Sept. 18, 1951 A. ILLSCHE 2,568,006

MEANS FOR RELEASING FOULED BOAT ANCHORS

Filed April 17, 1948

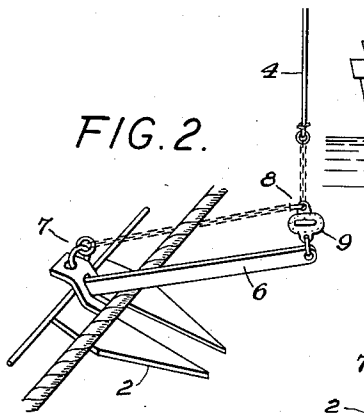


FIG. 2.

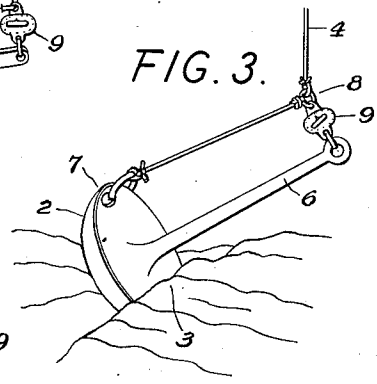


FIG. 3.

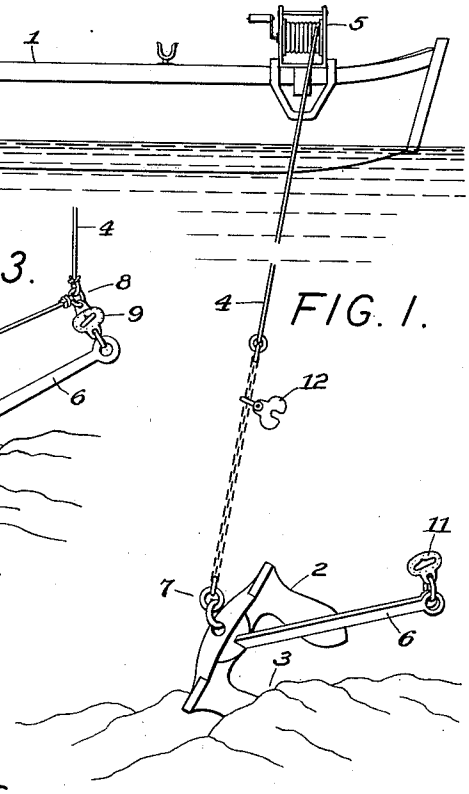


FIG. 1.

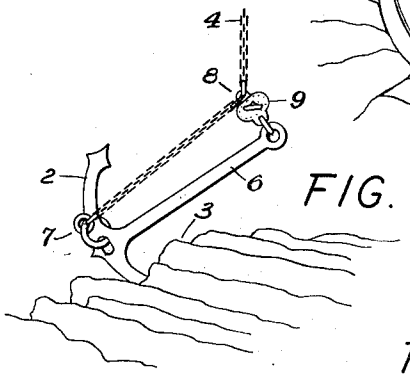


FIG. 4.

FIG. 6.

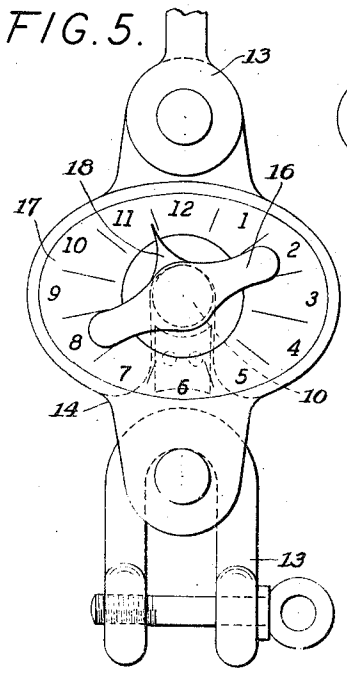
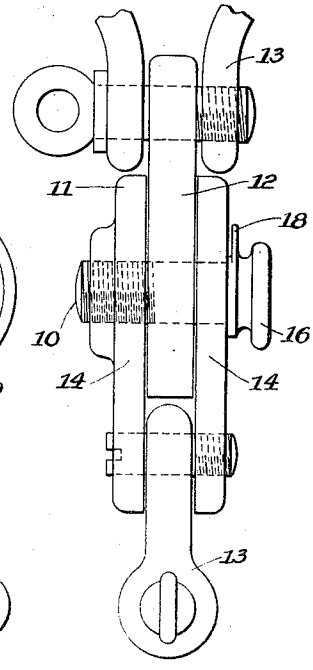


FIG. 5.



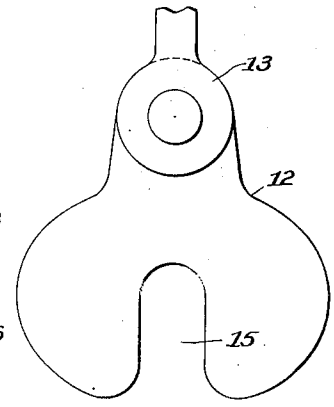


FIG. 7.

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MEANS FOR RELEASING FOULED BOAT ANCHORS

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Application April 17, 1948, Serial No. 21,715

2 Claims. (Cl. 114—221)

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This invention relates to boat anchors and more particularly to means for releasing and freeing anchors caught on bottom obstructions of various kinds.

A hauling line, attached to the free end of the anchor stem, is ordinarily employed for raising and lowering an anchor from a boat and, under normal conditions, is effective for the purpose, but when the anchor becomes fouled by a bottom obstruction, pull on the line usually results in increasing the bottom hold on the anchor and makes it necessary in many cases to cut the line and abandon the anchor.

