

(No Model.)

S. A. LENTZ.

JACKING DEVICE FOR BOOT AND SHOE HEEL SHAPING AND
BURNISHING MACHINES.

No. 303,377.

Patented Aug. 12, 1884.

Fig. 1

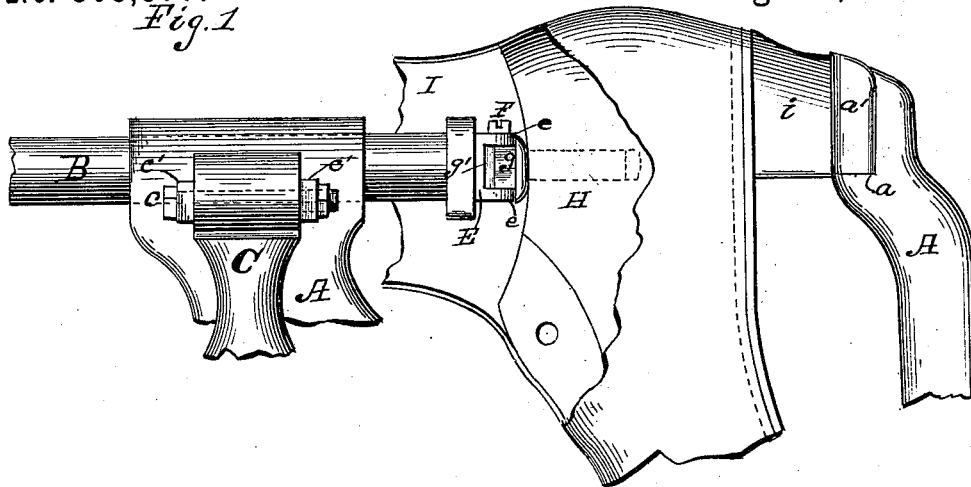


Fig. 2.

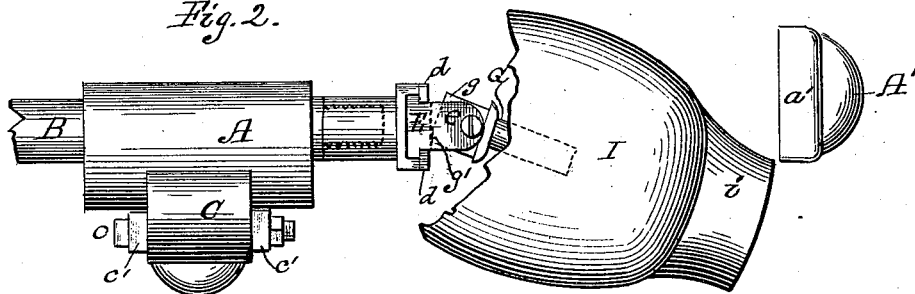
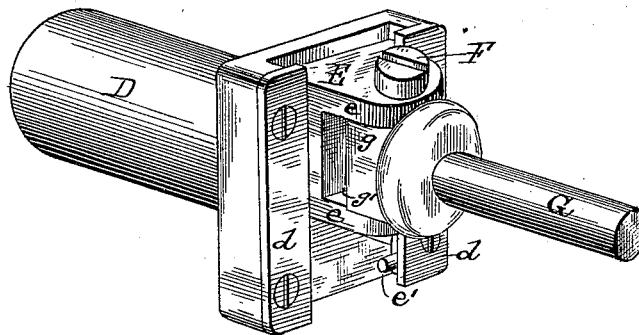


Fig. 3.



Witnesses:

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Att'y-

UNITED STATES PATENT OFFICE.

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JACKING DEVICE FOR BOOT AND SHOE HEEL SHAPING AND BURNISHING MACHINES.

SPECIFICATION forming part of Letters Patent No. 303,377, dated August 12, 1884.

Application filed January 16, 1884. (No model.)

To all whom it may concern:

Be it known that I, SILAS A. LENTZ, a citizen of the United States, residing at Allentown, in the county of Lehigh and State of Pennsylvania, have invented certain new and useful Improvements in Jacking Devices for Boot and Shoe Heel Shaping and Burnishing Machines, of which the following is a specification, reference being had therein to the accompanying drawings, in which—

Figure 1 is a side elevation of a portion of a jack of a boot and shoe heel burnishing-machine provided with my improvements, a portion of the shoe being broken away to more clearly show certain devices employed. Fig. 2 is a plan, the last, pin, and shoe being shown in position for removal from or insertion into the clamp. Fig. 3 is a perspective of my spindle-head and last-pin detached.

Like letters refer to like parts in all the figures.

Heretofore the means for holding a heel in position for the operation of shaping and burnishing devices thereon has comprised a jack consisting of a substantially U-shaped piece, one arm of which serves as a rest against which the seat or lower surface of the heel is pressed by the other arm being forced within the shoe and against the last therein, in cases where lasts are used, and suitable clamping devices to hold the parts in desired relative position; and it is found in practice that when under the pressure of the burnisher or shaper either the last is apt to shortly become damaged by constant wear, or, if the pressure of the clamping-arm is reduced to avoid this difficulty, the boot or shoe is apt to be forced from the jack and by falling to sustain damages to the edges of the heel and sole. Furthermore, it has heretofore been necessary in this above-referred-to class of jacks to remove the boot or shoe and put it upon a pin, for the purpose of running the seat-wheel upon the seat of the heel, and to provide more or less complicated means for raising various sizes of heels to the burnisher or shaper.

