-section and fits within the elongated channel socket member 31. This socket member 31 is anchored or secured in any desired manner to the outer face of the side of the boat 26 in downwardly spaced relation from the gunwale or upper edge 30 of the boat to be out of the way, and to avoid being an obstruction along the deck of the boat of any suitable type to which the device is attached.

The socket member 31 comprises a bottom channel section 32 which is semi-circular in cross-section and which is anchored to the boat 26 by means of an anchoring bracket 27. A cover section 28, also semi-circular in cross-section, is hingedly connected as at 29, to the bottom channel section 32 and is normally held in a closed position to encase the head 25, by means of the conventional latches 33. The bottom channels section 32 is provided with a cut-away portion 34 below the shank 24 of the head 25 and the cover section 28 is provided with a cut-away portion 35 above the shank 24 to permit the shank 24 to swing upwardly and downwardly relative to the socket member 31, as the head 25 rocks within the socket member 31. This socket member 31 extends longitudinally along the outer face of the boat 26 and transversely of the shank 19.

The operation of the apparatus is as follows:

The boat 26 is moved into place, and the extensible shank 19, which is hung on the hook 16 in the position shown in dotted lines in Figure 1, is swung to the full line position. The head 25, when the apparatus is not in use, rests in the hook 16, as shown in detail in Figure 2, to support the shank 19 in a vertical position along the side of the pier or dock 10. When the shank 19 is swung from the vertical dotted line position to the substantially horizontal full line position shown in Figure 1, the shank 19 is adjusted to the proper length for the head 25 to rest in the bottom channel section 32 of the socket member 31. The cover section 28 is then closed over the T-shaped head 25 and the latches 33 are secured to hold the cover section 28 in a closed position over the T-shaped head 25. The sleeve 17 is free to slide up and down upon the vertical anchoring bar 13 to accommodate itself to the rise and fall of the boat 26, and also to facilitate hanging the shank 19 in a vertical hook engaging poistion. Due to the fact that the T-shaped head 25 is circular in cross-section, and the socket member 31 is circular in cross-section, the head 25 will oscillate or rock within the socket member 31 as the boat 26 rocks upon the water. The loose hinge or link connection of the eyes 18 and 20 will also facilitate a substantial universal movement at this point of connection. The sleeve 17 will facilitate an up and down motion upon the vertical bar 13 to accommodate itself to the rise and fall of the boat 26.

It should be understood that certain detail changes may be made in the apparatus, so long as these changes fall within the scope of the appended claim. Furthermore, it should be noted that two or more substantially parallel connections between the wharf and the boat may be used, if desired, to hold the boat in substantial parallel relation to the wharf 10, the connections to be constructed in accordance with the mooring apparatus above described.

Having described the invention, what is claimed as new is:

An apparatus of the class described comprising a support, a vertical anchoring means secured to said support,

an extensible boat-connecting shank slidably connected to said vertical anchoring means, a T-shaped head carried by said shank, said head including an elongated horizontally extending portion circular in cross-section, an elongated channel member secured to the outer face of the side of a boat in a downwardly spaced relation from the gunwale of the boat to avoid being an obstruction along the deck of the boat, said socket member comprising a bottom channel semi-circular in cross-section and opening upwardly, an anchoring bracket supporting said bottom channel and anchoring the bottom channel to the side of the boat and supporting said bottom channel with its open face uppermost to facilitate the dropping of said elongated horizontally extending portion of said T-shaped head into the said bottom channel when connecting said head to said bottom channel, a hinged cover section carried by said bottom channel to hold said T-shaped head in said socket member after assembly, said T-shaped head including a neck shank connecting said elongated

horizontal portion of said head to said boat-connecting shank, and said bottom channel and said cover section each being provided with a cut-away portion surrounding said neck shank of said T-shaped head to facilitate the rotation of said elongated horizontal portion of said T-shaped head within said socket member and to facilitate the up and down swinging movement of said neck portion of said T-shaped head as the boat moves upwardly and downwardly under the action of the water in which the boat floats.

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