

J. R. ROGERS.
 KEYBOARD MECHANISM FOR LINE CASTING MACHINES, &c.
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925,844.

Patented June 22, 1909.

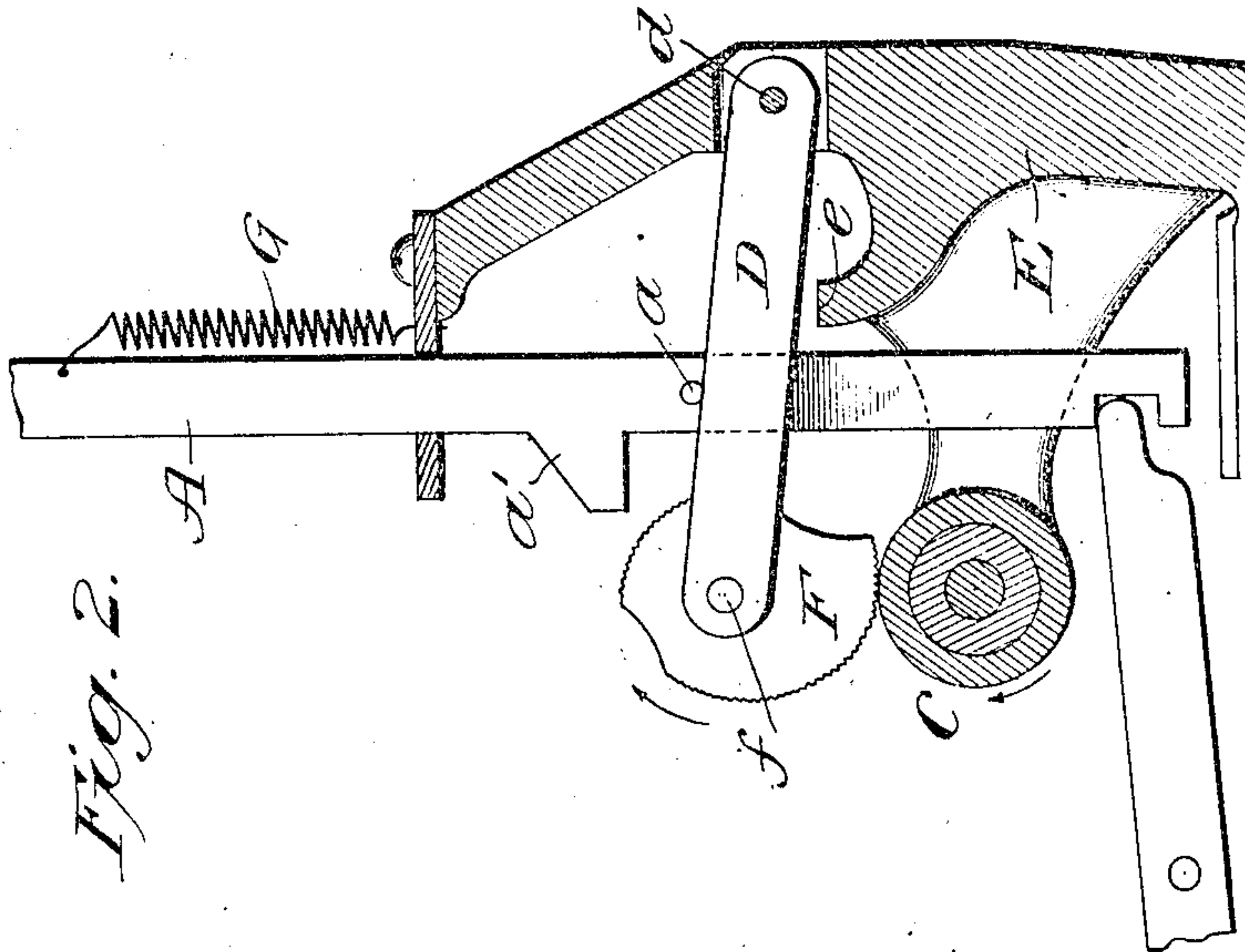


Fig. 2.

