

(No Model.)

W. FORWARD.
MACHINE FOR AFFIXING POSTAGE STAMPS.

No. 590,569.

Patented Sept. 28, 1897.

Fig. 4.

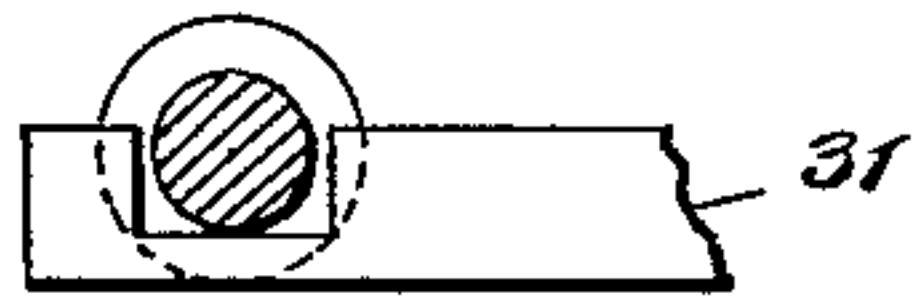


Fig. 5.

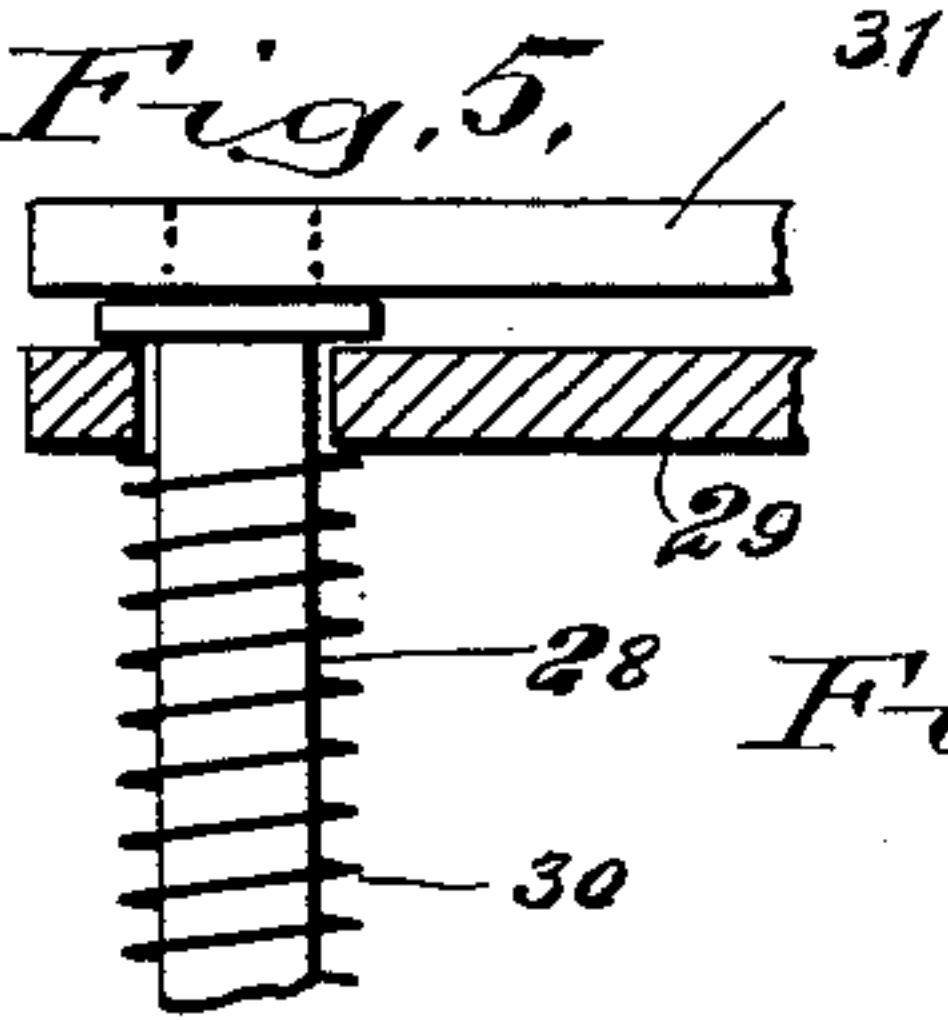


Fig. 1.

