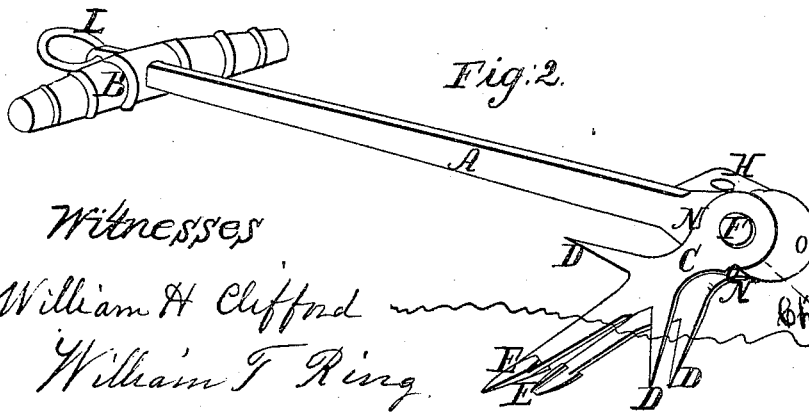
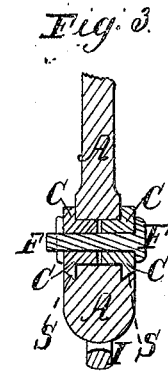
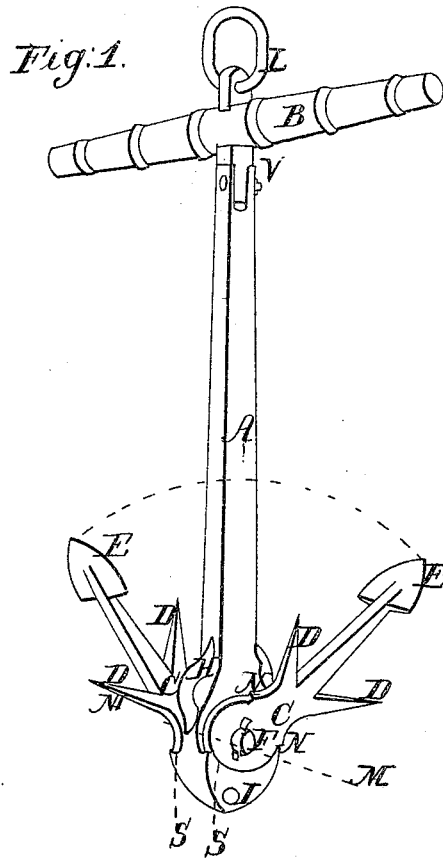


C. E. Marshall.

Anchor.

N^o 50,542.

Patented Oct. 17, 1865.



Witnesses

William H. Clifford

William T. Ring

Inventor

Charles E. Marshall

UNITED STATES PATENT OFFICE.

CHARLES E. MARSHALL, OF DIGBY, NOVA SCOTIA.

IMPROVED ANCHOR.

Specification forming part of Letters Patent No. 50,542, dated October 17, 1865.

To all whom it may concern:

Be it known that I, C. E. MARSHALL, of Digby, in the Province of Nova Scotia, have invented a new and useful Improvement in Anchors; and I hereby declare the following to be a full and exact description of the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 represents a view of my improved anchor; Fig. 2, the same in operation; Fig. 3, a section of the anchor or crown, showing the method of attaching the flukes.

The object of my invention is to produce an anchor which, when of equal weight, shall possess largely more holding-power, be more convenient in use, and less liable to irreparable accident than those of ordinary construction.

My invention consists in furnishing the shank of the anchor with vibrating flukes, so that they may revolve in the arc of a circle in such manner as always to turn to the ground side of the shank, however the anchor may be placed. The flukes revolve upon a pivot passing through the crown of the anchor. The flukes turn in the arc of a circle indicated by the curved line E E, Fig. 1.

It also consists in constructing on the crown of the anchor two shoulders, which restrict the revolution of the flukes and help sustain the strain when the anchor is holding. The flukes being prevented by the shoulders from describing a complete revolution, it is obvious the anchor can be placed in no position when the stock is horizontal in which the flukes will not incline to the under side.

My invention further consists in making the flukes straight and fitting them on their inner sides, where they come in contact with the shank, with sockets, or projections which penetrate into recesses in the crown of the anchor,

and, in connection with the shoulders before described, relieve the pivot from all strain, except such as is occasioned by the mere weight of the flukes. The pivot F passes through a hole in the sockets. The shoulders are shown at S, Figs. 1, 2, and 3, and the sockets at C C, Fig. 3. The flukes are furnished with barbs or spurs D D, Figs. 1 and 2. The object of these is twofold: first, to increase the holding-power of the anchor; and, second, when the anchor is lying flat upon the holding-surface with the stock in a horizontal position, by penetrating the earth, to turn the flukes in such manner that they will commence holding as soon as any draft is made on the cable.

The angle which the flukes make with the shank can be regulated by varying the length of the curved shoulders S S, before described.

Each fluke is provided with a separate socket, so that it can turn upon the pivot independently of the other.

The shank is fitted with a joint, (shown at K, Fig. 1,) to prevent fouling of the anchor when the ship changes her position in relation to it, and for convenience of stowing.

The loop H is designed for convenience of fishing and securing the anchor to the ship's side.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination of the shoulders S S, the sockets C C, and the perforated crown, as and for the purposes described.

2. The combination of the spurs D D with the straight vibrating flukes E E, as and for the purposes specified.

CHARLES E. MARSHALL.

Witnesses:

WILLIAM H. CLIFFORD,
SEWELL C. STRAUT.