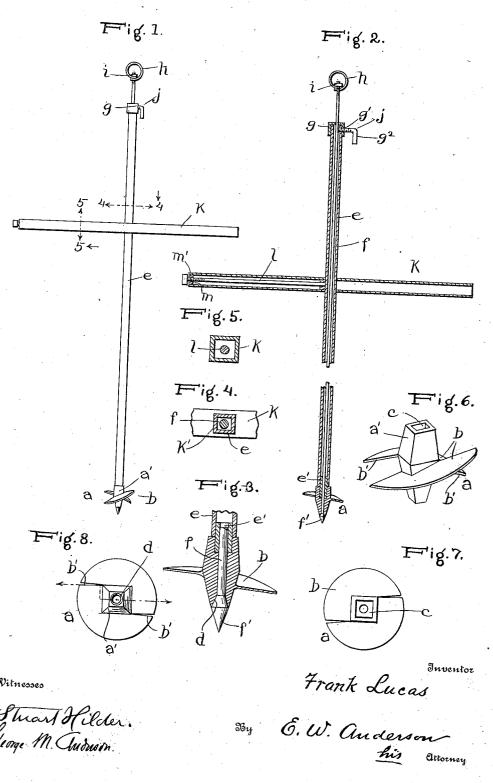
F. LUCAS. GROUND ANCHOR. APPLICATION FILED AUG. 20, 1907.



UNITED STATES PATENT OFFICE.

FRANK LUCAS, OF SIDNEY, OHIO.

GROUND-ANCHOR.

No. 888,917.

Specification of Letters Patent.

Patented May 26, 1908.

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To all whom it may concern:

Be it known that I, Frank Lucas, a citizen of the United States, resident of Sidney, in the county of Shelby and State of Ohio, have made a certain new and useful Invention in Ground-Anchors; and I declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it appertains to make and use the invention, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 is a side elevation of the invention. Fig. 2 is longitudinal central section on a larger scale and partly broken away. Fig. 3 is a detail sectional view of the anchor proper, the anchor stem and rod being shown in place therein and partly broken away. Fig. 4 is a section on the line 4—4, Fig. 1. Fig. 5 is a section on the line 5—5, Fig. 1. Fig. 6 is a detail perspective view of the anchor proper. Fig. 7 is a detail plan view of the same. Fig. 8 is a detail bottom plan view of the same.

The invention has relation to ground anchors for the guy ropes of telegraph, telephone, electric railway and construction poles and the like, and it consists in the novel construction and combinations of parts as hereinafter set forth.

In the accompanying drawings illustrating the invention, the letter a, designates the anchor proper, having a body portion a', provided with two fins or wings b, b, of opposite relation to each other and having a spiral or inclined arrangement upon such body. These fins run in opposite directions 40 around the anchor body and terminate at their lower ends in opposite oblique edges b', b'. The body a', has a square socket c, located above the fins, and an inward tapered seat d, located below the fins.

Neatly fitting in the square socket c, of the anchor body is the reduced squared end portion e', of the upright stem e, of the anchor, consisting of a piece of square tubing of suitable length. Within this tubing is located the anchor rod f, which extends below the tubing through the body of the anchor proper and is provided with an enlarged tapered point portion f', fitting neatly in the seat d, of such body and having the point thereof exposed.

The anchor rod also extends at its upper

end portion beyond the tubular stem e, passing through a cap g, fitting upon and rigidly secured to the stem, such rod carrying at its upper extremity a strap loop h, for guy rope 60 connection. This loop has lapped lower end portions provided with an aperture engaging the extremity of the rod, which has a securing nut i, threaded thereupon.

A set screw i, has engagement with a latest eral threaded aperture g', of the cap g, and is provided with a crank handle g^2 , such set screw having a bearing against the anchor rod to prevent its displacement.

k, is the horizontal handle, consisting of a 70 piece of square tubing of larger cross section than the tubing of the stem e, and having a square central aperture k', with which said stem has engagement. The handle is adjustable upon the stem of the anchor, and is 75 provided with a threaded rod or set screw l, running through one arm thereof, such rod having threaded engagement with the aperture m' of a plug or diaphragm m of the hollow handle.

In assembling the parts, the tubular handle is first secured in position upon the stem, when such stem is seated in the square socket of the anchor proper and the anchor rod passed upward through the anchor proper and stem until its enlarged tapered point portion is seated in the tapered aperture d. The loop h is then secured in position at the upper end of the anchor rod, and the set screw j turned to secure the rod in 99 position.

The double fins of the anchor will quickly work into the ground, and the different parts being all securely braced together, an efficient device for the purpose is provided.

Having described the invention, what I claim and desire to secure by Letters Patent is:

1. A ground anchor for the purpose described, including an anchor proper having a 100 body provided with an inclined fin, an upper angular socket, a lower tapered seat, an anchor stem having a lower angular portion fitting in said socket, an anchor rod in said stem having a tapered enlarged point portion 105 fitting in said seat, and a transverse handle.

2. A ground anchor for the purpose described, including an anchor proper having a body provided with an inclined fin, an upper angular socket, and a lower tapered seat, a 110 tubular angular anchor stem having a reduced angular lower portion fitting in said

socket, an anchor rod in said stem having an enlarged tapered point portion fitting in said seat, and an angular tubular transverse handle having a central angular aperture en-

gaging the anchor stem.

3. A ground anchor for the purpose described, including an anchor proper having a body provided with an inclined fin, an upper squared socket and a lower tapered seat, a 10 square tubular anchor stem having a reduced squared lower portion engaging said socket, an anchor rod in said stem having an enlarged tapered point portion fitting in said seat, an adjustable square tubular handle 15 having a central square aperture engaging the anchor stem, means for fixing the anchor rod in said stem, and means for fixing said handle as adjusted upon said stem.

4. A ground anchor for the purpose de-20 scribed, including an anchor proper having a body provided with an inclined fin, and a tapered seat, an anchor stem connected to said body, an anchor rod in said stem having an enlarged tapered point portion engaging 25 said seat, said anchor rod having a loop at its upper end, a set screw for fixing the anchor rod in the stem, a transverse handle having sliding engagement with said stem, and means for fixing said handle as adjusted 30 upon the stem.

5. A ground anchor for the purpose described, including an anchor proper having a body provided with an inclined fin, an upper squared socket and a lower tapered seat, a 35 square tubular anchor stem having a reduced

squared end portion engaging said socket, an anchor rod located in said stem and having an enlarged tapered point portion engaging said seat, and a loop connection at its upper end, a set screw for fixing said anchor rod in 40 said stem, an adjustable transverse square tubular handle having a central squared aperture engaging said stem, and a threaded rod in said handle for fixing the position thereof as adjusted upon said stem.

6. A ground anchor for the purpose described, including an anchor proper having a body provided with an inclined fin and a tapered seat, a tubular anchor stem connected to said body and an anchor rod in 50 said stem having an enlarged tapered point portion engaging said seat, and a loop con-

nection at its upper end.

7. A ground anchor for the purpose described, including an anchor proper having a 55 body provided with an inclined fin and a tapered seat, a tubular anchor stem con-nected to said body and an anchor rod in said stem having an enlarged tapered point portion engaging said seat, and a loop con- 60 nection at its upper end, and a transverse handle having sliding adjustment upon said

In testimony whereof I affix my signature, in presence of two witnesses.

FRANK LUCAS. '

Witnesses:

J. G. CAMPBELL, A. G. Minniear.