

No. 711,490.

Patented Oct. 21, 1902.

W. GIENOW.  
BOOK EDGE GILDING PRESS.

(Application filed July 23, 1902.)

(No Model.)

3 Sheets—Sheet 1.

FIG. 1.

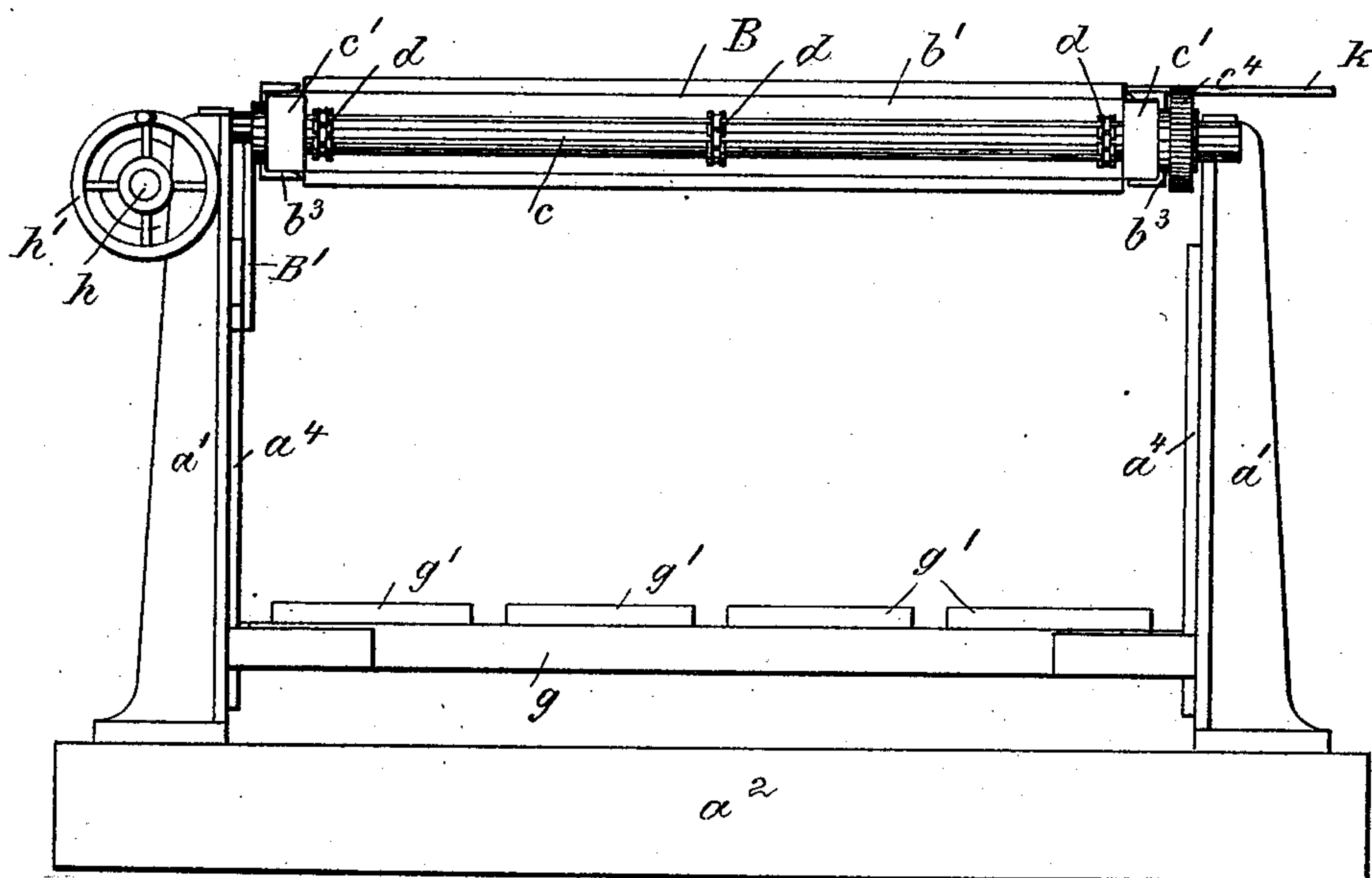
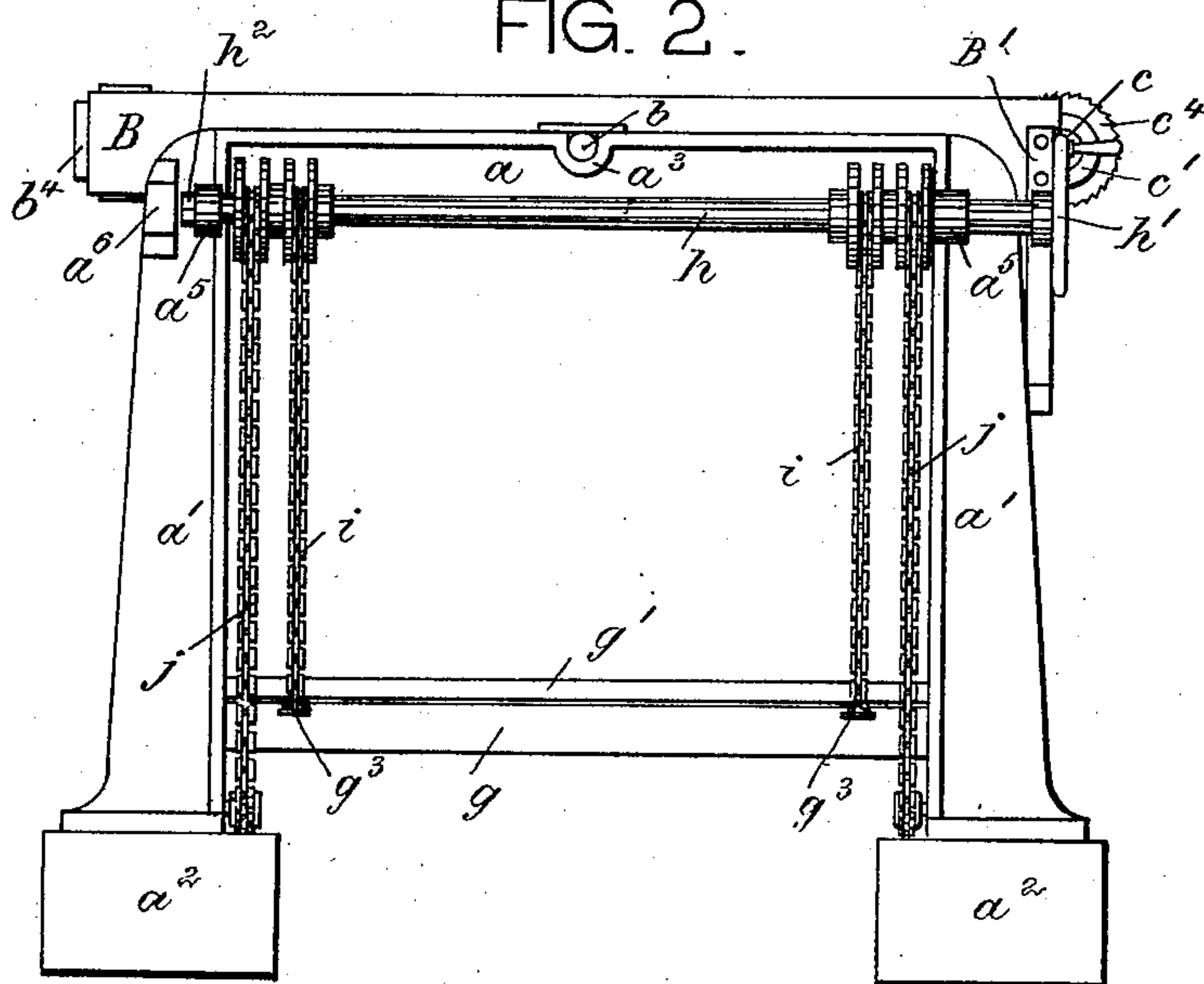


