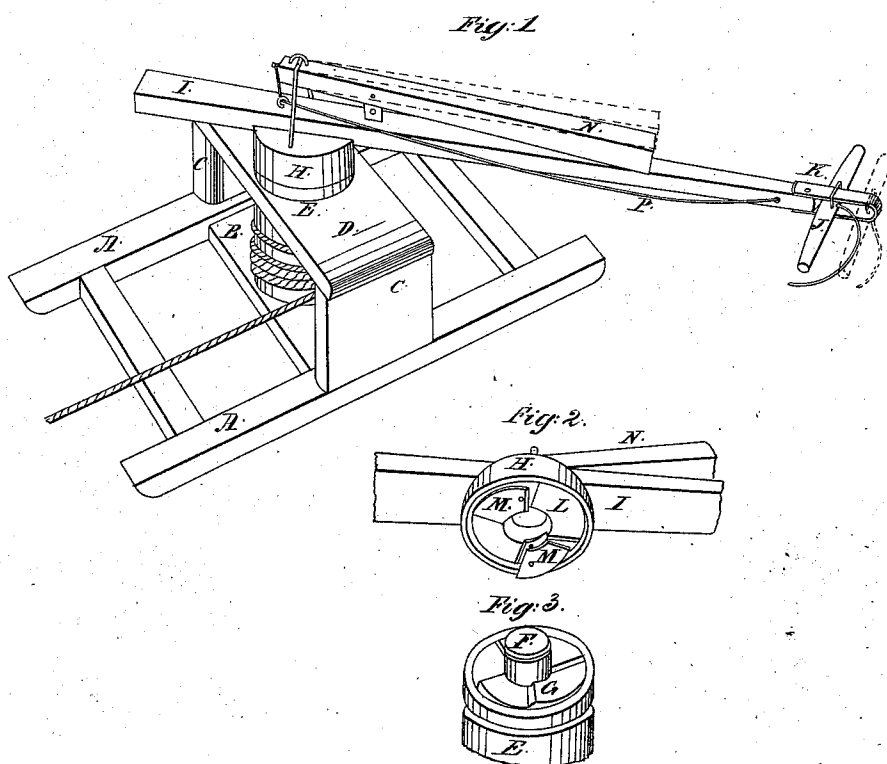


H. E. Mead,
Stamp Elevator.
Nº 83,651. Patented Nov. 3, 1868.



Witnesses:
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United States Patent Office.

HENRY E. MEAD, OF CENTREVILLE, MICHIGAN.

Letters Patent No. 83,651, dated November 3, 1868.

IMPROVEMENT IN STUMP-EXTRACTOR.

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

To whom it may concern:

Be it known that I, HENRY E. MEAD, of Centreville, in the county of St. Joseph, and State of Michigan, have invented a new and useful Improvement in Capstan Grubbers; and I do declare that the following is a true and accurate description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, and being a part of this specification, in which—

Figure 1 is a perspective view;

Figure 2 is a bottom view of the cap and clutch-plates; and

Figure 3 is a perspective view of the capstan, with the head removed.

The object of my invention is to apply a capstan, mounted on a suitable frame, to the extracting of stumps and grubs, and to provide the capstan with a self-acting clutch, by means of which, when the draught on the sweep ceases, the cylinder will be thrown out of gear, and the rope slackened automatically.

To enable others skilled in the art to make and use my invention, I will now describe the same.

A are sled-shaped sills, framed together, to serve as a foundation, and having framed therein a centre-plate, B, and standards, C, connected together by the cross-tie D at their top.

Pivoted to the centre-plate B, and rising through the cross-tie D, is a capstan-cylinder, E, terminating in a journal, F, surrounding the base of which is formed the clutch G. Fitting easily on the journal F is a cap, H, secured to which is a sweep, I, to the outer end of which is attached an evener, J, working in a guide-

yoke, K. The under side of the cap is formed with recesses, L, in which are loosely hung the clutch-plates M, fig. 2, secured to the ends of a yoke, O, passing up through the cap H. N is a lever, hinged to a proper fulcrum on the sweep I, the shorter arm of which engages with the yoke O. The weight of the longer arm of the lever will, if not prevented, draw up the clutch-plates M, into the recesses L, and thus throw the capstan out of gear. P is a rope, one end of which is secured to the end of the short arm of the lever N, and led through proper guide-rings on the sweep, and secured to the evener J, so that when the team attached to the same is started forward, the short arm of the lever is drawn down, and the clutch-plates M will engage with the clutch G on the cylinder E. When the team stops, the plates M will be drawn into their recesses by the action of the lever N, the cylinder E thrown out of gear, and the rope slackened.

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

The combination and arrangement of the capstan-head H, provided with recesses L, clutch-plates M, and the yoke O, with the cylinder E, provided with a journal, F, and clutch, G, sills A, centre-plate B, standard C, cross-tie D, sweep I, evener J, guide-yoke K, lever N, and cord P, when constructed and operating substantially as herein described, and for the purposes specified.

HENRY E. MEAD.

Witnesses:

E. F. PEIRCE,
JOHN RUTHERFORD.