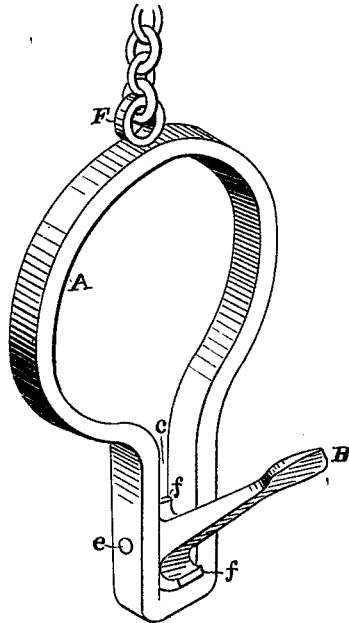


R. R. SPEDDEN & D. F. STAFFORD.
Anchor.

No. 200,673.

Patented Feb. 26, 1878.



Witnesses
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UNITED STATES PATENT OFFICE.

ROBERT R. SPEDDEN AND DANIEL F. STAFFORD, OF ASTORIA, OREGON.

IMPROVEMENT IN ANCHORS.

Specification forming part of Letters Patent No. **200,673**, dated February 26, 1878; application filed December 29, 1877.

To all whom it may concern:

Be it known that we, ROBERT R. SPEDDEN and DANIEL F. STAFFORD, of Astoria, in the county of Clatsop and State of Oregon, have invented an Improved Anchor; and we do hereby declare the following specification to be a full, clear, and exact description thereof, reference being had to the accompanying drawings.

Our invention relates to a novel method of constructing ships' anchors; and it consists in pivoting or hinging a single fluke, provided with cam-shaped tripping-arms at its base, in a peculiarly-constructed frame or shank. This shank, on account of its peculiar shape, serves both as shank and stock, and is devoid of any projecting arms or points to come in contact with the ship's sides or bottom when it is being taken up, or to entangle the cable or chain, so as to foul the anchor, when it is resting on the bottom.

Referring to the accompanying drawing, the figure is a perspective view of our invention.

Let A represent the frame of our anchor. This frame is made of a continuous bar of metal, of the required size and strength, corresponding to the size of the anchor.

The main portion of the frame is represented in the present instance as being circular in form; but it can be made square, diamond-shaped, or any other open form. At one side of this circular or other shaped main portion the bar is bent outward and doubled upon itself, as represented, so as to form a slot, C, in which the single fluke or tongue B is pivoted or hinged. The rear end of this tongue or fluke B is secured in the slot C by a pin or bolt, e, which passes through the frame on each side of the slot, and through a hole in the rear end of the fluke or tongue, and this pin is headed at each end, so as to secure it in place, while the fluke can play up and down upon it. The fluke is formed with two cam-

shaped curved spurs or arms, f, projecting at right angles from its rear end, one above and the other below. These spurs or arms are long enough to project above and below the frame, so that when the anchor is lying on the ground and a draft or strain comes upon it, the lower arm or spur will trip the fluke and force its point downward into the earth. These arms or spurs, by their cam shape, also serve as stops to arrest the depression of the fluke, by striking the end of the slot when it has dropped to the proper holding angle. A swivel-eye, F, is attached to the frame A, directly in front of the point of the fluke, to which the anchor chain or cable is attached, so that the pull of the vessel is directly in line with the length of the fluke.

It is evident from the above description that it will be impossible for this anchor to foul, as it has no projecting points to entangle the cable. Its action is rendered positive by the trip-arms, so that it is sure to take hold of the bottom when a draft comes upon it. The anchor is much more easily stowed than those in common use, and is not liable to be broken, or to injure the vessel, should it settle down upon the anchor, as often happens when the tide goes out, especially in the case of scows and small crafts.

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

In an anchor constructed substantially as described, the cam-shaped tripping and binding spurs f f, in combination with the single fluke B, as and for the purpose described.

In witness whereof we have hereunto set our hands and seals.

ROBERT R. SPEDDEN. [L. S.]
DANIEL F. STAFFORD. [L. S.]

Witnesses:

H. S. SHUSTER,
R. HICKMOTT.