Oct. 6, 1936. F. E. WELLES 2,056,439

ANCHOR

Filed July 8, 1935

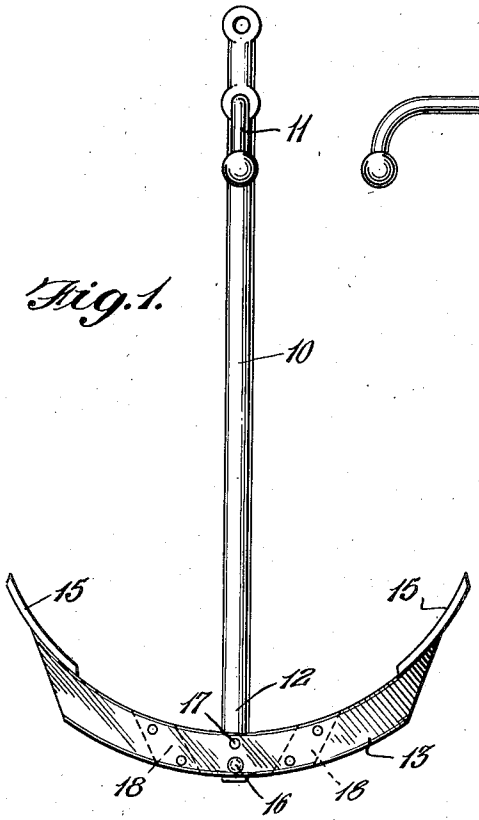


Fig. 1.

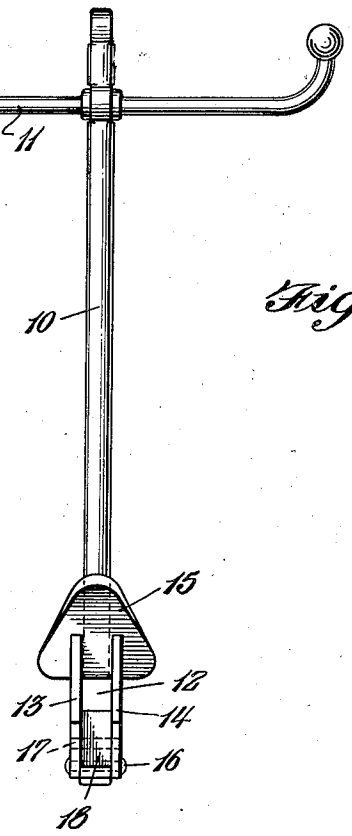


Fig. 2.

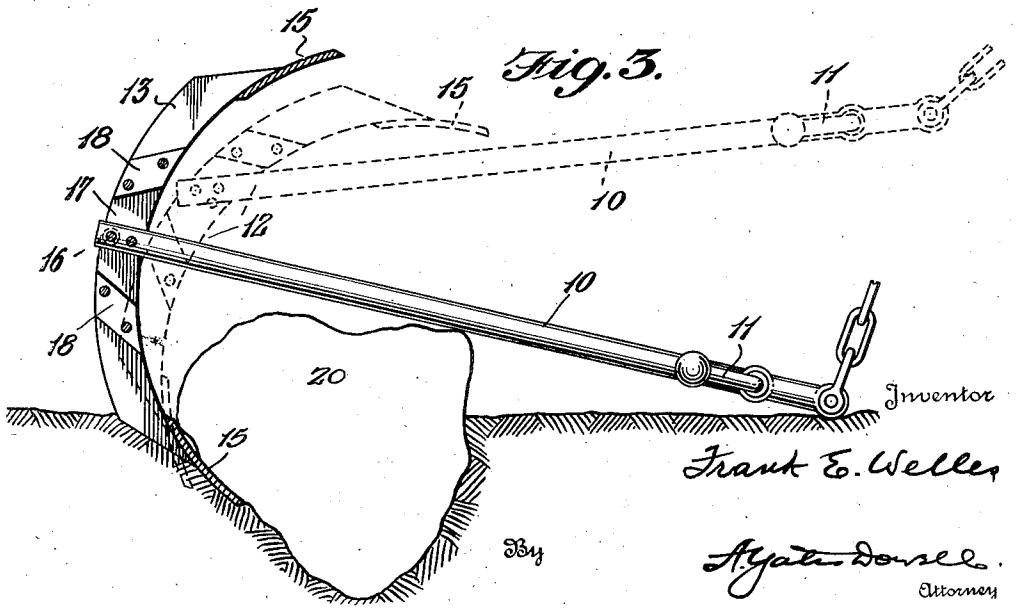


Fig. 3.

