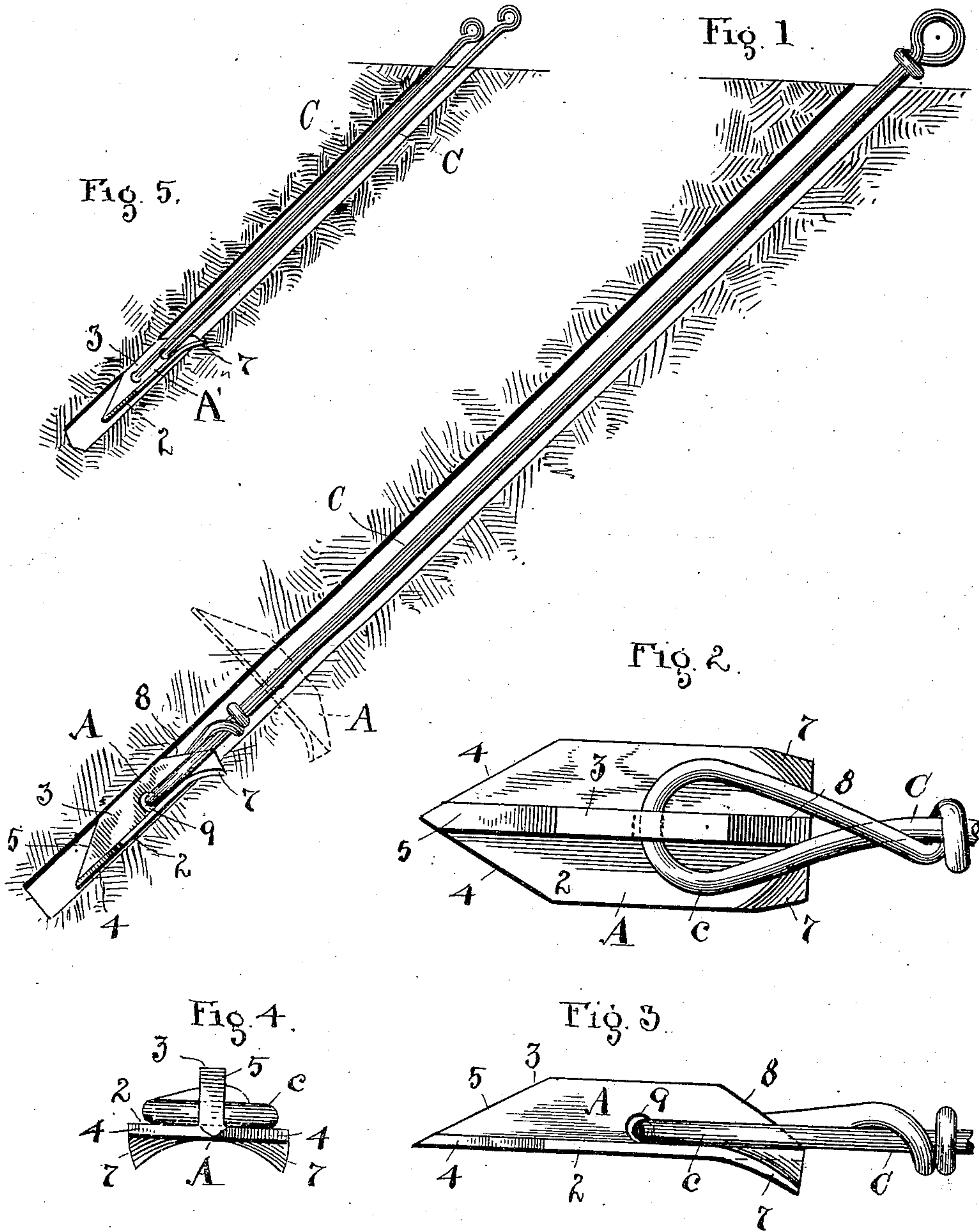


No. 855,298.

PATENTED MAY 28, 1907.

C. E. FROST.
EARTH ANCHOR.

APPLICATION FILED SEPT. 12, 1906.



WITNESSES:
C. A. Sell
C. M. Fisher,

INVENTOR.
CLINTON E. FROST
BY
Fisher & Moser
ATTORNEYS.

UNITED STATES PATENT OFFICE.

CLINTON E. FROST, OF CLEVELAND, OHIO.

EARTH-ANCHOR.

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To all whom it may concern:

Be it known that I, CLINTON E. FROST, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Earth-Anchors; and I do declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention has reference to an earth anchor as an article of manufacture and sale, and the object of the invention is to provide an anchor adapted to be placed in a driven hole or to be bodily driven into the earth and to make an effective engagement for guy-ropes, stays and the like in connection with fence-posts, telegraph and telephone poles, ropes for staking circus and other tents, and in which secure earth anchorage is especially important.

