

E. A. RUSSELL.

No. 15,574.

Hand Stamp.

Patented Aug. 19, 1856.

Fig. 1.

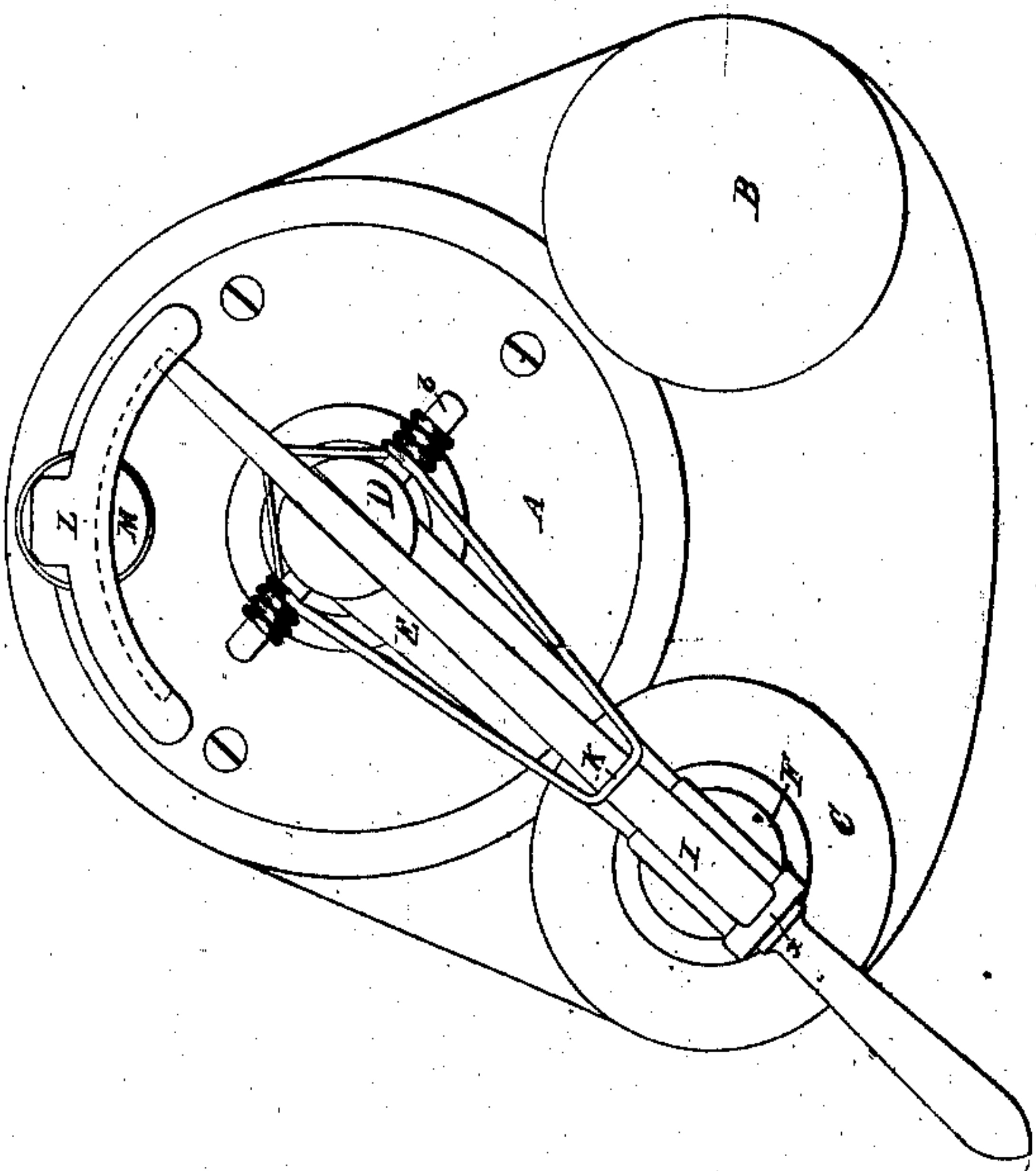


Fig. 3.

