

No. 662,528.

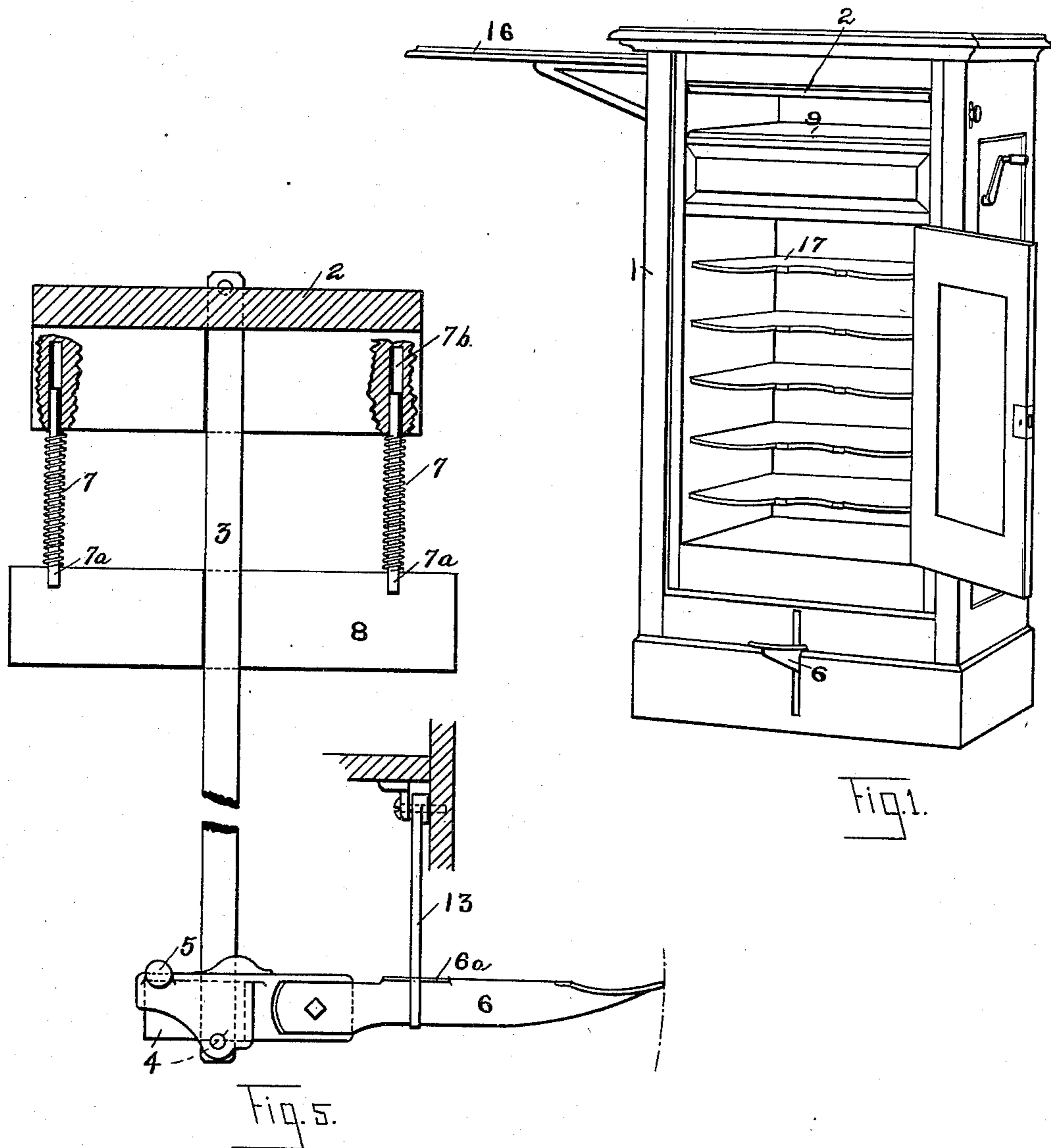
Patented Nov. 27, 1900.

E. FEIGE.
LETTER COPYING CABINET.

(Application filed June 4, 1900.)

(No Model.)

2 Sheets—Sheet 1.



WITNESSES:

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Ernest Feige INVENTOR.

