

Dec. 21, 1965

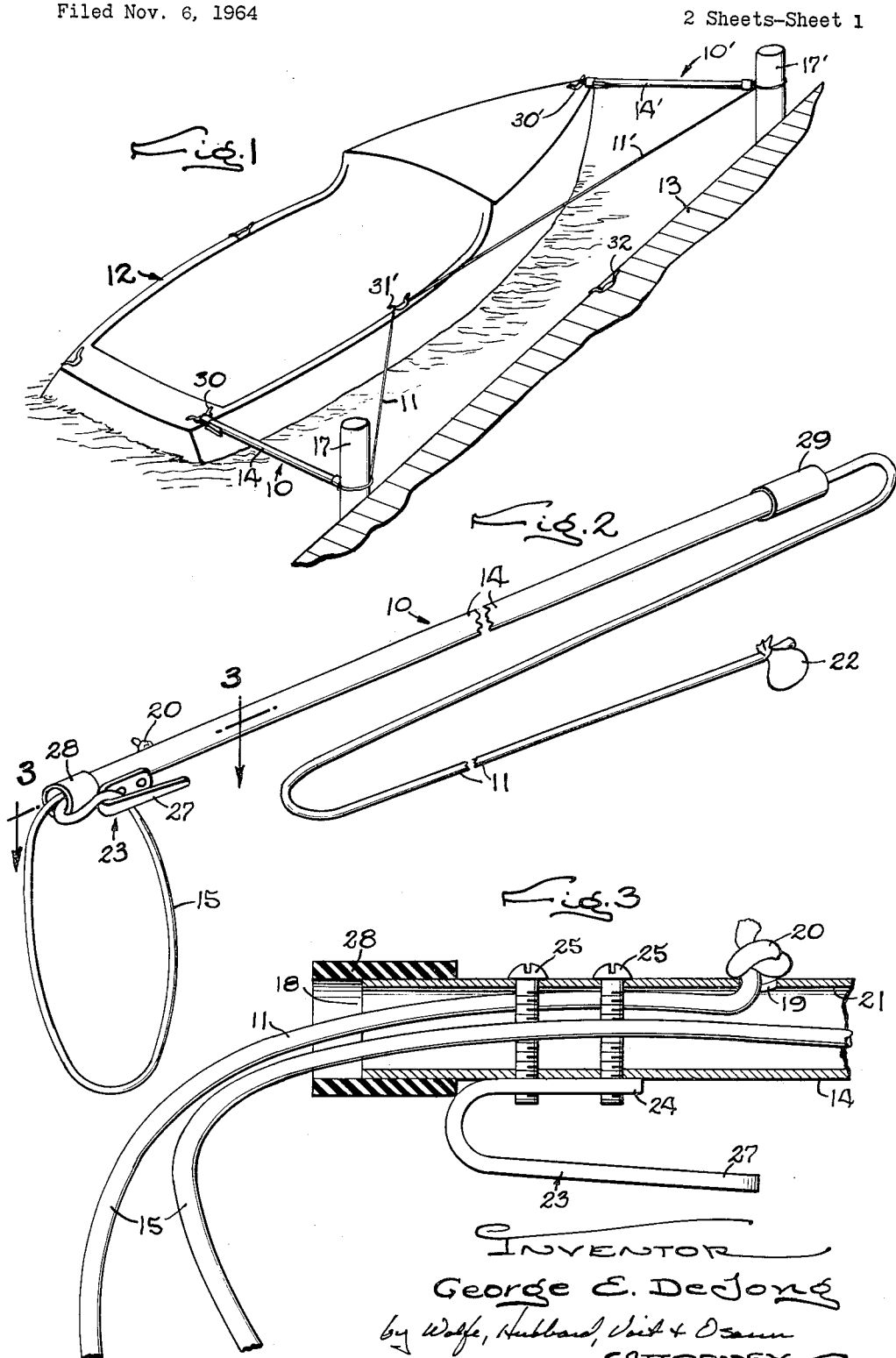
G. E. DE JONG

3,224,404

MOORING DEVICE

Filed Nov. 6, 1964

2 Sheets-Sheet 1



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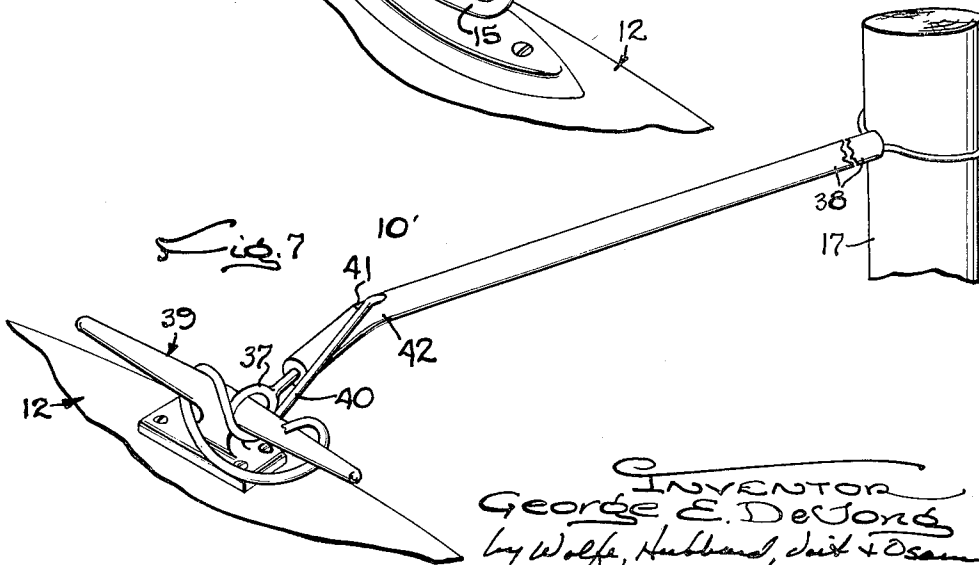
