

(No Model.)

J. BAUM.

MACHINE FOR SQUARING METALLIC BOXES, FRAMES, &c.

No. 481,998.

Patented Sept. 6, 1892.

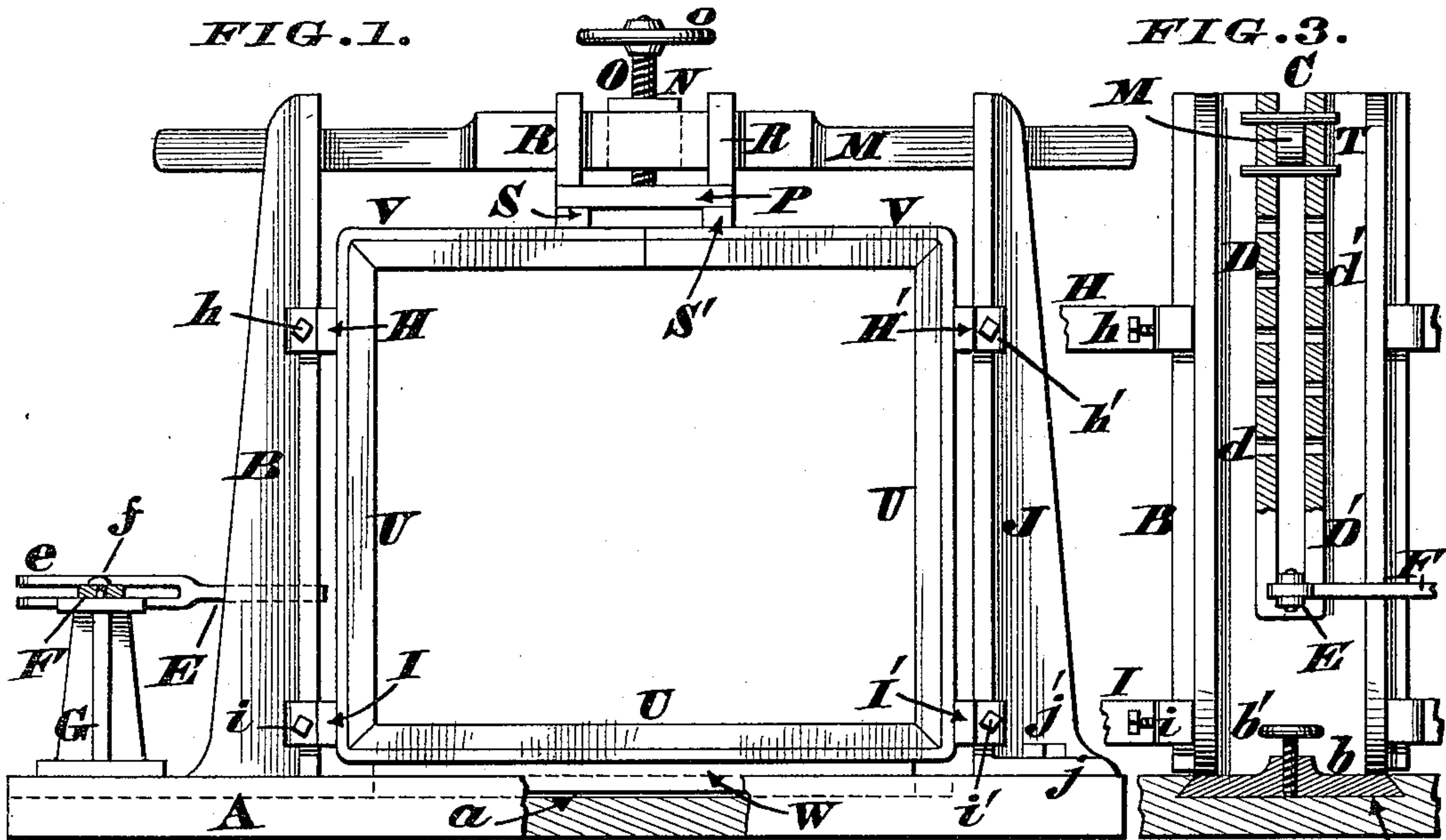


FIG. 2.

FIG. 3.

