

(No Model.)

L. H. DOLAN.
HAND STAMP.

No. 474,724.

Patented May 10, 1892.

Fig. 1.

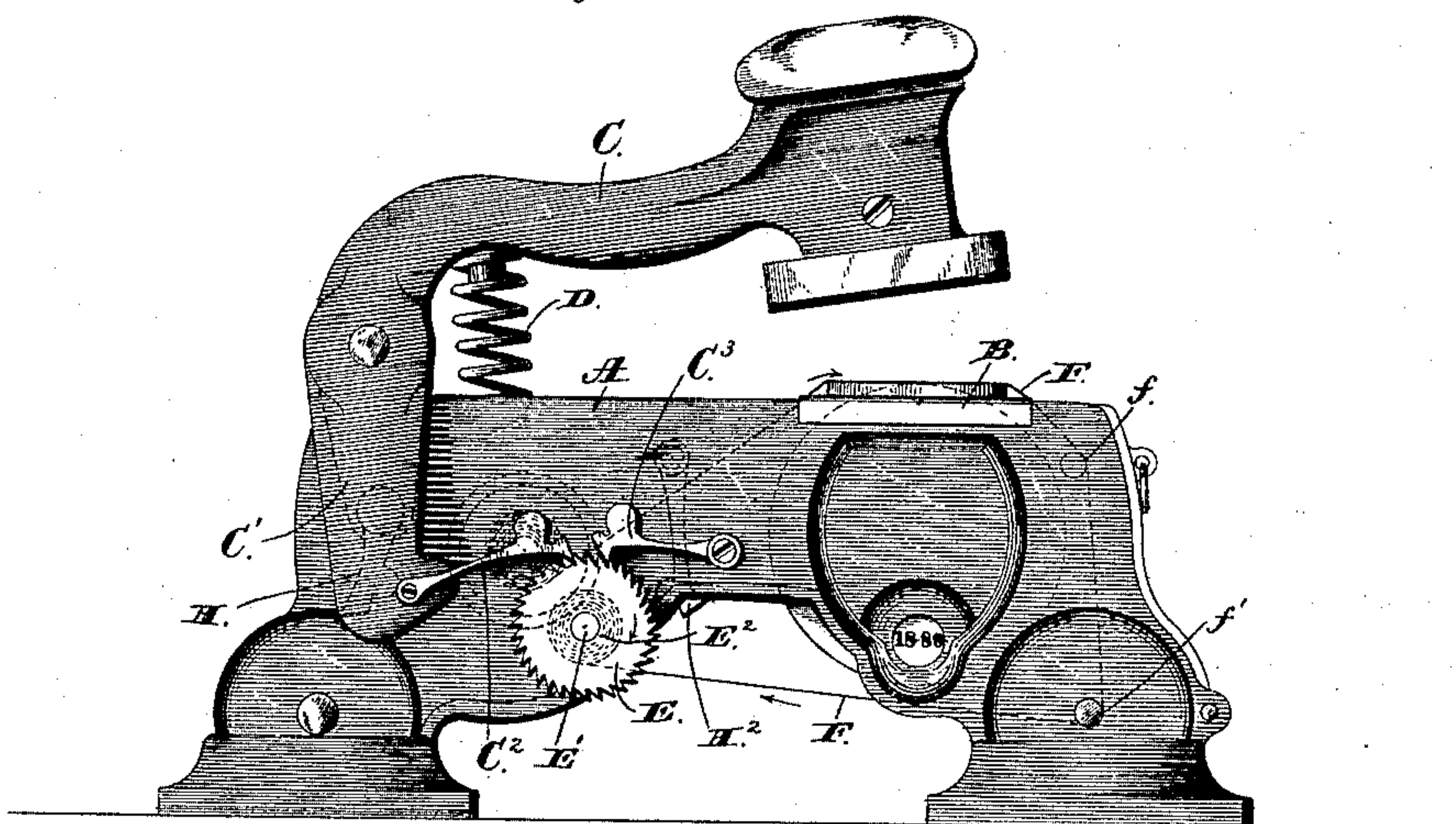
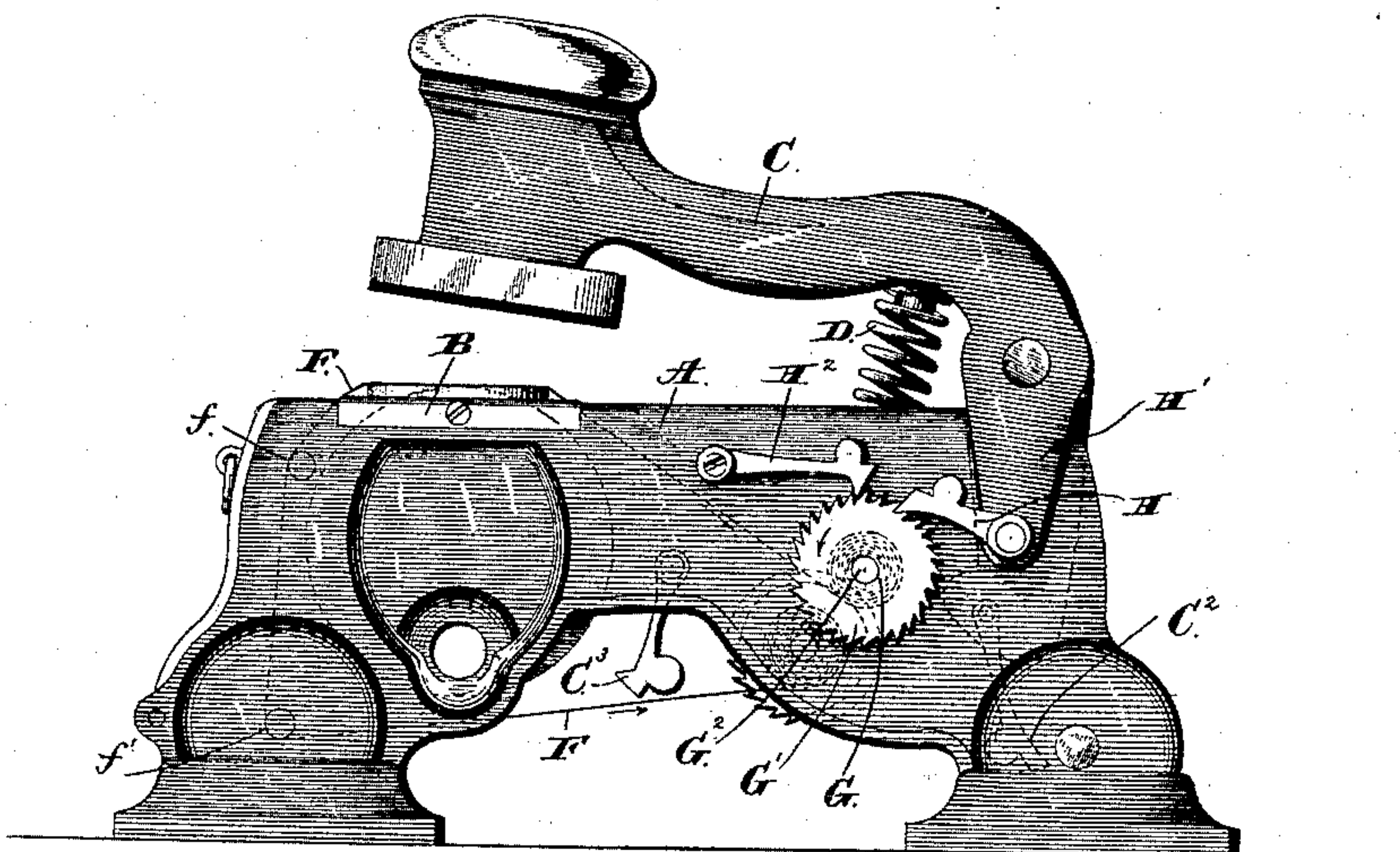


