June 14, 1960 R. W. BARTELS ET AL 2,940,411

COLLAPSIBLE BOAT ANCHOR

Filed Sept. 26, 1957

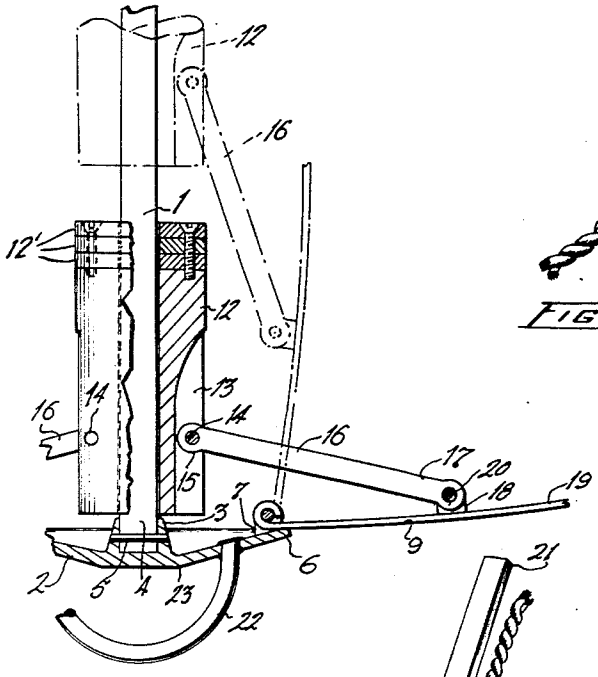


FIG. 3.

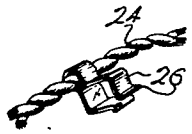


FIG. 4.

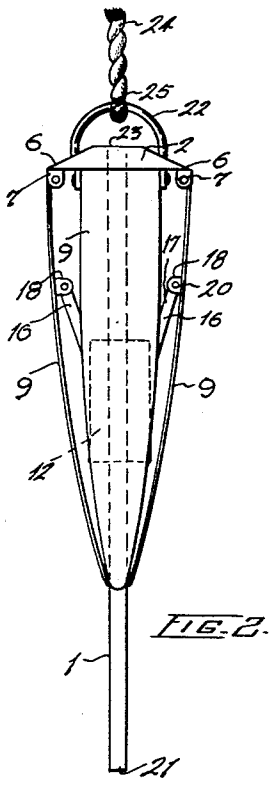


FIG. 2.

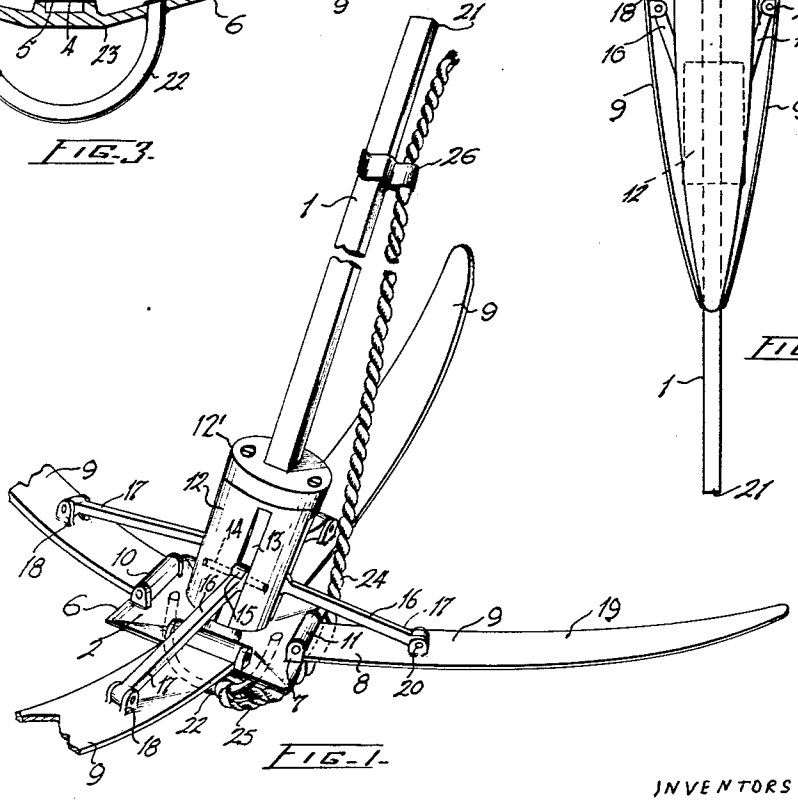


FIG. 1.