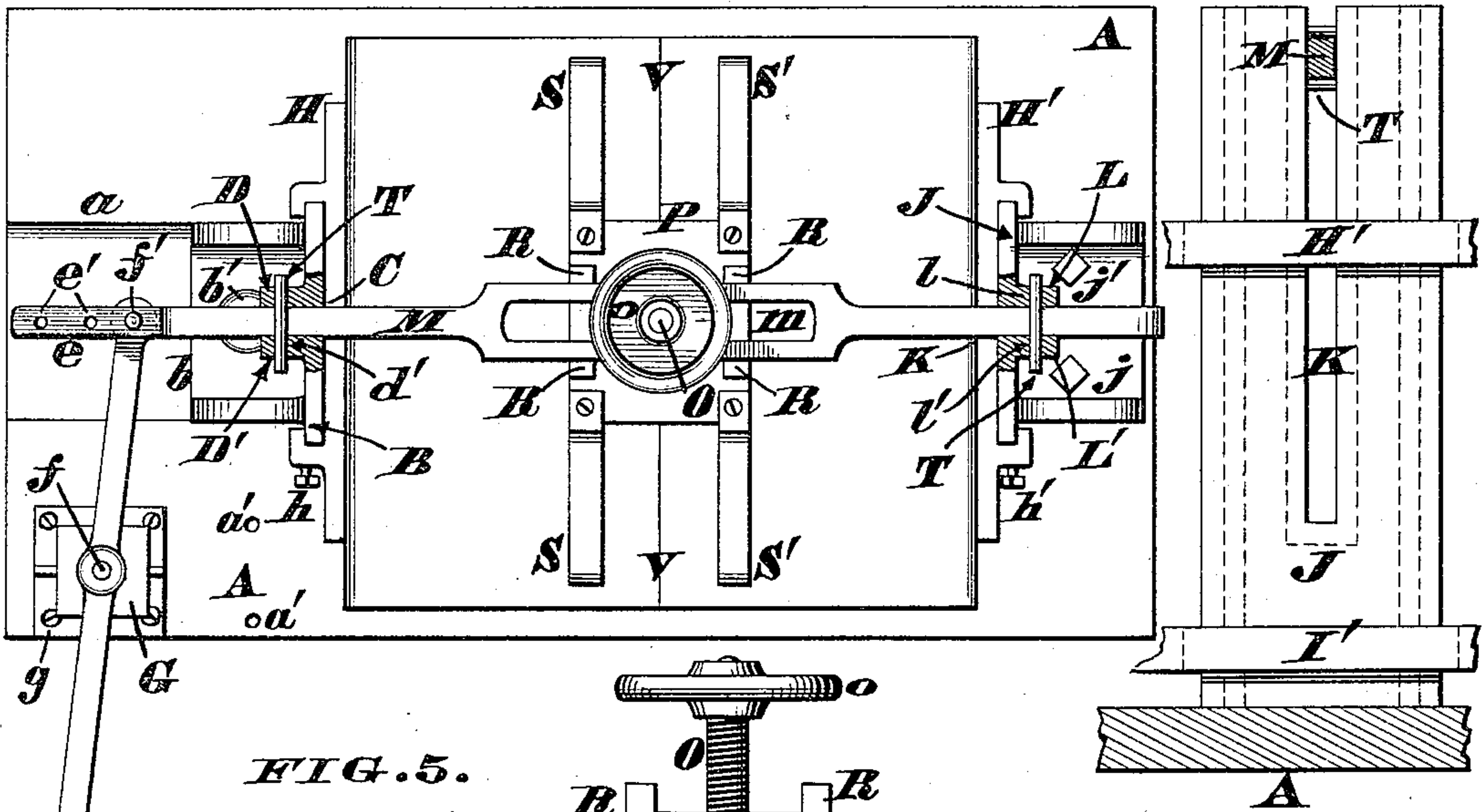
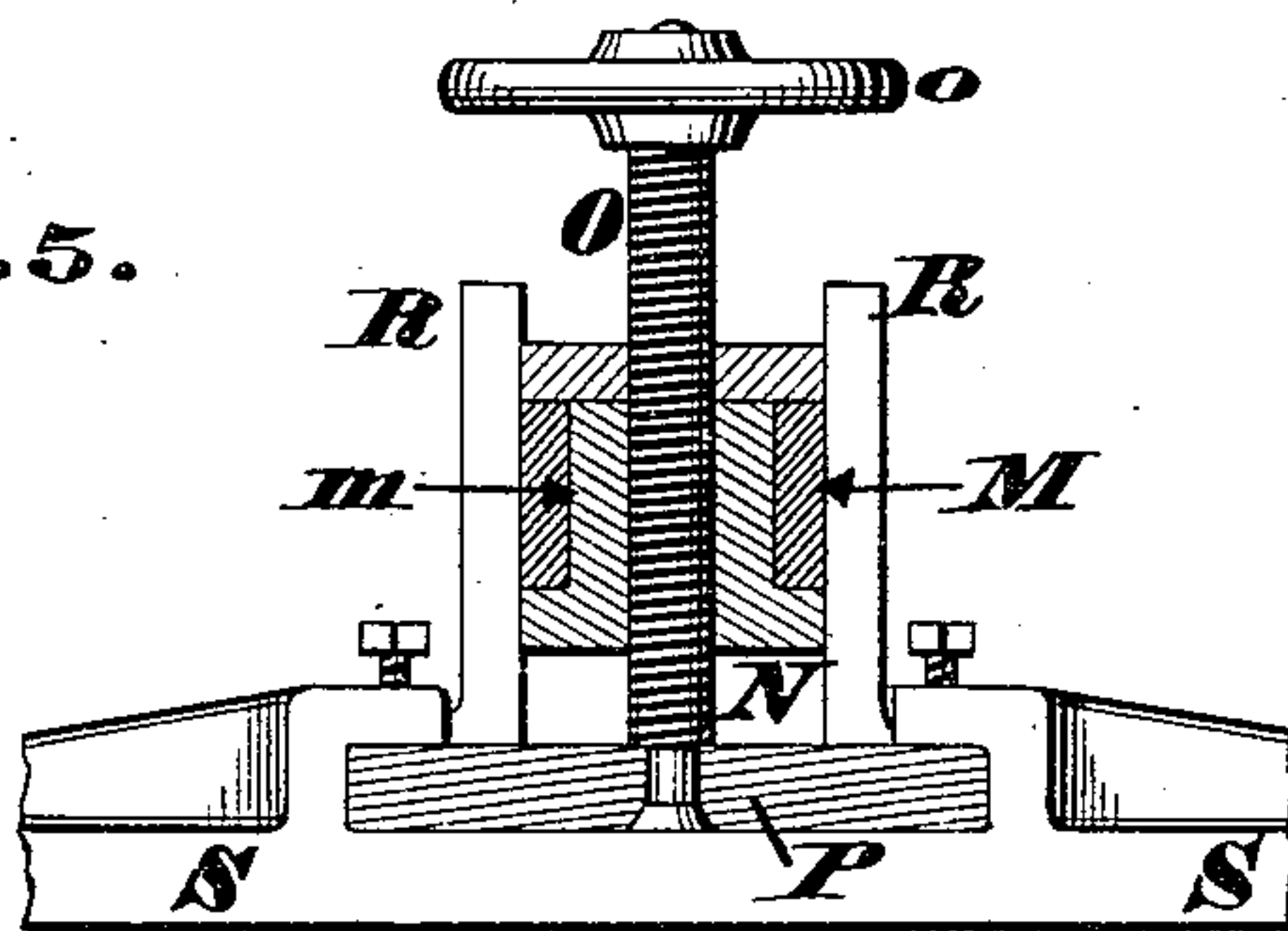