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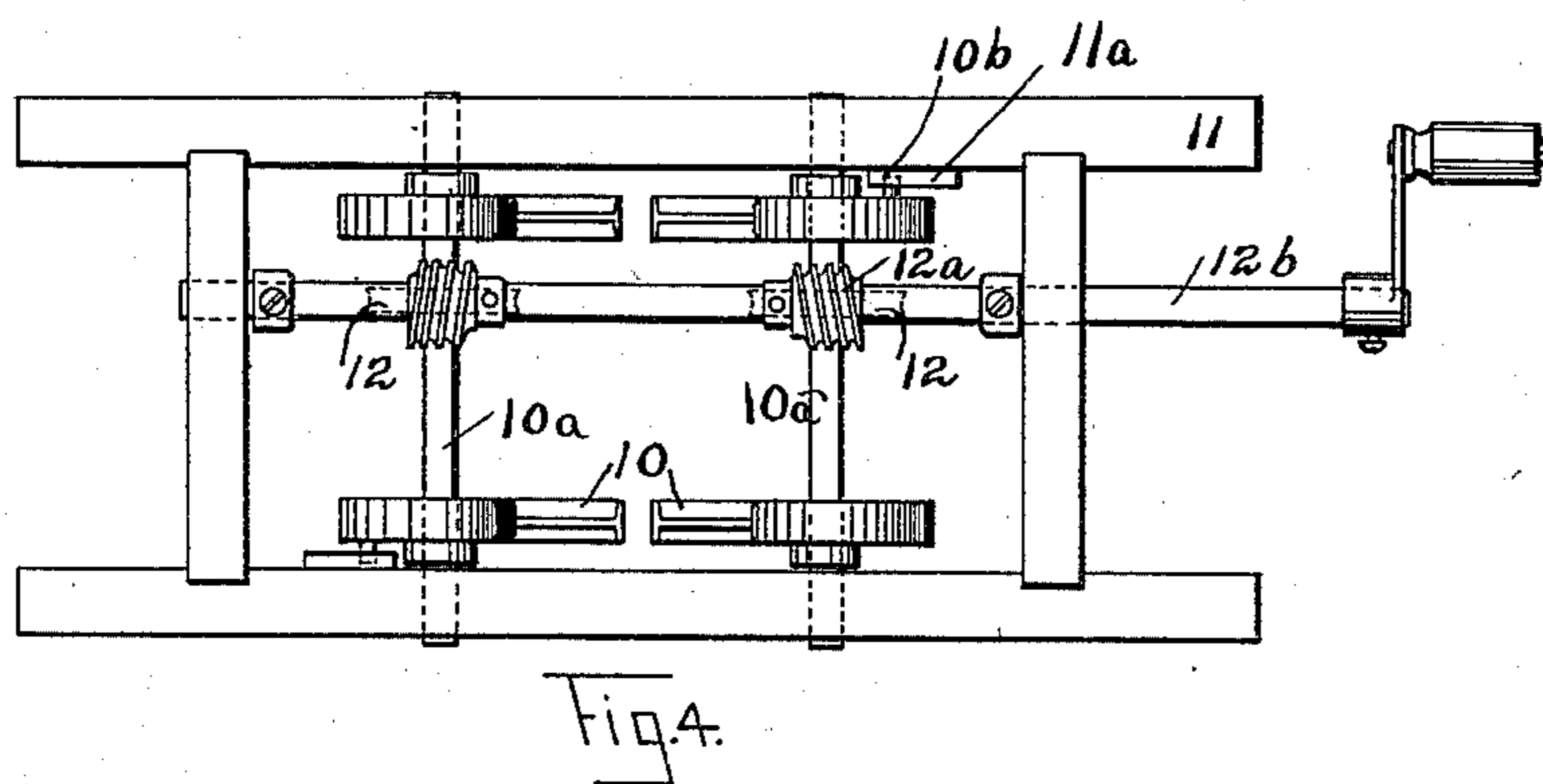
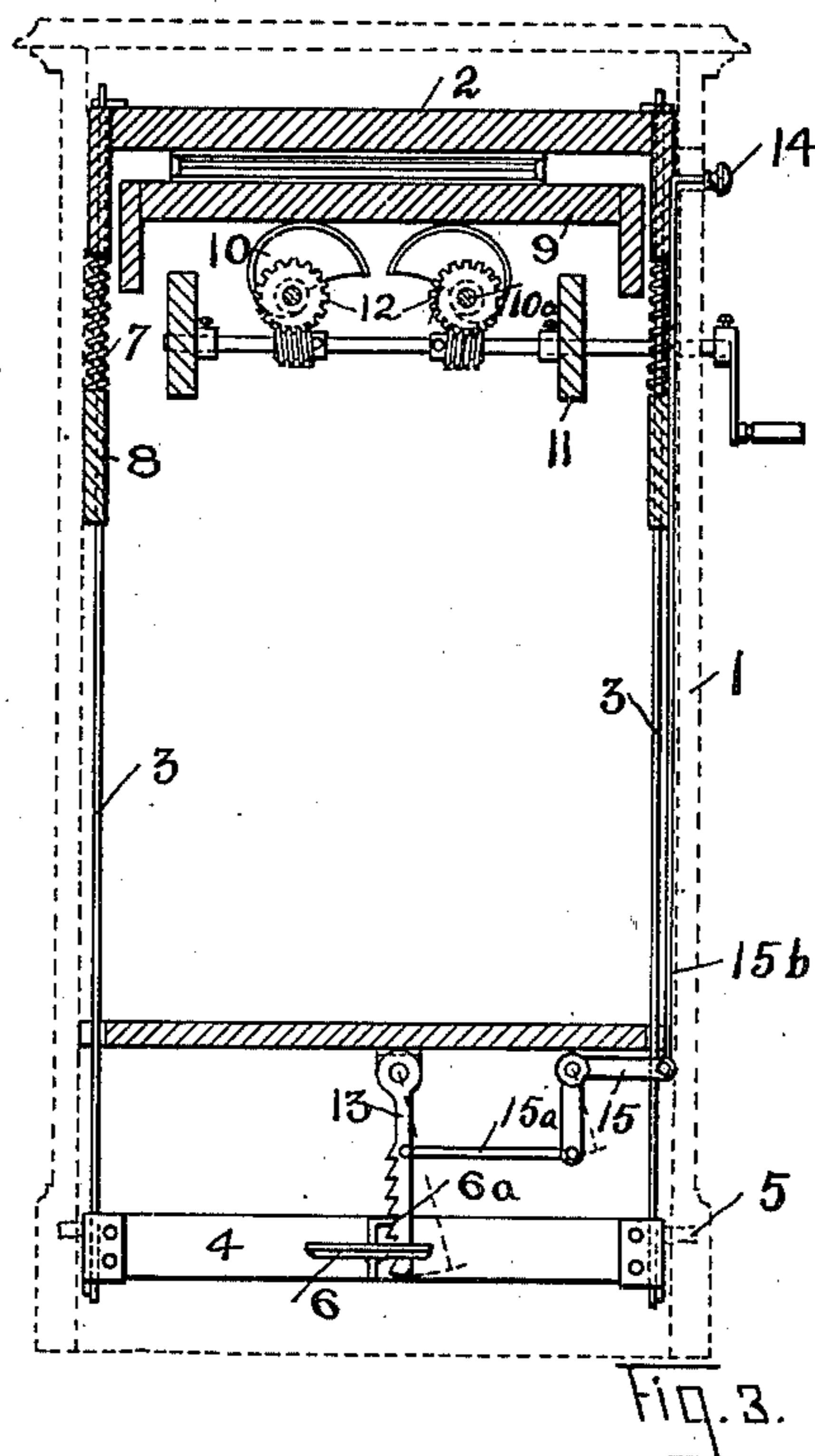
