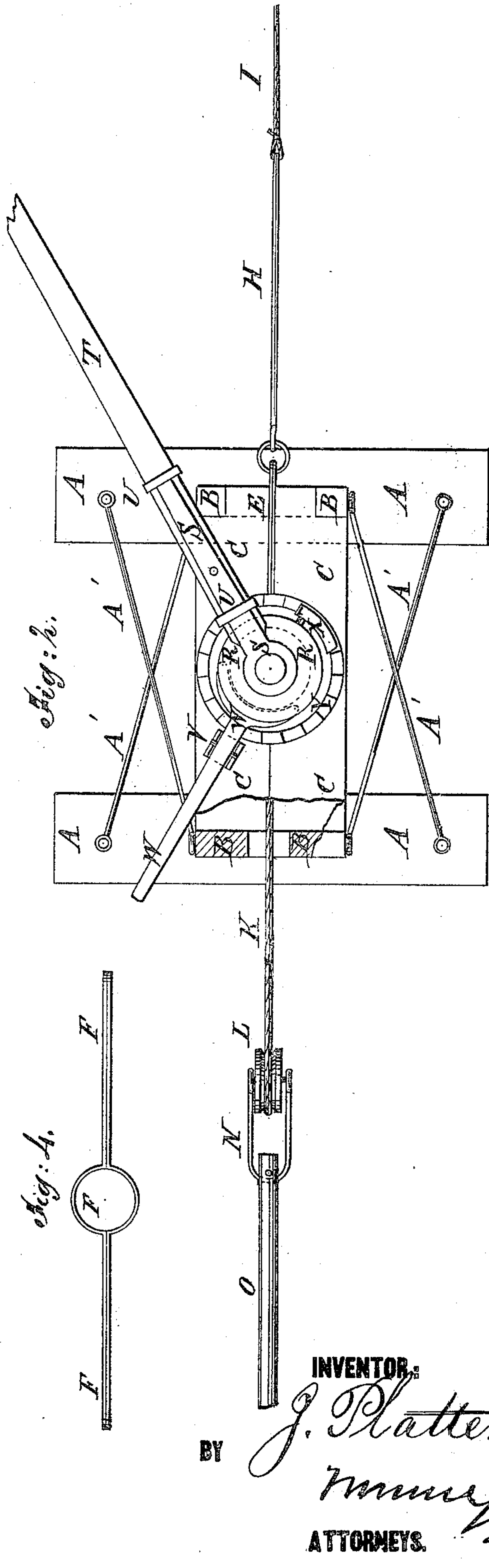
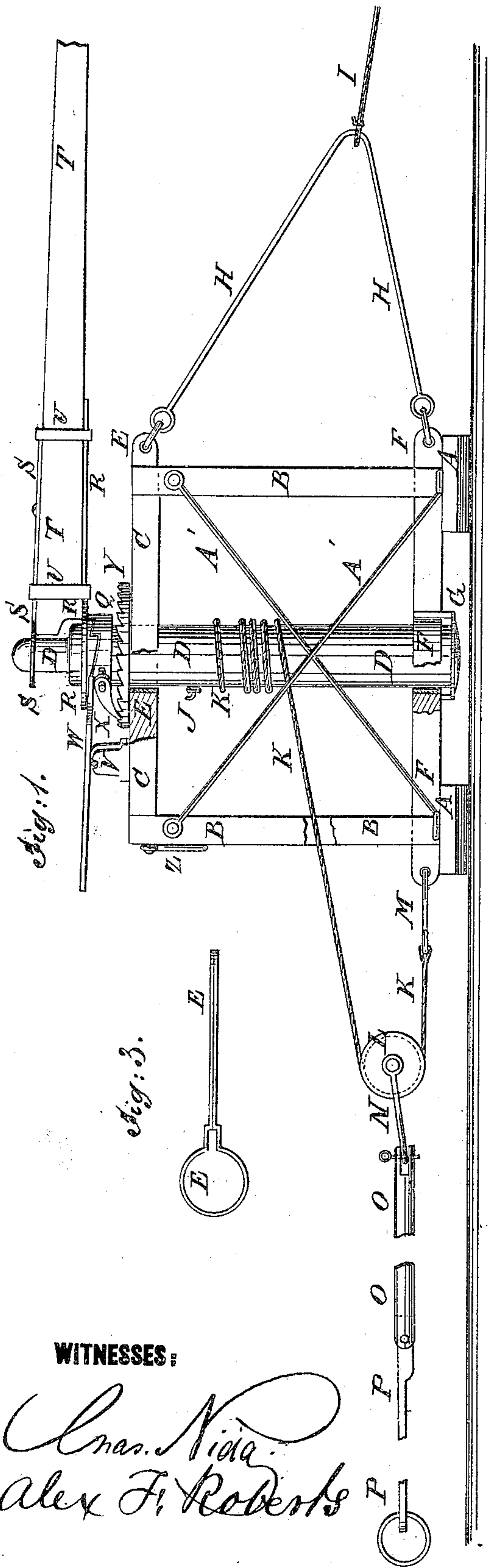


J. PLATTEN.  
STUMP-EXTRACTOR.

No. 172,483.

Patented Jan. 18, 1876.



WITNESSES:

*Chas. Nida*  
*Alex F. Roberts*

INVENTOR:

BY

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# UNITED STATES PATENT OFFICE.

