[13.]

John E. Plummer's

Improvement in Shoe Jacks

No. 119,533. Patented Oct. 3, 1871.

Fig. 1.

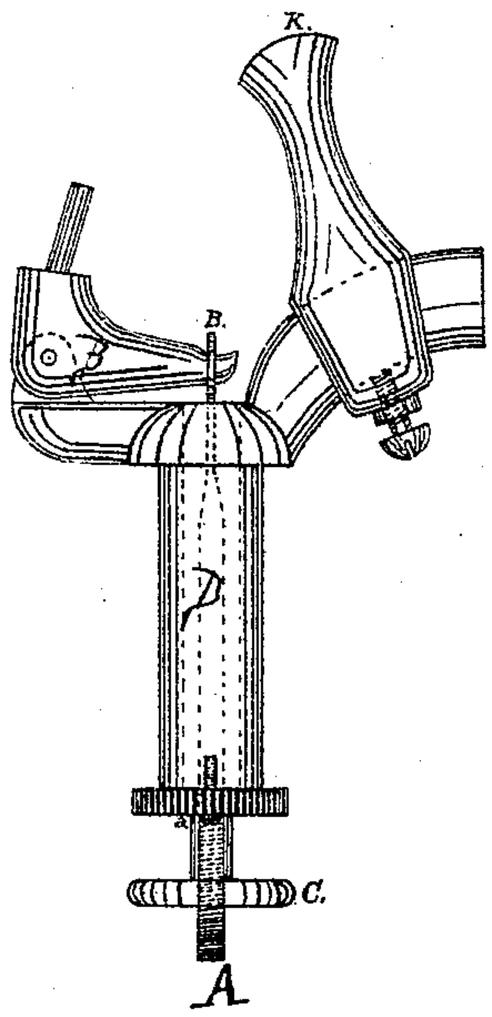


Fig. 5

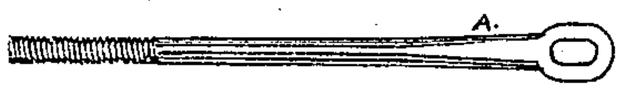
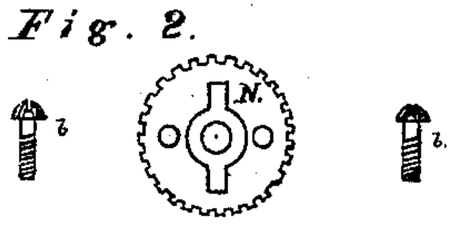


Fig. 2.



Witnesses

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119,533

UNITED STATES PATENT OFFICE.

JOHN E. PLUMMER, OF BINGHAMTON, NEW YORK.

IMPROVEMENT IN JACKS FOR FINISHING SHOES, &c.

Specification forming part of Letters Patent No. 119,533, dated October 3, 1871.

To all whom it may concern:

Be it known that I, JOHN E. PLUMMER, of Binghamton, in the county of Broome and State of New York, have invented certain Improvements in a Shoe-Jack for Finishing Shoes, for which Letters Patent No. 88,735, dated April 6, 1869, were granted to me, of which the following is a specification:

The invention relates to that class of jacks in which the boot or shoe is supported upon an arm having a vertical vibration for changing the angle at which the work is presented to the operator, the shoe being secured to a hollow shank or sleeve mounted in a suitable bearing in the arm in such manner that it can be readily rotated. The invention consists in a new, compact, and convenient arrangement of the devices by which the work is secured to the rotating shank or cylinder, as will be fully described.

Figure 1 in the accompanying drawing is an elevation of the cylinder detached from the machine, with the connections embodying my invention. Fig. 2 is the ratchet-wheel detached from the cylinder. Fig. 3 is the screw-rod removed from the same.

A is the screw-rod, the upper end of which is flattened, having an elongated hole to connect with the end of the lever B. The lower end or stem of the screw extends through the ratchet-wheel N. C is the circular hand-nut, the hub *a* extending a suitable distance above the disk to allow of its convenient operation by the hand. The ratchet N is fitted to the lower end of the cylinder D and secured in position by the screws *b b*.

When the last and shoe are to be placed in position for finishing the hand-nut C is turned down and the work attached to the lever, the toe bearing upon the toe-piece K. The nut C is then turned up, the end of the hub *a* bearing on the ratchet, which draws down the end of the lever B until the work is securely held in position for finishing. The nut and screw may be operated by turning the work with one hand and holding the nut in the other, or vice versa.

I am aware that a screw has been employed for actuating the heel-support; but the construction of parts in those machines was such that it was necessary to either use a double or compound lever, or else to place the screw upon the outside of standard upon which the heel-support is mounted, using the screw to thrust upward upon the bell-crank lever. Both of these arrangements have been found to be inconvenient and impracticable; but my arrangement is much more simple, compact, and effective.

A spring has been used in place of the screw-rod A; but this has been found impracticable, because the greatest tension is produced when the bell-crank lever is thrown back to remove a last instead of when the work is down upon the toe-support, to which it needs to be confined closely; whereas in my improved jack any desired pressure can be applied at this point.

What I claim is—

The arrangement of the heel-support, provided with the bell-crank lever B, the rotating cylinder or sleeve D, the screw-rod A within said cylinder, and nut or thumb-screw C, all as and for the purpose described.

JOHN E. PLUMMER.

Witnesses:

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