A. F. WHITE.
Anchor.

No. 212,340. Patented Feb. 18, 1879.

Fig.1.

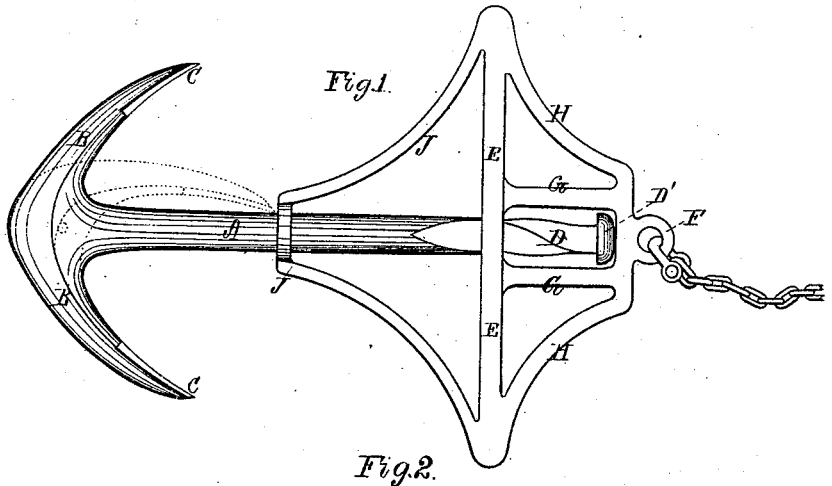


Fig.2.

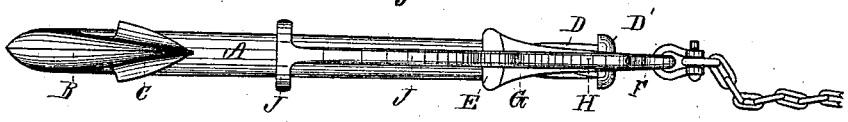


Fig.3.

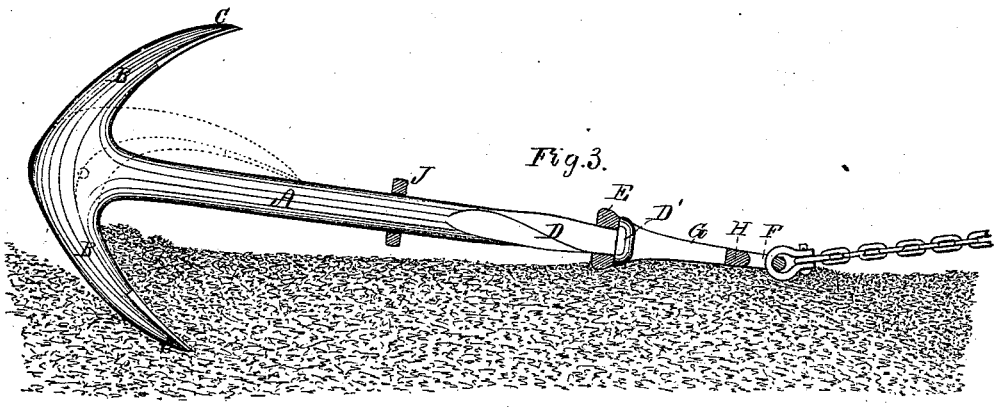
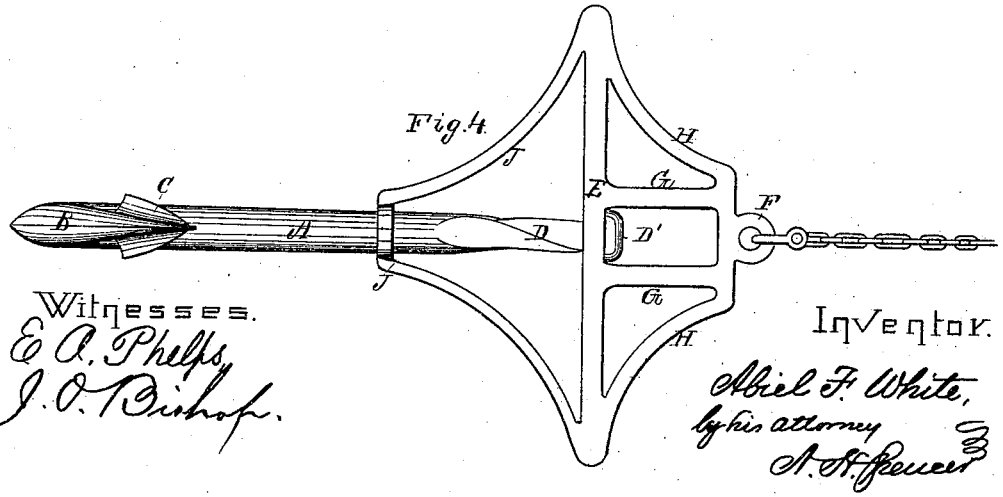


Fig.4.