FIG. 2.



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3 Sheets—Sheet 3.

FIG. 8.

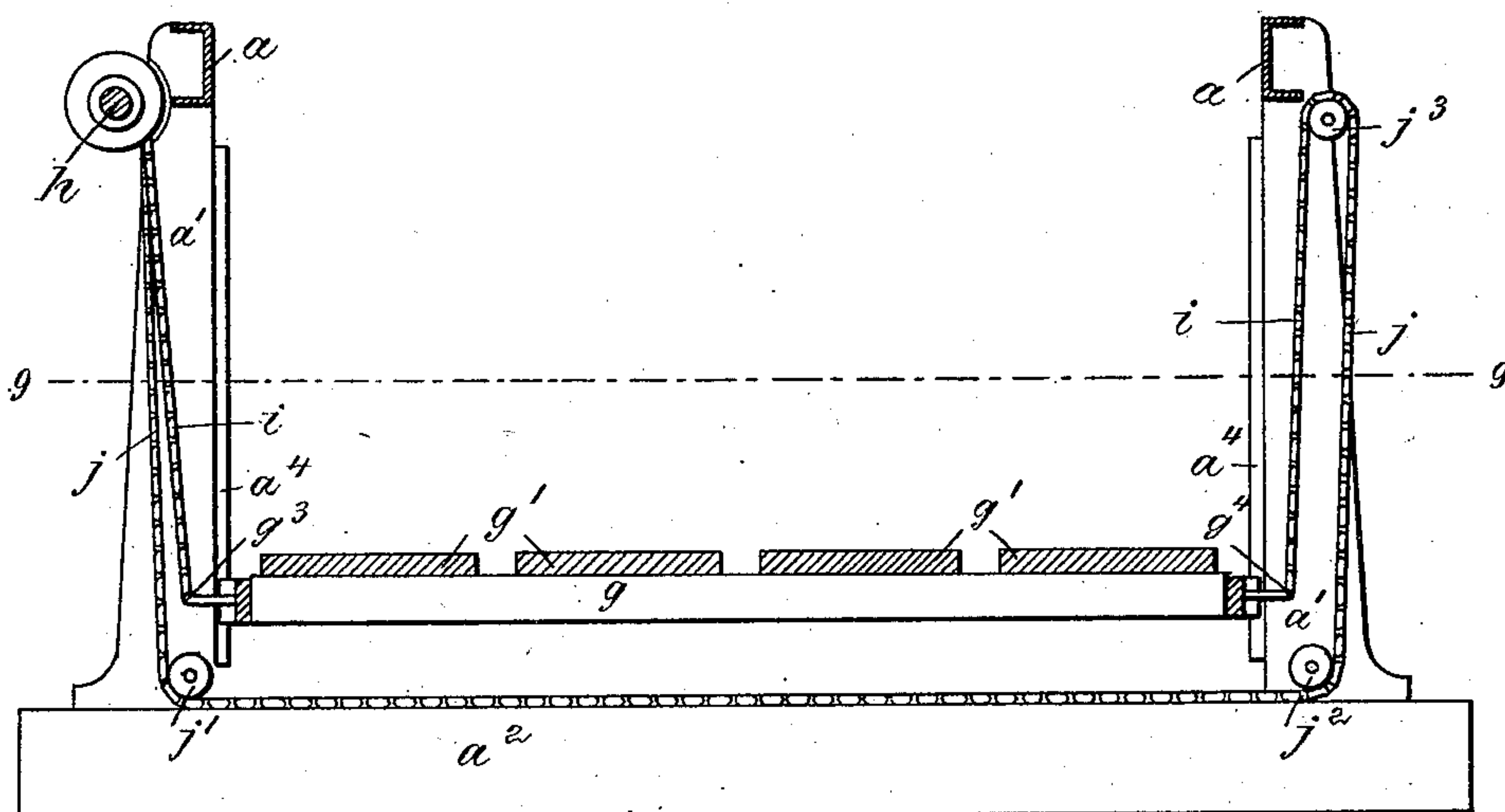
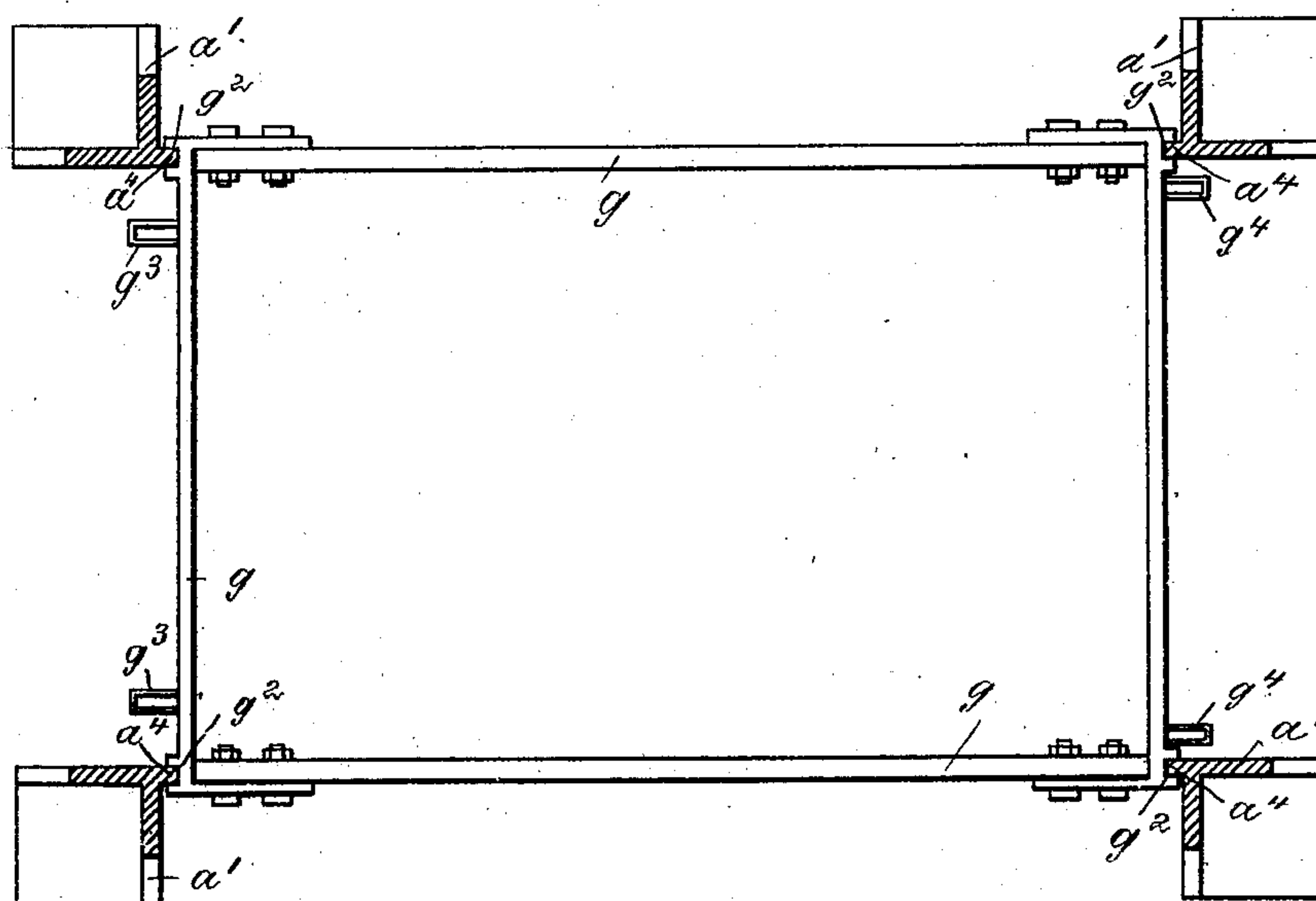