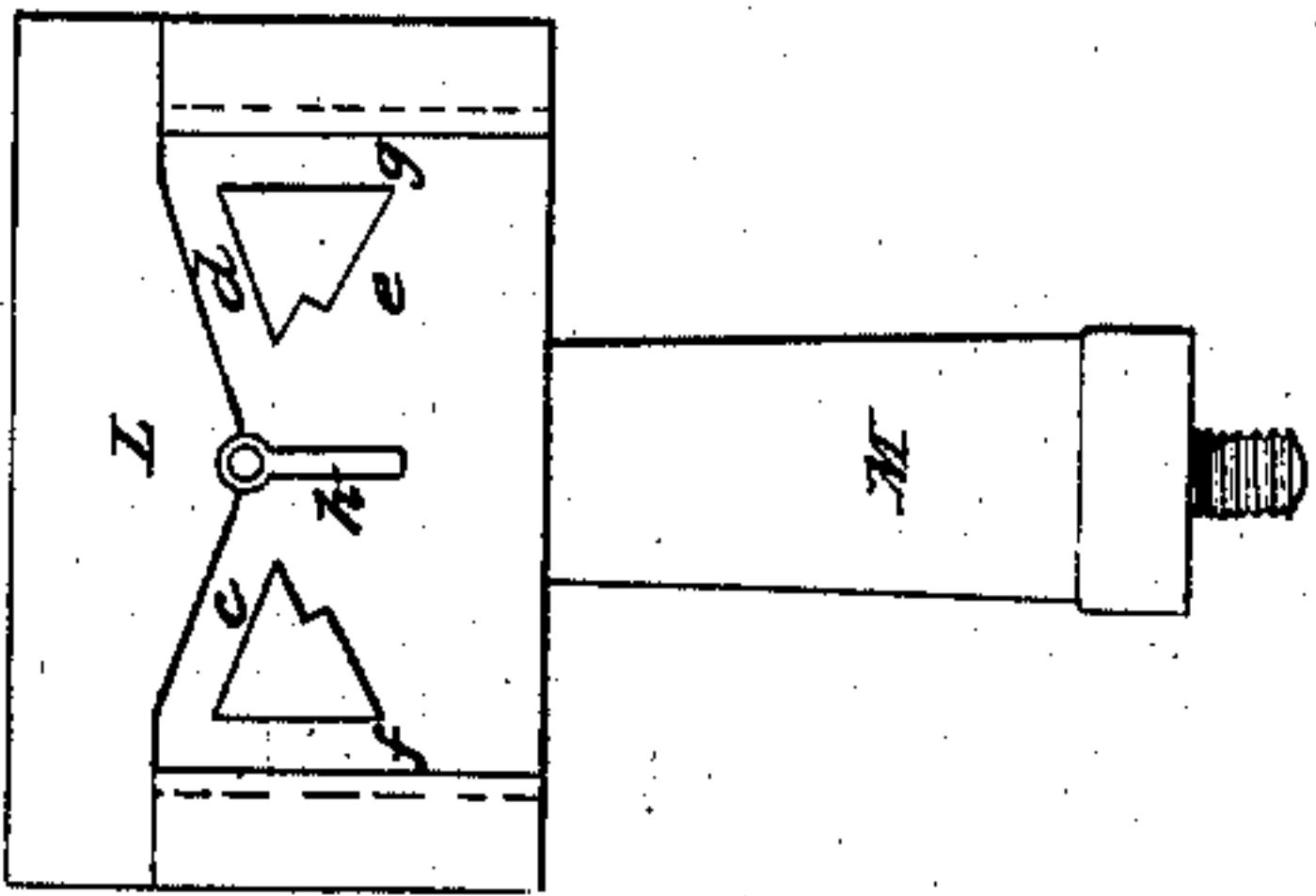


Fig. 2.