FIG. 5.

Attest.

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UNITED STATES PATENT OFFICE.

JACOB BAUM, OF CINCINNATI, OHIO, ASSIGNOR TO THE VICTOR SAFE AND LOCK COMPANY, OF SAME PLACE.

MACHINE FOR SQUARING METALLIC BOXES, FRAMES, &c.

SPECIFICATION forming part of Letters Patent No. 481,998, dated September 6, 1892.

Application filed June 4, 1892. Serial No. 435,557. (No model.)

To all whom it may concern:

Be it known that I, JACOB BAUM, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Machines for Squaring Metallic Boxes, Frames, &c.; and I do hereby declare the following to be a full, clear, and exact description of the invention, reference being had to the annexed drawings, which form part of this specification.

My invention comprises a machine which has been designed more especially for squaring the shells or casings of safes after the sheet-metal coverings of the same have been secured to the angle-irons, although said machine is capable of shaping various other four-sided metal boxes, frames, &c.

The essential features of the machine are a heavy bed-plate or base, a fixed standard, a shiftable standard, and a vertically-adjustable bar provided with a pressing attachment, the peculiar arrangement of these devices and the method of using them being hereinafter more fully described.

In the annexed drawings, Figure 1 is a front elevation showing the shell of a safe in the act of being "squared" with my machine, the lever that operates the shiftable standard and a portion of the bed-plate being sectioned. Fig. 2 is a plan of the machine, each of the standards thereof being sectioned in the plane of the vertically-adjustable bar. Fig. 3 is an elevation of the shiftable standard and its accessories, portions of the same being sectioned to show certain details. Fig. 4 is an elevation of the fixed standard and its attachments, the vertically-adjustable bar being sectioned. Fig. 5 is an enlarged axial section of the pressing attachment applied to said adjustable bar.

