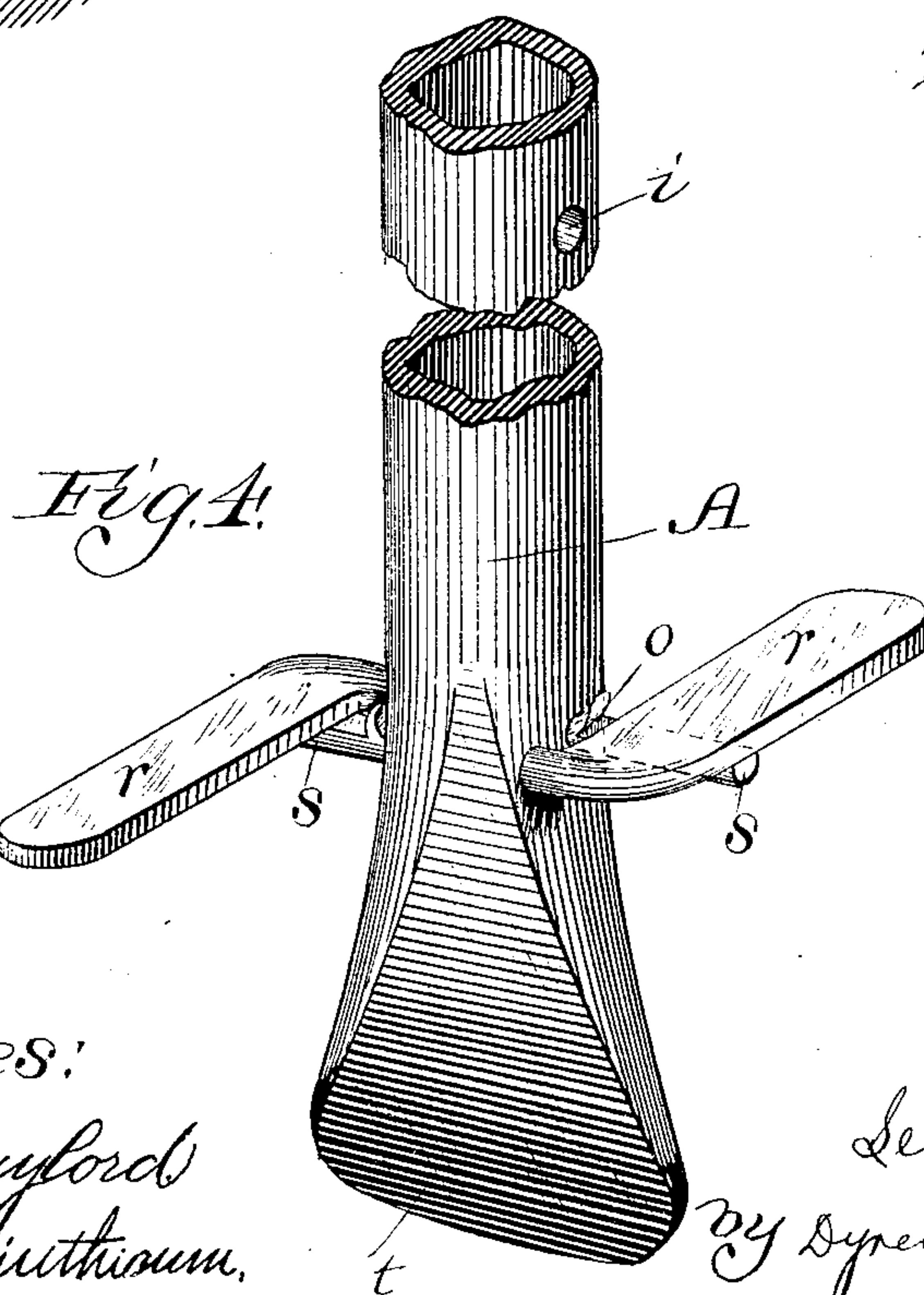
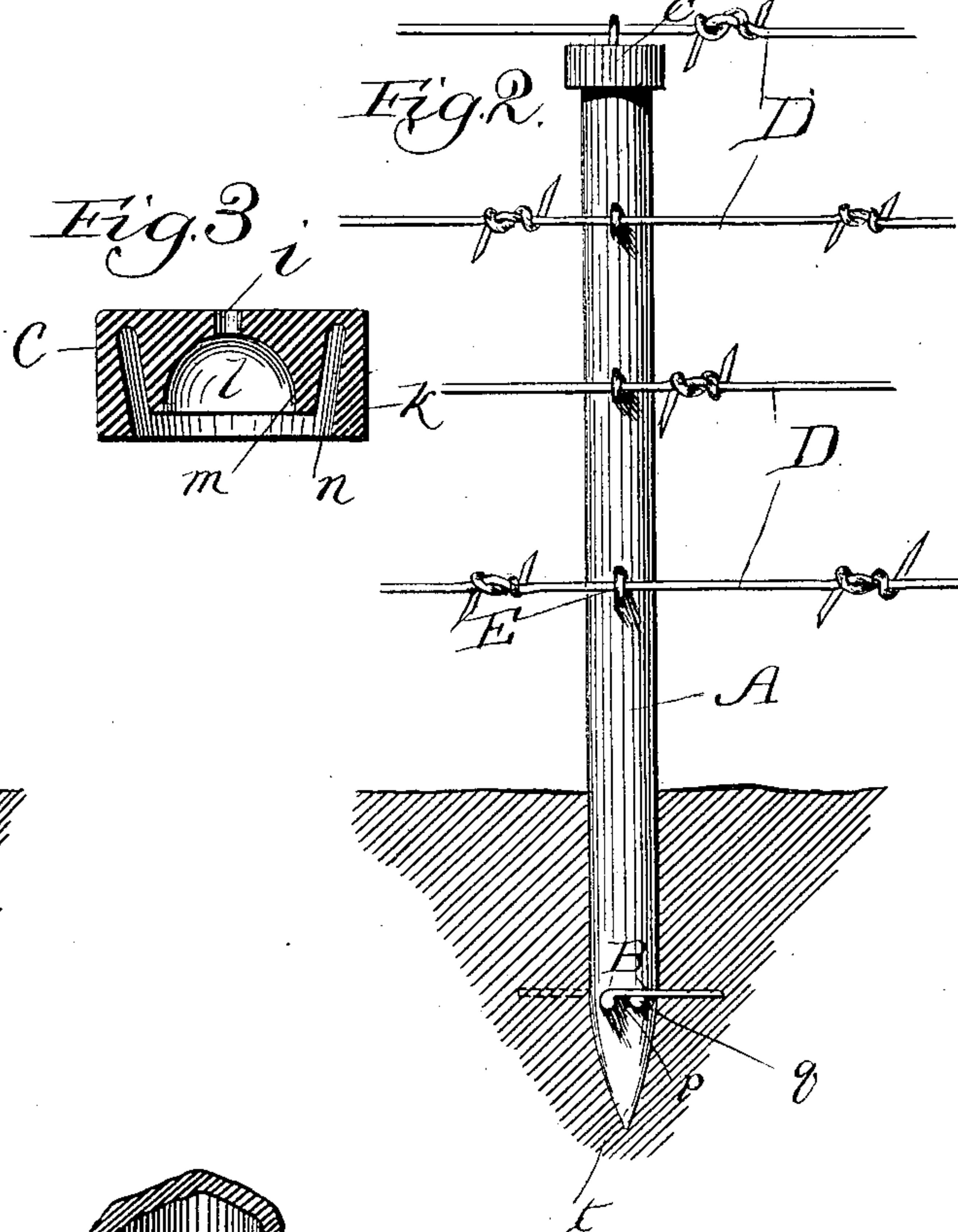
