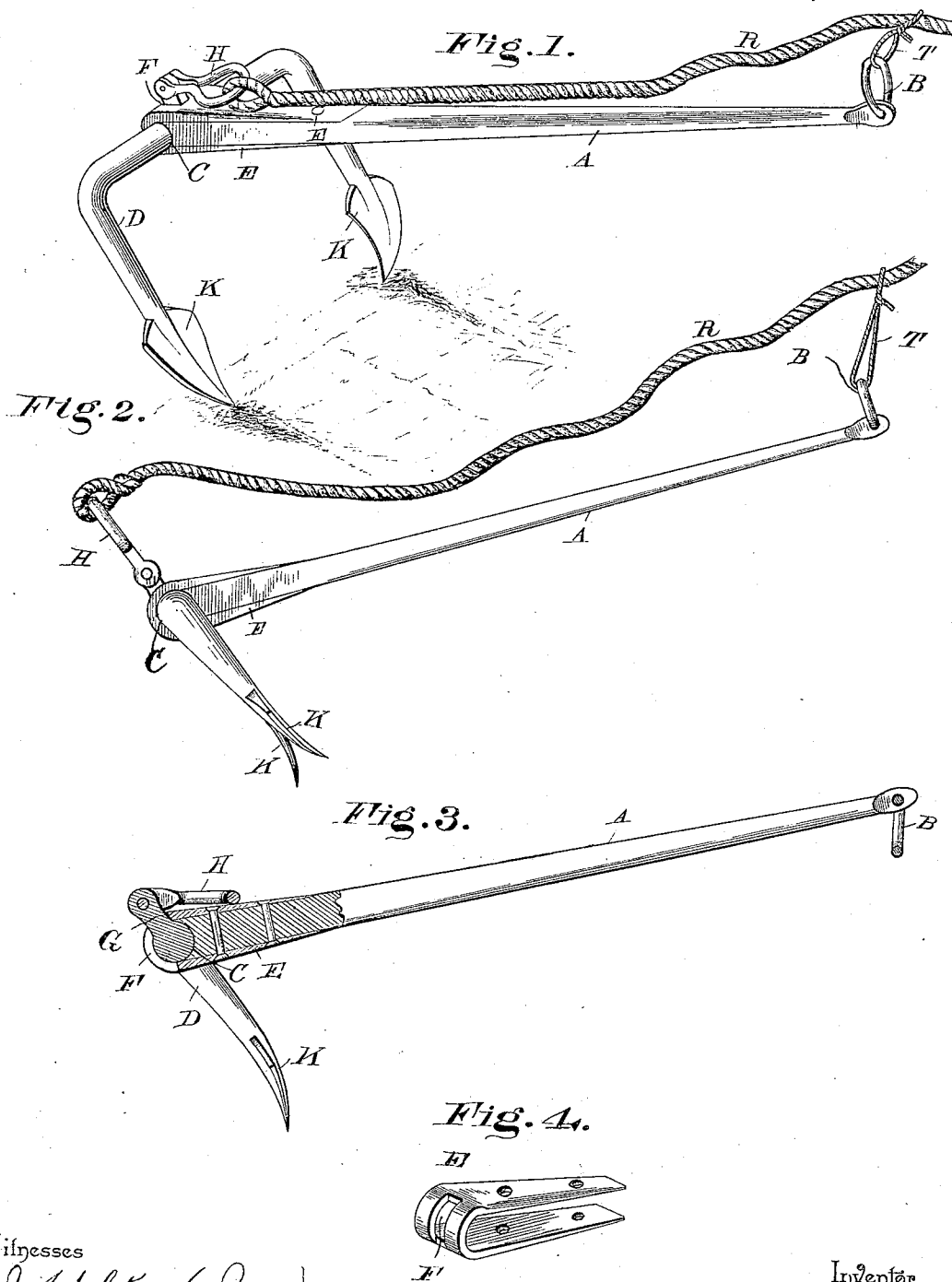


(No Model.)

D. McDONALD.  
ANCHOR.

No. 511,788.

Patented Jan. 2, 1894.



Witnesses

*J. Ulke, Jr.*  
*C. S. Doyle*

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# UNITED STATES PATENT OFFICE.

DUNCAN McDONALD, OF NORTH RIVER, CAPE NORTH, CANADA.

## ANCHOR.

SPECIFICATION forming part of Letters Patent No. 511,788, dated January 2, 1894.

Application filed February 27, 1893. Serial No. 463,871. (No model.)