FIG. 9.



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# UNITED STATES PATENT OFFICE.

WILLIAM GIENOW, OF NEW YORK, N. Y.

## BOOK-EDGE-GILDING PRESS.

SPECIFICATION forming part of Letters Patent No. 711,490, dated October 21, 1902.

Application filed July 23, 1902. Serial No. 116,638. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM GIENOW, a citizen of the United States, and a resident of New York city, (Bronx,) county and State of New York, have invented certain new and useful Improvements in Book-Edge-Gilding Presses, of which the following is a specification.

This invention relates to a book-edge-gilding press which is provided with a swinging book-holding frame that permits both edges of the book to be successively exposed and gilded without opening the press. In this way time and labor is saved and the manipulation of the work is greatly simplified.

The invention consists in the various features of construction pointed out in the claims.

In the accompanying drawings, Figure 1 is a front elevation of my improved press; Fig. 2, a side elevation thereof; Fig. 3, a plan; Fig. 4, a cross-section of the clamping-frame on line 4 4, Fig. 3; Fig. 5, a similar section with the books in position; Fig. 6, a detail of one of the double concave blocks; Fig. 7, a section on line 7 7, Fig. 3; Fig. 8, a section of the frame and platform on line 8 8, Fig. 3; and Fig. 9, a horizontal section on line 9 9, Fig. 8, with the boards removed.

The frame of the press consists, essentially, of two parallel beams or supports  $a$ , having legs  $a'$ , which are mounted upon the base-plates  $a^2$ . The beams  $a$  constitute at their center the bearings  $a^3$  for the trunnions  $b$  of a bottomless swinging frame B, which constitutes the clamp of the press and may be locked in its horizontal or slightly-inclined position by a catch  $B'$ . This frame is composed of a fixed jaw  $b'$ , an opposing movable jaw  $b^2$ , a pair of guide-rails  $b^3$ , and a connecting-piece  $b^4$ . The fixed jaw  $b'$  and the connecting-piece  $b^4$  are firmly attached to opposite ends of the guide-rails  $b^3$ , while the movable jaw  $b^2$  is guided along said rails. In order to draw the movable jaw toward the fixed jaw, and thus clamp the work to the press, I employ a shaft  $c$ , hung in bearings  $c'$  of frame B. This shaft may be rotated in suitable manner—such, for instance, as by a handle  $c^2$ , having a pawl  $c^3$ , that engages ratchet-wheel  $c^4$ , fast on shaft  $c$ , said ratchet-wheel being likewise engaged by a detent  $c^5$ , pivot-