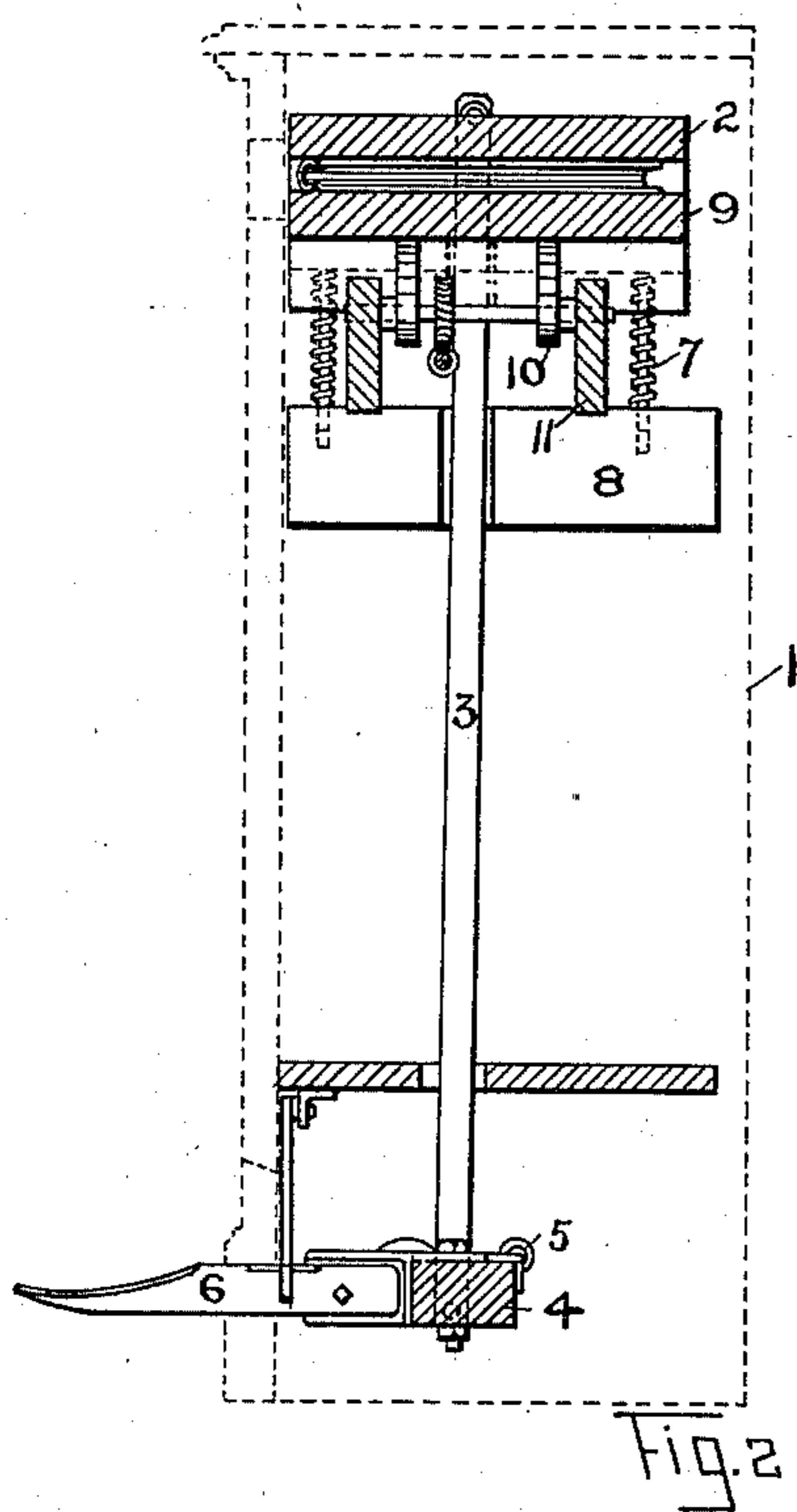
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WITNESSES:

