D. C. VOSS.

Anchors.

No. 157,707. Patented Dec. 15, 1874.

Fig. 1.

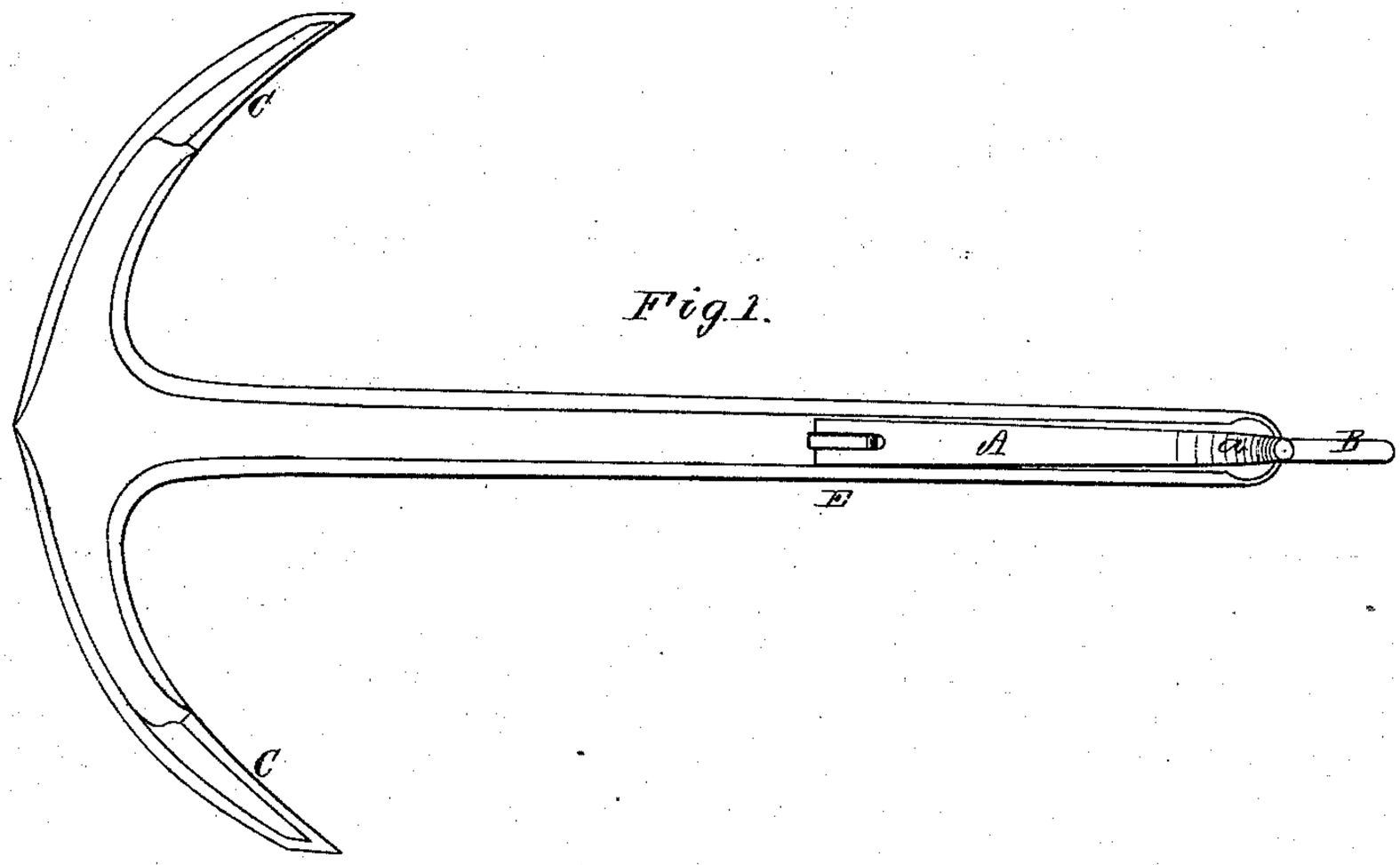
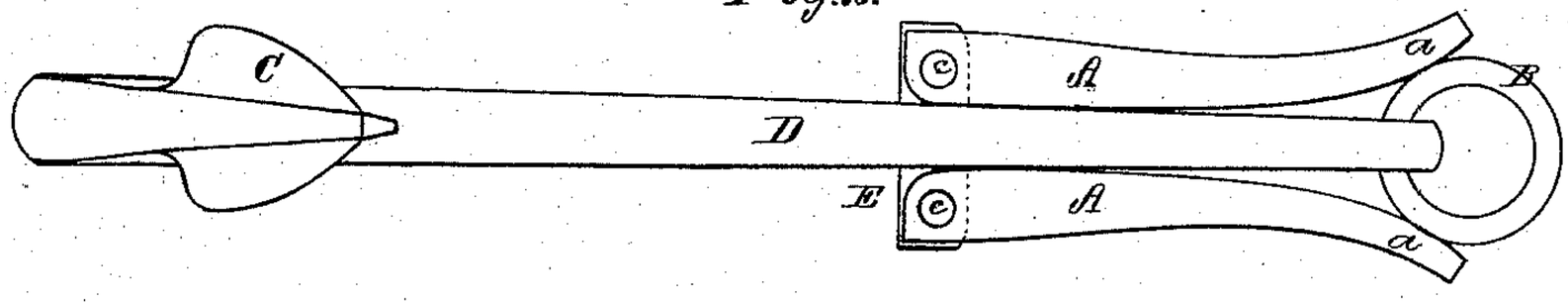


