(No Model.)

# N. NEWMAN.

## TACK DRIVER.

No. 407,444. Patented July 23, 1889.

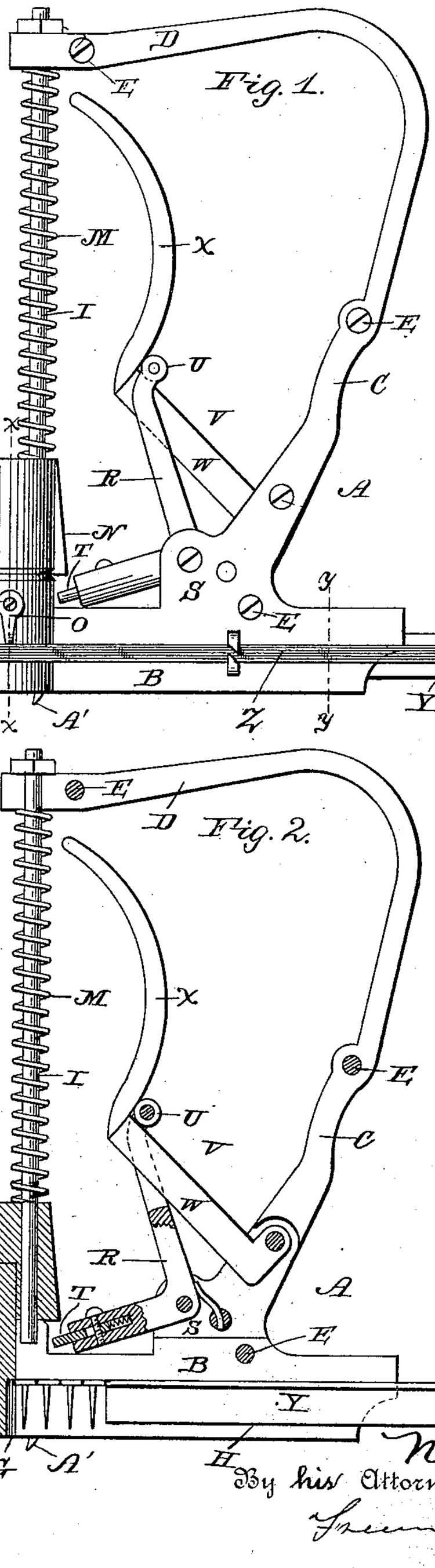


Fig. 1.

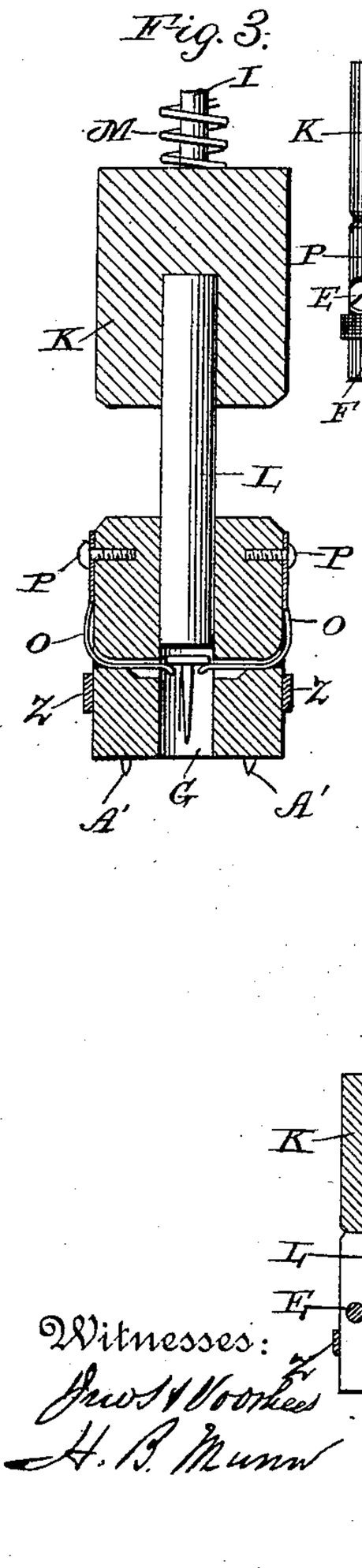


Fig. 3.




Fig. 2.

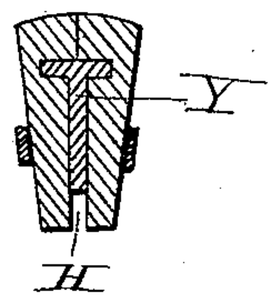


Fig. 4.

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# UNITED STATES PATENT OFFICE.

NELSON NEWMAN, OF SPRINGFIELD, ILLINOIS.

## TACK-DRIVER.

SPECIFICATION forming part of Letters Patent No. 407,444, dated July 23, 1889.

Application filed April 20, 1887. Renewed June 24, 1889. Serial No. 315,293. (No model.)

