J. M. KIRKPATRICK.

Making Post Holes.

No. 110,372. Patented Dec. 20, 1870.

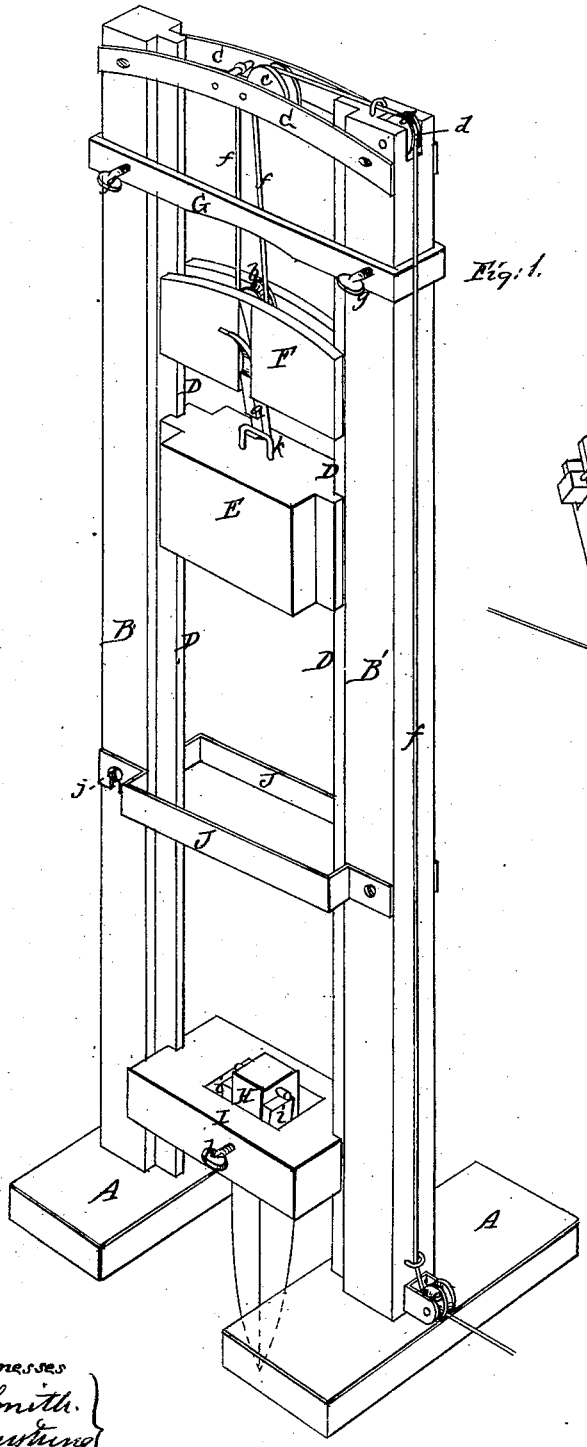
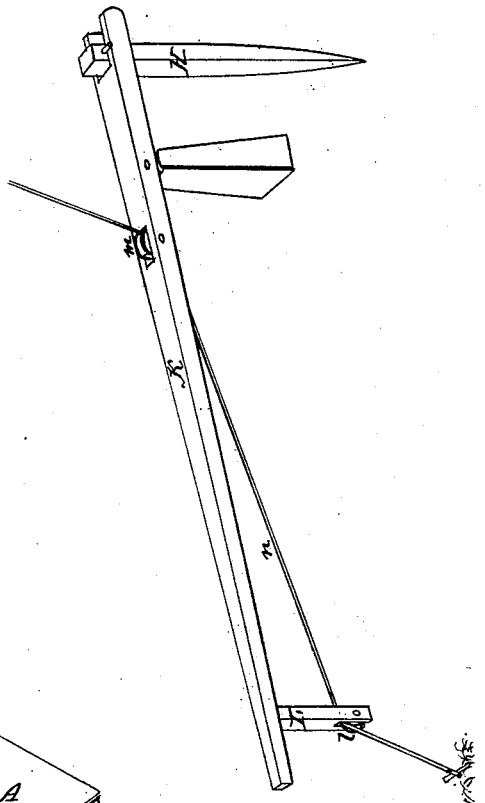


Fig. 1.



Witnesses

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JAMES M. KIRKPATRICK, OF UTICA, OHIO.