Fig. 2.



Witnesses:

L. W. Pipin.

L. N. Holland.

Diederich C. Voss.

by his attorney.

R. H. Eddy

UNITED STATES PATENT OFFICE.

DIEDERICH C. VOSS, OF GLOUCESTER, MASSACHUSETTS.

IMPROVEMENT IN ANCHORS.

Specification forming part of Letters Patent No. **157,707**, dated December 15, 1874; application filed April 23, 1873.

To all whom it may concern:

Be it known that I, DIEDERICH C. VOSS, of Gloucester, of the county of Essex and State of Massachusetts, have invented a new and useful Improvement in Anchors; and do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings.

The nature of my invention relates to an improvement in anchors; and it consists in passing through the shank of the anchor, near its middle, a copper bar, to each end of which is pivoted a suitable arm. The upper ends of these arms are curved outward, so as to enter the earth and assist in turning the anchor—the ends in no case extending upward beyond the ring in the end of the shank, so as to increase the length of the anchor.

The accompanying drawings represent my invention.

D represents the shank of the anchor, to which the flukes C and ring B are secured, in the usual manner. Passing through the shank, near its center, is a copper or Muntz-metal bar, E, to which the two arms A are pivoted by the bolts *c*, the pivoted ends of the arms being so formed as to stop and support the arms in a position at right angles to the shank. The free ends of the arms are curved outward, as at *a*, so that they will catch in the earth and assist in turning the anchor to a better advantage under the draft of the cable. The bar E is passed through the shank at such a distance from its upper end that the arms A can be made fully long enough for the purpose for which they are designed, and yet in no case extend, when closed, as shown in Figure 2, up above the ring B, so as to increase the length of the anchor. By passing the bar E through the shank, the shank is not weakened to the same extent that it is when the arms are fastened in sockets made in the sides of the shank, and by using non-corrosive metal the arms are prevented from rusting and sticking at the pivots. Were this bar cast with the shank, it would be too weak to stand the strain brought to bear upon it, and would have the additional defect of rusting. Should the bar become injured, it can be easily removed and replaced by another, whereas if it were cast the anchor would become useless, or could only be repaired with great trouble and expense.

This invention is intended as an improvement upon the patent granted to C. T. Julius, January 1, 1867, No. 60,903.

Having thus described my invention, I claim—

An anchor in which the arms A, having curved ends *a*, are pivoted to the shank by means of the bar E, the arms being of such length as not to increase the length of the anchor when they are folded up, substantially as shown and described.

DIEDERICH C. VOSS.

Witnesses:

R. H. EDDY,

J. R. SNOW.