Nov. 6, 1962 J. C. BACKE 3,062,168

BOAT ANCHORING SYSTEM

Filed April 14, 1960 3 Sheets-Sheet 1

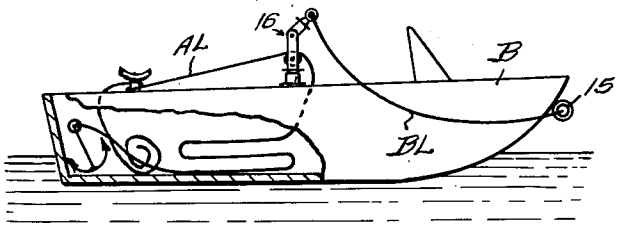


Fig. 1.

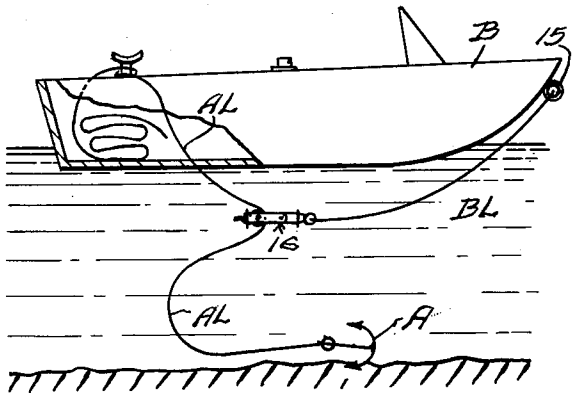


Fig. 2.

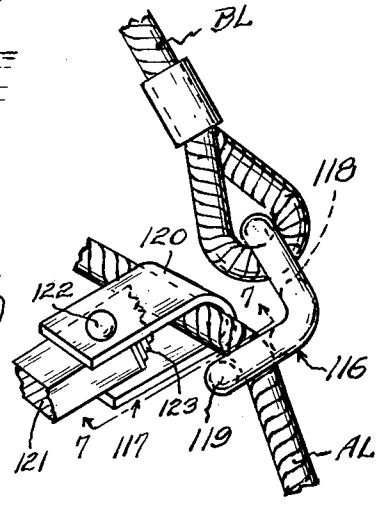


Fig. 6.

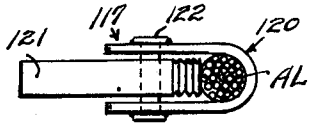


Fig. 7.

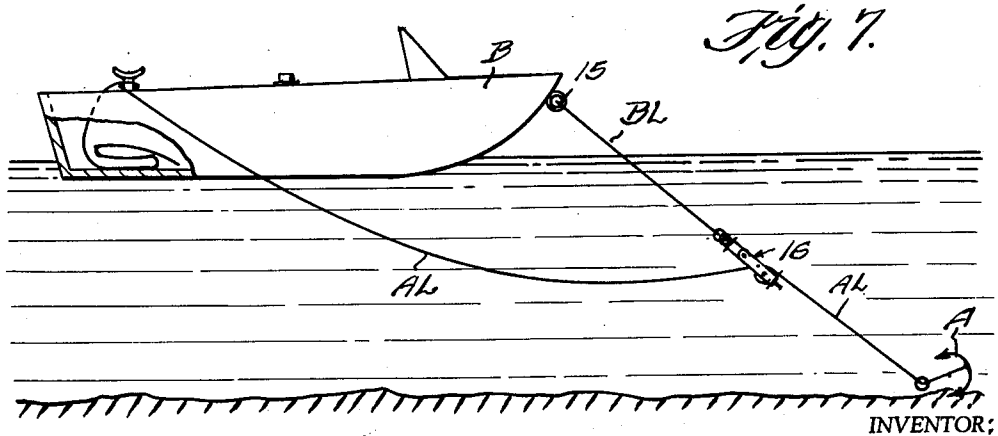


Fig. 3.

INVENTOR;
JOHN C. BACKE.

BY Roy E Ramey

ATTORNEY.

