

(No Model.)

2 Sheets—Sheet 1.

H. P. SMITH.
Hand Stamp.

No. 237,620.

Patented Feb. 8, 1881.

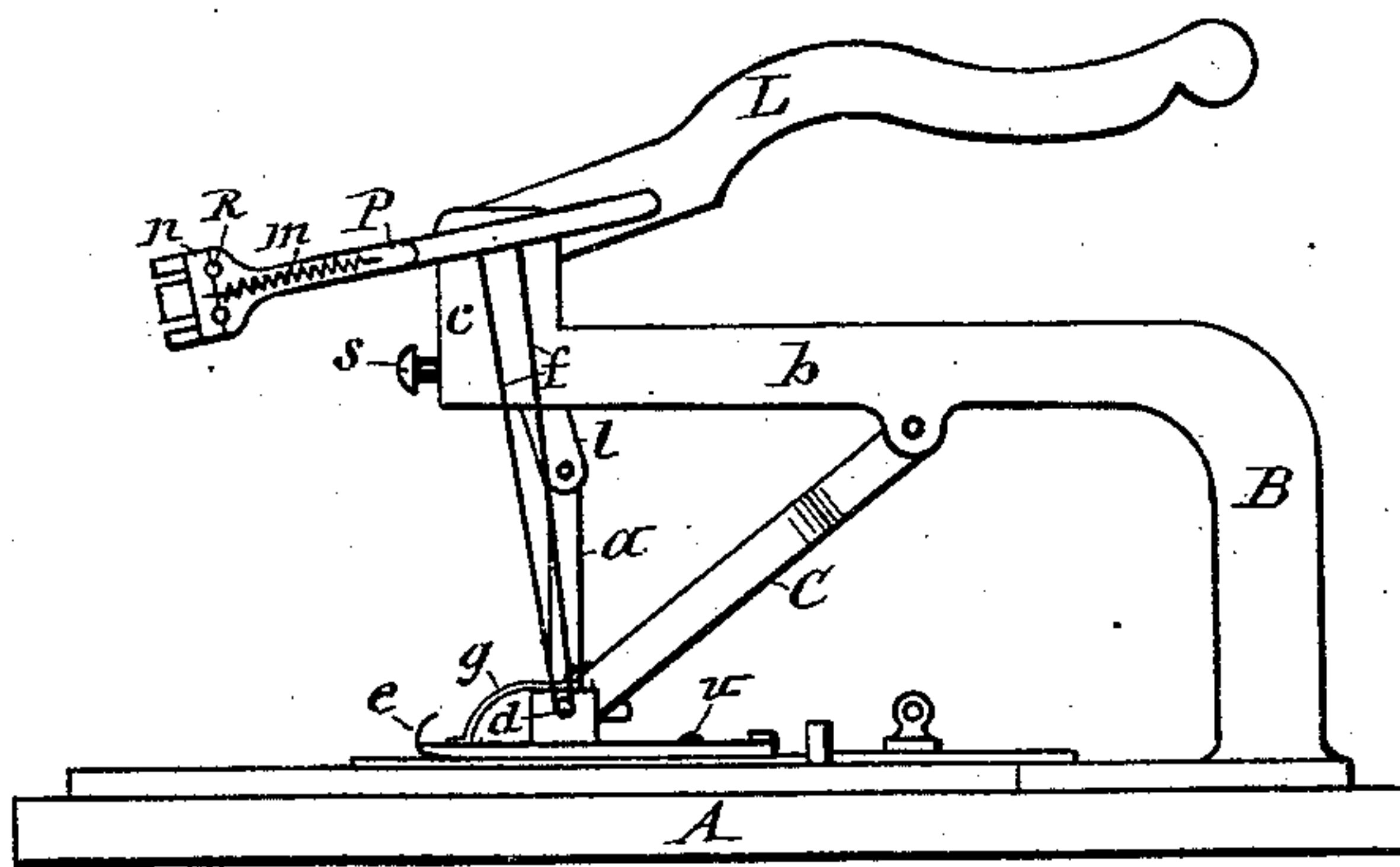


Fig. 1

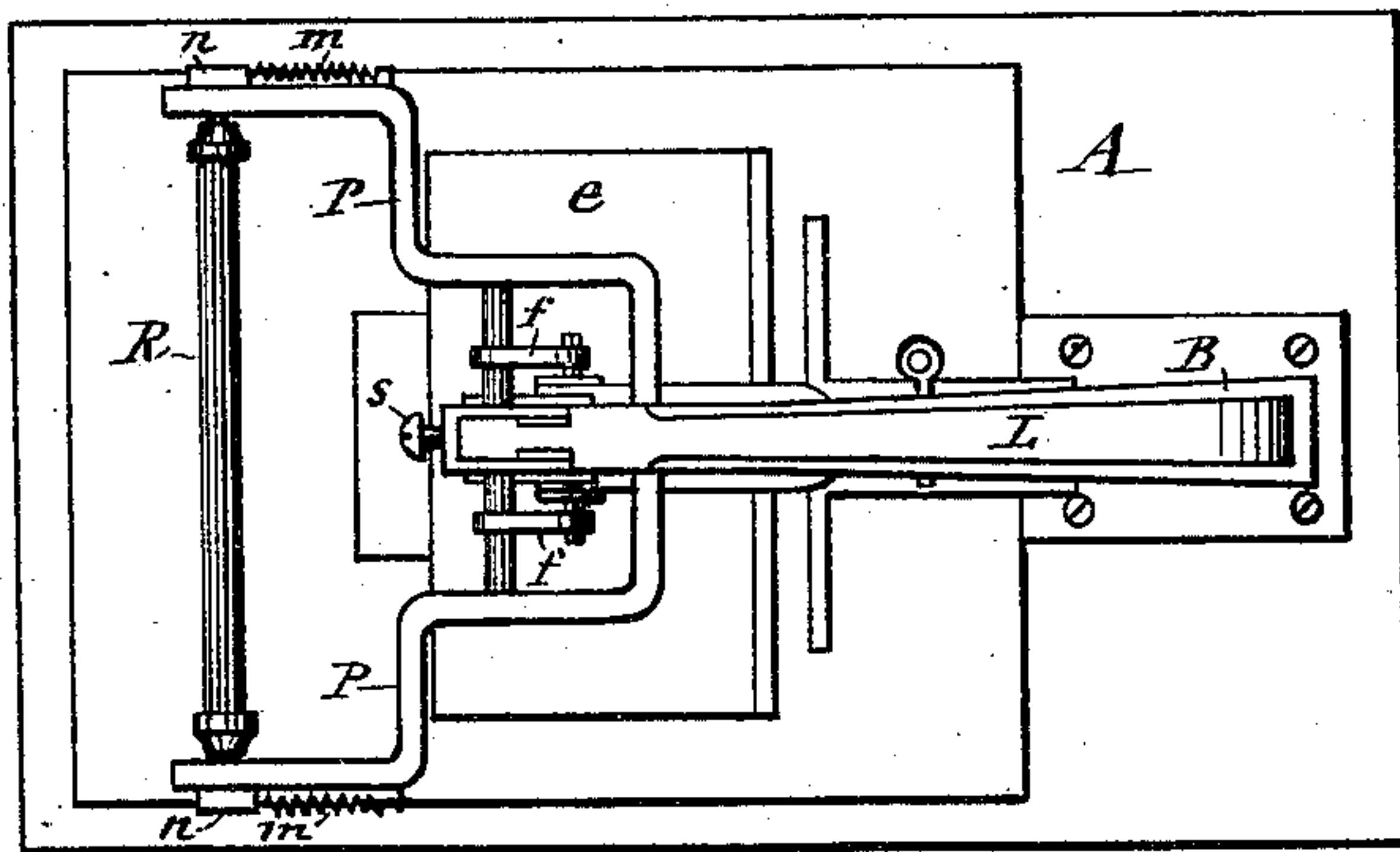


Fig. 2

