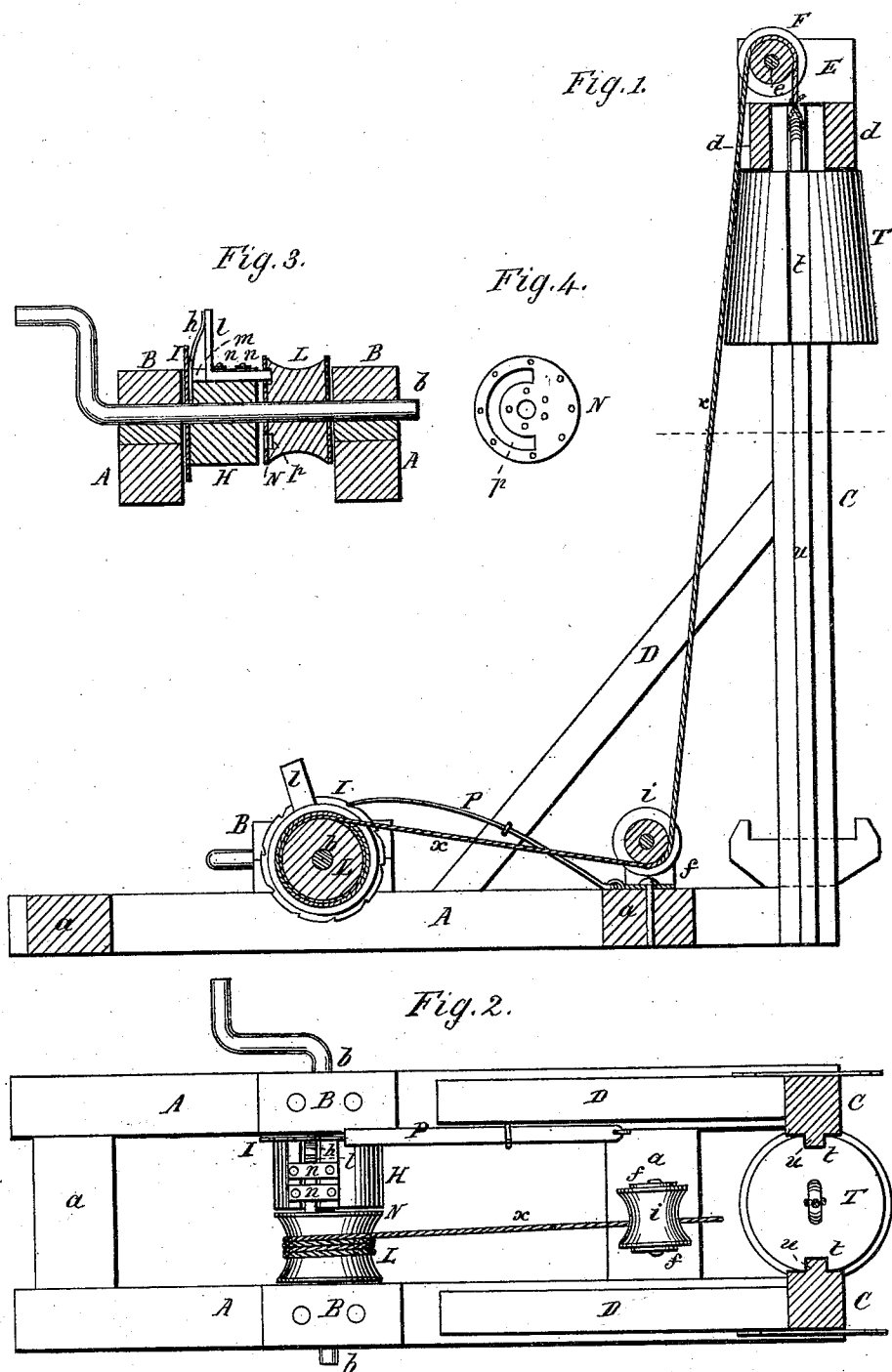


J. WILKINSON & J. CALNAN.

POST-DRIVER.