Witnesses.
E. A. Phelps
I. O. Bishop.

Inventor.
Abiel F. White,
by his attorney
A. H. Spencer

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

ABIEL F. WHITE, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN ANCHORS.

Specification forming part of Letters Patent No. **212,340**, dated February 18, 1879; application filed October 14, 1878.

To all whom it may concern:

Be it known that I, ABIEL F. WHITE, of Boston, Massachusetts, have invented certain Improvements in Anchors; and that the same are fully described in the following specification, and illustrated in the accompanying drawings.

The various forms of anchors hitherto used, having the stock and fluke-arms fixed upon the shank at right angles to each other, are objectionable in that they are extremely awkward of stowage when hauled in and are liable to foul the rigging. Attempts to remedy this difficulty have been made by detaching the stock from the shank while inboard, but this course involves an anchor unfit for immediate use in an emergency.

The object of my invention is to overcome these objections, and to provide an anchor having the requisite perpendicular position of the fluke-arms with relation to the stock when the anchor hangs ready for use, together with strengthening-braces and a suitable guide, and yet so constructed as that said parts may come into the same plane when the anchor is inboard.

My invention consists in an anchor having its stock so connected to the shank that said parts may move relatively to each other, by gravitation, ninety degrees, to bring the stock and flukes into parallel or perpendicular planes, in combination with a guide for the shank in its movements.

By my improvement compactness on deck and constant readiness for use are secured.

The best mode in which I have contemplated applying my invention is shown in the drawings, Figure 1 being a plan of my improved anchor on deck; Fig. 2, an edge or side view of the same; Fig. 3, a view of the anchor spread for actual use, and Fig. 4 a top view thereof.

A is the shank, having the arms B and flukes C formed integral with it in the usual manner; or, if preferred, the arms may be pivoted to the shank, so that one fluke may bear against it while the other extends at a suitable angle thereto. This construction is indicated in dotted lines.

D is the upper end of the shank, usually termed the "square," which part I twist or forge as a quarter-turn screw, or I form a rib on one side thereof extending spirally one-fourth of a complete revolution. E is the stock, through which the square D passes loosely. Its aperture is of a form corresponding to the shape of the part D, so as to give a rotary movement of ninety degrees when one part is raised or lowered with relation to the other, as shown in the drawings, by reason of the twist of the square. The same result will follow if the square is slotted spirally and the stock or a bar from it is passed through the slot. Hence I do not limit myself to the precise arrangement which I have illustrated. The end of the square is enlarged or furnished with a head, D′, to prevent disconnection of the parts.

F is the ring for attachment of the cable, connected with the stock by the vertical bars G and the braces H.

It will be obvious that when the anchor is dropped the weight of the shank, arms, and flukes will cause the square to descend as far as possible through the opening in the stock, and thereby to be turned upon its axis until the arms B stand at right angles to the vertical plane of the stock.

It is also apparent that the greater the strain upon the cable the more fixed this perpendicular position becomes, and while the strain continues the fluke-arms will necessarily remain in a plane crossing the plane of the stock at right angles along the axis of the shank.

It will also be seen that when inboard, and resting upon either arm, the weight of the parts E F G H will cause their approach toward the flukes, bringing them all into the same plane.

To secure efficient action at all times, I provide the shank A with a guide, J, through which it passes loosely. I prefer to join this guide diagonally to the ends of the stock for greater strength, and also to prevent fouling under water. I do not limit myself to this form of guide, since the bars G may be prolonged to serve the same function.

The parts G, J, and H may be formed integral with the stock, as shown, or secured thereto in any suitable manner.

I claim as of my invention—

1. The combination of the shank and fluke-arms with the automatically-adjustable stock and a rigid frame projecting downwardly from the stock, adapted to serve as a guide for the shank in its movements, substantially as and for the purpose set forth.

2. In an anchor, the transverse stock provided with lateral brace supporting the cable-ring at a point in line with the axis of the shank, in combination with the shank and flukes having a vertical and rotary movement with relation to the stock, substantially as and for the purpose set forth.

ABIEL F. WHITE.

Witnesses:
A. H. SPENCER,
E. A. PHELPS.