2 Sheets—Sheet 1.

J. W. ROGERS.

SHOE-PRESS BEDS.

No. 194,265. Patented Aug. 14, 1877.

Fig 1.

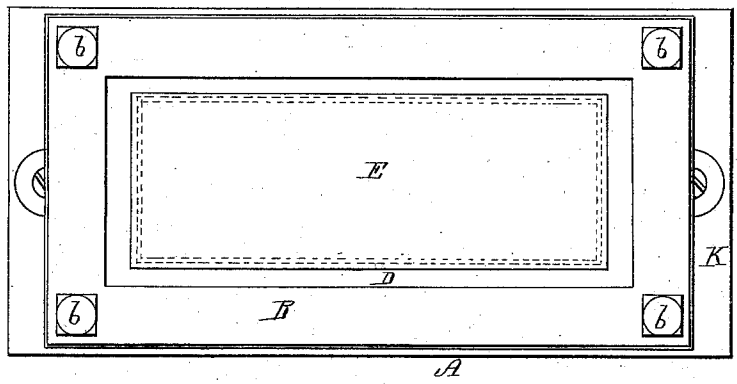


Fig 2.

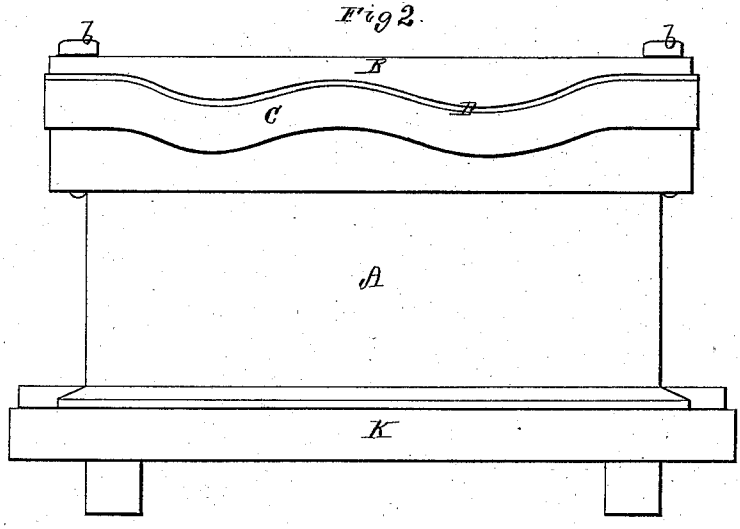
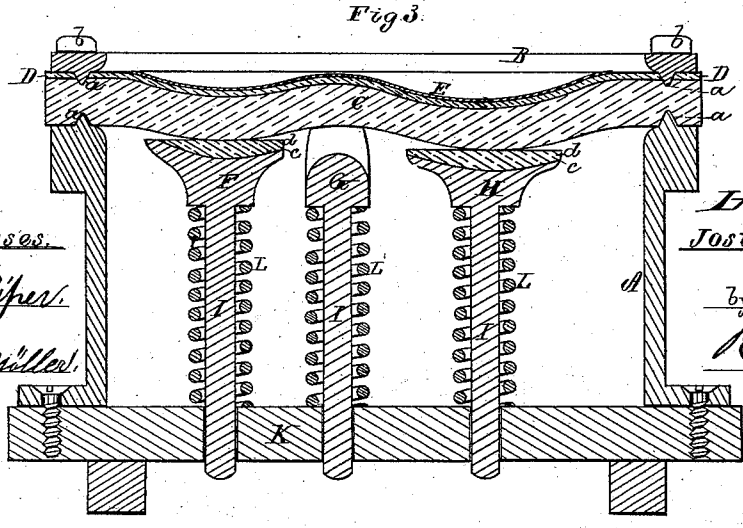


Fig 3.



Witnesses.
S. W. Piper.
L. W. Müller.

Inventor
Josiah W. Rogers
by his attorney
R. H. Eddy

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

2 Sheets—Sheet 2.

J. W. ROGERS.

SHOE-PRESS BEDS.

No. 194,265. Patented Aug. 14, 1877.

Fig 4.