*To all whom it may concern:*

Be it known that I, DUNCAN McDONALD, a subject of the Queen of Great Britain, residing at North River, Cape North, in the county of Victoria, Province of Nova Scotia, Canada, have invented a new and useful Anchor, of which the following is a specification.

My invention relates to improvements in anchors, the objects in view being to provide a simple, cheap and effective device capable of use upon large and small craft; furthermore, to provide means whereby the ordinary cross stock may be dispensed with; and furthermore, to provide improved means for causing the flukes to engage the bottom in any position of the anchor.

A further object of my invention is to so construct the anchor that both flukes may engage simultaneously, thus enabling the bow or yoke to be made lighter and of a single piece of metal; and furthermore, to provide means whereby the parts or members of the anchor may be detached to facilitate repair thereof.

Further objects and advantages of my invention will appear in the following description and the novel features thereof will be particularly pointed out in the appended claims.

In the drawings: Figure 1 is a perspective view of an anchor embodying my invention. Fig. 2 is a side view of the anchor as seen when upon the bottom. Fig. 3 is a central section in the same position, thus showing the opposite fluke to indicate that the flukes are bent or turned in opposite directions. Fig. 4 is a detail view of the slotted strap.

A designates the shank of the improved anchor, to one end of which is connected the usual ring B, and in the other end is formed a bearing C, in which is mounted the bow or yoke D. A strap E, completes the bearing formed in the end of the shank and, folded at its ends against opposite sides of the shank, is bolted thereto, as shown in Figs. 1 and 3. This strap is provided with a guide-slot F, and the bow or yoke is provided with a stop G to operate in this slot and limit the rotary movement of the bow or yoke. To this stop is pivotally connected the clevis H.

The hawser or cable R is attached at one

end to the clevis and, extending in a slack condition to the end of the shank of the anchor, is connected to the ring B by a tail-line T. When used for large boats or vessels the clevis may be dispensed with and the cable attached directly to the ring, it being evident that the peculiar, oppositely turned flukes will sink and engage the bottom without assistance. For small boats, fishing craft, &c., the clevis is employed, and as the portion of the cable between the clevis and the connection of the tail-line is slack the strain, in using the anchor, will fall upon the tail line. The tail-line is made sufficiently strong to bear any ordinary strain, but should the anchor become fouled the tail-line may be broken by a heavy strain thus allowing the anchor to be raised by means of the clevis. In this way the bow or yoke is moved in the direction of the length of its arms, and all possibility of sticking and becoming fast is avoided. The arms are provided with integral flukes K, which are turned or bent, toward their extremities, respectively, in opposite directions, as shown in the drawings, Figs. 1 to 3, whereby, in either position of the anchor, one fluke is turned up and the other down. By this arrangement one fluke is turned down in either position of the anchor, to guard against slipping or "dragging," and the use of the bent flukes, as described, avoids the necessity of giving the bow or yoke an extent of movement which is required by straight flukes in order to present the latter in proper position to properly engage the bottom or surface upon which the anchor rests. The deflection of the arms of the bow or yoke from the plane of the shank is limited by the engagement of the stop with the ends of the guide-slot. The length of this guide-slot is adjusted so as to allow the bow to turn equally in both directions. It will be seen that by the removal of the strap the bow or yoke may be removed from the shank, thus enabling the parts to be repaired.

Inasmuch as this anchor is devoid of a cross stock and its bow or yoke is capable of assuming a position in the same plane with the shank, it may be stored compactly, and as no part of the anchor stands above the

surface of the bottom when in use, there is little or no chance for the anchors or cables of other craft to foul therewith.

Changes in form,—proportion and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In an anchor, the combination with the shank, of a bow or yoke having parallel arms arranged in the same plane, said yoke being pivotally attached to said shank so that both arms may lie upon either side of the shank, and flukes carried by and integral with the extremities of said arms and turned or bent, respectively, in opposite directions from the plane of the bow or yoke, whereby one fluke

is turned down, or toward the surface upon which the anchor rests, in either position of the latter, substantially as specified.

2. In an anchor, the combination with the shank having a half-bearing in one end, a strap secured at its ends to the sides of the shank and completing said bearing and provided with a guide-slot, the fluke-carrying bow or yoke mounted in the bearing and provided with a stop to operate in said guide-slot, and a clevis carried by said stop, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

DUNCAN McDONALD.

Witnesses:

WILLIAM MCKINNON,  
DONALD K. McDONALD.