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United States Patent Office 2,940,411
Patented June 14, 1960

2,940,411

COLLAPSIBLE BOAT ANCHOR

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Filed Sept. 26, 1957, Ser. No. 686,452

8 Claims. (Cl. 114—208)

Our invention relates to new and useful improvements in collapsible boat anchors, particularly anchors for use with the sports of boating and fishing wherein relatively small boats are utilized, the principal object and essence of our invention being to provide a device of the character herewithin described which is foldable for storage and yet which is highly effective when in use.

In the sport of fishing and boating, it is usual to use either a rock on the end of a rope or a small solid anchor when it is desired to anchor the boat in any particular location remote from the shore. The rock has obvious disadvantages and the small solid anchor not only is a hazard in a small boat, but often gets jammed in the rocky bottom of many of the inland lakes.

Our invention overcomes these disadvantages by providing an anchor which is collapsible when in the boat yet which opens out when ready for use readily and easily. Furthermore, due to the novel construction of our anchor, it is virtually impossible for same to become jammed on the lake bottom due to the fact that the snatch clip can readily be removed from the shank thus enabling the pull to be directed to the base of the anchor rather than the upper end of the shank.

Another object of our invention is to provide a device of the character herewithin described which is drawn up from the lake bottom in the retracted position therefore reducing considerably the tendency of conventional anchors to engage weeds, moss, etc.

Yet another object of our invention is to provide a device of the character herewithin described in which the effective weight can readily and easily be changed according to circumstances.

Still another object of our invention is to provide a device of the character herewithin described which, when collapsed, is extremely compact and easily stored.

With the foregoing objects in view, and such other objects and advantages as will become apparent to those skilled in the art to which this invention relates as this specification proceeds, our invention consists essentially in the arrangement and construction of parts all as hereinafter more particularly described, reference being had to the accompanying drawings in which:

Figure 1 is a perspective view of our anchor in the extended position.

Figure 2 is a side elevation of our anchor in the raising position.

Figure 3 is an enlarged fragmentary section elevation of our anchor.

Figure 4 is an enlarged perspective view of the snatch clip and rope per se.

In the drawings like characters of reference indicate corresponding parts in the different figures.

Proceeding therefore to describe our invention in detail, reference should be made to the accompanying drawings in which it will be seen that we have provided an elongated shank 1 preferably of square cross-sectional configuration. A base plate 2 is provided of substantially

square configuration, and having a socket 3 at the centre thereof which is adapted to receive the lower end 4 of the shank 1, pin 5 securing the two together. Adjacent each side edge 6 of the base plate, we provide pairs of upstanding lugs 7 between which are supported the inner ends 8 of curved flukes 9. In this connection, a pivot pin 10 passes through the lugs and through a bearing 11 on the fluke end 8 so that the flukes are permitted to pivot within limits upon the base plate. However, as the lugs are fed inboard of the edges 6, the flukes cannot extend beyond the position shown in Figure 1.

A cylindrical weight 12 is apertured centrally to slide freely along shank 1, said weight being provided with a plurality of grooves 13 upon the sides thereof. Pivot pins 14 span these grooves and act as support for one end 15 of links 16. The other or outer ends 17 of the links 16 are pivotally engageable between lugs 18 formed upon the inner faces 19 of the aforementioned flukes 9, pivot pins 20 connecting the links to the flukes. From the foregoing, it will be appreciated that when the weight is adjacent the base plate 2 as shown in Figure 1, the links 16 extend the flukes to their fullest extent, but when the weight is slid along towards the upper end 21 of the shank 1, then the links 16 draw the flukes upwardly so that they lie alongside the shank 1 as clearly shown in Figure 2. The weight 12 is variable in effect by the provision of one or more segments 12' which may be secured to the upper end of the weight by set screws as shown in Figure 1.

