

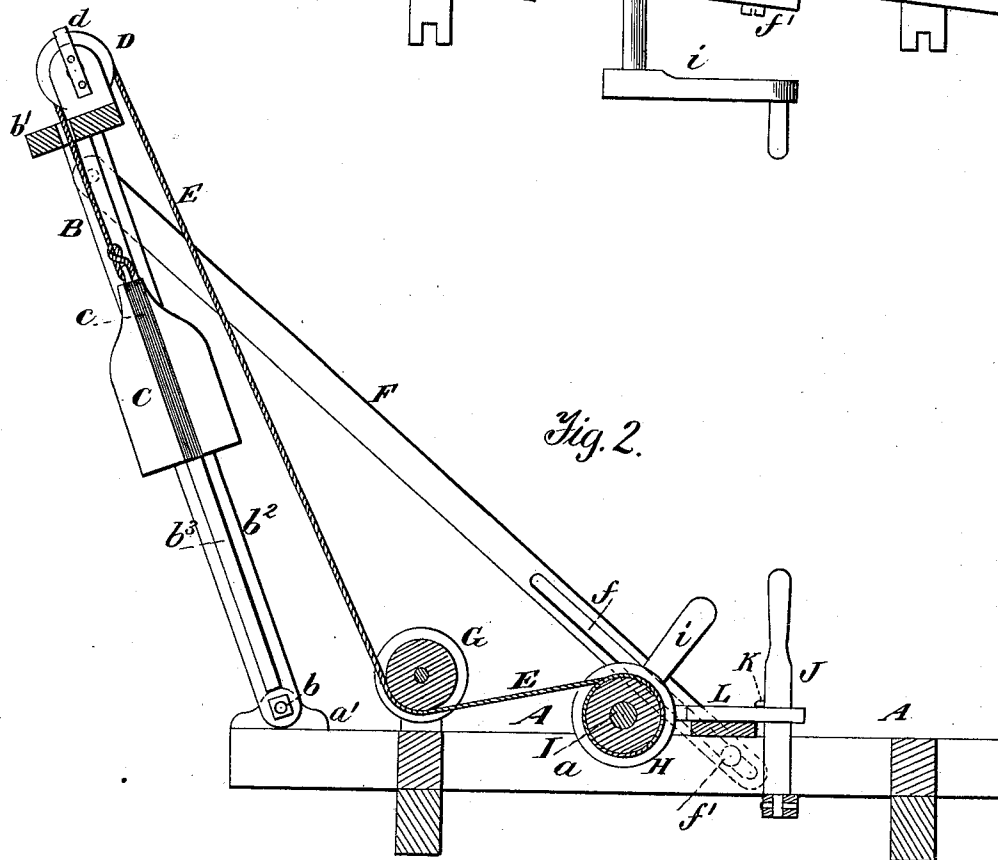
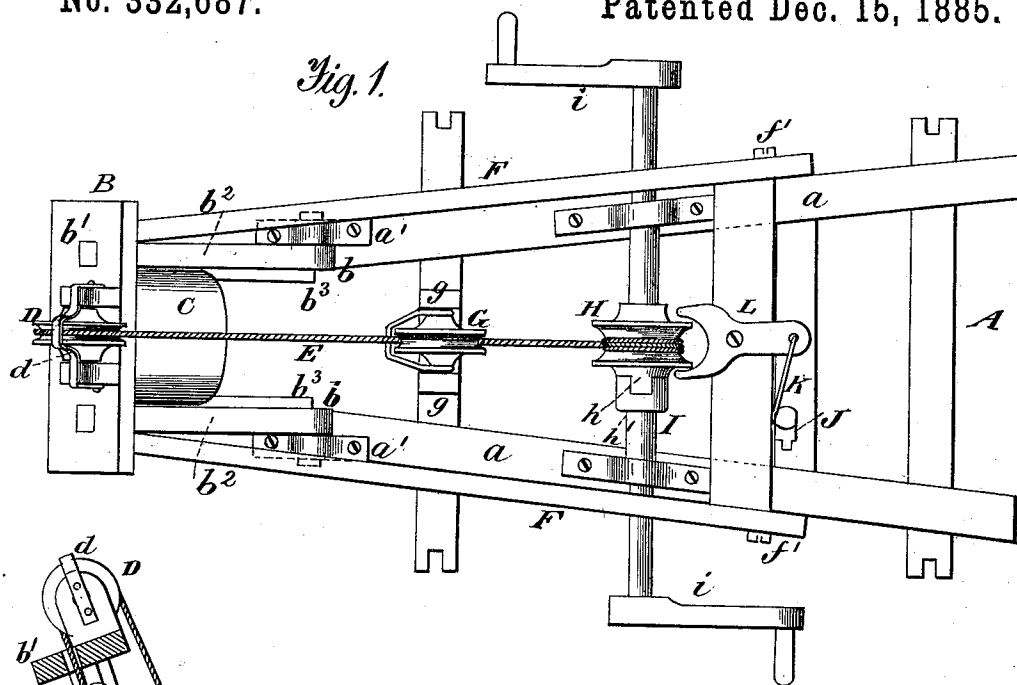
(No Model.)