Fig. 2.

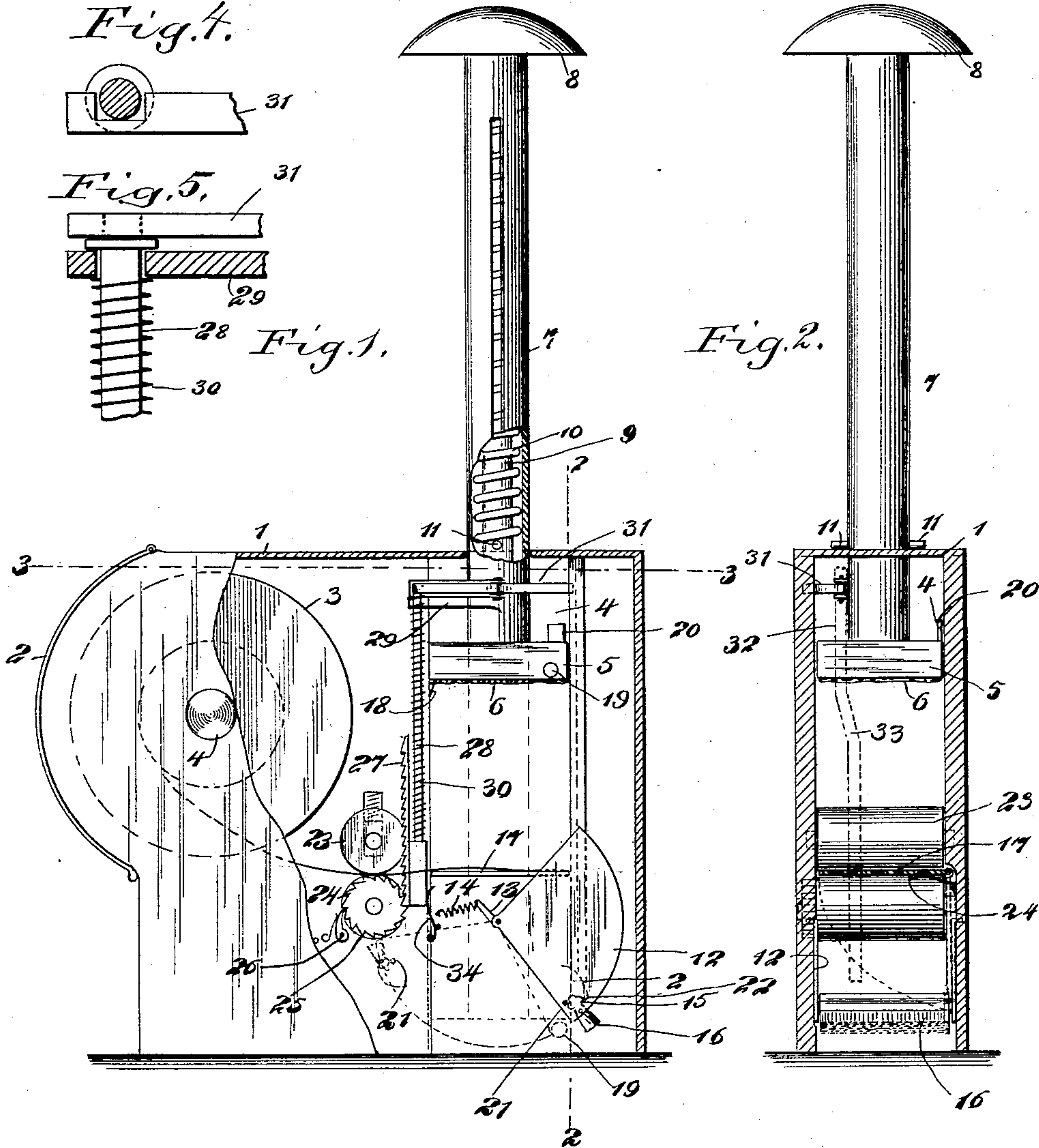
