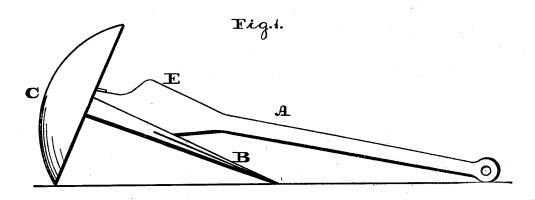
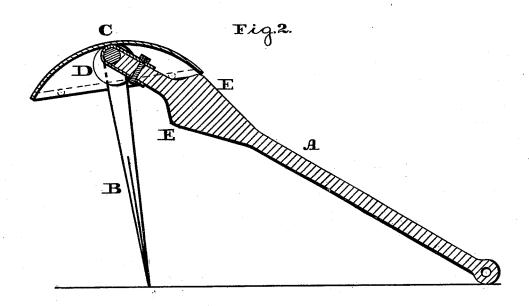
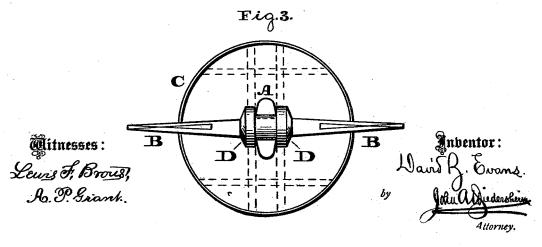
D. Z. EVANS. ANCHORS.

No. 181,928.

Patented Sept. 5, 1876.







## UNITED STATES PATENT OFFICE

DAVID Z. EVANS, OF TOWN POINT, MARYLAND.

## IMPROVEMENT IN ANCHORS.

Specification forming part of Letters Patent No. 181,928, dated September 5, 1876; application filed August 17, 1876.

To all whom it may concern:

Be it known that I, DAVID Z. EVANS, of Town Point, in the county of Cecil and State of Maryland, have invented a new and useful Improvement in Anchors; and I do hereby declare the following to be a clear and exact description of the nature thereof, sufficient to enable others skilled in the art to which my invention appertains to fully understand, make, and use the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a side elevation of the anchor embodying my invention. Fig. 2 is a central longitudinal section thereof. Fig. 3 is a front view thereof.

Similar letters of reference indicate corresponding parts in the several figures.

My invention relates to an improvement in the class of anchors having pivoted flukes; and it consists of a cap formed with or securely fastened to the fluke-arms, so as to occupy a position adjacent to the crown thereof, whereby the flukes will be elevated, and they will immediately penetrate when the cable is tightened, and they will be supported at the proper angle, and, furthermore, strengthened and braced.

Referring to the drawings, A represents the shank, and B the fluke-arms, to the crown of which the shank A is pivoted. C represents a cap of the form of the section of a hollow sphere, which is secured to or formed with the fluke-arms B, adjacent to the crown thereof, and it has a common motion with said arms B, the concave face of the cap being in front.

It will be seen that when the anchor rests on the ground the cap C elevates the crown thereof, so that the points of the palms are properly presented for penetration, as shown in Fig. 1.

When the cable is tightened and penetration occurs or the palms engage, the parts are elevated, as shown in Fig. 2, in which position the cap C comes to a bearing against the shank A, thus limiting the motion of the flukearms and taking up the strain thereon, and supporting the fluke-arms at the proper angle.

Moreover, the cap serves to strengthen and brace the fluke - arms, and consequently strengthen the anchor, and it also possesses considerable holding power before the flukes are thoroughly embedded.

It is evident that by my invention it is practicable and inexpensive to alter the old pattern of anchors, so that both flukes may at the same time exercise holding power

same time exercise holding power.

If desired, the cap may be re-enforced by bars or plates secured thereto, so as to increase its strength.

D represents collars which are formed on the crown portion of the fluke-arms, so as to circumscribe the sides of the shank A at the portion adjacent to the axis of the fluke-arms, and said collars may be extended so as to be connected to the cap C, or they may be made in the form of stirrups, which encircle the crown portion of the fluke-arms, embrace the sides of the adjacent end of the shank, and are secured to the cap C. These collars D prevent lateral play of the shank, and serve to strengthen the connection of the fluke-arms and shank.

The shank A is formed with an enlargement or swell, E, at or about the part against which the cap or stop of the fluke-arms comes in contact when the fluke-arms are in holding position, so that the shank will be enabled to withstand the great strain against said part, and the angle at which the fluke-arms will stand may be regulated by the extent of the enlargement.

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

1. The cap C, formed with or secured to the pivoted fluke-arms B, substantially as and for the purpose set forth.

2. The shank A, formed with an enlargement or swell, E, for the stop of the flukearms, substantially as and for the purpose set forth.

D. Z. EVANS.

Witnesses:

John A. Wiedersheim, H. E. Hindmarsh.