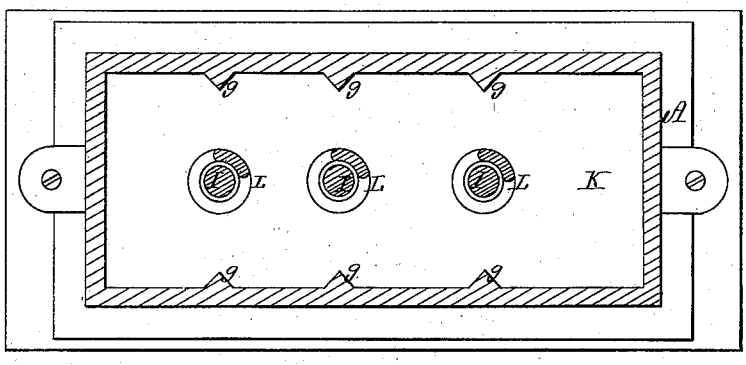


Fig 5.

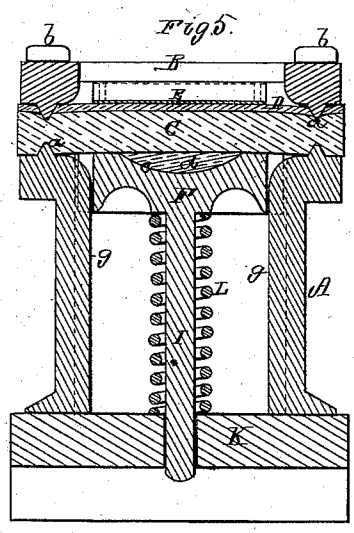


Fig 6.

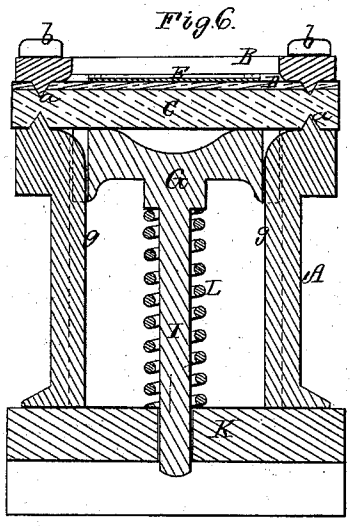


Fig 7.

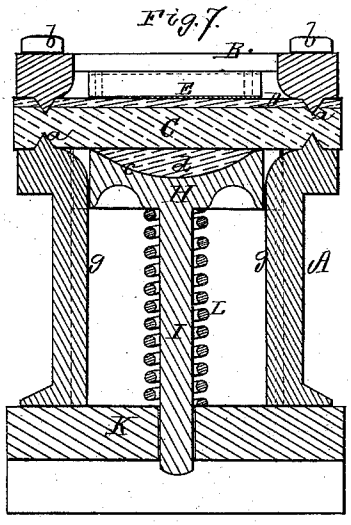
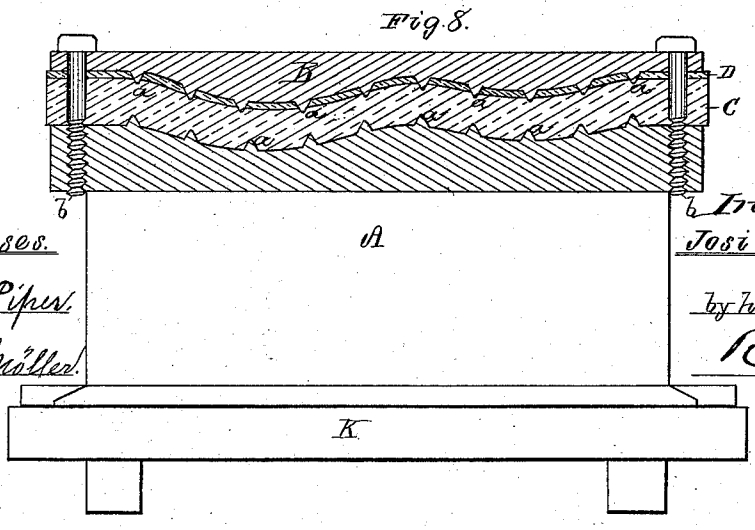


Fig 8.



Witnesses.

S. W. Piper.

L. A. Müller.

Inventor

Josiah W. Rogers

by his Attorney

R. H. Eddy

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JOSIAH W. ROGERS, OF SALEM, MASSACHUSETTS, ASSIGNOR TO HIMSELF AND FREEMAN WINSLOW, OF SAME PLACE.

IMPROVEMENT IN SHOE-PRESS BEDS.

Specification forming part of Letters Patent No. **194,265**, dated August 14, 1877; application filed April 24, 1877.