I have found by experiment and test that fouled anchors can be released in most instances, if the pull of the hauling line is temporarily shifted from the free end of the stem, to a point at or near the bottom of the anchor, the effect of which is to upset the anchor and thereby cause the flukes to be withdrawn from the engaging obstruction and the anchor being thus freed, may be drawn to the surface and aboard the boat without difficulty.

In clearing a fouled anchor, the above mentioned transfer of the pull of the hauling line to a point at or near the bottom thereof is effected automatically and is accomplished by securing the end of the hauling line permanently to the aforesaid bottom point of the anchor and providing a second higher connection of a yielding character, between the line and the free end of the anchor stem. This second connection is normally of sufficient strength to sustain the weight of a free anchor, as it is raised or lowered, without yielding. Interposed in and forming part of the second line connection, there is a slip joint or separable link, which is adapted to be set to yield to an excess of strain developed by the pull of the hauling line beyond a predetermined limit. This yielding action serves to disconnect the line from the free end of the anchor stem, thereby transferring the pull to the bottom of the anchor, to upset and free it from the engaging obstruction. Thereafter, the link members are reassembled, preparatory to further use of the anchor.

The structural features of the invention, not specially mentioned above, will be brought to attention in the detail description that follows.

In the accompanying drawings, I have illustrated an embodiment of the invention suitable for carrying it into effect but it is to be understood that no limitations are intended by this showing other than are imposed by the appended claims.

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In the drawings—

Fig. 1 shows the invention applied to a boat anchor fouled by a bottom obstruction and the separable link pulled apart by the strain on the hauling line, to disconnect the line from the free end of the anchor stem and transfer the pull to the bottom of the anchor.

Figs. 2, 3 and 4 show the application of the invention to different well known types of boat anchors and the separable link connecting the hauling line, attached at or near the bottom of the anchor, to the free end of the stem thereof.

Fig. 5 is a view in front elevation, on an enlarged scale, of the preferred form of separable link.

Fig. 6 is a side view thereof and

Fig. 7 shows the separable member of the link that is attached to the hauling line.

Referring now to the drawings, a boat afloat is indicated at 1 and the boat anchor at 2, fouled by a bottom obstruction 3. Attached to the anchor, a hauling line 4 is shown, running over a winch 5 on the boat.

The anchor may be of any well known or conventional form, provided with a stem 6, as shown is Figs. 1 to 4, inclusive and at or near opposite ends of the anchor, an end length of the hauling line is attached.

The attachment of the hauling line at or near the bottom of the anchor, as indicated at 7, is made normally permanent in any suitable or well known manner, as by knotting the line in an attached ring of the anchor or by a clevis-attached chain or by otherwise securing the line.

The second point of attachment of the line, is to the free end of the anchor stem, is indicated at 8 and a slip joint or separable link 9, is interposed as the attaching means.

The element 9 is constructed to yield to a predetermined strain put upon the line in excess of the weight of the anchor or the pull of the tide on an anchored boat, and disconnect the line from the free end of the anchor stem, thereby transferring the pull to the bottom of the anchor, the effect of which is to upset the anchor and cause the flukes to be withdrawn from an engaging bottom obstruction.

For purposes of illustration, I have shown the element 9 in the form of a two-part separable link, the members of which are frictionally held together under the tension of a clamp bolt 10. By turning up the bolt or running it back, the clamp pressure may be varied as required, to cause the link to withstand the weight of any free

anchor, the pull of the tide or like strains, without yielding and breaking the connection between the hauling line and the free end of the anchor stem.

The members 11 and 12 of the link are respectively attached, in a manner to be normally permanent, to the free end of the anchor stem and the hauling line, the connection being made in each instance by means of a clevis 13.

The link member 11 is suitably constructed to provide two clamping jaws 14, 14, between which the other member 12 is frictionally held by means of the clamp bolt 10. The member 12 is notched as indicated at 15, to straddle the bolt and thus constructed and arranged, is separable from the member 11, when the pull on the hauling line exceeds the frictional grip of the clamp.

The head 16 of the clamp bolt 10 is suitably shaped as a convenient hand grip for turning the bolt and the latter is provided with a fine thread to enable the clamp pressure to be varied and gradually increased or decreased with a fair degree of accuracy to meet normal strains. As a guide in varying the pressure, a suitable indicator may be employed consisting, as shown, of a scale 17 on the clamp member 11 and an index or pointer 18, secured to and movable with the bolt.

As the construction, operation and many important advantages of the invention will be apparent from the foregoing, it will not be necessary to further describe the same.

I claim:

1. In an anchor upsetting means in which the anchor cable is attached to the fluke end of the anchor, a separable element consisting of a two-plate clamp, a bifurcated slip plate frictionally held between them and a screw bolt that passes through the bifurcation of the slip plate and positively secures the plates of the clamp together in definite spaced apart relation and against separation by being threaded into one of the plates and rotatable to vary the spacing of the plates and the frictional strength of the clamp, the said separable element providing a releasable connection between an intermediate point in the length of the cable and the free end of the anchor shank and being adjustable to support the weight and withstand the normal strain of the anchor in being raised or lowered and adapted to yield and temporarily disengage the connection under abnormal strain of a fouled anchor leaving the latter held at the fluke end by the cable.

2. An anchor-upsetting means, as defined in claim 1, in which the slip plate is bifurcated at its lower end to straddle and clear the bolt when released.

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