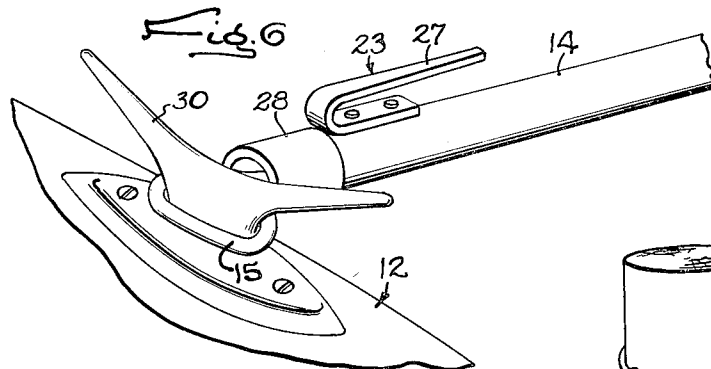
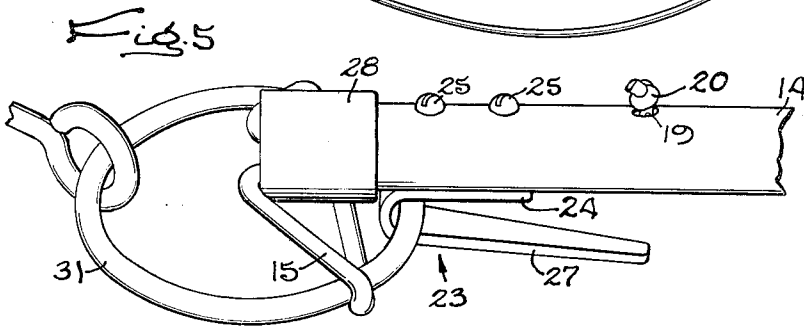
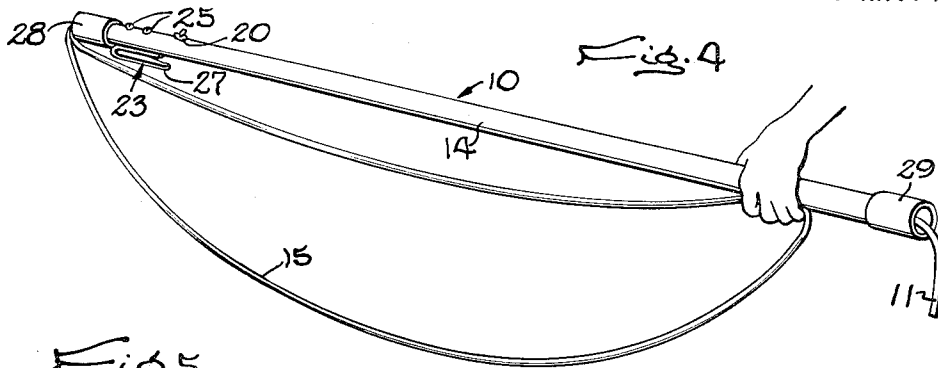
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2 Sheets-Sheet 2