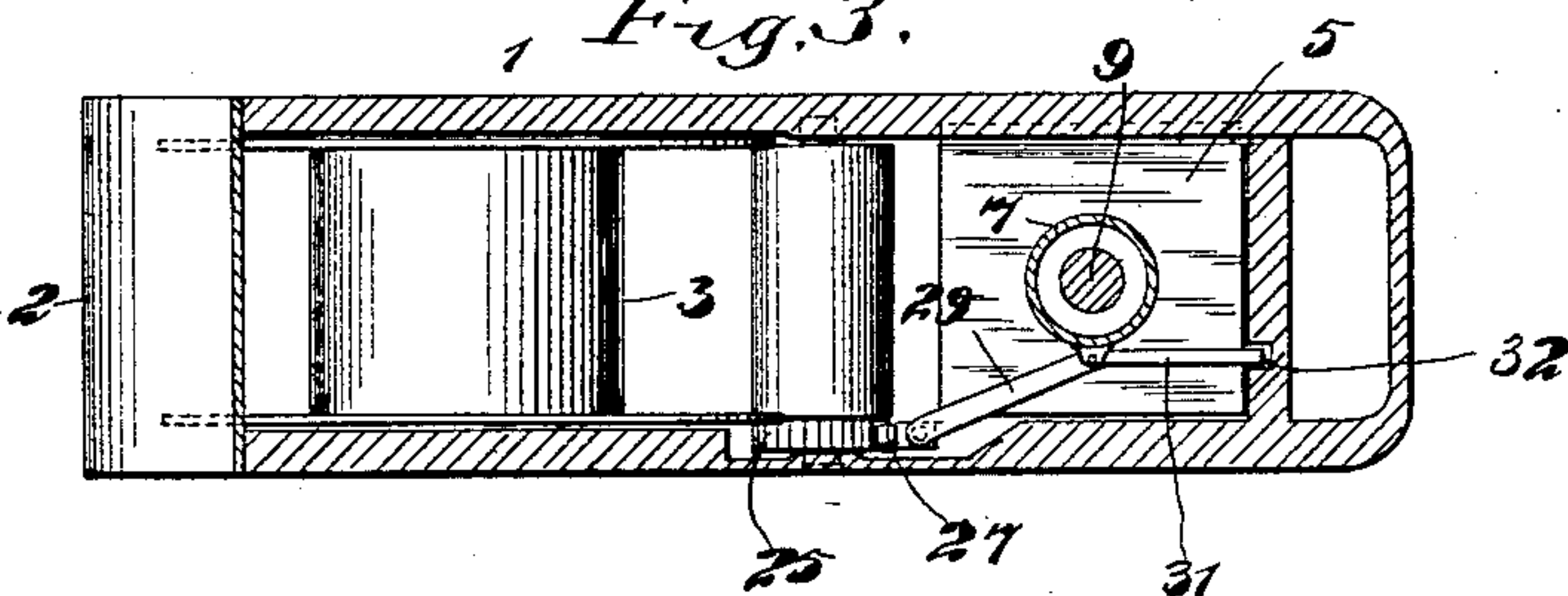