Letters Patent No. 110,372, dated December 20, 1870; antedated December 15, 1870.

IMPROVEMENT IN MACHINES FOR MAKING POST-HOLES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, JAMES M. KIRKPATRICK, of Utica, in the county of Licking and State of Ohio, have invented a new and useful Improvement in Machine for Making Post-Holes; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, in which—

Figure 1 is a perspective of the machine, and

Figure 2, a perspective view of the lever for raising the false post from the ground.

The nature of my invention consists in the peculiar construction of a machine for making post-holes by driving a false post and then removing the same, thus forming a hole with the earth compressed around it, and ready to receive the permanent post.

Also, the peculiar construction and arrangement of a lever for removing the false post.

To enable those skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

A represents the base.

B B, the posts.

C C, cross-pieces, which are fastened to the sides of the posts near their upper ends.

D D, guides, on the inner sides of the posts B B.

E, the sliding weighted drop.

F, the lifting-block, in one side of which is a recess in which is pivoted a catch or latch, *a*.

b c d c are pulleys, there being one on the upper side of the lifting-block F, another between the cross-pieces C C, another in the upper end of the posts B, and another on its outer side, near its lower end.

f, the rope, one end of which is secured to the cross-pieces C C. It extends down to and under the pulley *b*, thence up over the pulleys *c* and *d*, then down outside the post B and under the pulley *e*, and its end extending to the operating power.

G is an adjustable cross-bar, the ends of which extend around to the back of the posts B B, by which means it is kept on the posts. It can be raised or lowered at will, and secured in any desired position by the set-screws *g g*.

In the edges of the drop E, and lifting-block F are grooves, into which the guides D D fit.

H is the false post, which may be covered with iron or steel, and is sharp or pointed at its lower end.

Between the posts B B, near their lower ends, is a movable frame, I, which fits on the guides D D.

The false post H is placed inside of the frame I, which is secured to one or more set-screws, *h*, the wedges *i i* being driven in between the frame I and post H, to hold the post firmly in the frame; or if it is desired to make a hole not vertical, the inclination of the false post can be regulated by the wedges and set-screws.

The point of the false post being placed on the ground, the frame I holds it in proper position while being driven.

J J are braces, one of which is secured at each end to the posts B B, one end of the other one being hinged on one of the posts, and in the other end is a slot, open at the lower side, which fits over a pin, *j*, in the post B.

The braces J J accomplish two objects: first, a piece of board may be placed on the top of them, thus forming a rest for the drop E, when not in use; also, firmly connecting the two posts B B together.

If a post after being set extends above the braces, by raising the hinged brace it allows the machine to be removed from the post.

Its operation is as follows:

The machine is placed where it is desired to make the hole, and the false post H placed and secured in the frame I. The power is then applied to the rope *f*, thereby raising the lifting-block F; consequently, as the catch *a* is hooked into the staple *k* in the top of the drop E, they rise simultaneously.

In the upward movement of these posts, the upper end of the catch *a* strikes the under side of the adjustable cross-piece G, and releases the catch *a* from the staple *k*, thus causing the drop E to fall down on the top of the false post H, thus, by continued repetitions of the above-described operation, driving the false post H the desired depth into the ground.

To remove the false post H, place the forked end of the lever *k* around the upper end of the post H, the upper side of the fork of the lever being under the pins or projections on the end of the post.

Near the other end, and on the under side of the lever *k*, is a short piece, L, in the lower end of which is a pulley, I.

In the lever *k*, near the fulcrum, is another pulley, *m*.

I then secure one end of a rope, *n*, to the ground, pass the other end over the pulley I, then under the pulley *m*, up through the aperture around this pulley, and then secure this end of the rope to the latch *a*, and then apply the power to the rope *f*, raising the lifting-block F, thus drawing on the rope *n*, and drawing down the long end of the lever *k*, and raising

the false post H out of the ground, thereby leaving a hole for the insertion of the permanent post.

The cross-piece G can be secured at any desired height, consequently more or less force can be given to the drop E, as desired.

Having thus fully described my invention,

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

1. The movable frame I, set-screws *h*, and wedges *i i*, in combination with the false post H, substantially as shown and described.

2. The lever K, constructed, arranged, and operating, substantially in the manner and for the purpose shown and described.

J. M. KIRKPATRICK.

Witnesses:

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