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MOORING DEVICE

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Filed Nov. 6, 1964, Ser. No. 410,827

6 Claims. (Cl. 114-230)

This is a continuation-in-part of application Serial No. 230,457 filed October 15, 1962, now abandoned.

This invention relates to a device for use in mooring a boat and relates more particularly to a mooring device for securing a line between the boat and a dock.

The general object of the present invention is to provide a novel device of the above character which is easy to manipulate and simple in construction and operation, is capable of securing a line quickly and easily to all the various mooring connections normally found on docks, and which, after being used in mooring the boat, subsequently serves as a brace for preventing chafing of the boat against the dock.

A related object is to provide a portable mooring device which moors the boat completely with a flexible line and includes an elongated brace for holding the boat away from the dock.

A more specific object is to provide a novel mooring device including an elongated handle with a line secured at one end to the handle and formed with a loop adapted to be held open, dropped over, and drawn tightly around a mooring connection, the free end of the line then being snubbed around a second mooring connection at the other end of the handle.

Another object is to provide novel means on the handle for cooperating with the line in securing the device quickly and easily to a mooring connection.

Other objects and advantages of the invention will become apparent from the following detailed description taken in connection with the accompanying drawings, in which

FIGURE 1 is a fragmentary perspective view showing a boat moored to a dock with mooring devices embodying the novel features of the present invention.

FIG. 2 is an enlarged fragmentary perspective view of one of the mooring devices shown in FIG. 1.

FIG. 3 is an enlarged fragmentary sectional view taken along the line 3-3 of FIG. 2.

FIG. 4 is a fragmentary perspective view showing one way in which the device is used.

FIG. 5 is an enlarged fragmentary perspective view showing the device secured to a mooring ring.

FIG. 6 is an enlarged fragmentary perspective view showing the device secured to a mooring cleat, this view being similar to a portion of FIG. 1.

FIG. 7 is an enlarged fragmentary perspective view generally similar to FIG. 6 and showing a modified form of the invention.

As shown in the drawings for purposes of illustration, the invention is embodied in a mooring device 10 (FIG. 1) for use in securing a mooring line 11 between a boat 12 and a dock 13. The improved device is easily manipulated either from the dock or from the boat, makes it possible to reach the dock from a distance without leaning out of the boat, and may be securely connected to mooring connections at both ends. Moreover, after the line 11 is secured between the boat and mooring connection on the dock, the device prevents the boat from drifting toward and rubbing or chafing against the dock.

To these ends, the mooring device 10 includes an elongated tubular handle 14 with a flexible line 11 fast at one end on the handle and extending first outwardly from one end of the handle and then back into and through the latter to form a loop 15 at the outer end of the handle adapted to be dropped over a post 17 or mooring cleat on the dock.

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The loop may be drawn tightly around the post by pulling on the free end portion of the line at the inner end of the handle. This free end portion then is secured to the boat or dock to complete the mooring operation.

5 In this manner, the boat 12 is moored quickly and easily with a flexible line. When the loop 15 is tightened and the free end of the line is secured close to the other end of the handle, however, the latter, in addition to facilitating the docking of the boat, forms a rigid, non-compressible mooring brace which holds the boat away from the dock even in rough weather.

10 In the present instance, the handle 14 is formed by a hollow tube of any desired length which is composed of sturdy but lightweight metal. One end portion of the line 11, which usually will be braided nylon, extends a short distance into one open end 18 of the tube and is inserted in a hole 19 (FIGS. 3 and 5) adjacent the tube end. This end of the line is knotted at 20 to fasten the line to the tube. The other end portion of the line 11 is passed through the interior 21 of the tube from the same end and is long enough to project well beyond the other open end of the tube. To prevent the line from pulling accidentally from the tube, a member 22 larger than the interior of the tube is fast on the free end of the line.