We have provided means for extending or retracting the anchor as desired, and in this connection a lifting ring 22 is secured to the underside 23 of the base plate 2. The anchor rope 24 is secured to this ring by the lower end 25 of the rope and a snatch clip 26 is secured to the rope a distance spaced from this lower end 25. This snatch clip is spring-loaded and is preferably of square cross-sectional configuration as shown in Figure 4 so that same will engage firmly around the shank 1 and will only be displaced by a relatively sharp jerk.

In operation, the anchor is preferably stored within the boat in the position shown in Figure 2. However, when it is desired to use the anchor, it is up-ended with respect to Figure 2 so that the weight 12 descends by gravity towards the base plate 2 thus extending the flukes 9. The rope is secured to the lifting ring 22 and the snatch clip engaged around the shank 1 so that the anchor takes up the position shown in Figure 1 whereupon it may be lowered to the lake bed and engaged in the usual manner.

It will be observed that the normal steady strain upon the anchor rope will not disengage the clip and that the anchor will act as a normal anchor under these circumstances. However, when it is desired to raise the anchor, a sharp jerk or snatch is given to the anchor rope thus disengaging the clip 26 from the shank 1. This enables the strain to be placed directly upon the lifting handle 2 which up-ends the anchor, disengages same from any obstruction, and permits same to be raised readily.

As soon as the anchor is up-ended, the weight 12 moves towards the end 21 of the shank thus closing the flukes to the position shown in Figure 2 so that the anchor can readily be withdrawn and lifted from the water by means of the lifting ring 22. It will also be observed that any moss or weeds would automatically clear as the anchor is raised through the water in this position.

If it is desired merely to move the position of the anchor, then a steady pull on the rope 24 will disengage the anchor normally without disengaging the snatch clip whereupon it can be raised clear of the bottom and be replaced when the boat has been re-positioned.

Since various modifications can be made in our inven-

tion as hereinabove described, and many apparently widely different embodiments of same made within the spirit and scope of the claims without departing from such spirit and scope, it is intended that all matter contained in the accompanying specification shall be interpreted as illustrative only and not in a limiting sense.

What we claim as our invention is:

1. A collapsible boat anchor comprising in combination a shank, a base plate secured to one end of said shank, and a plurality of flukes pivotally connected by one end thereof to said base plate, a weight on said shank slidable therealong, and links pivotally connecting each of said flukes to said weight whereby when said weight is adjacent said base plate, said flukes are extended and when said weight is towards the opposite end of said shank, said flukes are retracted, against said shank.

2. The device according to claim 1 which includes an anchor rope secured to said base plate and a snatch clip secured to said rope and detachably securable to said shank.

3. The device according to claim 1 in which said shank is of square cross-sectional configuration, said weight is cylindrical and is apertured to slide on said shank, a plurality of longitudinal grooves in the sides of said weight, said links being pivoted within said grooves, the other ends of said links being connected to said flukes intermediate the ends thereof.

4. The device according to claim 2 in which said shank is of square cross-sectional configuration, said weight is cylindrical and is apertured to slide on said shank, a plurality of longitudinal grooves in the sides of said weight, said links being pivoted within said grooves, the other ends of said links being connected to said flukes intermediate the ends thereof.

5. The device according to claim 1 in which said weight is provided with a plurality of segments detachably securable thereon for varying the effect of said weight.

6. The device according to claim 2 in which said weight is provided with a plurality of segments detachably securable thereon for varying the effect of said weight.

7. The device according to claim 3 in which said weight is provided with a plurality of segments detachably securable thereon for varying the effect of said weight.

8. The device according to claim 4 in which said weight is provided with a plurality of segments detachably securable thereon for varying the effect of said weight.

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