Nov. 6, 1962 J. C. BACKE 3,062,168

BOAT ANCHORING SYSTEM

Filed April 14, 1960 3 Sheets-Sheet 2

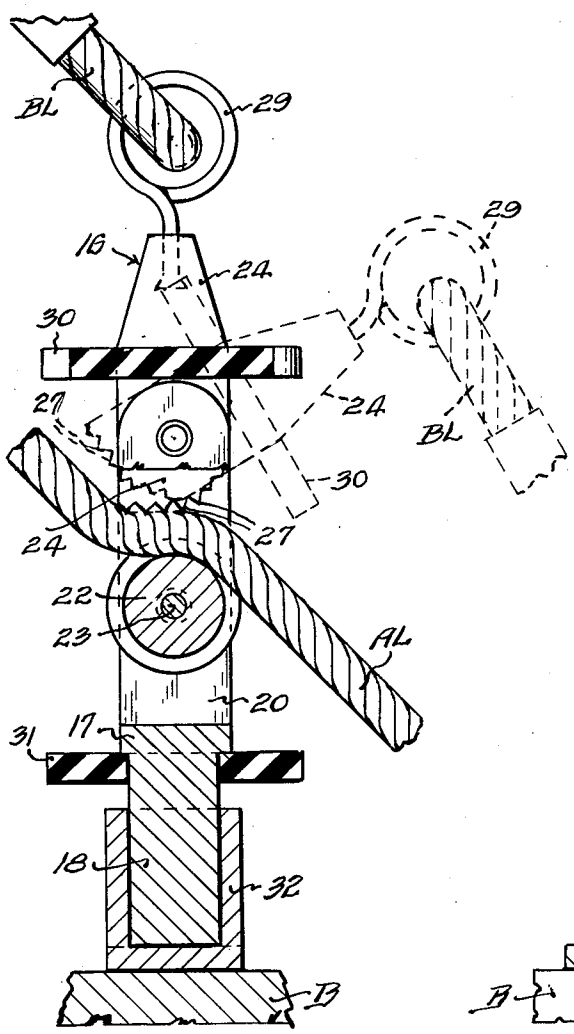


Fig. 4.

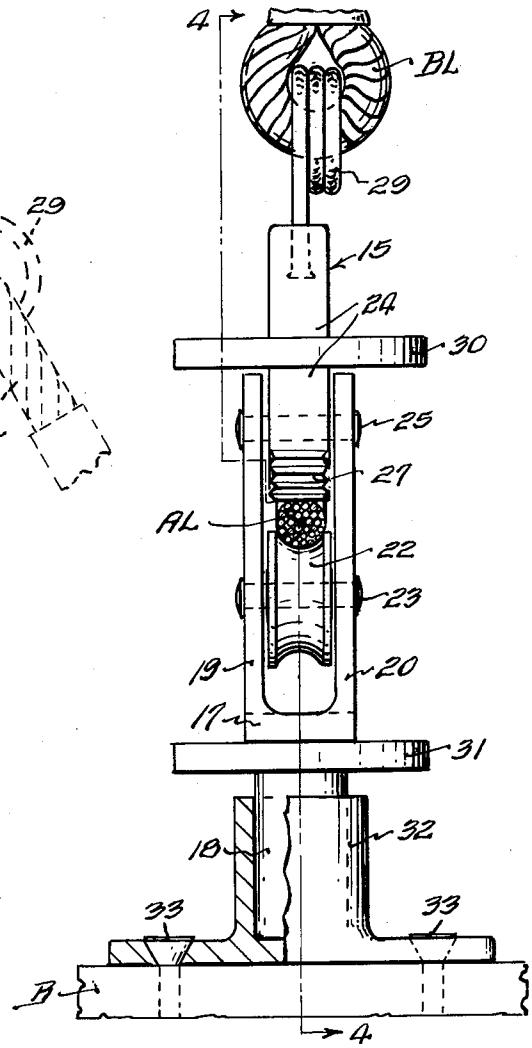


Fig. 5.

INVENTOR,
JOHN C. BACKE
BY Roy E Ramey
ATTORNEY.