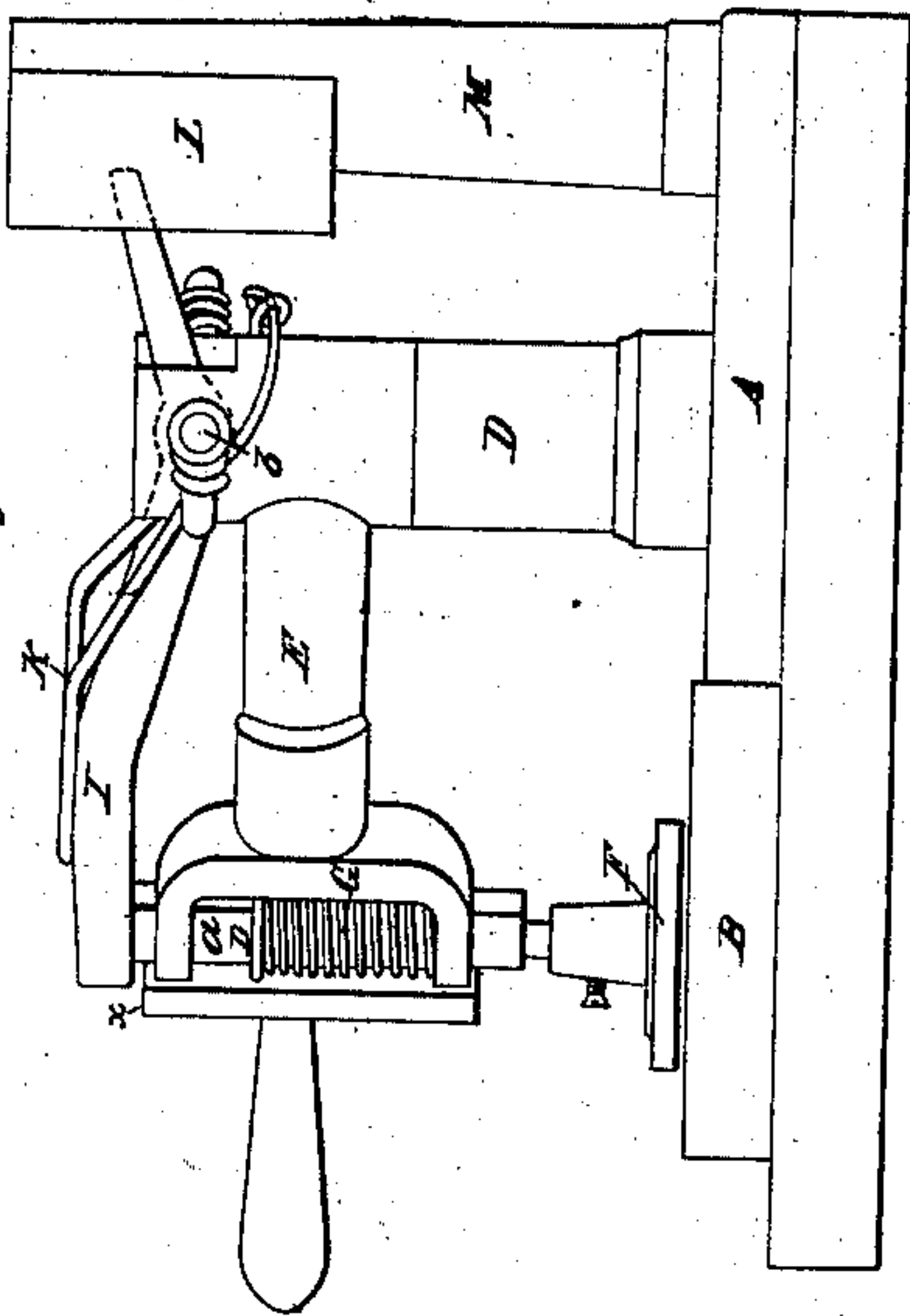