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5 Claims. (Cl. 114—208)

My invention relates to an anchor and more particularly to an anchor having movable or collapsible flukes whereby the anchor may be released if caught under a rock, coral formation or the like.

Difficulty in raising their anchors has been encountered by fishermen in certain localities, as for example the Gulf of Mexico where coral formations of all shapes and sizes abound on the bottom of the Gulf. Anchors in general use frequently become caught in these coral beds and are lost as they cannot be drawn up.

It is an object of my invention to provide an anchor which may be easily released under such circumstances and drawn to the surface.

It is a further object of my invention to provide an improved anchor of this character which may be readily put in condition for re-use.

For a better understanding of the invention, reference may be had to the accompanying drawing, wherein

Fig. 1 is an elevation illustrating a preferred form of anchor constructed in accordance with the present invention.

Fig. 2, a side elevation of the anchor shown in Fig. 1; and

Fig. 3, a view illustrating the manner in which the anchor may be released from a rock or other obstruction.

Referring to the drawing, an anchor embodying the invention comprises a stock or shank 10 having a crossbar 11 on one end thereof and a fluke arm mounted at the other end 12 thereof. The fluke arm of the anchor may comprise two plate members 13 and 14 of suitable configuration having points or palms 15 secured to the ends thereof.

The members 13 and 14 are pivotally secured to the shank 10 of the anchor, as by means of a master pin or bolt 16 extending through said members and the end portion 12 of the shank. The members 13 and 14 are further releasably secured to the shank 10 by means of a shearing pin 17 of steel, or other suitable material adapted to withstand the normal stresses to which the anchor is subjected.

The points or palms 15 are secured to the members 13 and 14 in any desired manner, preferably by welding. The members 13 and 14 are further secured to each other by means of spacing members 18 which may be riveted or welded thereto. The parts of the anchor may be constructed of any suitable material such as rolled or forged steel or the like and the members 13, 14 and 15 may be formed of a single piece, for example of cast steel.

As shown in Fig. 3, when the anchor is caught upon a rock 20 or other obstruction so that the anchor cannot be released by pulling upon the line or cable, the shearing pin 17 will be sheared off, permitting the fluke arm to turn upon the shank 10 to a releasing position as indicated in dotted lines whereupon the anchor may be lifted. In this manner the loss of the anchor is avoided as the shearing pin 17 may be readily replaced after which the anchor is again ready for use.

Various modifications in the detailed construction shown and described above will occur to those skilled in the art and are intended to come within the scope of the invention if within the terms of the appended claims.

I claim:

1. An anchor comprising a shank, an arm consisting of a pair of rigid plates with a fluke adjacent each end thereof, spacers for said plates positioned to form stops for said shank, one end portion of the shank being disposed between said plates and spacers, a master bolt and a shear pin securing the arm to the shank, said pin being adapted to shear under abnormal stress and permit the arm to pivot about the master bolt between the stops.

2. An anchor comprising a shank, a fluke arm connected adjacent its center to said shank, a stop on said arm at each side of said shank, the connection between said arm and shank including a master bolt and a shear pin, said pin being adapted to shear under abnormal stress and permit the arm to pivot about the master bolt between the stops.

3. An anchor comprising a fluke arm, stops on said arm spaced substantially equidistantly from the ends of the arm, a shank having one end disposed between said stops, a master bolt and a shear pin securing said arm and shank together in a manner that said shear pin will shear under abnormal stress and allow the arm to pivot about the master bolt between the stops.

4. An anchor comprising a shank, a fluke arm, a master bolt and shear pin securing said arm and shank together, said pin being adapted to shear under abnormal stress and permit the arm to pivot about the master bolt, and one or more stops on said arm to limit pivotal movement of the arm about the shank after the pin has sheared.

5. An anchor comprising an arm, a shank, a master bolt, a shear pin, and one or more stops, said arm and shank being connected by said master bolt and shear pin, said shear pin being adapted to shear under abnormal stress and permit the arm to pivot about the master bolt, said stops being mounted on said arm with relation to the master bolt in a manner to be engaged by said shank and limit movement of said arm about the master bolt relative to the shank.

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