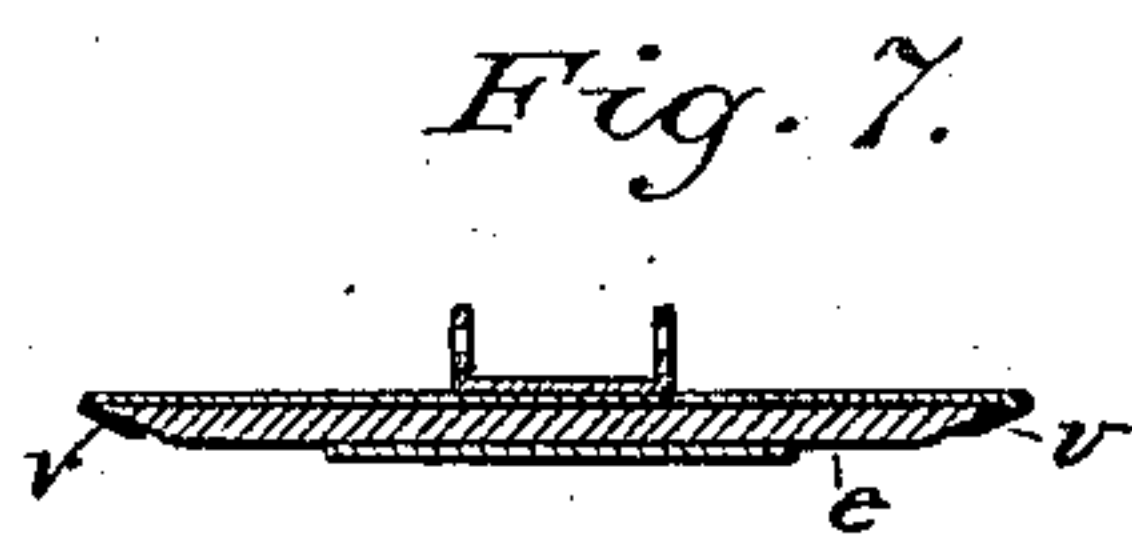


Fig. 7.

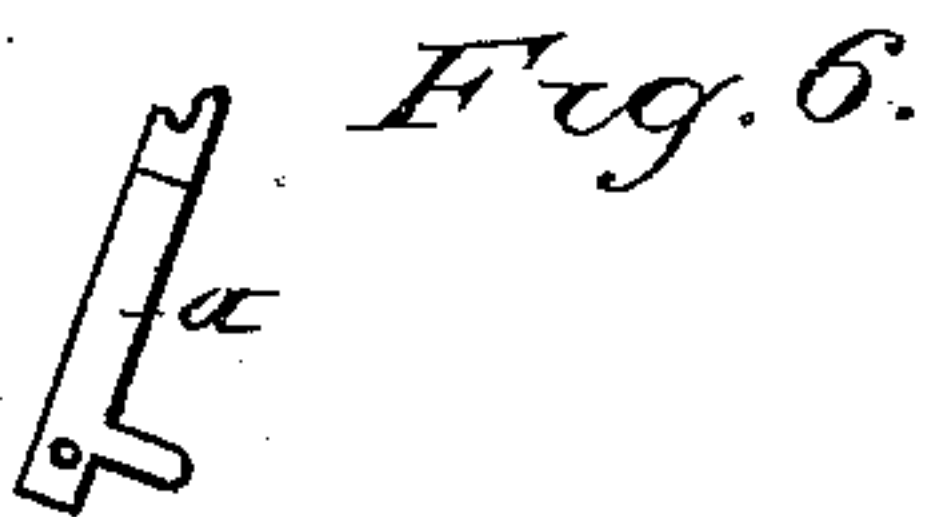


Fig. 6.



Fig. 8.