Nov. 6, 1962 J. C. BACKE 3,062,168

BOAT ANCHORING SYSTEM

Filed April 14, 1960 3 Sheets-Sheet 3

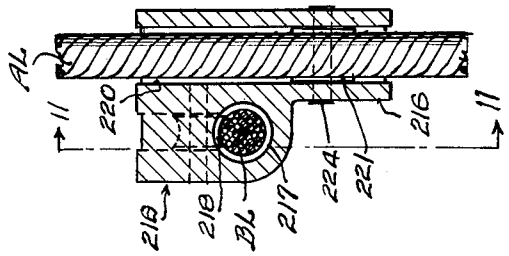


Fig. 12.

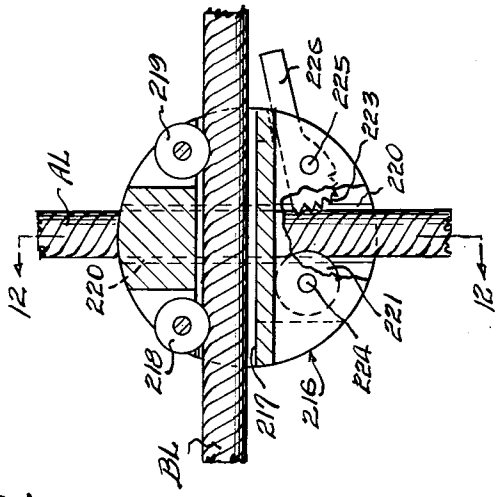


Fig. 11.

Fig. 8.

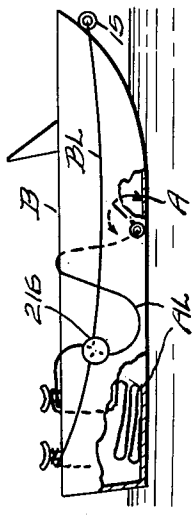
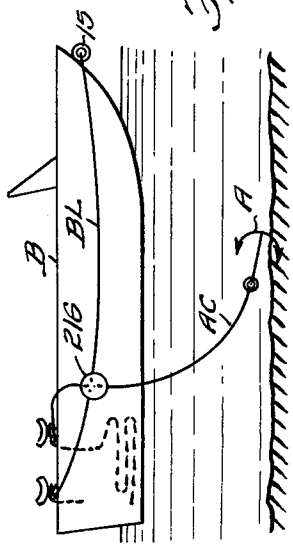


Fig. 9.



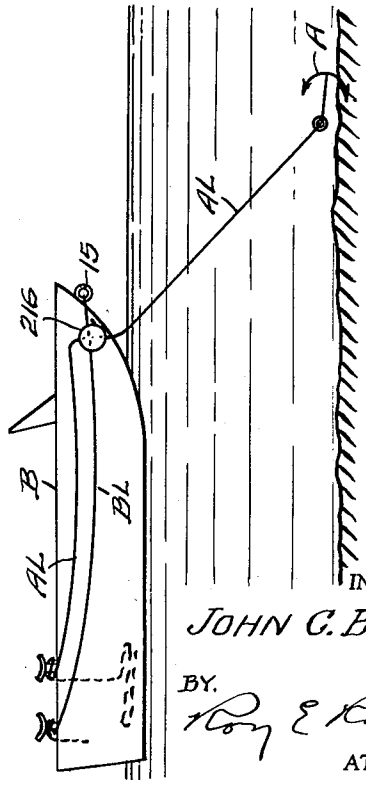


Fig. 10.

INVENTOR
JOHN C. BACKE
BY.
Roy E Kaney
ATTORNEY

United States Patent Office 3,062,168 Patented Nov. 6, 1962

3,062,168

BOAT ANCHORING SYSTEM

John C. Backe, 6401 5th Ave. N., St. Petersburg, Fla.

Filed Apr. 14, 1960, Ser. No. 22,151
4 Claims. (Cl. 114—206)

The present invention relates to an improved anchoring system and devices therefor by which an anchor of a relatively small boat can be cast and hauled in remote from the bow to thereby eliminate the necessity for the boatman to cast or haul in the anchor from a position at or near the bow.