ed to frame B. To the shaft  $c$  are secured the ends of a suitable number of chains  $d$ , that pass around pulleys  $e$  and are then connected to the fixed jaw  $b'$ , Fig. 4. The pulleys  $e$  are hung in the forked ends  $e'$  of screw-rods  $e^2$ , which are secured to the movable jaw  $b^2$  by nuts  $e^3$ . It will be seen that by rotating the shaft  $c$  by handle  $c^2$  the jaw  $b^2$  is drawn toward the jaw  $b'$  to clamp the work between them. When the detent  $c^5$  is disengaged from ratchet-wheel  $c^4$ , the movable jaw will be released and will open by the pressure of the work.

I prefer to arrange the books D within the clamp B in sets, Fig. 5, and interpose between each set a double-concave block  $f$ , by means of which the pressure of the clamp is transmitted to the edges of the books only, while the centers of the books remain free. In this way I obtain an increased compression at the edges by a reduced amount of power.

In order to support the books while they are being secured to and removed from frame B, I employ a platform  $g$ , which is vertically movable beneath said frame. This platform, Figs. 8 and 9, is preferably open and covered by loose boards  $g'$ , which may be tilted to remove accumulated sediments. The frame  $g$  is guided along the uprights  $a'$  by grooves  $g^2$  and flanges  $a^4$ , so as to obtain proper rectilinear movement. It may be raised and lowered in suitable manner—such, for instance, as by a shaft  $h$ , rotatable by hand-wheel  $h'$  and hung in bearings  $a^5$  of the press-frame. To the shaft  $h$  are connected one of the ends of four chains  $i i j j$ , the other ends of which are connected to the platform  $g$ . The chains  $i i$  extend directly from eyes  $g^3$  at one end of the platform to the shaft  $h$ , while the chains  $j j$  extend to said shaft from eyes  $g^4$  at the opposite end of the platform. The chains  $j$  pass over idlers  $j' j^2 j^3$ , pivoted to the uprights  $a'$ .

In order to lock the platform  $g$  in its elevated position, the shaft  $h$  is axially movable in its bearings  $a^5$  and provided with an angular projection  $h^2$ , adapted to be received by a corresponding angular socket of a lug  $a^6$ . When the chains are wound up and the platform is raised, the shaft is pushed backward and into engagement with said socket to lock the parts in position. To lower the platform, the shaft  $h$  is drawn forward, so that it becomes



unlocked and the platform may descend by gravity.

From the rails  $b^3$  may be suspended the detachable supports  $k$ , that carry the gold-cushion.

The operation is as follows: The frame B being in a horizontal or slightly-inclined position, the platform  $g$  is raised until the distance between the top of the boards  $g'$  and the center of the frame is equal to one-half the height of the books. The books are now arranged upon the platform between the opened jaws of the frame B, with the double-concave blocks  $f$  interposed, and then the shaft  $c$  is rotated to close the clamp, Fig. 5. The upper edges of the books are now gilded, and then the platform  $g$  is lowered, so as to permit the frame B to be turned around in its bearings  $a^3$ , and thus expose the lower edges of the books. After these lower edges have also been gilded the platform is again raised and the clamp opened, so that the released books will be supported upon the platform and may be removed from the press.

It will be seen that my press is reversible and permits both edges of the books to be successively exposed and gilded without being

unclamped. In this way the operation is greatly simplified, while time and labor are saved.

What I claim is—

1. A book-edge-gilding press composed of a support, a bottomless clamping-frame pivoted thereto, and a platform below the frame, substantially as specified.

2. A book-edge-gilding press composed of a support, a bottomless clamping-frame pivoted thereto, a movable platform beneath the frame, and means for raising and lowering said platform, substantially as specified.

3. A book-edge-gilding press composed of a support, a bottomless clamping-frame pivoted thereto, means for operating said frame, means for locking the frame, a platform beneath the frame, means for raising and lowering said platform, and means for locking the platform, substantially as specified.

Signed by me at New York city, New York, this 22d day of July, 1902.

WILLIAM GIENOW.

Witnesses:

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