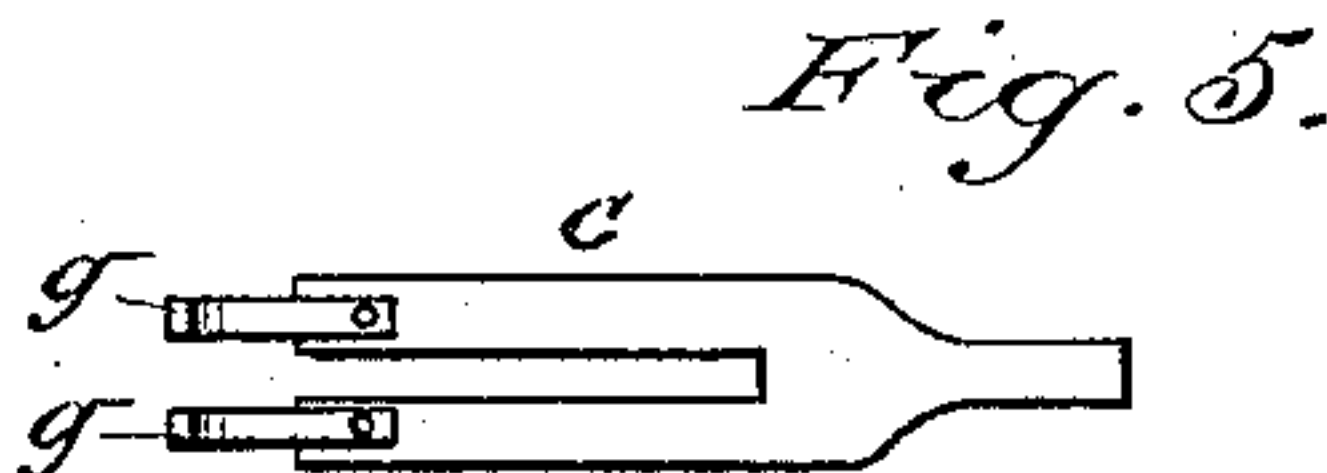


Fig. 5.

WITNESSES

W. Bendixon
Wm. L. Raymond

INVENTOR:

Henry P. Smith
per Wm. L. Raymond & Co.
attys

(No Model.)

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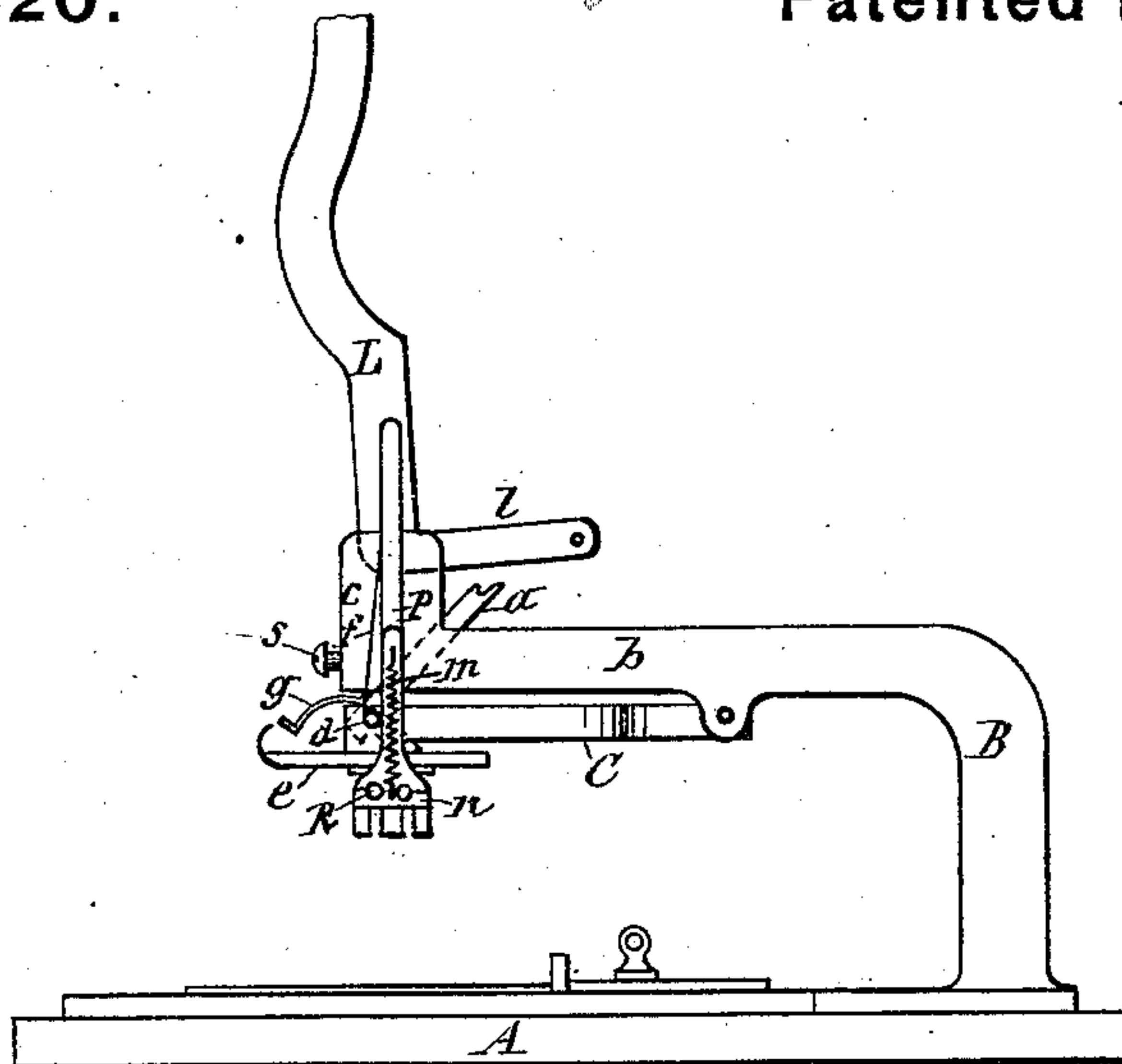