Fig. 3.



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WALTER FORWARD, OF SAN DIEGO, CALIFORNIA, ASSIGNOR TO JOHN F. FORWARD, OF SAME PLACE.

MACHINE FOR AFFIXING POSTAGE-STAMPS.

SPECIFICATION forming part of Letters Patent No. 590,569, dated September 28, 1897.

Application filed September 11, 1896. Serial No. 605,510. (No model.)

To all whom it may concern:

Be it known that I, WALTER FORWARD, of San Diego, in the county of San Diego, State of California, have invented a new and Improved Machine for Affixing Postage-Stamps, of which the following is a full, clear, and exact description.

This invention relates to machines for sticking or placing postage-stamps on mail-matter—such as letters, papers, &c.—and the object is to provide a machine of comparatively simple construction by means of which the stamps one at a time may be separated from a strip and quickly affixed to the mail-matter, and, further, to so arrange the machine that it may be employed for affixing labels or the like to packages.

I will describe the machine embodying my invention and then point out the novel features in the appended claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a partial side elevation and partial vertical elevation of a machine embodying my invention. Fig. 2 is a section substantially on the line 2 2 of Fig. 1. Fig. 3 is a section substantially on the line 3 3 of Fig. 1. Fig. 4 is a plan view, on an enlarged scale, of a portion of the device, part being in section; and Fig. 5 is a partial side elevation and partial section thereof.

The device comprises a casing 1 of any suitable material—such, for instance, as metal. The casing has a general rectangular form and at its rear side it has an opening provided with a swinging door 2. Within the rear portion of the casing 1 is arranged a reel 3, upon which a strip of postage-stamps is to be wound and successively fed underneath a plunger, as will be hereinafter described. The reel 3 is mounted on a spindle 4, removably extended through the casing and through said reel, so that the reel may be removed at any time for placing stamps thereon and then replaced.

In the forward portion of the casing 1 is a plunger-casing 4, within which is arranged to move vertically a plunger 5, which prefer-

ably has on its under side a yielding material 6—such, for instance, as felt. Extended upward from the plunger 5 and through a perforation in the top wall of the casing 1 is a tubular shank 7, provided with a handpiece 8 at its upper end, and also extended upward from the plunger within the tubular shank 7 is a rod 9, surrounding which is a coiled spring 10, the lower end of said coiled spring bearing upon pins 11, affixed to the top of the casing 1 and extended through slot-openings in the side of the tubular shank, the upper end of the said spring engaging with the under side of the handpiece 8.

The casing 1 has an opening in its lower wall in line with the opening through the plunger-casing 4. It may be here stated that the lower end of this plunger-casing is somewhat above the bottom of the casing 1, so that a moistener-carrier may be moved transversely of the lower end of the said plunger-casing. This moistener-carrier consists of two segmental plates 12, pivoted at their apex within the casing 1. One of the parts 12 has an upwardly-extended finger 13, from which a spring 14 extends to a connection with the casing, said spring serving to hold the frame in its normal position, as indicated in Fig. 1.

Supported at the lower edge of the parts 12 is a water-fount 15, having a brush material—such, for instance, as felt 16—extended from its lower edge and communicating with its interior. This fount 15 is preferably so connected to the frame that it may be removed when it is desired to use the moistener-felt by hand.

Arranged above the pivotal point of the moistener-carrier frame and within the plunger-casing is a swinging table 17. This swinging table is hinged at one edge to the inner side of the casing 1, and the wall of the casing to which said table is hinged is provided with a recess to receive the table when swung in its downward position, as clearly indicated in Fig. 2. This table 17 is preferably provided with perforations to admit air against the under side of a stamp to cause said stamp to adhere against the plunger in its downward course.

The operation of the device as far as described is as follows: On the downward move-

ment of the plunger 5 a cutter 18 on the plunger will sever a stamp previously placed upon the table 17 at the line of the perforations between said stamp and the next stamp. Then upon a further downward movement of the plunger the table 17 will be swung downward by the plunger. The air-pressure through the perforations of the said table will cause the stamp to adhere against the under side of the plunger, and at the same time that the table 17 is swung upon its hinge a pin or projection 19 on the plunger 5 will engage one of the portions 12 of the moistener-carrying frame and rock the same to carry the brush 16 across the letter or other matter to which the stamp is to be affixed. After the moistener-carrying frame shall have reached the position indicated in dotted lines in Fig. 1 the plunger 5 may be forced still farther downward and press the stamp onto the moistened portion of the letter or other matter. Upon releasing the plunger the spring 10 will return it to its upper position. As the plunger 5 when in its lowest position will extend below the lower edge of the table 17, I provide the upper side of the plunger 5 with a finger 20, adapted to engage against the said table and hold it in its open position. A pin 21 on the inner side of the frame 1, designed to bear against the moistener-fount 15, will form a stop to prevent a rocking movement of the fount while the brush is moving over the paper to be moistened. The said moistener, however, will be free to swing on the backward movement of the carrier, so as to prevent its wiping the affixed stamps. It will be returned, however, to its operative position at the completion of its return movement by means of a spring-yielding finger 21 engaging with the pin 22, extended from the inner side of the casing 1.

