(No Model.)

# R. G. WORK.

## POST DRIVER.

No. 567,060. Patented Sept. 1, 1896.

Fig. 1.

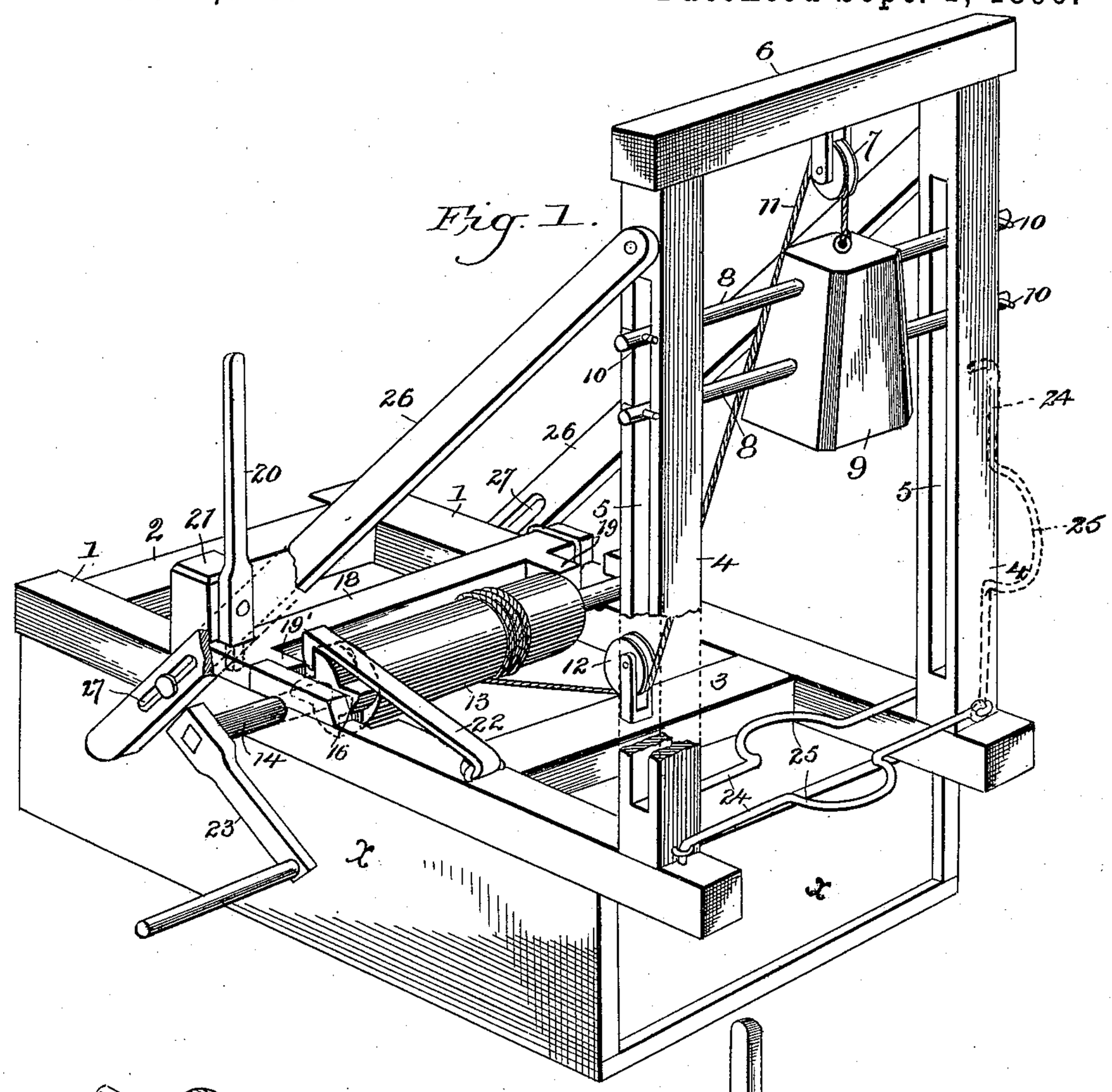
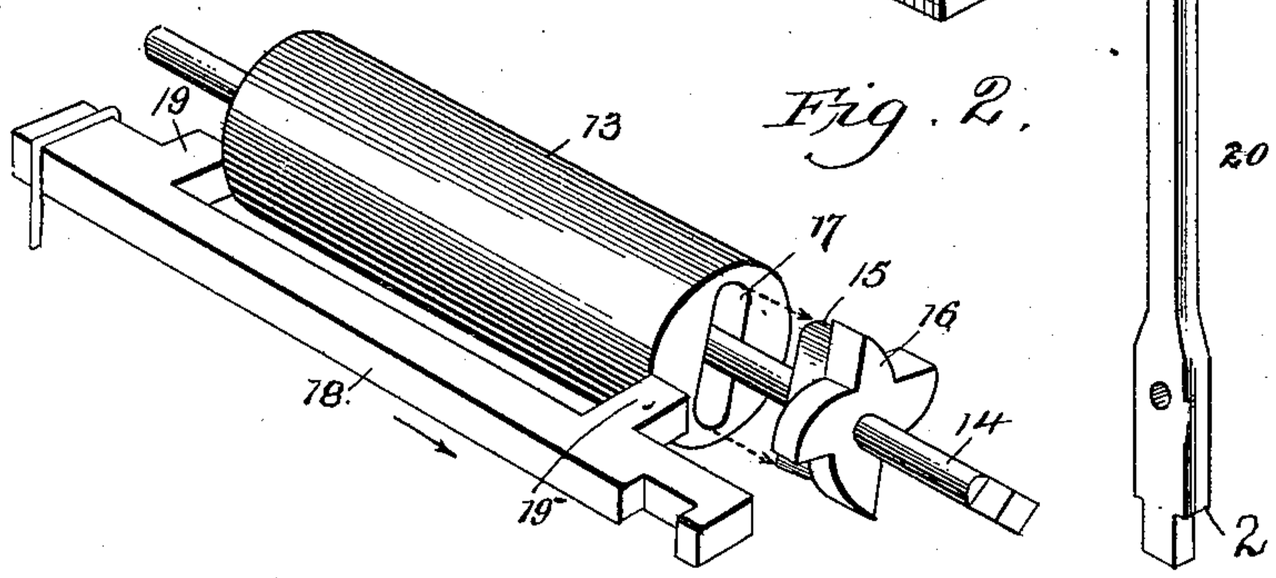