Fig. 3

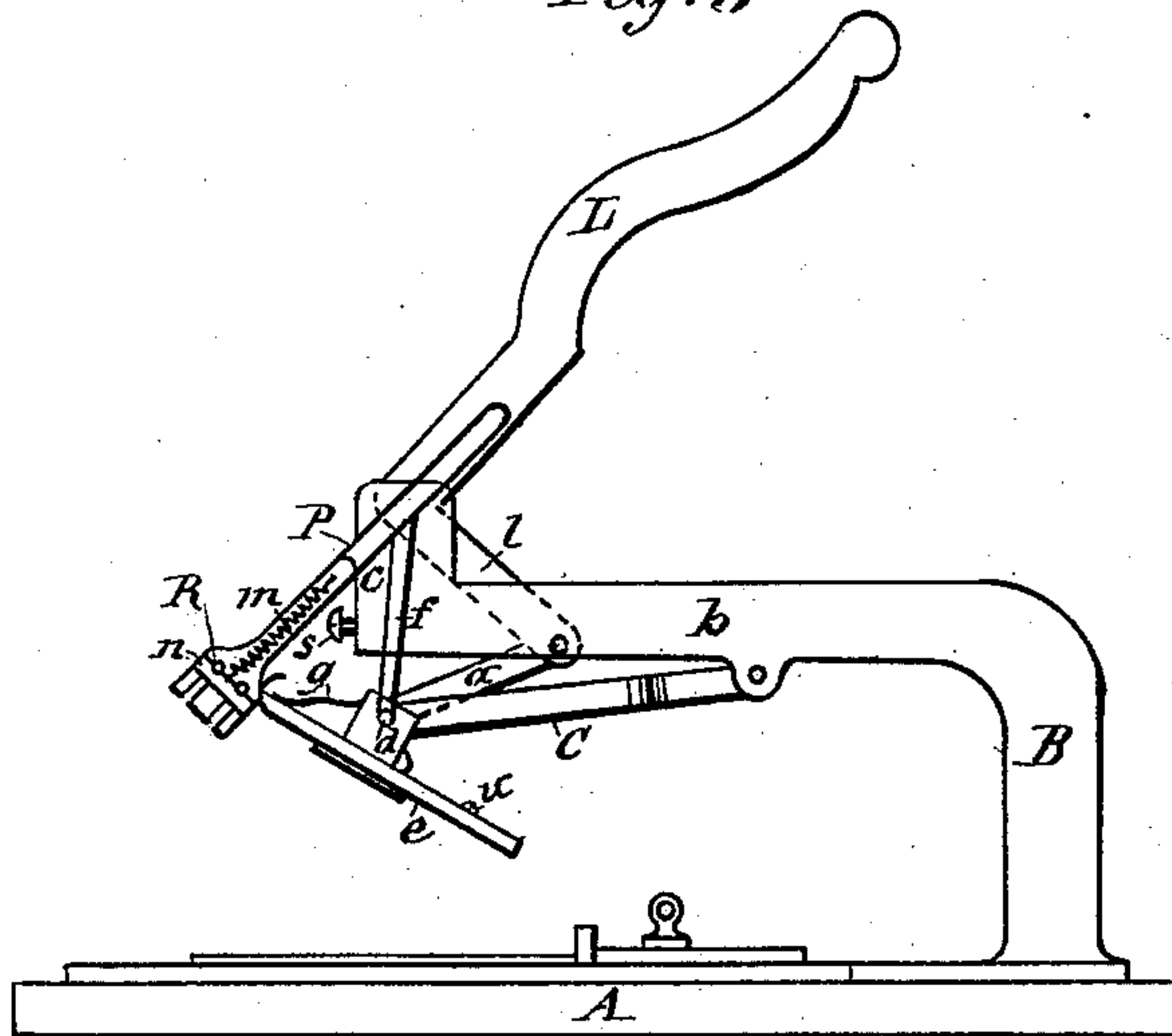


Fig. 4

WITNESSES:

C. Bendixon

Wm. L. Raymond.

INVENTOR:

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UNITED STATES PATENT OFFICE.

HENRY P. SMITH, OF SYRACUSE, NEW YORK.

HAND-STAMP.

SPECIFICATION forming part of Letters Patent No. 237,620, dated February 8, 1881.

Application filed December 11, 1880. (No model.)

To all whom it may concern:

Be it known that I, HENRY P. SMITH, of Syracuse, in the county of Onondaga, in the State of New York, have invented new and useful Improvements in Rubber-Stamp Presses, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

The nature of this invention consists, chiefly, in a novel combination and arrangement of a bed or type plate carried by an oscillating arm held yieldingly in an elevated position, and a lever arranged to depress the bed or type plate, whereby a simple, efficient, and accurately-operating stamping-press is obtained.

It also consists in providing the aforesaid lever with arms carrying one or more inking-rollers in such a position as to pass said rollers across the face of the bed or type plate automatically with the elevation of said lever and bed; and it furthermore consists in certain peculiarities in the detail construction of the stamping-press, all as hereinafter more fully described.

In the accompanying drawings, Figure 1 is a side elevation of my improved rubber-stamp press, showing it in position for stamping or printing; Fig. 2, a plan view of same. Figs. 3 and 4 are side elevations of the rubber-stamp press, showing it in position for applying the ink to the bed or type plate. Figs. 5 and 6 are detail views, respectively, of the oscillating arm which carries the bed, and of the cam which, in conjunction with the press-lever, operates the bed; and Figs. 7 and 8 are longitudinal and transverse sections, respectively, of the bed or type plate.