Fig. 2.



Witnesses:

Jas. E. Hutchinson.
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Inventor.

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UNITED STATES PATENT OFFICE.

LYONS H. DOLAN, OF ALEXANDRIA, VIRGINIA.

HAND-STAMP.

SPECIFICATION forming part of Letters Patent No. 474,724, dated May 10, 1892.

Application filed May 11, 1889. Serial No. 310,447. (No model.)

To all whom it may concern:

Be it known that I, LYONS H. DOLAN, of Alexandria, in the county of Alexandria, and in the State of Virginia, have invented certain new and useful Improvements in Hand-Stamps; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which—

Figure 1 shows in side elevation my improved stamp with the ribbon-feed arranged to move the ribbon in one direction; and Fig. 2, a similar view of the stamp from the other side, showing the arrangement of parts for moving the ribbon back in the other direction.

Letters of like name and kind refer to like parts in both of the figures.

The object of my invention is to provide certain improvements in stamping machines or apparatus; and to this end my invention consists in the stamp and in the construction, arrangement, and combination of parts thereof, as hereinafter specified.

In dating, canceling, and other forms of printing-stamps using an ink-ribbon it has been customary heretofore to provide automatic means for feeding the ribbon along as the stamp is operated, so as to change the portion of the ribbon presented to the type or printing devices. In the ordinary and well-known form of stamp of the general shape and construction of that shown in the accompanying drawings the swinging arm which carries the platen or striking-head has been provided with a pawl to engage a suitable ratchet-wheel on the shaft of one of the ribbon-rollers, so as to turn such wheel and roller a certain distance each time that the arm is moved down and released. With a second pawl engaging the ratchet-wheel, so as to prevent backward movement thereof as the pawl on the swinging arm moved over the wheel-teeth during the downward or stamping motion of the platen and arm, the ink-ribbon can be fed well enough in one direction only. Where, as is usually the case, it is desired to run the ribbon through again to use it for more printing, it has been necessary in the stamps as ordinarily made heretofore to disengage the pawls from the ratchet-wheel and then by hand turn the other roller, from which the ribbon has been

taken, until the latter is wound back thereon. This winding back of the ribbon by hand takes time and may become necessary just when it is desirable to use the stamp rapidly and continuously for some time. I have, therefore, in order to make it possible to avoid entirely the vexatious delay incident upon this winding back of the ribbon by hand, devised certain means for performing such operation automatically during the operation of the stamp. The ribbon can then be fed back and forth first in one direction and then the other as the stamping operation is continued.

