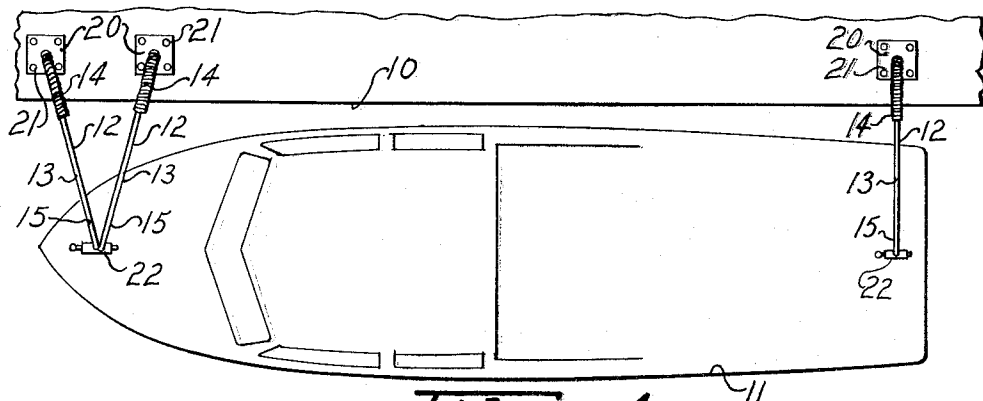


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BOAT MOORING DEVICE;

Filed Oct. 7, 1959



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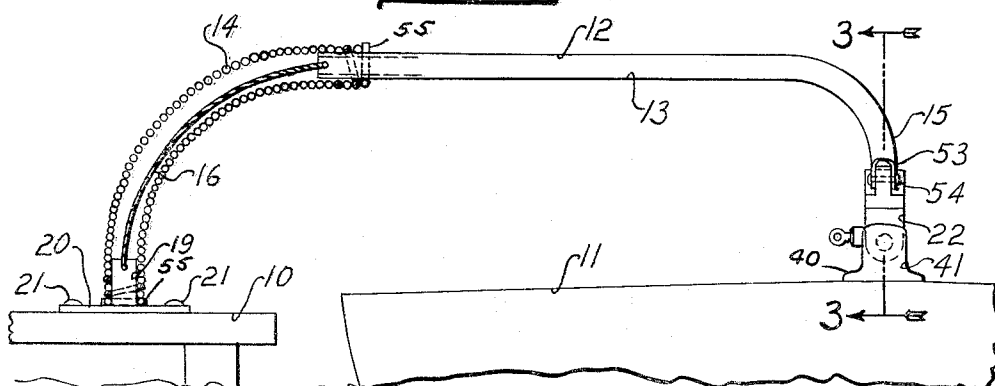


Fig - 2

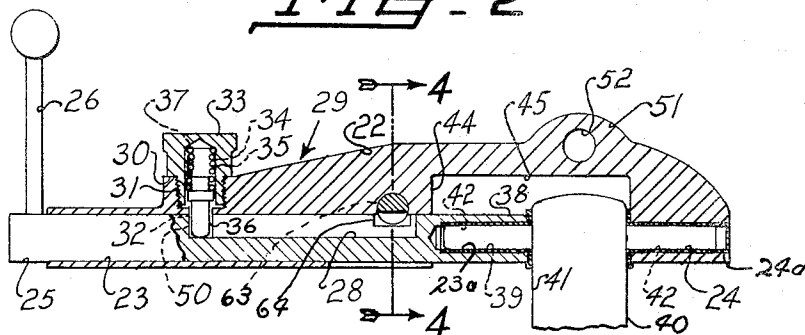


Fig. 3

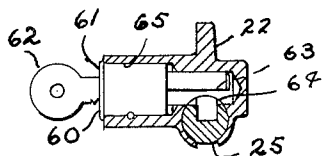


Fig. 4

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2,996,033

BOAT MOORING DEVICE

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2 Claims. (Cl. 114-230)

This invention relates to improvements in boat mooring devices and more particularly to a novel means for mooring a boat to a dock or other object.

An object of this invention is to provide a boat mooring device of the type that has a bit engaging locking assembly which may quickly be attached to the boat and which may be as readily released, but which will not jam or release by itself.

A further object of this invention is to provide a boat mooring apparatus which may be quickly engaged with or attached to the bit of a boat or disengaged therefrom and when engaged, effectively holds the boat to a support such as a dock or the like while permitting free rocking and up and down movement of the boat such as results from the rise and fall of the level of the water.

Further objects, and objects relating to details and economies of the invention will appear from the description to follow, reference being had to the accompanying drawing, in which:

FIGURE 1 is a top plan view of an apparatus or equipment embodying my invention in operative relation to a boat, a fragment of a dock being illustrated.

FIGURE 2 is a side view, partly in cross-section, of the invention embodied in FIGURE 1.

FIGURE 3 is an enlarged view of the actual bit engaging device which forms a part of the structure generally shown in FIGURES 1 and 2.

FIGURE 4 is a detail of one form of locking medium used to lock the stem in engaged position.

In the drawing 10 designates a dock of any ordinary construction, and 11 designates a part of a boat of any usual construction.

The boat is held to the dock by mooring apparatus of the invention, comprising one or more mooring arms designated generally by the numeral 12.