Similar letters of reference indicate corresponding parts.

A denotes the base of the machine. To this base is firmly secured a standard, B, having a forward-projecting arm, *b*, terminating with an upward extension, *c*. Vertically through the extension *c*, and through the adjacent portion of the arm *b*, is extended a slot, in which plays a lever, L, pivoted to the end of the extension *c*, and having a rigid rearwardly-projecting arm, *l*, standing nearly or quite at right-angles to the lever.

To the under side of the arm *b* of the standard is hinged an arm, C, which has its free end

bifurcated and extended under the pivot of the lever L.

To the free end of the arm C, at a point slightly forward of a perpendicular line from the pivot of the lever L, is pivoted an L-shaped cam, *a*, the pivotal pin *d* of which passes through the junction of the two limbs of said cam. *e* denotes the bed or type plate carried by the end of the arm C, to which it is hinged by the pin *d*, aforesaid, passing through ears on the back of the bed or type plate. Said bed is held yieldingly in an elevated position by elastic bands or springs *f*, suitably connected at one end to the extension *c* of the standard, and at the opposite end to the protruding end of the pin *d*. One arm of the cam *a* projects upward and rearward, and has its free end adapted to engage with the arm *l* of the lever L, when depressed. The connection of the said two arms converts them into toggle-jointed levers, which, by a further depression of the lever L, are forced toward a perpendicular position, and nearly in line with each other, and thus caused to exert a gradually-increasing downward pressure on the bed or type plate, which latter readily yields to said pressure and descends to the platen of the machine. By raising the lever L the bed or type plate is released from the aforesaid pressure, and allowed to rise by the aid of the spring *f*.