In the drawings, A designates the stamp bed or base, of ordinary and well-known form and construction, having at B a suitable chase containing the desired type or printing devices.

In the stamp shown in the drawings there are the usual printing-wheels having type adapted to be brought by the rotation of the wheels to the proper place within the chase; but I do not limit myself to such construction or arrangement, as my invention has nothing to do with the form of the printing devices.

Pivoted in the usual way to one end of the bed A is the swinging arm C, carrying the striking head or platen above the chase or type-bed. A spring D between such arm and the base A serves to hold the arm normally raised and to lift it after it has been depressed or struck down.

Projecting down from the pivotal portion of arm C close to the side of bed A is the arm C', carrying pivoted on its lower end the pawl C², adapted to engage the teeth of ratchet-wheel E, so as to turn such wheel as the arm C' is moved forward by the rising of the platen-carrying arm C. Such ratchet-wheel is fixed upon the shaft E' of the ribbon-roller E², upon which is wound one end of the ink-ribbon F. The pawl C² is preferably weighted, so that it will normally remain in operative position with its end resting upon the ratchet-wheel. A second pawl C³, pivoted to the side of bed A, has its end adapted to rest upon and engage the teeth of the ratchet-wheel, so as to prevent backward rotation of the wheel. This pawl is, like the other, preferably weighted, so as to keep it down in operative position. Both pawls are, however,

adapted to be swung back out of engagement with the wheel E, and their pivotal supports are so situated that, as shown in dotted lines in Fig. 2, when they are so swung back they hang down clear of the wheel's teeth. From roller E² the ribbon F runs up over the chase or type-bed B and then down within base A around guides *f* and *f'* and to the other ribbon-roller G.

10 On the side of the base A opposite to that on which is ratchet-wheel E is a second similar ratchet-wheel G' on the shaft G² of roller G. A weighted pawl H, similar to pawl C², is pivoted to a second arm H' on the platen-

15 carrying lever or arm C and is adapted to rest upon and engage the ratchet-wheel G', so as to turn the same as the arm H' is actuated by the upward movement of said lever or arm C. A second weighted pawl H², pivoted to the side of the base A, is adapted to

20 engage the ratchet-wheel G', so as to prevent back rotation of the latter as pawl H rides over its teeth during the downward stroke of lever C. Both pawls H and H² are so pivoted

25 as to hang out of contact with the wheel G' when they are turned back and down from the same. The opposite ends of the ink-ribbon are wound upon their respective rollers, so that as either roller is turned forward

30 by the rotation of its ratchet-wheel the ribbon will be wound upon it and drawn from the other roller.

With my stamp constructed and arranged as described the direction of travel of the

35 ribbon during use of the stamp can be varied instantly, as desired. With the pawls C² and C³ in engagement with ratchet-wheel E and the pawls H and H² swung back out of engagement with ratchet-wheel G' the

40 roller will as the platen or head carrying lever C is operated be rotated to wind the ribbon F upon roller E² and so feed it along over the type-bed or chase B. This feeding of the ribbon can be continued until the latter has been unwound as much as desired

45 from roller G and it becomes necessary to run the ribbon back again. The pawls C² and C³ are then swung back from ratchet-wheel E and the pawls H and H² are swung

50 into engagement with ratchet-wheel G'. The

operation of lever C during continued use of the stamp will then cause the ribbon to be wound back upon roller G and unwound from roller E². With my stamp, then, it is not necessary to stop the stamping operation in order to wind back the ink-ribbon after it has passed in one direction over the type-bed or chase, but both the forward and back travel of the ribbon can be automatically secured from the movement of the platen-carrying lever.

Having thus described my invention, what I claim is—

1. In a stamp, in combination with the pivoted striking-lever having the two arms, the ink-ribbon and the two rollers for winding the ribbon placed close to the lever, the two ratchet-wheels on the shafts of the respective rollers, the two pawls each pivoted to one of the arms on the striking-lever and adapted to be placed in or out of engagement with one of the ratchet-wheels, as desired, and the two pawls for preventing back movement of the ratchet-wheels, each adapted to be thrown at will into or out of engagement with its respective wheel, substantially as and for the purpose specified.

2. In a stamp, in combination with a suitable base or bed, the ink-ribbon, the two rollers for winding the ribbon, the two ratchet-wheels on the shafts of the respective rollers, the pivoted striking-lever having the two arms extending down on opposite sides of the base, and the two weighted pawls, each pivoted to one of such arms and adapted to be placed at will in or out of engagement with one of the ratchet-wheels, and the two pawls for preventing back movement of the ratchet-wheels, pivoted to the base and adapted to be thrown at will into or out of engagement with the respective wheels, substantially as and for the purpose specified.

In testimony that I claim the foregoing I have hereunto set my hand this 4th day of May, A. D. 1889.

LYONS H. DOLAN.

Witnesses:

JAS. E. HUTCHINSON,
HENRY C. HAZARD.