The principal object of the invention is the provision of an improved anchor system for small boats comprising a bow line having one end secured to the fore part of the boat and a fitting on the bow line through which an anchor line, which may be stored in any convenient part of the boat away from the bow, is guided for paying out the anchor, and means to selectively lock the anchor line to the fitting so that after the proper length of anchor line has been paid out the boat may swing at anchor by the bow line. This system permits the anchor to be cast or hauled in from any point remote from the bow, so that it is unnecessary for the boatman to go to the bow to drop or hoist anchor, which might entail climbing over a windshield, controls, etc.

A further object of the invention is the provision of a fitting or device which can be secured to the bow line and which has a guide through which the anchor line may be paid out, and lock means associated with the fitting to clamp the anchor line thereto to thereby secure the anchor line to the bow line. In the preferred form of the invention, the locking means is connected with the bow line so that the pull of the boat to the latter tends to increase the locking effect of the locking means.

It is another object of the invention to provide a fitting or device which may travel along a line extending from the bow of the boat rearwardly thereof and having means to guide the anchor line therethrough, in combination with means to fix the anchor line to the fitting, either by a locking device on the fixture or by a device selectively positionable along the anchor line and cooperating with the fitting to prevent movement of the anchor line from the fitting.

Other objects and advantages of the invention will become apparent from the following description of preferred forms of the invention, reference being made to the accompanying drawings, wherein—

FIGS. 1, 2 and 3 are schematic views of a boat equipped with a preferred form of the anchoring system of the inventtion, the various figures showing different phases in the anchoring of the boat;

FIG. 4 is a sectional view taken on line 4—4 of FIG. 5, of a device or fitting employed in the anchoring system shown in the preceding figures;

FIG. 5 is an end view of the fitting shown in FIG. 4 showing the fitting secured in a holder on the boat, the holder being partly broken away;

FIG. 6 is a fragmentary view of an anchoring system like that shown in FIGS. 1, 2 and 3 but employing a different form of fitting;

FIG. 7 is a view taken along line 7—7 of FIG. 6;

FIGS. 8, 9 and 10 are schematic views similar to FIGS. 1, 2 and 3, showing another form of the invention;

FIG. 11 is a sectional view, taken on line 11—11 of FIG. 12, of a fitting employed in the anchoring system shown in FIGS. 8, 9 and 10, and

FIG. 12 is a view taken partly along line 12—12 of FIG. 11.

Referring to FIGS. 1 through 5, an anchoring system is shown for a boat B by which an anchor A attached

to an anchor line AL can be cast and hoisted to and from the boat from adjacent the stern, for example, so that it is unnecessary to go to the bow for this purpose, which is often inconvenient due to the presence of a seat, windshield, deck, controls, etc. In the system shown, a bow line BL is secured at one end to the bow as by a ring 15 and the other end of the line is attached to a fitting 16, described in greater detail hereinafter. Preferably, the length of the bow line is such that it will extend to the point furthest from the bow from which the anchoring operation is to be carried out so that fitting 16 can be handled by the boatsman in this position.

Fitting 16, as may be best seen in FIGS. 4 and 5, is comprised of a bifurcated member or body 17 having a cylindrical end section 18 and the tynes 19 and 20 of the body project from the end section, support a pulley wheel or sheave 22 journaled between the tynes on a pin 23, and the anchor line AL is reeved over this pulley, as shown. Means are provided for locking line AL to sheave 22, and in the form of the invention shown it comprises a cam type clamp 24 which is pivoted by a pin 25 between the tynes. The lower end of clamp 24 is eccentric to the pivot and is serrated to provide ridges 27 which grip the anchor line. The cam surface of the clamp is such that as the clamp is rotated counterclockwise from the broken line to the full line position shown in FIG. 4, the clamp surface moves toward sheave 22 to thereby clamp or joint the anchor line to the sheave and prevent movement of the line from left to right, as viewed in FIG. 4. The upper end of clamp 24 has a ring 29 secured thereto to which the bow line is secured and it will be appreciated that the more the pull on the anchor line the greater is the clamping action by member 24. Preferably, two soft annular bumper rings 30 and 31, which may be of a material such as rubber, surround the body 17 to prevent scuffing the side of the boat by the body swinging thereagainst.