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UNITED STATES PATENT OFFICE.

ERNEST FEIGE, OF SAGINAW, MICHIGAN.

LETTER-COPYING CABINET.

SPECIFICATION forming part of Letters Patent No. 662,528, dated November 27, 1900.

Application filed June 4, 1900. Serial No. 19,001. (No model.)

To all whom it may concern:

Be it known that I, ERNEST FEIGE, a citizen of the United States, residing at Saginaw, in the county of Saginaw and State of Michigan, have invented certain new and useful Improvements in Letter-Copying Cabinets; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention is a letter-copying cabinet; and the improvements consist in certain construction, combinations, and arrangements of parts whereby the objects of my invention are accomplished. These objects are to provide a device capable of copying letters in letter-books by applying the weight of the operator to a foot-lever, to provide means for locking and releasing the foot-lever, and also to provide means for quickly adjusting the distance between the pressure plates or platens to accommodate copy-books of various thicknesses.

A further object is to produce as an article of manufacture a letter-copying cabinet that is strong, compact, and neat in appearance, as well as rapid and efficient in operation.

I attain these objects by the means illustrated in the accompanying drawings throughout the several views, of which similar characters of reference designate corresponding parts and devices.

Figure 1 is a perspective view of a complete cabinet embodying my improvements. Fig. 2 is a vertical section showing the working parts, the section being taken parallel with the sides of the cabinet. Fig. 3 is a similar vertical section taken parallel with the front of the cabinet. Fig. 4 is a plan view showing the mechanism for adjusting the lower platen as it appears when seen from below. Fig. 5 is a detail showing the mechanism for operating the upper platen.