No. 177,445.

Patented May 16, 1876.



Witnesses

John et Tauberschmidt
Chas. O. Gill

Inventors
John Wilkinson
and J. Calnan
by their Attorneys
Cox & Cox.

UNITED STATES PATENT OFFICE.

JOHN WILKINSON AND JAMES CALNAN, OF MOULTON, IOWA.

IMPROVEMENT IN POST-DRIVERS.

Specification forming part of Letters Patent No. 177,445, dated May 16, 1876; application filed March 28, 1876.

To all whom it may concern :

Be it known that we, JOHN WILKINSON and JAMES CALNAN, of Moulton, in the county of Appanoose, and State of Iowa, have invented a new and useful Improvement in Post-Drivers, of which the following is a specification, reference being had to the accompanying drawings:

The invention relates to devices for driving posts, and consists in the mechanism herein-after claimed.

Figure 1 is a central longitudinal vertical section of a device embodying the elements of the invention. Fig. 2 is a top view of same. Fig. 3 is a central vertical longitudinal section of the windlass and adjacent parts. Fig. 4 is a plan view of the plate N.

In the accompanying drawings, A represents a frame connected by the bars *a*, and provided upon its upper surface, near one end, with the pillow or plumber blocks B, in which the axle *b* has its bearings, one end of said axle extending beyond the edge of the frame, and is provided with a crank, by which the device is operated. The other end of the frame A is provided with the guide posts C, which extend upward a suitable distance, being properly braced by the stanchions D, and having their tops connected and secured by the transverse bars *d*, across the upper surfaces of which are arranged the bars E, serving as bearings for the axle *e* of the wheel F. Upon the bar *a*, nearest the guide-posts, are provided the standards *f*, in which the axle of the wheel *i* is journaled. The cylinder H is secured upon the axle *b*, being provided on one end with a circular-toothed ratchet, I, between which and the wheel is secured the spring *h*, flaring upward and pressing against the upright arm of the angular bar *l*, which is secured in position in the slot *m* by the bars *n*, so as to have a free horizontal movement. Upon the end of the axle *b*, opposite the crank, is loosely placed the windlass L, having a concave surface, and provided on its end, nearest the cylinder H, with the plate N, in which is cut the slot *p*, said slot fitting over a groove of similar form cut in the wheel, forming a keeper for the end of the angular bar *l* when thrown forward by the

spring *h*. The pawl P is provided to engage the teeth of the rack I, so as to prevent the cylinder H from turning backward, and to facilitate the operation of elevating the ram T, moving between the guide-posts C, the slots T cut in the sides of said ram moving upon the guides *u*, thereby retaining its proper position, and allowing a free vertical movement, which causes the ram to ascend very readily, and descend with greater force and effect than it otherwise would. To the top of the ram T is attached one end of the rope or chain *x*, the other end of which ascends and passes over the pulley-wheel F, from thence it descends, passing under the wheel *i*, and from there it extends toward the front of the machine, and is secured to the windlass L by any desirable means.

Operation: The device being in its initial condition, and properly placed, the operator begins by turning the crank from left to right, which causes the windlass to revolve, winding the rope upon it, and thus gradually drawing the ram to the top of the guide-posts, where it is retained by the assistance of the pawl and ratchet.

To cause the ram to descend it is only necessary to press against the upright arm of the angular bar *l*, which operation causes the bar *l* to recede from the recess in the windlass, thus leaving said windlass free to revolve upon its axle, when the weight of the ram causes the rope to unwind, descending with great force upon the object beneath it.

What we claim as our invention, and desire to secure by Letters Patent, is—

In a post-driver the windlass L, having the slot *p*, in combination with the cylinder H, provided with the angular bar *l* and spring *h*, substantially as set forth.

In testimony that we claim the foregoing improvement in post-drivers, as above described, we have hereunto set our hands this 17th day of March, 1876.

JOHN WILKINSON.
JAMES CALNAN.

Witnesses:
J. C. COAD,
C. H. HUGHES.