The foundation of my machine is a heavy bed-plate or base A, having an undercut longitudinal groove *a* to admit the foot *b* of a shiftable standard B, which is capable of being held to any specific adjustment by means of a clamp-screw *b'*. Furthermore, this standard has a vertical slot C, flanked on each side by ribs or flanges D D', the latter being perforated at *d d'* for a purpose that will presently appear. Coupled to this standard is one end

of a link E, the other end of which is forked at *e* to admit a lever F, pivoted at *f* to a pedestal G, said pedestal being securely bolted upon the bed-plate A, and capable of adjustment by the bolts *g* and holes *a'*. This forked end of link E is provided with a series of perforations *e'*, as seen in Fig. 2, to admit a pin *f'*, wherewith the lever F is coupled to said link.

H and I are bearers capable of vertical adjustment on the standard B, to which they are secured by set-screws *h i*.

J is the fixed standard, the foot *j* of which is secured to base A by bolts *j'*. K is a vertical slot in said standard, and L L' are ribs or flanges on the opposite sides of said slot, said ribs being pierced, as seen at *l l'* in Fig. 2. This standard carries bearers H' I', which are vertically adjustable and held in place by set-screws *h' i'*.

Adapted to move freely up and down within the slots C K of the standards is a stout bar M, whose central portion is slotted vertically at *m* to admit a nut N, traversed by a screw O, the latter being surmounted by a hand-wheel *o*, and carrying at its lower end a plate P. This plate is confined to a vertical path by four guides R, and has attached to it a pair of parallel horizontal bars S S'.

T are pins passed through the holes *d d'* *l l'* of the standards, and serving to retain the bar M at any convenient height.

U is the frame of a safe or other similar metallic structure, and V is the outer covering or shell thereof.

W is a block that may be inserted within the groove *a* for the purpose of raising the safe or other box or frame a slight distance above the bed-plate A, and to prevent obstructions entering the groove *a*.

My machine is operated in the following manner: The set-screw *b'* is first unslackened, to permit a proper retraction of the standard B, in order that the safe W V may be readily placed within the machine, which safe has previously been bent to an approximately square shape. Lever F is then grasped and standard B is forcibly advanced, thereby causing the bearers H I H' I' to press against the sides of the safe and thus cause them to be parallel with each other and ver-

tical with reference to the base A, the standard being held in this advanced position by tightening the screw *b'*. The press attachment O P S S' is then screwed or otherwise
 5 forced down, the result being to render the top of the safe parallel with the bottom, after which act the abutting edges of the frame U and sheet V may be secured together in any suitable manner. Screw *b'* is again unslack-
 10 ened, standard B retracted, and the safe removed in a perfectly square condition. The holes *d d' l l'* enable the bar M to be adjusted either up or down according to the height of the safe, while the perforations *e'* of link E
 15 permit a sufficient shifting of standard B to make up for the different widths of such structures. Finally, although I have shown and described my machine as employed for squaring a safe, it is to be distinctly under-
 20 stood that the invention is not limited to any special use, but may be employed for imparting a correct shape to all four-sided metallic boxes or frames or other structures capable of being bent to the desired form.

25 I claim as my invention—

1. In a machine for squaring four-sided metallic boxes, frames, &c., the combination of a horizontal base, a perpendicular standard
 30 secured thereto, another perpendicular standard capable of being shifted on said base, a vertically-adjustable bar carried by said

standards, and a pressing attachment applied to said bar and adapted to be forced toward said base, substantially as described.

2. In a machine for squaring four-sided metallic boxes, frames, &c., the combination of a horizontal base, a perpendicular standard secured thereto, another perpendicular standard capable of being shifted on said base, a vertically-adjustable bar secured in longitudinal slots of said standards, and a pressing attachment applied to said bar and adapted to be forced toward said base, substantially as described.

3. In a machine for squaring four-sided metallic boxes, frames, &c., the combination of the grooved base A *a*, the shiftable standard B, having a vertical slot C, perforated ribs D *d D' d'*, and bearers H I, the fixed standard J, having a vertical slot K, perforated ribs L *l L' l'*, and bearers H' I', and the vertically-adjustable bar M, secured within said slots C K and provided with a nut N, screw O, plate P, and a pair of bars S S', for the purpose described.

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

JACOB BAUM.

Witnesses:

JAMES H. LAYMAN,
 RANKIN D. JONES.