A. WEEDEN.

POST DRIVER.

No. 332,687.

Patented Dec. 15, 1885.



Witnesses.
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UNITED STATES PATENT OFFICE.

ALFRED WEEDEN, OF BON, WISCONSIN, ASSIGNOR OF ONE-HALF TO J. W. BRADSHAW, OF SAME PLACE.

POST-DRIVER.

SPECIFICATION forming part of Letters Patent No. 332,687, dated December 15, 1885.

Application filed May 25, 1885. Serial No. 166,555. (No model.)

To all whom it may concern:

Be it known that I, ALFRED WEEDEN, of Bon, in the county of Richland and State of Wisconsin, have invented an Improved Post-Driver, of which the following is a specification.

The special object of the invention is to combine certain instrumentalities with a wagon-frame in such a way that posts may be driven into the ground at the desired distance apart, while the mechanism may be conveniently and expeditiously moved from place to place.

The invention will first be described in connection with the drawings, and then pointed out in the claims.

Figure 1 of the drawings is a plan view. Fig. 2 is a longitudinal vertical section.

In the drawings, A represents an ordinary wagon-frame, except that I preferably make the beams *a a* converge toward the front, so as to bring the uprights of rack B more compactly together, to better support the weight of hammer C. The rack B is pivoted at *b b* to the bearing-blocks *a' a'* on the frame, and is provided at the top with a cap-plate, *b'*. Between two uprights on this cap is journaled a pulley, D, over which passes a band, *d*, detachably, so that the hammer rope, chain, or other flexible connection, E, may not escape from the pulley.

F F are braces, which have longitudinal slots *f f* at the lower end, while they are pivoted at the upper to the side bars, *b² b²*, of the rack.

f' f' are clamp-screws, which pass through slots *f f* with their shanks, and into the sides of frame A. By loosening the clamp-screws the braces may be slid so as to support the rack at a greater or less forward projection or in a perpendicular plane.

The hammer C is provided on each side with a groove, *c*, which fits loosely over the guides *b³ b³* of rack, and thus causes the hammer in its fall to strike exactly where it is intended. The flexible connection E is made fast to the hammer, passed over rack-pulley D, carried under a pulley, G, journaled in uprights *g g*, near front of frame, and then made fast to a pulley, H, on the windlass I. On the latter I preferably use diametrically-opposite crank-handles *i i*, so that two strong men may wind up the heavy hammer. The pulley H is made

to slide loosely on the windlass or shaft I, and carries on one side a half-clutch, *h*, which connects with the fast clutch *h'* on windlass.

When it is desired to wind up the hammer, a workman operates the hand-lever J, rod K, and bifurcated horizontal lever L, so as to lock the half-clutches *h h'* to one another, and incidentally to the windlass. On the other hand, as soon as the hammer has reached its intended height, a reverse movement of lever J disconnects the pulley H from the windlass-clutch, allows it to turn, and the hammer falls on the top or head of post.

I may use a ratchet-wheel and pawl on the windlass and frame, so that the windlass can never turn backward and the hammer can never fall until the pulley H is unclutched from the shaft or windlass.

I am aware that it is not new to raise the hammer or ram by means of rack, pulleys, and windlass, or to use a horizontally-movable lever to disconnect the two parts of a clutch, or to connect such a lever with a pull-rod, or to shift the braces by an arc-slot slightly, so as to allow for the inclination of the ground; but what I have done is to regulate the distance of the fall of the hammer, and thus graduate its blow to the softness or hardness of the ground. This has been found by me to be necessary to prevent a post from being driven too far into the ground. This I accomplish by pivoting my braces to the rack and clamping them adjustably to the frame by means of long straight slots.

Another thing which I accomplish is to combine the trip with the windlass mechanism, so that one man can both raise and trip the hammer. This is done by connecting a hand-lever with an ordinary clutch-lever, and arranging said hand-lever in such local relation with the hand-crank of windlass-shaft that the hand-crank will be within easy reach of one hand, while the hand-lever will be within convenient reach of the other hand.

As the wagon straddles the line of fence, one man is sufficient to work the post-driver and drive up his team from point to point, while another sets up the posts in position to be driven.

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

1. In post-drivers, the two braces for the

pivoted rack, slotted near the lower end, in combination with a screw-clamp adapted to connect them adjustably with the supporting-frame, as shown and described.

- 5 2. In a post-driver having a windlass, pulley, hand-crank, clutch, and horizontally-movable lever, the vertically-movable hand-lever connected with the horizontally-movable le-

ver, and placed in such local relation to the hand-crank on windlass that a man working to the windlass may also work the trip mechanism, as described.

ALFRED WEEDEN.

Witnesses:

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