*To all whom it may concern:*

Be it known that I, NELSON NEWMAN, a citizen of the United States, residing at Springfield, in the county of Sangamon and State of Illinois, have invented certain new and useful Improvements in Magazine Tack-Hammers; 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 relates to an improvement in magazine tack-hammers; and it consists in the peculiar construction and combination of devices, that will be more fully set forth hereinafter, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is an elevation of a magazine-hammer embodying my improvements. Fig. 2 is a vertical sectional view of the same. Fig. 3 is a detail vertical transverse sectional view taken on the line *x x* of Fig. 1. Fig. 4 is a similar view taken on the line *y y* of Fig. 1.

A represents a frame of the form shown in Fig. 1, composing the base B, the standard C, rising from one end of the base, and the horizontal arm D, projecting forward from the upper end of the standard and arranged directly over the base.

The frame is made of two pieces of metal secured together by transverse screws E. The front end of the base has a vertical cylindrical head F, in which is made a vertical central opening G. A longitudinal opening H is made in the base of the frame and extends through the same. The front end of this opening H communicates with the opening G, and the said opening H is T-shaped in cross-section, as shown in Fig. 4.

I represents a vertical rod which connects the front ends of the base and the arm D.

K represents a hammer-head, which slides vertically on the rod and has a vertical depending stem L, that enters the opening G. A coiled extensile spring M is placed in the rod I and bears between the arm D and the upper side of the hammer-head to force the latter downward. The hammer-head is provided on its rear side with a shoulder or offset N.

O represents a pair of flat springs, which are arranged on opposite sides of the head F, and have the upper ends secured by screws P. The lower ends of the springs O are bent inwardly at right angles and project toward each other and enter openings made in the sides of the head F.

R represents a right-angled lever that is fulcrumed on an ear or lug S, that projects from the upper side of the base at the inner end thereof. The lower arm of this lever is provided at its free end with a projecting spring-actuated detent T, and the upper arm of the said lever has an anti-friction roller U journaled on a spindle that projects from one side of its upper end.

V represents a handle-lever having an inclined lower arm W and a curved arm X, that projects upward from the outer end thereof. The inner end of the inclined arm W is pivoted to the standard, and the roller U bears upon the upper side of the said inclined arm.

Y represents a feed-slide, which is T-shaped in cross-section and fits in the opening H made in the base. A spring Z forces the slide in the opening H toward the opening G.

The operation of my invention is as follows: The slide Y is withdrawn from the opening H, and a number of tacks are placed in the said opening, the heads of the tacks resting on the horizontal upper portion of the opening H, and the shanks of the tacks extending downward in the vertical portion of the said opening. The slide Y is then fitted in the opening H, and its spring causes it to press against the tacks and force them forward toward the opening G. The operator grasps the standard of the frame and the handle-lever with one hand and applies the base of the frame to the surface in which the tacks are to be driven. Studs A′, which depend from the lower end of the head F, prevent the frame from slipping by entering the surface on which it bears. The handle-lever is then pressed toward the standard by the operator closing the hand with which he grasps the machine, which causes the roller U to move down on the inclined arm of the lever, and thereby move the right-angled lever R to cause its detent, which normally bears under the offset or shoulder of the hammer-head, to

raise the latter against the resistance of the spring M. As soon as the stem of the hammer moves upward past the front end of the opening H, the forward tack is forced forward into the vertical opening G under the spring by the spring-actuated slide, and the inner bent ends of the springs O grasp the head of the tack and suspend the same in the opening G, directly below the stem of the hammer. When the hammer reaches the upper limit of its movement, the spring-actuated detent T slips from under the shoulder or offset on the hammer, thus releasing the latter, and the spring W causes it to descend with sufficient force to drive the tack home, as will be very readily understood.

Having thus described my invention, I claim—

1. The combination of the frame A, having the base B, provided with the vertical opening G in its front end and the horizontal opening H, communicating therewith, the standard C, rising from one end of the base, and the horizontal arm D, projecting forward from the standard and arranged over the base, with the spring-actuated feed-slide fitting in the opening H, the rod I, connecting the front ends of the base and arm D, the vertically-movable hammer guided on said rod and having the depending stem L to enter the opening G, and the lever to raise the hammer-head and then release the same, all combined and arranged to operate substantially as described.

2. The frame A, having the horizontal opening H in its base, the vertical opening G, communicating therewith, and the depending engaging studs A′, for the purpose set forth, in combination with the vertically-movable spring-actuated hammer having the depending stud adapted to enter the opening G, (on its downstroke,) the spring-actuated feed-slide Y, fitting in the opening H, and the lever pivoted to the frame and adapted to raise the hammer and then release the same, substantially as described.

3. In a magazine-hammer, the combination of the frame, the vertically-movable hammer-head, the lever S, having the spring-actuated detent T to engage the hammer-head, and the roller U, and the handle-lever having the inclined arm W, on which the roller U bears, for the purpose set forth, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

NELSON NEWMAN.

Witnesses:

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