As is clearly shown in the drawings, the device consists in a case or cabinet 1, in the upper part of which are two horizontal pressure plates or platens between which the letter-book is pressed. The upper platen 2 is forced downward upon the book by means of tension-rods 3, pivoted to the platen at

their upper ends and extending downwardly on each side of the cabinet to within a short distance of the floor, where they are pivoted to opposite ends of a rocker-arm 4. The rocker-arm is pivotally mounted by projecting journals 5 to the walls of the cabinet, and its partial rotation imparts a vertical movement to the tension-rods 3 and the upper platen 2. A foot-lever 6, secured to the rocker-arm and having a foothold extending outside the cabinet, serves to operate the upper platen through the tension-rods 3, as is plainly indicated in Fig. 5. To return the upper platen 2 to its normal position after being depressed, coiled springs 7 are placed under it. These springs are preferably mounted on guide-rods 7^a, fixed to a brace 8. The upper ends of the guide-rods slide in holes 7^b of the upper platen 2 when the springs are compressed or released by the movement of the upper platen. While I consider the spring arrangement just described a preferable mode of supporting the upper platen, it is evident that any other equivalent means accomplishing the same result may be substituted without departing from the spirit of my invention. The pressure brought upon the copy-book by the upper platen is transmitted to the lower platen 9. This lower platen has means for vertical adjustment to suit various thicknesses of copy-books and to accommodate more than one book at a time if desired.

The means I have adopted for supporting the lower platen firmly in any position and for automatically locking it wherever it is placed is as follows: A series of cams or eccentrics 10, mounted on horizontal shafts 10^a, is arranged below the lower platen 9 and supports it. A suitable framework 11, secured to the walls of the cabinet, supports the ends of the shafts 10^a. To rotate the shafts and their attached cams uniformly and to prevent lateral movement of the platen 9, I arrange the shafts and cams as shown in Fig. 4. The two shafts 10^a carry opposing pairs of cams, which can be rotated simultaneously both inwardly or both outwardly, as desired, thereby avoiding any tendency to displace the platen horizontally. To rotate the cams, I secure worm-wheels 12 to the shafts 10^a and drive the worm-wheels by right and left hand

worms mounted on a shaft 12^b, that extends outside the cabinet and is provided with a suitable crank or wheel. Rotating the shaft 12^b thus revolves the cams simultaneously, thereby raising or lowering the platen 9, as desired, and the worm-gears automatically hold the cams locked in position.

To prevent the cams from revolving beyond their effective curve, I provide one or more of them with projecting pins or stops 10^b, that engage corresponding projections 11^a on the frame 11.

When the foot-lever 6 is depressed, it is held in place by means of a toothed or notched bar 13, that engages a projecting rib 6^a of the lever 6. To release the foot-lever when the copy is completed, I provide a movable button or other suitable device 14, that extends outside the cabinet within easy reach of the operator and connected by rods or wires to the pivoted bar 13. I have found that a bell-crank lever 15, connected by rods 15^a and 15^b to the bar 13 and button 14, serves this purpose well in practice.

Additional usefulness is imparted to the cabinet by providing shelves or partitions 17 below the platens to receive extra copy-books, copying-pads, and other articles. A shelf 16, hinged to one side of the cabinet, is convenient for arranging the copies in the book, &c.

By the means above described I produce a combination cabinet and letter-press that is simple in construction, ornamental in appearance, and very easy and rapid in operation. The construction and arrangement of parts give great strength, for the tension produced by the foot-lever is transmitted through metal bars 3 to the upper platen, and the resulting

stress acts as a downward thrust through the frame of the cabinet and has no tendency to distort the cabinet or force the joints.

What I claim is—

1. In a letter-copying cabinet having a depressible upper platen operated by a foot-lever, and a thrust-resisting lower platen: the combination with pairs of thrust-resisting cams for supporting the lower platen and adjusting its height; of a right-hand worm and gear for rotating and automatically locking one pair of said cams; a left-hand worm and gear for rotating and automatically locking the other pair of cams; and a shaft extending outside the cabinet to revolve the worms, thereby simultaneously rotating said pairs of cams in opposite directions.

2. A letter-copying cabinet comprising in combination with a lower platen and a foot-operated upper platen; rotatable thrust-resisting cams for adjusting the operative distance between said platens to suit books of various thicknesses, said cams being arranged in pairs approximately near the middle of and below said lower platen; a right-hand worm and gear for rotating and automatically locking one pair of said cams; a left-hand worm and gear for rotating the other pair of said cams; and a shaft to simultaneously rotate said pairs of cams in opposite directions, for the purposes described.

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

ERNEST FEIGE.

Witnesses:

GEO. B. WILLCOX,
WILLIAM STEPHENS.