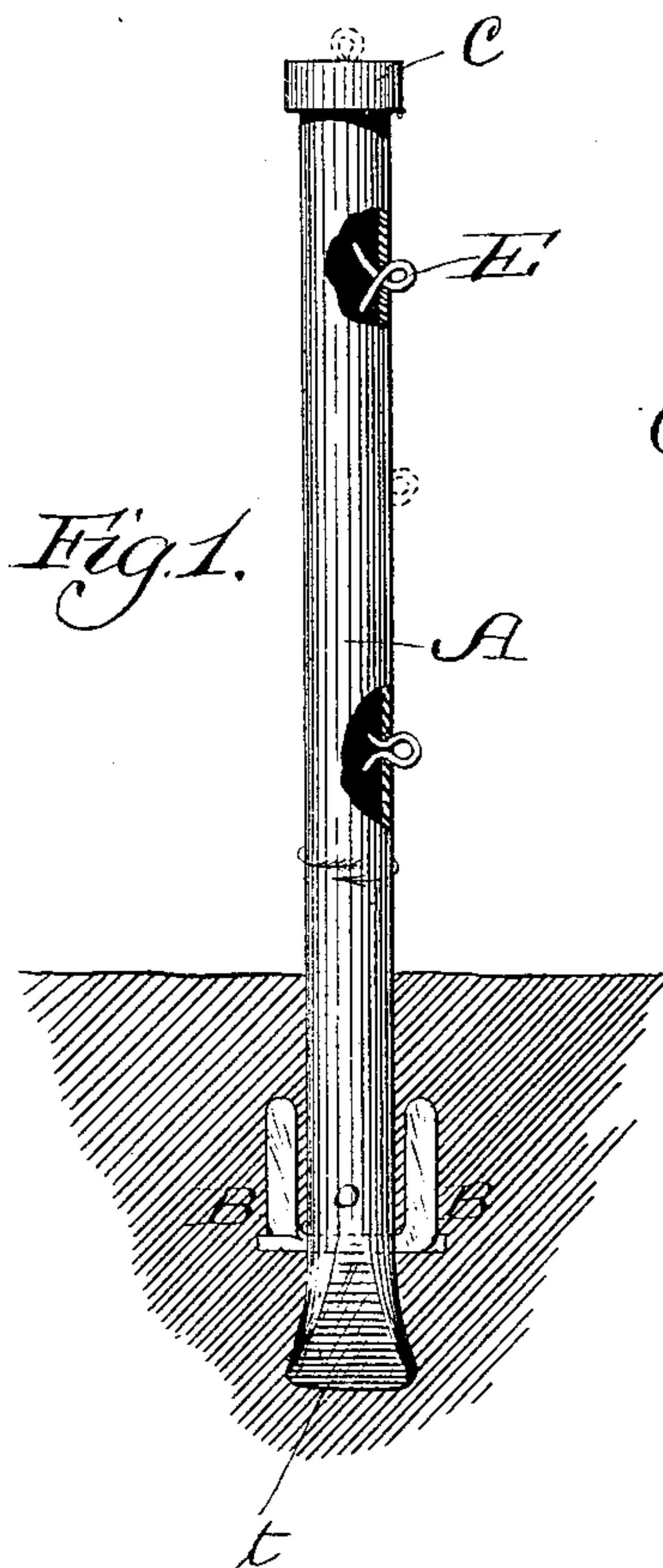