25 In the form shown in FIGS. 1-6, a connector in the form of a hook 23 is mounted on the tube 14 adjacent the end 18 thereof. This hook comprises a generally U-shaped bar with its open end facing toward the remote end of the tube. One leg 24 of the bar is held flat against the tube by screws 25 passed through the tube and threaded into the bar (see FIG. 3). The other leg 27 of the bar is spaced from the tube and preferably diverges slightly therefrom toward its free end. As will appear later, this hook is used for various purposes in docking a boat.

35 Sleeves 28 and 29 composed of a resilient material such as relatively firm rubber are telescoped onto the opposite ends of the tube and project somewhat beyond the tube ends (see FIG. 3). In addition to reducing fraying of the line 11 by the tube edges, these sleeves cushion the contact between the mooring device 10 and the boat 12 to prevent marring of the surfaces of the latter.

40 Three ways in which the loop 15 may be formed preparatory to docking a boat are shown in FIGS. 2, 3 and 4. In FIG. 3, the loop is allowed to hang freely with the two strands thereof slightly parted. This usually will be sufficient separation of the strands where the loop is to be dropped over a cleat 30 such as the one shown in FIGS. 1 and 6. To effect a somewhat wider opening of the loop, one strand may be slipped around the hook 23 as shown in FIG. 2. Where a wide loop is desired, one strand of the loop is drawn down along the side of the handle 14 and gripped in the manner shown in FIG. 4. In each case, the loop is drawn tight to bring the sleeve 18 tightly against the mooring connection.

55 The primary purpose of the hook 23 is to effect a quick and secure connection to an annular mooring connection such as a mooring ring 31 (FIG. 5) on the boat or dock. For this purpose, the loop 15 first is slipped over the ring and the free end of the outer leg 27 is hooked through the ring. When the loop then is drawn tight in the manner shown in FIG. 5, it holds the hook securely in engagement with the ring. To release this connection, the loops is loosened so that the hook may be shifted out of the ring.

65 It will be understood that the tube 14 may be made of any desired length selected according to the normal use to which the device will be put. The spacing of dock posts or cleats, the size of the boat, and other factors influence the choice as to length. Further, a pair of devices normally is used to moor one boat.

70 In the mooring shown in FIG. 1, the boat 12 has been docked by a person on the dock rather than in the boat.

In such a case, the person on the dock 13 drops the loop 15 over a cleat 30 on one end of the boat, the stern in FIG. 1, when the boat is close enough to be reached. He then pulls the loop tight so that the sleeve 28 on the outer end of the tube abuts against the cleat as shown in FIG. 3. The sleeve probably will bear against the deck of the boat. Then, the free end portion of the line is snubbed around a cleat on the dock, or around a post 17 as shown in FIG. 1, with the other sleeve 29 on the inner end of the tube abutting against the post or cleat. Thus, the stern of the boat is secured to the dock.

The second device 10' shown in FIG. 1 is secured to a connection such as a second post 17' adjacent the opposite end of the boat, the bow in FIG. 1. It may be desirable at this time to use the hook 23 in an eye or ring (not shown) on this end of the boat to pull the latter within easy reach. Either the loop 15 will be secured to a cleat 30' on the bow of the boat or the loop and hook will be used in the manner shown in FIG. 5 on an eye.

After the device 10' has been secured to the boat 12, the free end portion of this line 11' is snubbed around the post 17' or cleat on the dock. To complete a relatively rigid bracing structure, it is desirable to make the lines 11 and 11' long enough to be angled back to the boat and the free ends fastened to another, intermediate cleat 31'. Thus, the free end portions form spring lines for the moored boat.

It will be apparent that if the boat is docked by the operator alone, the process involves the same general steps, the loops 15, 15' being dropped over the dock posts 17, 17' and the spring lines being fastened to the cleats 30, 30' on the boat and then angled back to a cleat 32 on the dock. During a mooring of this type, the substantial reach provided by the devices reduces the danger of tipping and contributes to the ease of docking.