To these ends the invention consists in the construction of an anchor adapted to be embedded in the earth and to operate substantially as shown and described and particularly pointed out in the claims.

In the accompanying drawings Figure 1 is a view showing a section of earth bored or driven to receive the anchor and showing the anchor in the bottom thereof in full lines and in anchored position dotted lines. Fig. 2 is a bottom view of the anchor and the loop portion of the stay attached thereto, and Fig. 3 is an edge view of Fig. 2. Fig. 4 is an end elevation of the anchor. Fig. 5 is a similar view to Fig. 1 of a modification.

As thus shown the anchor A, is preferably formed from metal substantially T shape in cross section and constituting a device in which the portion 2 represents the plate or faced body of the anchor and 3 a rib longitudinally at the center upon the rear thereof. The stock from which the anchor is cut can be rolled to any suitable weight and surface measurement, and different sizes can be made according as they are designed for different uses and as more or less resistance in the anchor is needed. Preferably, also, the rib 3 is of less depth than the sides of the plate as measured laterally therefrom, and the point of the anchor is beveled relatively as shown and preferably to the same angle of inclination at the sides 4 and on the rib at 5. The rear end is shown as cut off at right angles and the side corners 7 are bent inward or turned slightly toward the face of the an-

chor, and rib 3 is beveled or cut away at 8 at an inclination corresponding substantially to the bevel 5 at the front.

C represents a stay wire or rod, which is pivotally or flexibly engaged with the anchor through a hole 9 in the rib 3 sufficiently off the middle of the anchor to balance the surfaces of body 2 in respect to said connection, and the preferable method of connection is by means of a loop c formed in wire C and of a length to allow the upper portion of rib 3 to lie therein and thus bring anchor and stay wire into alinement for pacing the anchor in the ground, Fig. 1.

Rib 3 serves several important purposes, providing, as it does, for attaching the stay or member C loosely to the anchor and also as a guide if driving be employed, and especially as a strengthening portion for the anchor. By using a rib of this kind I can make the remainder or face plate or portion correspondingly light and still provide a perfectly safe anchorage, and thus provide a comparatively light but efficient article. However, this anchor is not made to be driven, though it may, but rather to be introduced through a hole that is bored or driven to receive the anchor. The hole so made may have no greater cross section than the width of the anchor, or even less, and then the anchor is placed in position to a suitable depth according to conditions and the work to be done. To do this possibly some driving of the anchor may be required, but the anchor will follow the hole to its bottom and then if a pull be exerted on the stay wire the reverse bends 7 at the heel of the anchor will operate as a fulcrum by engaging in the wall of the hole and as the upward pull continues the anchor will gradually turn until it assumes a transverse position and is positively fixed against further yield substantially as shown in dotted lines, Fig. 1. For convenience of consideration the side of the plate or body having rib 3 is referred to as the bottom or lower side of the anchor, and the other side toward which corners 7 are turned as the top or upper side.

In Fig. 5 I show a modification especially adapted for such purposes as require a temporary anchor, as in circus tents, where they strike tents daily and wish to take their anchors with them. To these ends I make an anchor with two holes in rib 3, one near each end, and engage a rod C with each hole. The anchor is set in the same way as the other

style having a single rod or wire C, but when it comes to removal the method is to push down on one rod and pull on the other, and thus throw the anchor into original position
5 in the bore through which it was introduced and draw it out.

What I claim is:—

1. A ground anchor having a rib lengthwise on its back and provided with an eye at
10 about its middle, and one end of the anchor straight lengthwise with its side edges tapered to a point and the other end having square corners turned to an inclination away from the side having said rib.

15 2. A ground anchor having a rib longitudinally at its center on one side and a substantially flat body having a tapered point at one end and the other end having a straight transverse edge and a portion thereof on
20 both sides said rib bent to an inclination to the plane of the anchor.

3. A ground anchor having a rib centrally on its back lengthwise, said rib beveled at

both ends substantially to the plane of the body of the anchor and provided with a
25 transverse eye near the middle, and said anchor provided with a square end having its corners turned in the same direction, in combination with a stay having a loop engaged directly through said eye.
30

4. A ground anchor having a flat body with a rib integral therewith centrally between its ends and one end of the anchor tapered along its edges to a point and the other
35 end full width of said body and the corners thereof turned away from said rib to an inclination, a stay having a loop engaged through said rib and said rib and loop constructed to throw the stay and anchor into
40 alinement one with the other.

In testimony whereof I sign this specification in the presence of two witnesses.

CLINTON E. FROST.

Witnesses:

C. A. SELL,

R. B. MOSER.