(No Model.)

L. G. HAASE.
FENCE POST.

No. 368,334.

Patented Aug. 16, 1887.



Witnesses:
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UNITED STATES PATENT OFFICE.

LEO G. HAASE, OF OAK PARK, ILLINOIS.

FENCE-POST.

SPECIFICATION forming part of Letters Patent No. 368,334, dated August 16, 1887.

Application filed April 2, 1884. Serial No. 126,393. (No model.)

To all whom it may concern:

Be it known that I, LEO G. HAASE, a citizen of the United States, residing at Oak Park, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Fence-Posts; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to tubular iron posts employed for the purpose of sustaining barbed wire; and my improvements consist, first, in the construction which I employ for the "wings," so called, which are arms pivotally connected to the lower portion of the post in such a way that their free ends may be thrown outward after driving, and thus serve to prevent ejection of the post from the ground by frost or other causes; secondly, in the construction which I employ for the cap to exclude water from the interior of the post; and, thirdly, in the method which I employ for securing and supporting the wire to the post by means of a wire-sustaining staple inserted into a hole formed in the wall of the hollow post, all as hereinafter described.

In the drawings, Figure 1 is an elevation, with a small part broken away, of a post provided with all my improvements in its condition when driven into the ground, but before being turned; Fig. 2, an elevation of the same in its condition when driven into the ground and after being turned; Fig. 3, a central vertical section of the cap enlarged, and Fig. 4 an enlarged perspective view of the lower portion of the post.

A is the metal tube constituting the post, welded to a wedge-shaped part at its lower end, as shown at *t*.

B B are the wings, each comprising the cylindrical part *s*, and flattened part *r* at about a right angle with the part *s*. The wings are attached by drilling two holes, *q q*, through the post in the same transverse plane above the wedge-shaped portion, and nearly in vertical line with the edges of the same, and passing the parts *s* of the wings through these holes in opposite directions, whereby the flattened parts *r* are arranged on opposite sides of the post. The part *s* of each wing is of sufficient length to extend beyond the post when passed through the hole, and thus form a bearing for the flat-

tened part *r* of the other wing to prevent the latter from going below a horizontal position. In order that the flattened parts *r*, when brought down upon their bearings, as described, shall lie nearly in the same plane, it is advisable to have them "out of center" with the parts *s*, as shown at *p*. After passing the part *s* of a wing through the hole in the post, a burr, *o*, is cut in it on the side of the post opposite the part *r* to prevent withdrawal.