JOHN PLATTEN, OF FORT HOWARD, WISCONSIN.

## IMPROVEMENT IN STUMP-EXTRACTORS.

Specification forming part of Letters Patent No. **172,483**, dated January 18, 1876; application filed October 8, 1875.

*To all whom it may concern:*

Be it known that I, JOHN PLATTEN, of Fort Howard, in the county of Brown and State of Wisconsin, have invented a new and useful Improvement in Machine for Pulling Stumps, &c., of which the following is a specification:

Figure 1 is a rear view of my improved machine, parts being broken away to show the construction. Fig. 2 is a top view of the same, part being broken away to show the construction. Fig. 3 is a detail top view of the upper bar. Fig. 4 is a detail top view of the lower bar.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved machine for pulling stumps, moving houses, and other similar work, which shall be simple in construction and convenient, safe, and effective in use.

The invention consists in a new combination of mechanical elements, and in a ring-bar at top as well as at bottom, combined with a cylinder working in a cup-plate.

A are the base-bars of the frame, the lower sides of the end edges of which are rounded off, so that the machine may be readily moved upon the ground. To the middle parts of the base-bars A are secured the lower ends of two pairs of uprights, B, the bars of each pair of which being placed at such a distance apart as to allow space for the passage of the rope or chain. The lower ends of the uprights B are widened upon their inner sides so as to nearly meet, only sufficient space being left between them to receive the end parts of the lower bar. To the upper ends of the uprights B are attached the ends of two bars, C, the adjacent edges of which, for one half their length, are close together, and for the other half are cut away to give space for the insertion of the upper bar. In the adjacent edges of the middle parts of the bars C are formed half-round notches to receive the cylinder D, which passes through a ring formed upon the inner end of the upper bar E, which is placed between the two bars C, and its end projects at the end of the said bars C. The lower end of the cylinder D revolves in a ring formed in the center of the lower bar F, and rests and revolves in a cup-shaped plate, G, connected with and

supported from the bar F, a space being left between the edge of the cup G and the ring of the bar F, to enable any sand or dirt that may get into the said cup to be conveniently removed. To the ends of the bars E F are secured the ends of the rods, chains, or ropes H, which meet at an angle, and are connected with the end of a single rope or chain, I, which is designed to be secured to a tree, stump, post, or other support, to anchor the machine while being used. To the shaft or cylinder D, near the top bars C of the frame, is attached a hook, J, upon which is hooked the end of a chain or rope, K, which passes out through the space between the uprights B, passes around a pulley, L, and has a hook, M, attached to its end, which is hooked into the end of the lower bar F. The pulley L works upon the pin of a clevis, N, the bend of which is inserted in a slot in the end of a bar, O, where it is secured by a pin. The bar O is made round, so that it will not inconvenience the horse in stepping over it. The outer end of the bar O has a slot formed in it to receive the end of a bar, P, which is secured in place by a pin. In the outer end of the bar P is formed a slot to receive the end of the next bar. Any desired number of the bars P may be used, according to the distance of the stump to be pulled from the machine. In the outer end of the last bar B is placed a large ring, to receive the chain or chains by which the stump or stumps are secured. Upon the cylinder D, a little above top bars C, is formed, or to it is attached, a collar, Q, upon the upper side of which are formed three or more ratchet-teeth, into which mesh the ratchet-teeth formed upon the under side of the ring R, placed upon the upper part of the cylinder D. The upper end of the cylinder D may be turned down, and upon it is placed a ring, S. The rings R S have each an arm formed upon one side, which arms are placed upon the upper and lower sides of the inner end of the sweep T, and are bolted to said sweep. The arms of the rings R S are further secured to the sweep T by bands U, slipped upon them. To the top bar C of the frame is attached a bracket, V, to which is pivoted a lever, W, the inner end of which is forked to fit beneath the ratchet-toothed ring R, so that, by oper-



ating the said lever W, the ring R may be raised, raising its teeth out of gear with the teeth of the collar Q, to enable the cylinder D to be turned back to unwind the rope or chain K without detaching the sweep T or turning it back. To an arm attached to the upper part of the cylinder D is pivoted a pawl, X, the engaging end of which rests upon the teeth of the ratchet-wheel Y, securely attached to the top bars C of the frame, so as to hold the cylinder D in any position into which it may be turned, and prevent it and the sweep from being turned back by the strain should the sweep or the harness break. Z is a hook, pivoted to one of the uprights B in such a position that it may be hooked over the outer part of the forked lever W when lowered to raise the teeth of the ring R out of gear with the teeth of the collar Q, and enable the cylinder D to be turned back to unwind the rope or chain K without moving the sweep T.

The uprights B may be braced by the bars

A', which cross each other, and the ends of which are attached to the said uprights B, and to the outer parts of the base-bars A.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination of frame A B C, cylinder D, provided with draft mechanism K L M N O P, rack and pawl X Y, ratchet-rings Q R, and the lever T, as and for the purpose specified.

2. The combination of the bar E, having a ring formed upon its inner end, and the bar F, having a ring formed upon its center, and provided with a cup-plate, G, with the cylinder D and the frame-work A B C, substantially as herein shown and described.

JOHN PLATTEN.

Witnesses:

CHAS. H. PUERNER,  
JOHN DIEDERICH.