To facilitate handling of the anchoring equipment, fitting 16 may be secured in place on the gunwale of the boat, for example, by placing end section 18 in a socket member 32 secured to the boat by screws 33, as seen in FIG. 5.

Anchor A may be of any suitable type, and is attached to one end of anchor line AL, the other end of which may or may not be cleated to the boat because, when at anchor, the pull of the anchor line on the boat structure occurs solely through the bow line, as is explained more fully hereinafter.

Normally, the anchor may be carried in the rear of the boat and fixture 16 is normally retained in socket 32, as shown in FIG. 1. Bow line BL may extend rearwardly of the boat along the outside, or it may be carried inboard and when it is desired to anchor the boat, clamp member 24 is moved to its line releasing position and the boatsman lowers the anchor overside from his position in the rear portion of the boat and pays out the anchor line through fitting 16 until the anchor touches bottom and a suitable amount of slack is payed out. Clamp 24 is then swung toward the locking position shown in solid lines in FIG. 4 which locks the anchor line to the pulley of the fitting thereby effectively connecting the anchor line to the bow line BL and the fitting is then removed from its holder and cast overboard so that the boat will then ride at anchor as shown in FIG. 3. It will be seen that in riding at anchor the pull of the anchor line exerted through fitting 16 to the bow line will tend to cause clamp 24 to be rotated to tighten its grip on the anchor line so that the more pull on the anchor line the greater will be the locking effect of the clamp.

When it is desired to hoist anchor, the anchor rope is hauled in from the same position from which it was cast and when fitting 16 is drawn into the boat clamp 24 may

be released by rotating it to the position shown in broken lines in FIG. 4 and the fitting may then be secured in holder socket 32 and the anchor line hauled in over sheave 22 until it is alongside the boat and can be taken in over the side.

A similar system of anchoring can be accomplished by substituting a fitting 116 and a line clamp 117, shown in FIGS. 6 and 7, for fitting 16 just described. Fitting 116 comprises two ring or eye sections 118 and 119 which are disposed at right angles to one another and joined at one edge so that they are integral. Bow line BL may be attached to eye 118 and anchor line AL is threaded through eye 119, as shown in FIG. 6. Normally fitting 116 may be carried in the boat on a suitable hook, not shown, attached to the boat in a location, such as that at which fitting 16 is located. Line clamp 117 comprises a U-shape plate 120 of a suitable non-corroding material, such as stainless steel, and a cam type clamp member 121 is pivoted between the sides of the plate by a pin 122. Clamp member 121 has an eccentric, serrated surface 123 which is arranged to engage the anchor line AL, which passes between the yoke of plate 120 and the eccentric surface 123, when member 122 is rotated to extend at right angles to the anchor line and thereby clamp the line to the yoke of plate 120. When the clamp member is rotated counterclockwise from the position shown in FIG. 6, the anchor line is released.

The anchor line is arranged so that a pull on the anchor tends to cause clamp member 121 to rotate clockwise and increase its wedging effect on the anchor line against the yoke of plate 120 to thereby tightly secure the line to the plate.

When it is desired to anchor the boat, clamp member 121 is moved to line releasing position and the anchor line is payed out through the plate 120 until the anchor may secure a satisfactory hold on the bottom. Clamp member 121 is then rotated to clamp the anchor line to plate 120 which prevents further paying out of the anchor line and causes the clamp to engage eye 119 and transfer the pull of the anchor line to the bow line through fitting 116. The anchor may be hauled in by the anchor line from the same position it was cast; i.e., near the rear of the boat as desired.

In both forms of the invention described, the inboard end of the anchor line has no pull thereon other than the weight of the slack portion between the boat and the fitting, and it need not be secured to a substantial fastening, but one of mere convenience.