The object of my invention is to provide means for holding the last and shoe or boot thereon, so that it can readily be placed in or removed from the clamp; to relieve the last from undue wear, and to securely hold the

work at various positions relative to the operating-tools. Other objects and advantages will appear in the following description of the construction and operation of my invention, and the novel features thereof will be specifically set forth in the claims.

A A' represent the two end portions of any ordinary jack which is employed for holding and presenting a boot or shoe to a shaping or burnishing tool, as usual in machines for such work, one of which is known in the trade as the "Tapley machine," but to any other of which class of machines my invention is readily applicable; and I therefore do not limit myself to its use in connection with any particular machine, nor to heel-burnishing machines only; but I may employ my said invention in any machine wherein a boot or shoe is presented to operative tools during the course of its manufacture. The jack may be supported in any of the well-known ways, which, not being essential to my invention, are not shown. In the end or head A of the jack is a shaft, bar, or spindle, B, which is capable of movement toward and from the end A', and which, by means of a securing device, as a cam-lever, C, may be secured at desired positions. The cam of lever C projects through a slot in the head A and bears against the spindle and snugly binds it in the head, as usual in ordinary securing devices of this class. The lever is supported pivotally by a bolt, c, passing therethrough and through lugs c' formed on the head C, as clearly shown. In the end or head A', having the usual offset or shoulder, a, I fit a plate, a', of metal, wood, or other suitable substance, against which the seat or bottom of a heel may rest when it is desired to rotate or turn the shoe while the heel thereof is being shaped or burnished. The inner end of the spindle B is reduced in size and screw-threaded, as shown by dotted lines, Fig. 2, for the reception of the last-holding devices, in which is the principal novelty of my invention, when said devices are constructed separate from and to be attached to ordinary spindles, or other means than a screw-thread may be employed for connecting said devices with a spindle, as such means may suggest themselves to persons skilled in the construction of machinery of

this class; or said devices may be formed, in part, as a part of the spindle, as in Fig. 1.

D represents the stock or shank of my last-holding device; and in this instance it is bored and screw-threaded to fit the spindle B, and at the opposite end is provided with gibs or guiding-flanges *dd*, and is otherwise constructed to receive a T-block, E, having lugs *e* for the reception of a vertical pivot, F.

G represents the last-pin, the head *g* of which, at one corner thereof, is beveled, as at *g'*, so as to permit the pin to be swung in one direction on the pivot F, whereby the pin is thrown out of line with the spindle B, the remainder of the head *g* being flat and extended back of the pivot, so that when the pin is in line with the spindle said head bears against the surface of the block E between the lugs *e e*, (see dotted line, Fig. 2,) thereby making the parts rigid longitudinally.

H represents the last, and is or may be provided with a hole, as shown, for the reception of the pin G, whereby the shoe or boot I may be supported when the heel *i* is being shaped or burnished. A pin, *e'*, or any other suitable stop is so located as to prevent the complete passage of the T-block downward through the guides *d d*.

The operation of my invention is as follows:

A boot or shoe upon a last being placed upon the pin when turned out of line with the spindle, as shown in Fig. 2, is, with the pin, turned in line with the spindle, and the latter being previously adjusted lengthwise in the head A for lasts and shoes of a desired size, such shoe is, in the manner described, properly presented for the action of the shaping or burnishing tool, and may be swung or turned in a vertical plane to expose the heel fully to the tool, and by the vertical support of the head *g* of the screw, by the lugs *e*, and by its longitudinal support in the direction of the spindle, as described, the entire strain and pressure of the

tools against the heel is taken and sustained by the pin, which, on account of the position and length of its bearing upon and within the last, secures a firm, positive holding of the same and the shoe, without the use of auxiliary clamps or wear of the last. Furthermore, by providing vertical movement of the pin and T-block, the shoe and last are readily adjusted for operation, notwithstanding any reasonable variance in its size from a preceding shoe, so that, within due bounds, the last-holding devices are adapted to various sizes of work.

I consider the results of my invention, or their production by equivalent means to those herein shown, or any merely skillful modification of the same, within the scope of my invention.

Having described my invention and its operation, what I claim as new is—

1. In machinery of the class described, a last-pin pivoted for lateral swinging, adapted for vertical adjustment and removal, and arranged to abut against the spindle when in line therewith, substantially as specified.

2. In machinery of the class described, a spindle provided with gibs or ways having a bottom stop, a T-block adapted to move vertically therein, and a last-pin pivoted in the T-block, substantially as specified.

3. The combination of the pin G, having head *g g'*, with the vertically-adjustable block E, having lugs *e e*, and the pivot F, substantially as shown and described.

4. The combination of the stock D, having the guides *d d*, the block E, pivot F, and pin G, having the head *g* and beveled portion *g'*, substantially as shown and described.

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

SILAS A. LENTZ.

Witnesses:

JACOB D. BURGER,
EDWARD H. RENINGER.