Fig. 2.







Witnesses
J. D. K. Reynolds
Chas. E. Hoyer

Inventor
Robbert G. Work.
By John Weddenburn
Attorney

# UNITED STATES PATENT OFFICE.

ROBBERT G. WORK, OF MARION CENTER, PENNSYLVANIA.

## POST-DRIVER.

SPECIFICATION forming part of Letters Patent No. 567,060, dated September 1, 1896.

Application filed June 20, 1894. Serial No. 515,197. (No model.)

*To all whom it may concern:*

Be it known that I, ROBBERT G. WORK, a citizen of the United States, and a resident of Marion Center, in the county of Indiana and State of Pennsylvania, have invented certain new and useful Improvements in Post-Drivers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention is an improvement in the class of portable post-drivers adapted to be mounted upon a wagon-bed.

The features of novelty are hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a perspective view of my improved machine applied to a wagon-bed. Fig. 2 is a detail perspective view of the rope-winding drum and shifting mechanism therefor.

The numerals 1 2 3 indicate the horizontal beams of the frame which rests on the wagon-bed or body X and is in practice secured thereto by any suitable means.

4 4 indicate vertical standards, and 6 a cap-beam that connects them. The weight or "monkey" 9 is guided by two parallel cross-bars 8, that pass through and work in lengthwise slots 5 of said standards 4 and are provided with cross-pins 10 for securing them, as shown. Inclined braces 26, having slots 27, support the standards 4, as shown.

The chain or cable 11 for hoisting the weight 9 passes over a pulley 7, suspended from the cap-beam 6, and is attached to the winding-drum 13, mounted on a shaft 14, having a transverse spline 15 near one end, which is integrally formed with a ratchet-wheel 16, and said spline 15 is adapted to be inserted in a similarly-shaped slot 17 in the adjacent end of the drum 13, and to disconnect or connect the drum 13 with the spline. A shifting-bar 18 is employed, which is mounted in a horizontal position and has shanks 19 19′ extending from one edge thereof, which are adapted to engage the opposite ends of the drum.

One end of the bar is provided with a notch or recess 30 and rests against a post 21. The opposite end of the bar is secured in position by means of a staple 31, through which it passes loosely, so that it is permanently held adjacent to the drum 13, but may have a longitudinal movement through the staple and against the post 21. Projecting into the recess 30 of the said shifting-bar 18 is a shifting-lever 20, which is pivotally connected to the post 21, and by this means the drum 13 is adjusted, as stated. The lower end of the lever is provided with shoulders 20′, which fit above the top of the bar 18 and prevent it from being raised from the frame, which, together with the drum which holds it from moving forward, produces a very cheap and efficient device.

Engaging the ratchet-wheel 16 is a gravitating pawl 22 to prevent backward movement of the drum. The shaft 14 has an operating crank-handle 23 at one end for turning the same, but it will be understood that horse-power may be applied, if desired.

Under the weight or driver 9 and secured to the guide-standards 4 near their lower ends are a pair of transverse guides 24, having central outwardly-bent loops 25 and which act to support the post in proper position while being driven. The spaces between the transverse guides or supports are such as to permit the insertion of large or small posts with ease and facility.

The guides 24 are stout rods or bars having the construction and arrangement of pivoted hooks. That is to say, each guide 24 is pivoted at one end and has a hook or nose at the other end adapted to enter a staple, as shown. The guides 24 are thus adapted to be raised, as shown by dotted lines, Fig. 1, so that the machine may be easily and quickly arranged over a post to be driven, after which the guides 24 are let down to the position shown in full lines, in which they engage their respective staples and hold the machine in the required relation to the post.

When the machine has been so adjusted and secured in due position, the lever 20 is operated to slide the drum 13 into engagement with the spline 15, and the crank 23 is then rotated to wind the cable 11 on the drum 13, and thereby raise the weight 9 to its highest elevation. The lever 20 is then pulled in the opposite direction to disengage the drum 13

from the spline 15, so that it is left free to rotate, whereupon the weight 9 descends upon the head of the post.

The sliding bar 18 is so constructed that the descent of the weight 9 may be controlled and graduated, as required, to give a light blow, since by pulling on the lever 20 the shank 19′ of the sliding bar 18 may be kept in firm engagement with the recessed end of the drum 13, so that the rapidity of rotation of the latter will be hindered corresponding to the degree of pressure and friction between it and said shank 19′ and sill or horizontal beam. By this simple construction and arrangement the same means that release the drum serve also to regulate its rotation and control the movement of the weight, so that it may even be lowered without being allowed to strike a blow, if required.

What I claim is—

In a post-driving machine, the combination, with the sill or horizontal beam the standards, weight, chain, and rotatable crank-shaft having the spline 15, of the drum mounted free on said shaft and having an end recess to receive the spline, the bar 18, sliding in keepers and having lateral shanks 19, 19′, which embrace the ends of the drum, and the pivoted hand-lever 20, whose lower end engages said bar, as shown and described, whereby the drum may be disengaged from the spline and its rotation regulated by friction with the bar and sill, as specified.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

ROBBERT G. WORK.

Witnesses:
W. E. DODSON,
J. B. GUTHRIE.