In the form of the invention shown in FIGS. 8–11, a bow line BL is attached at one end to the bow of the boat B like that described with reference to the system shown in FIGS. 1–3, and the other end of the bow line is secured to a point aft, such as adjacent the stern. A fitting 216 is movably supported on the bow line by a trolley-like arrangement and it forms a guide through which anchor line AL may be directed in paying out and hauling in the anchor. Fitting 216 comprises a body having a channel 217 extending crosswise thereof through which the bow line extends and in which two idler sheaves 218 and 219 are journaled so that the fitting may ride freely along the bow line on the sheaves in the manner of a trolley carriage. A passage 220 is also provided in the body at right angles to channel 217 and to the rear thereof, as viewed in FIG. 11, and the lower portion of the passage is open at opposite sides to accommodate a sheave 221 and a locking clamp 223 which are pivoted on pins 224 and 225 respectively. Anchor line AL is passed through passage 220 and the anchor end of the rope passes downwardly between sheave 221 and clamp 223. Clamp 223 includes an eccentric or cam portion opposite sheave 221 and is shaped so that the clockwise rotation thereof causes the clamping surface to approach the opposite sheave and

thereby grip the anchor line. Preferably the line engaging surfaces of the clamp are serrated transversely of the direction of travel of the line to provide gripping edges. A handle 226 extends from clamp 223 so that the boatsman can rotate the clamp to lock or unlock the anchor line, as desired. It will be seen that the cam 223 is arranged so that downward pull of the anchor line tends to rotate the clamp to increase its clamping action.

Normally the anchor is carried in the boat near the stern and fitting 216 will be carried on the bow line near by. When it is desired to anchor the boat, the anchor is dropped overboard and the anchor line payed out through fitting 216 until the anchor holds to the bottom. The boatsman then manipulates handle 226 to clamp the anchor line to fitting 216, as described, and the fitting will then move along the bow line as the boat drifts from the anchor until it engages the bow ring or the bow line pulls taut to hold the fitting adjacent the bow of the boat, depending upon the slack in the bow line. The boat will then ride at anchor as seen in FIG. 10, and the greater the pull on the anchor line, the greater will be the clamping effect of the clamp 223 on the anchor line.

When it is desired to hoist the anchor, the boatsman pulls on the anchor line which moves fitting 216 along the bow line to the boatsman and he then releases clamp 223 so that the anchor line may then be drawn up through fitting 216 until the anchor can be lifted into the boat.

It will be seen that by my invention the anchors for boats can be handled entirely from a point remote from the bow so that a boatsman need not climb over windshields, controls, etc., in attending to this function. The system of anchoring can be carried out with inexpensive, reliable and simple devices. Furthermore, the bow line by which the boat rides at anchor can be attached to the bow somewhat below deck to improve the riding of the boat at anchor because it is unnecessary to handle the bow line either when anchoring or hoisting anchor.

Although I have shown several forms of my invention, it is to be understood that other forms, modifications and adaptations can be made, all falling within the scope of the claims which follow.

I claim:

1. A system for anchoring a boat comprising, a bow line attached to the boat adjacent to the bow thereof, a fitting on said bow line for movement to a position aft of the bow while attached to the bow through said line, an anchor line guided by said fitting and having one end in the boat and the other end attached to an anchor, and means to selectively lock said anchor line relative to said fitting.

2. A system as defined in the preceding claim for anchoring a boat in which said means comprises a member detachably connected to said anchor line and arranged to engage said fitting to prevent movement of said anchor line in one direction through said fitting.

3. A system for anchoring a boat comprising, a bow line attached at one end to the bow of the boat, and the other end attached to an after part of the boat, a fitting on said bow line and movable therealong, an anchor line guided by said fitting, and means to selectively lock said anchor line relative to said fitting.

4. A system for anchoring a boat as defined in claim 3 in which said means comprises a member detachably connected to said anchor line and arranged to engage said fitting to prevent movement of said anchor line in one direction through said fitting.

References Cited in the file of this patent

UNITED STATES PATENTS

1,709,910	Gray	Apr. 23, 1929
2,893,341	Anderson	July 7, 1959