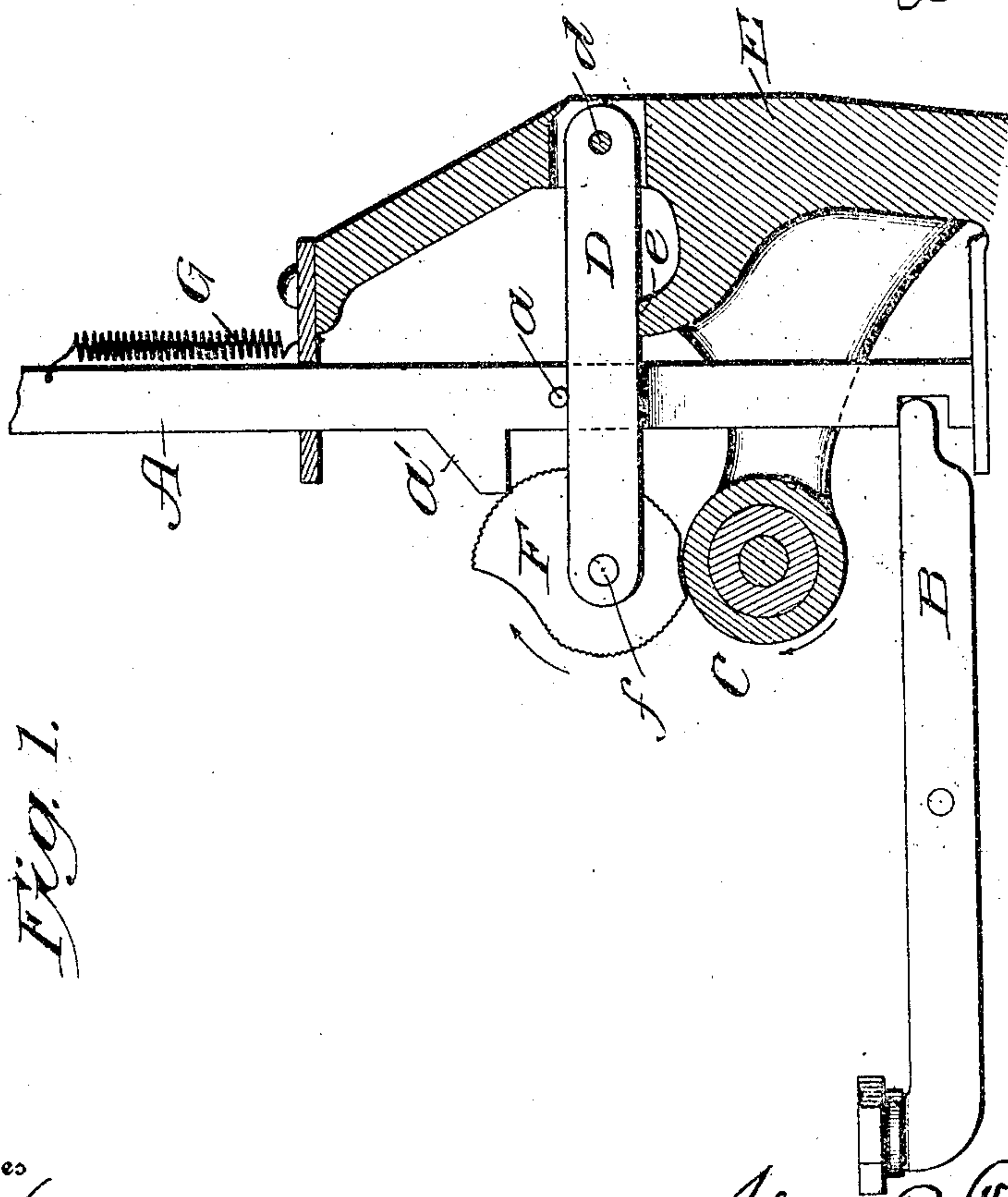


Fig. 1.

Witnesses

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KEYBOARD MECHANISM FOR LINE-CASTING MACHINES, &c.