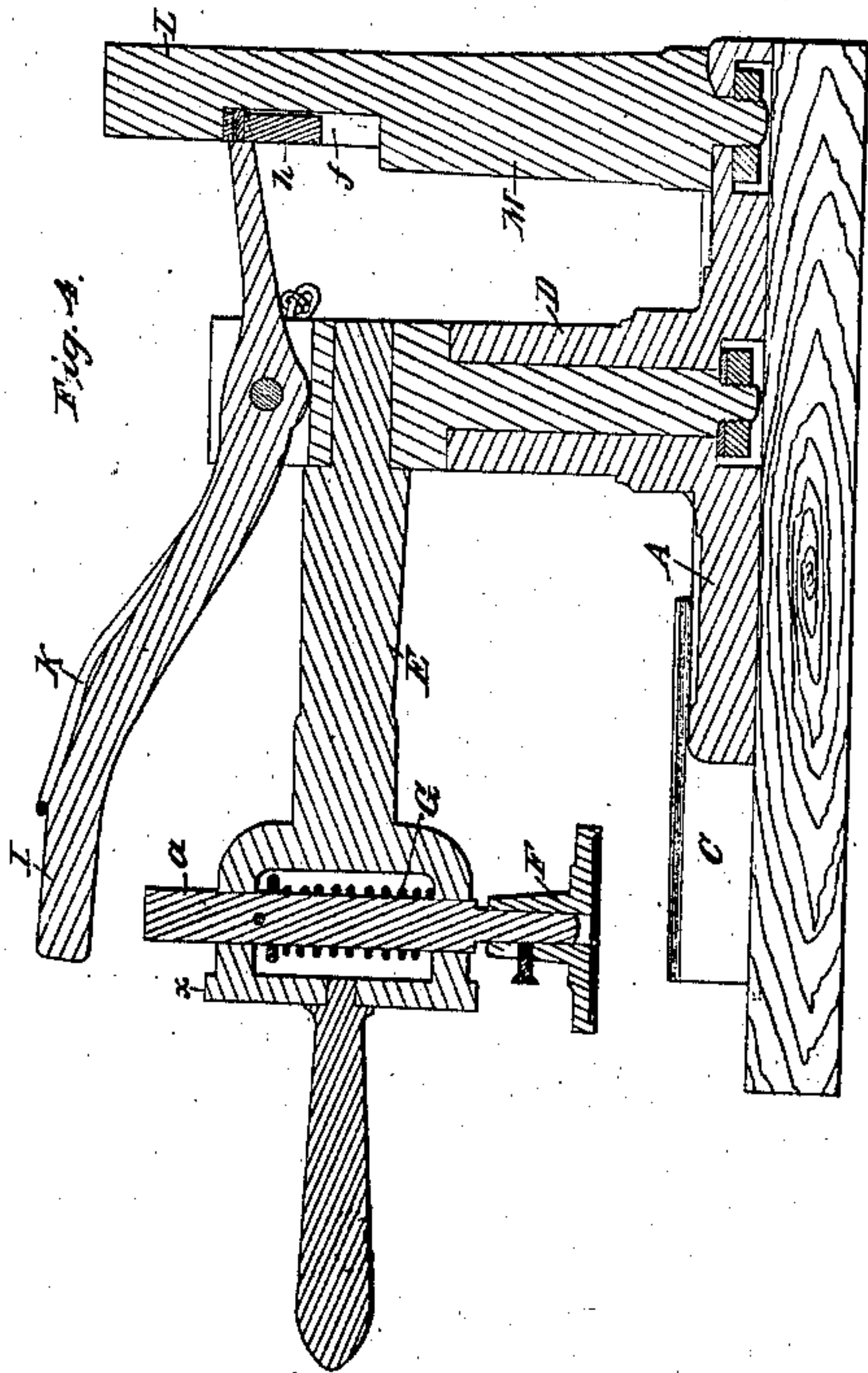