The end of the arm C is provided with springs *g*, which bear on the forward portion of the back of the bed or type plate, and, in conjunction with the short arm of the cam *a* bearing on the rear portion of the back of the bed, hold the bed at a rearwardly-inclined angle when relieved of pressure from the lever L and held in an elevated position, as shown in Fig. 4 of the drawings. The downward pressure of the lever L, and resultant forward thrust of the long arm of the cam *a*, raises the short arm of said cam off the bed, and allows the springs *g* to force the bed into a horizontal position during its descent. The stroke of the bed is gaged to operate on various bulks of blanks placed under the bed through the medium of a set-screw, *s*, inserted through the end of the arm *b* of the standard, and arresting the movement of the arm *l* of the press-lever L at the desired point.

The lever *L* is provided above its pivot with rigid forward-extended arms *P P*, the extremities of which are furcated or slotted, and through the slots of which pass the journals 5 of the inking roller or rollers *R R*, extended across the machine. The ends of said journals protrude at the outside of the arm *P*, and are provided thereat with sliding bearings or boxes *w*, hung on springs *m* connected with the arms 10 *P*. The arms *P* carry the inking-rollers *R* in such position in relation to the lever *L* that when the latter is depressed and the bed in position for printing, as shown in Fig. 1 of the drawings, said rollers are carried out from 15 under the bed, and in elevating the lever *L* the rollers are brought down and passed across the face of the bed. During the approach of the inking rollers the bed is held in a rearwardly-inclined angle by the spring *g* and the 20 short arm of the cam *a*, in the manner before described, and is thus held in proper position to receive the inking-rollers. A further elevation of the lever *L* relieves the bed of the pressure of the short arm of the cam *a* and 25 allows the bed to swing into a horizontal position and the inking-roller to pass over the face thereof. The springs *m* supporting said rollers impart to them the requisite pressure for applying the ink to the bed.

30 The pivotal pin *d*, which connects the bed *e*, arm *C*, and cam *a*, is made removable, so as to facilitate the attachment and detachment of said parts for repairs or renewal.

35 The bed is composed of a metal back plate, with inward flanges *v* on its sides, and the stamp or type plate is inserted from the front edge of the metal plate and received between the flanges aforesaid. A set-screw, *u*, inserted

through the back of the metal plate and entering the stamp or type plate, securely holds 40 the latter in the desired position during the operation of the press.

What I claim as my invention is—

1. In combination with the bed *e*, carried by the oscillating arm *C*, the L-shaped cam *a*, 45 pivoted at the junction of its two limbs on the bed *e*, and the lever *L*, having the rigid arm *l*, adapted to engage and release the longer limb of the cam *a*, substantially as described and shown. 50

2. In combination with the bed *A* and standard *B*, provided with the arm *b* and extension *c*, the lever *L*, provided with the arm *l*, L-shaped cam *a*, arm *C*, type-bed *e*, and springs *f*, substantially in the manner described 55 and shown.

3. In combination with the type-bed *e*, hinged to the oscillating arm *C*, and operated by the cam *a* and lever *L*, as described, the springs *g*, substantially as and for the purpose 60 set forth.

4. The combination of the type-bed *e*, hinged to the arm *C*, the springs *g*, L-shaped cam *a*, and the lever *L*, provided with the arm *l*, and having rigid forward-extended arms *P*, pro- 65 vided with the inking roller or rollers *R*, substantially in the manner described and shown.

In testimony whereof I have hereunto signed my name and affixed my seal in the presence of two attesting witnesses at Syracuse, in the 70 county of Onondaga, in the State of New York, this 9th day of December, 1880.

HENRY P. SMITH. [L. S.]

Witnesses:

A. F. LEWIS,
CHAS. BLUST.