Each mooring arm comprises a rigid tubular member or bar 13 and a flexible extension 14. In non-operative position and when not securing the end 15 or bar 13 to the boat, said bar 13 assumes an upright position relative to the dock 10. This is brought about through normal action of flexible extension 14 which, in non-operative position, also extends vertically upwardly relative to the dock 10. A cable 16 is connected to one end of the bar 13 and to an upright extension 19 of the plate 20. The particular function of the cable is merely for added safety in the event and under extraordinary circumstances, a break occurs in the flexible extension 14. The plate 20 is secured to the dock by suitable fastening elements 21.

Connected to the other end of the bar 13 is a boat bit engaging device 22. This device 22 is longitudinal in shape and has bored therethrough two separable bores 23 and 24. Bore 23 is of substantially greater length and diameter than bore 24, and contains a stem 25 which is reciprocable therein. This stem has a manually operating handle 26 projecting upwardly at approximate right angles therefrom and is used for reciprocating said stem. A longitudinally extending slot 28 is cut through the surface of said stem and is located intermediate of the ends of the stem.

The body 29 of said device 22 is flattened at 30 and provided with an enlarged counterbored recess 31 in communication with an aperture 32 in direct communication with the bore 23. The recess 31 is threaded and has mounted thereon a spring loaded nut 33. The nut 33 has an enlarged longitudinal opening 34 which contains a

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spring 35 and a pin 36. The pin 36 has an enlarged flange 37 which bears on spring 35 with said pin projecting downwardly through aperture 32 and into slot 28, as shown in FIGURE 3.

The opposite end 38 of stem 25 has a longitudinally extending opening 39 formed therein. The length and diameter of opening 39 is approximately the same size as that of bore 24.

The numeral 40 indicates the bit which is attached to the boat. This bit includes a vertical extending column 41 and two arms 42 projecting outwardly at right angles therefrom and on opposite sides of said column. In operative relationship, I first loosen the nut 33 and pull the end of stem 25, flush or nearly so, with the side wall 44 of the enlarged recess 45 cut in the body of the device. I provide in bore 24 and opening 39 bushings 24a and 23a, respectively. These bushings are of a resilient material, rubber or other material of similar characteristics. By having these bushings 23a and 24a I provide a relatively soft enclosure for arms 42 to keep the surfaces of 42 shiny and with no opportunity of being mutilated or marred. In operation, I first insert one of the arms 42 in the bushing 24a and then push the stem 25 forwardly so the other arm 42 fits in the bushing 23a. The stem 25 is pushed forwardly to the point where the pin 36 butts against the wall 50 of the recess 28. Tightening down the nut 33 locks the device 22 to the bit 40. A boss 51 is formed integral with the body of the device and has an opening 52 formed therethrough. The free end 53 of rod 12 is split to pass over said boss and is tied to said boss 51 by passing a pin 54 through opposed openings in said rod and the opening 52 in said boss 51.

The flexible extension 14, which in actual construction is an elongated coil spring, is locked at each end to a locking coil 55. One coil 55 is anchored to the rod 12 by welding and the other coil 55 is anchored to the upright projection 19 in the same manner. These coils 55 are so arranged whereby each end of the spring 14 winds about one of the coils 55 and, in each instance, is locked to said coils 55.

To prevent unlocking of the stem 25 from boat mooring position, I propose to use a latching device 60. This latching device 60 comprises a key engaging cylinder 61 which receives a key 62 for turning a cam 63 extending forwardly from cylinder 61 and adapted to be engaged or disengaged from the slot 64 cut in the walls of the longitudinally extending slot 28. The cylinder 61 is enclosed in an opening 65 formed in the body of the device 22.

This particular application provides a new and unique construction for mooring boats. The particular design embodies a construction which is extremely efficient in operation, very sturdy in construction, and simple and economical to build.

What I claim as new and desire to secure by Letters Patent is:

1. A device for mooring a boat to a dock, comprising a rod, an elongated coil spring and a pair of separate spring coils, each end of said coil spring wound about and locked to one of said spring coils, one of said spring coils secured to an end of said rod, an anchoring member secured to said dock, a bit secured to said boat, the other of said spring coils secured to said anchoring member, a boat bit engaging assembly mounted on the other end of said rod, said assembly detachably mounted to said boat bit, said rod extending upwardly when said assembly detached from said bit, said assembly comprising two bores, a stem in one of said bores, said bit including a vertically extending column with two arms projecting outwardly from said column, one of said arms received in one of said bores, the other arm adaptable to be engaged by said stem to lock said assembly to said bit.

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2. A device for mooring a boat to a dock, comprising a rod, an elongated coil spring and a pair of separate spring coils, each end of said coil spring wound about and locked to one of said spring coils, one of said spring coils secured to an end of said rod, an anchoring member secured to said dock, a bit secured to said boat, the other of said spring coils secured to said anchoring member, a boat bit engaging assembly mounted on the other end of said rod, said assembly detachably mounted to said boat bit, said rod extending upwardly when said assembly detached from said bit, said assembly comprising two bores of different size, a stem capable of being reciprocated in the larger of said bores, an opening in said stem of approximately the same size as the smaller of said bores, resilient brushings in said smaller bore and the opening in said stem, said bit including a vertically extending column

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with two arms projecting outwardly from said column, each of said arms received in said bushings when said stem is reciprocated in one direction to lock said assembly to said bit.

References Cited in the file of this patent

UNITED STATES PATENTS

1,847,378	Browning	Mar. 1, 1932
2,558,763	Lee	July 3, 1951
2,569,783	Smith	Oct. 2, 1951
2,912,953	Olsen	Nov. 17, 1959
2,930,339	Trinka	Mar. 29, 1960

FOREIGN PATENTS

130,393	Great Britain	Aug. 7, 1919
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