Fig. 4.



UNITED STATES PATENT OFFICE.

EDWIN A. RUSSELL, OF HOOKSET, NEW HAMPSHIRE.

HAND-STAMP.

Specification of Letters Patent No. 15,574, dated August 19, 1856.

To all whom it may concern:

Be it known that I, EDWIN A. RUSSELL, of Hookset, in the county of Merrimack and State of New Hampshire, have invented a new and useful or Improved Automatic Hand-Stamp; and I do hereby declare that the same is fully described and represented in the following specification and the accompanying drawings, of which—

Figure 1, is a top view of said machine; Fig. 2, a side elevation of it; Fig. 3, a front view of the cam grooves, and vibrator by which the spring trip hammer, (to be hereinafter described) is operated; Fig. 4, a vertical, central and longitudinal section of the machine.

In these drawings, A, exhibits a platform supporting an inking bed or table B, and another similar bed or table C, whose office is to sustain a sheet of paper or other article to be imprinted or stamped. Arranged with respect to said bed and upon the platform A, as seen in the drawings, is a vertical column or post D, upon the upper end of which is placed an arm or hand lever, E, which turns horizontally on said post as a fulcrum and carries at or near its middle, a stamp, E, whose vertical rod, *a*, slides up and down freely in the arm or lever and is supported on a spring G, arranged within the lever as shown in Figs. 2 and 4; such spring serving to elevate the stamp immediately after it has been forced downward by a blow from the spring trip hammer to be hereafter described. This hammer is shown at I. It is formed in the shape of a lever, and turns vertically on a fulcrum *b*, arranged in the lever E, and directly over the fulcrum thereof, the said hammer having a smart spring K, applied to it and the lever E, in the position as shown in the drawings. The rear arm of the hammer extends into a curved cam plate L, which is fixed and supported upon the top of a post M, erected on the platform A, in the position as shown in the drawings. This cam plate is constructed with grooved recesses *c*, *d*, *e*, *f*, and *g*, arranged with respect to one another and formed as shown in Fig. 3, and it also has a tongue or vibrator, *h*, which is placed at the junction of the two grooves *c*, and *d*, or is hinged to the vertex of the angle of their upper sides and so that it may play across and close each of the grooves *c*, *d*, and guide the rear arm of the trip hammer across said groove or prevent it from entering the same

during or immediately after its passage out of the other groove.

In operating with the machine, the longer arm of the lever, E, is to be seized by the hand of an attendant and the lever moved so as to carry the stamp directly over the inking bed B. While this is being done, the rear arm or tail of the trip-hammer I, will be made to travel down the groove *d*, against the vibrator *h*, and into the space, *e*, and toward and into the vertical groove *f*, of the cam plate L, the trip hammer being raised thereby above the stamp rod. As soon as the rear arm of the trip hammer enters the vertical groove *f*, the trip hammer will be forced downward by the action of its spring K, and striking upon the top of the slider of the stamp will depress said stamp quickly upon the inking bed, the force of the blow being sufficient to move the stamp rod a short distance beyond the hammer after the latter has struck a stop *x*, such movement being such as to cause the stamp to descend upon the inking bed. Subsequently or immediately afterward it will be raised a short distance off the same by the action of the spring G. This operation will cause the lower surface of the stamp to be inked. Next, the stamp lever E, is to be moved laterally toward and over the bed C, on which it may be supposed there has been previously laid a piece of paper, to be stamped or printed. During such movement of the said lever, the tail or rear arm of the trip hammer will pass down the groove *c*, and against the vibrator D, and will move the latter across the groove *d*, and move in toward and enter the recess *e*, and thence pass into the vertical groove *g*. At the instant, the tail of the hammer enters the groove G, the spring of the hammer will depress the trip hammer smartly upon the slider of the stamp causing the stamp to be operated or moved with respect to the bed C, substantially as hereinbefore described with reference to the inking bed B, the stamp being made to give an impression on the paper on the bed C. Thus by alternately moving the stamp from one bed to the other it will be inked and caused to give an impression.

I do not claim the combination of a movable stamp carrier or lever with an inking bed and a bed for supporting a piece of paper or any article to be printed, the stamp being moved by one hand of a person alternately from one bed to the other and

driven downward by a blow from the other hand of such person or a hammer held therein, as I am aware that such a hand press or stamp is not new, but

5 What I do claim is—

Combining with the movable lever or stamp carrier E and beds B, and C, a mechanism substantially as described whereby, during and by the lateral movements of the
10 said lever or stamp carrier from one bed to the other, the stamp shall not only be struck or forced downward but raised off the same in manner and for the purpose as specified,

such mechanism being a trip hammer with its operating spring, a cam L, and a spring 15 G, constructed and made to act with respect to the stamp and its carrier essentially as stated.

In testimony whereof I have hereunto set my signature this 16th day of June A. D. 20 1856.

EDWIN A. RUSSELL.

Witnesses:

R. H. EDDY,

F. P. HALE, Jr.