No. 925,844.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JOHN R. ROGERS, of the borough of Brooklyn, county of Kings, and State of New York, have invented a new and useful Improvement in Keyboard Mechanisms for Line-Casting Machines, &c., of which the following is a specification.

My invention has reference to the so-called keyboard mechanisms in which power driven devices controlled by finger keys are used to actuate the escapements for releasing the matrices of line-casting machines, and for releasing type in composing machines, etc.

The object is to provide a very simple and positive mechanism for the purpose.

In the drawings; Figure 1 is a vertical section through the mechanism in accordance with my invention, the parts in the position they occupy when at rest. Fig. 2 is a similar view of the parts at an intermediate point in their operation.

Referring to the drawings, A represents a vertical rod the upper end of which will serve, directly or indirectly, to actuate the escapement.

B is a finger key pivoted at *b* to engage the rod A for the purpose of giving the same an initial elevation.

C is a horizontal, continuously rotating roll, preferably covered with rubber or similar material.

D is a yoke or bar pivoted to the main frame E at *d*, so that its opposite end may rise and fall.

F is a vertical cam or eccentric, connected by a horizontal pivot to the forward end of the bar or yoke D.

The yoke D passes by the side of, or straddles the rod A, and bears beneath the stud, *a*, thereon, so that when the yoke is lifted it will raise the bar against the resistance of a depressing spring, G, which connects the bar with the frame. The bar or reed A is provided with a shoulder, *a'*, overlying the cam F, which cam is preferably toothed in the periphery as shown.

When the parts are at rest they stand in the position shown in Fig. 1, with the shoulder *a'* resting against the outer and heavier side of the cam, so as to prevent its rotation.

At this time the yoke D rests on a solid support, *e*, on the frame, so that it is prevented from falling, and caused to sustain the cam F out of contact with the roll C. When the finger-key is actuated so as to slightly lift the bar A, the shoulder *a'* disengages from the cam F, which turns downward by gravity until it bears upon, and engages the roll C. The rotation of the roll causes a corresponding rotation of cam, which turns on a pivot, *f*. The eccentricity of the cam causes it to lift the free end of the yoke D, which in turn lifts the bar or reed A until the outermost point of the cam passes over the surface of the roll, whereupon the cam, continuing its rotation, permits the yoke and the reed to descend until they assume their original position. The rotation of the cam is arrested by the shoulder *a'*, and the descent of the cam is arrested by the shoulder *e* on the main frame, so that the cam is out of contact with the driving roll.

Having described my invention, what I claim is:

1. In combination, the vertical slide, the lever or yoke for lifting same, the cam pivoted to the yoke, the constantly rotating roll to actuate the cam, means for imparting an initial upward movement to the slide, and means controlled by the slide to arrest the rotation of the cam.

2. The combination of the vertical slide, the lifting lever D extending past the slide, the fixed pivot at one end and the rotary cam at the opposite end, the continuously driven roll beneath the cam, and a finger lever for imparting the initial upward movement to the slide.

3. In a mechanism of the class described; in combination with the continuously driven roll, a cam mounted to ride upon the roll, a vertical slide having a stop shoulder to arrest the rotation of the cam, and means through which the cam lifts the slide.

4. The combination of the lever or yoke D, having a limited vertical motion, the cam carried thereby, means to actuate the cam, and the vertical slide arranged to be lifted by the yoke and provided with means to arrest the rotation of the cam.

5 5. In combination, the vertical slide provided with a stop shoulder, the spring to depress the slide, the key lever connected to the slide, the yoke, the cam to lift the yoke, and the roll for turning the cam. . .

6. In a mechanism of the class described, the vertically movable slide, the cam and means through which the cam effects the lifting of the slide, the latter provided with

means to arrest the rotation of the cam substantially as shown.

In testimony whereof I hereunto set my hand this fifteenth day of January, 1909, in the presence of two attesting witnesses.

JOHN R. ROGERS.

Witnesses:

ROBERT G. CLARK;

LUCY E. SMITH.