To all whom it may concern:

Be it known that I, JOSIAH W. ROGERS, of Salem, of the county of Essex and State of Massachusetts, have invented a new and useful Improvement in Shoe-Press Beds; and do hereby declare the same to be described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a top view, Fig. 2 a side elevation, Fig. 3 a longitudinal section, Fig. 4 a horizontal section, and Figs. 5, 6, and 7, transverse sections, of a shoe-press bed embracing my invention.

It is for use in cementing an outer sole to the inner sole and upper of a shoe, and is to accomplish such very much in the manner in which such is effected by the press-bed described in the United States Patent No. 149,364, dated April 7, 1874, and granted to myself and Freeman Winslow.

My invention may be said to consist as follows, viz: First, in the box and its cap-frame, provided with teeth on their next adjacent surfaces, in combination with the elastic cushion or plate arranged between each box and frame; second, in the combination of an auxiliary rubber-plate and a leather re-enforce with the elastic cushion of the bed-press; third, in the combination of two cushioned slides and an intermediate concave slide and their supporting-springs with the press-box and its elastic cushion or plate, all being substantially as represented.

In the drawings, A denotes a hollow box or frame of metal, curved on its two larger upper edges in manner as represented, and having over it a rectangular frame, B, which is counter-curved on two longer lower edges. The next adjacent surfaces of these frames are furnished with teeth *a a a*, which extend from them in manner as shown in section in Fig. 8, such teeth being to enter and hold firmly a thick plate, C, of india-rubber, covering the box A, and interposed between it and the rectangular frame B, which is secured to the box by screws *b b b b*, arranged as shown. A thin elastic plate or stratum, D, of india-rubber, is laid on and covers the entire plate C, and has sewed to it on its upper surface a cap or covering, E, of leather. The auxiliary plate D and its re-enforce or leather covering E are to protect the plate C from wear, and they render it unnecessary to change such plate C for another, which becomes requisite when it is without any such movable re-enforcement, and may become worn by use. Within the box A are three slides, F G H, formed as shown, each being applied to the box so as to move vertically therein and on suitable guides *g g*. A round rod or shank, I, extends down from each slide through the base-plate K, on which the box rests. Furthermore, each rod is encompassed by one of three strong helical springs, L L L, which rest on the plate K and sustain the slides F G H. Each of the outer slides F and H has a concavity, *c*, to receive a cushion or mass, *d*, of india-rubber, arranged in it, as shown, the middle or shank slide G being concave lengthwise and convex widthwise on its upper surface, and without any such cushion. The said slide G, by its action on the elastic plate C, causes it to readily and properly adapt itself to the outer sole and the latter to the shank of the shoe while such shoe may be in the act of being pressed down upon the press-bed for the purpose of effecting the cementing of the outer sole to the inner sole and upper.

With the improved shoe-press bed, as described, a lasted shoe, while being forced by a press upon a sole laid on the upper yielding surface of the press-bed, and having cement on it or on the contiguous surface of the shoe, will first have the sole pressed upward at the shank, and next force the shank toward the toe and heel, and next in opposite directions laterally from the medial line toward the opposite edges of the sole, whereby all the parts of the upper surface of the sole will be properly brought into contact with the lower surfaces of the insole and the portions of the upper which may be lapped on such insole. In the meantime the surplus cement, if any, will be gradually crowded from the middles of the soles toward the edges of the outer sole, whereby a close fit and equality of cementation of the parts to be connected will result.

I do not claim, in combination with a box or open frame and a thick plate of rubber stretched across and fixed thereto, a single bar extend-

ing lengthwise of the plate and resting on springs, all as shown in the drawings of the aforementioned patent, as I have in the place of such bar and springs three slides, as described, acting independently of each other, and thereby operating to better advantage, and being productive of new or improved results.

I claim, in the above-described improved press-bed, as follows, viz:

1. The box A and the cap-frame B, provided with teeth on their next adjacent surfaces, in combination or for use with the elastic plate C, arranged between the said box and frame, as set forth.

2. The combination of the auxiliary removable plate D and its leather re-enforce E with the elastic plate C of a shoe-sole bed-press, substantially as described.

3. The combination of the two cushioned slides F H and the intermediate concave slide G and their supporting-springs with the box A and its elastic plate C, all being to operate as described.

JOSIAH W. ROGERS.

Witnesses:
R. H. EDDY,
J. R. SNOW.