The mooring device also may be used as a temporary anchor for the boat where a projection such as a tree branch, a stump, or a rock is available. The loop 15 simply is dropped over the projection and drawn tight, and the free end portion is fastened to the boat as before.

An incidental feature of this versatile device is its usefulness in correcting an "overshoot" or missed mooring where the operator misjudges his approach to the dock and is drifting past at a distance too great for the normal use of the mooring device. In such a situation, the handle 14 is used to whip the free end portion of the line, weighted by the member 22, toward the dock and wrap several turns of the line around a dock post. Preferably, the member 22 is a dead weight such as a small bag of lead shot which will not bounce away from the post upon contacting it. Thus, the boat operator can start the boat toward the dock simply by pulling on the line. It will be seen, of course, that the line probably will unwrap under the operator's pull and, therefore, the process may have to be repeated a number of times to reach the dock.

A modified form of the mooring device is shown in FIG. 7. In this instance, a connector in the form of an eye or ring 37 is fastened to the inner end of the tube 38 to be slipped over one end of a mooring cleat 39 as shown in FIG. 7. The free end portion of the line 40 extends through a hole 41 spaced from the inner end of the tube and, when wrapped in the usual manner around the cleat, positively holds the ring 37 in place on the cleat thereby effecting a quick and secure connection.

The inner end portion of the tube is bent at 42 to form an obtuse angle on the order of 30 degrees with the outer end portion so that the tube is spaced well above the deck of the boat when the two mooring connections are at different levels. The boat may rise and fall with the tide without rubbing against the tube. A hook (not shown) similar to the hook 23 may be mount-

ed adjacent the outer end of the tube as in the first form.

From the foregoing, it will be apparent that a mooring device of the type described is an extremely versatile and useful tool well adapted to fit almost any docking situation. At the same time, it is quite simple in construction and inexpensive to manufacture.

I claim as my invention:

1. A boat mooring device including, in combination, an elongated tube, a line extending through said tube and formed with a loop projecting from one end of the tube, said line having a free end portion projecting from the other end of said tube whereby said loop is drawn into the tube to be tightened around a mooring connection, said tube forming a brace for holding a moored boat away from a dock when said free end portion is secured to a second mooring connection at said other end, and a hook fast on the exterior of said tube adjacent said one end and opening toward said other end to cooperate with said loop in securing said device to an annular mooring connection.

2. A boat mooring device including, in combination, an elongated rigid tube, a line fast at one end on said tube and projecting outwardly from the outer end of the tube and back into and through the tube to form a loop at the outer end, said line having a free end portion projecting beyond the inner end of the tube whereby said loop is drawn tightly around an annular mooring connection, and a hook fast on the exterior of said tube adjacent the outer end and opening inwardly toward the other end to hold said loop open during the mooring operation and also to cooperate with said loop in securing said outer end to said annular mooring connection.

3. A mooring device as defined in claim 2 in which said hook is a generally U-shaped bar having one leg disposed against said tube and a second leg spaced from and generally parallel to said tube.

4. A boat mooring device including, in combination, an elongated rigid tube, a line fast at one end on said tube and projecting outwardly from the outer end of the tube and back into and through the tube to form a loop at the outer end, said line having a free end portion projecting beyond the inner end of the tube whereby said loop is drawn tightly around a mooring connection, and an eye secured to said inner end and sized to slip onto a mooring cleat thereby to cooperate with said line in securing said inner end to a mooring cleat.

5. A boat mooring device including, in combination, an elongated rigid tube, a line fast at one end on said tube and projecting outwardly from the outer end of the tube and then back into and through the tube to form a loop at said outer end, said line having a free end portion projecting beyond the inner end of the tube whereby said loop is drawn tightly around a mooring connection, and an eye on said tube adjacent said inner end for cooperating with said free end portion in securing said inner end to another mooring connection, said eye being offset laterally from said tube to hold the latter away from the deck of a boat to which it is connected.

6. A mooring device as defined in claim 5 in which said tube has a bend between its ends disposing the inner end portion at an obtuse angle with the outer end portion thereby to provide the offset of said eye laterally from said outer end portion.

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