The operation of this part of my device is as follows: When the post is driven into the earth, the wings assume a vertical position, and, since they follow the grooves formed in the earth by the edges of the wedge, (which, it will be noted, extend beyond the cylindrical portion of the post to about the same extent as the wings,) they offer no material obstruction to the driving. When the post has been driven to the required distance, it is given a quarter-turn or more with a pair of pipe-tongs or a wrench in the direction of the arrow in Fig. 1, the effect of which is to bring the parts *r* down to a horizontal position. When in this position, they rest upon the projecting ends of the parts *s*, which prevent them from going lower, and thus cause them to resist any attempt to pull the post out of the ground, or any material force tending to eject it.

This second feature of my invention is clearly shown in detail in Fig. 3. It consists of a cap, C, having formed in it from its lower end an annular flaring groove, *n*, having a width great enough to admit the metal forming the tube. As an incident to this groove an internal conical frustum, *m*, is formed, which, for the purpose of economizing metal, and for another reason, which will appear further on, is hollowed out at the center, as shown at *l*. The frustum *m* terminates, preferably, above the lower end of the outer wall, *k*, of the cap, and at its lower end is of such diameter as to fit easily within the top of the tube. To attach the cap, it is placed over the top of the tube and driven on with a hammer or mallet. The frustum *m*, being driven into the top of the tube, expands the latter and spreads it out into the flaring groove, whereby the cap is held firmly in place. It is obvious that the act of driving the post into the ground will have the effect only of securing the cap still more firmly.

To attach the wires D to the post, I use ordinary staples, E. These are put over the wire and the ends are then brought together, or, by preference, slightly crossed and inserted into
 5 holes *i*, drilled in the post and having a diameter about double that of the wire forming the staples. When a staple has been thus inserted into a hole, it is driven in by means of
 10 a hammer, when the ends incidentally spread apart on the inside of the tube, thus preventing withdrawal. The driving causes the ends to extend a little more widely apart when crossed than when simply brought near together before insertion; but beyond this slight difference the
 15 results are the same. The cap is likewise provided with a hole, *i*, to receive a staple and afford a fastening for a top wire. The hollowing out of the frustum permits this to be done.

A post provided with all the features above
 20 enumerated is believed to possess every necessary qualification. The different features may, however, be used separately. For example, the staples may be used to fasten the wires to any fence-post formed of thin metal,
 25 whether tubular or not, and with the tubular post above described the cap may be omitted and the ends welded shut in the manner common with ordinary heater-tubes.

What I claim as new, and desire to secure by
 30 Letters Patent, is—

1. In combination with a tubular fence-post having holes *q* through it near its lower end, the wings B, each comprising an axial part, *s*, having a length greater than the diameter of
 35 the post, and a flattened part, *r*, forming nearly or quite a right angle with the part *s*, said wings being attached to the post by passing the parts *s* in contrary directions through the holes *q*, whereby the turning of the post in the

ground brings the part *r* of each wing down 40 upon the projecting end of the part *s* of the other, substantially as described.

2. In combination with the tubular post A, made wedge-shaped at its lower end, and provided with two holes, *q*, through it in trans- 45 verse line above the wedge, the wings B, each comprising the axial part *s*, and flattened part *r*, forming a right angle with the part *s* and out of center with the same, said parts *s* passing in contrary directions through the holes *q* 50 and being secured against withdrawal by a burr, *o*, formed on the projecting end of each, substantially as described.

3. The cap for closing the end of the tube A, consisting of a metal body having formed in 55 it a flaring annular groove, *n*, of a size at its open end to receive the end of the tube A, whereby the driving on of the cap expands the tube and causes it to spread out in the groove, and thus hold the cap in place, substantially 60 as described.

4. The cap C, for closing the end of the tube A, having the annular flaring groove *n* and central recess, *l*, substantially as described.

5. The method herein described of apply- 65 ing and securing to a hollow metal fence-post the wire-sustaining staple, which consists in forming a hole through the shell of the post, inserting both points of the staple into the said hole, and forcing the staple farther in by a 70 blow upon its head, whereby the points are caused to spread apart without the use of a separate spreading medium, substantially as set forth.

LEO G. HAASE.

In presence of—

DOUGLAS DYRENFORTH,
 H. ANDERSON.