I will now describe a means for feeding the stamps one at a time to a position under the plunger and upon the table 17. This means consists of feed-rollers 23 24, journaled within the casing 1 rearward of the plunger-casing, the meeting surfaces of the said feed-rollers being of course in line with the upper side of the table 17. The upper roller 23 preferably has a vertically-yielding bearing. As here shown, it has trunnion-bearings in blocks mounted to slide in slots formed in the casing 1 and held yieldingly downward by means of springs, as plainly shown in Fig. 1. The feed-roller 24 has affixed to it at one end a ratchet-wheel 25, with which a spring-pressed dog 26 engages to prevent a backward movement of the feed-rollers. Motion is imparted to the feed-rollers by means of a rack 27, adapted to engage with the ratchet-wheel 25. This rack 27 is attached to a rod 28, the upper end of which extends loosely through a hole formed in an arm 29, extended from the shank 7.

The rod 28 at its upper end above the arm 29 is provided with a head to engage upon the upper side of the said arm. Surround-

ing the rod 28 is a spring 30, one end of the said spring bearing against the under side of the arm 29 and the lower end of the said spring bearing against a block at the lower end of the rod 28 and to which is attached the rack 27. Fulcrumed on the tubular shank 7 is a lever 31, adapted to engage at one end over the upper side of the head on the rod 28. As shown in Fig. 4, this end of the lever 31 is provided with a notch to engage around the projection from the head of the said rod. The opposite end of the lever 31 projects into a slot 32, having an offset 33 intermediate of its ends. It will be seen that the portion of this slot below the offset 33 is arranged in a different vertical plane from that of the portion above said offset. The rack 27 is held yieldingly against the ratchet-wheel 25 by means of a spring 34, attached to the inner side of the casing 1 and bearing against the block to which the rack is attached. In operation a downward movement of the plunger will move the rack 27 downward over the wheel 25 and consequently rotate the feed-rollers to feed the stamp upon the table 17. After the stamp shall have been fed upon the table the offset 33 in the slot 32 will deflect the lever 31 and carry it out of engagement with the rod 28, and therefore the plunger may continue on its downward movement without imparting movement to the rack 27, as the lower portion of the said rack will engage against the lower wall of the casing 1, and the arm 29 will move downward over the rod 28. During the upward movement of the plunger the spring 30 will hold the rack downward until the arm 29 shall have reached a position against the under side of the head on the rod 28 and at this time the lever 31 will again engage in the offset 33, so as to swing its end over the top of the said head, and thus the plunger and rack will return to their normal positions for subsequent action.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A stamp-affixing machine, comprising a casing, a plunger-casing arranged therein, a plunger operating in the plunger-casing, a perforated table having hinge connection with a wall of the plunger-casing below the normal position of the plunger and operated by the plunger, a swinging moistener, means for swinging the moistener, feed-rollers, and means for operating the feed-rollers to place a stamp on the hinged table during the downward movement of the plunger, but before the plunger reaches the table, substantially as specified.

2. A stamp-affixing machine, comprising a casing, a plunger operating therein, a perforated swinging table arranged in the line of movement of the plunger to be operated by contact with the plunger and adapted to receive a stamp on its upper side, a finger on the plunger for holding the table in its open position when the plunger is in its lowermost

position, means for feeding stamps onto the table, a moistener-carrier having pivotal connection with opposite side walls of the casing, a moistening-fount mounted to swing in the carrier, and a pin on the plunger for moving the carrier in one direction, substantially as specified.

3. A stamp-affixing machine, comprising a casing, a plunger movable therein, a perforated swinging table in the casing, feed-rollers, a ratchet-wheel on one of the feed-rollers, a spring-pressed dog engaging with the ratchet-wheel, a rack also engaging with the ratchet-wheel, a rod extended upward from

the rack, an arm extended from the plunger-shank and having an opening through which the rod loosely passes, a head on the rod above the arm, a projection on the head of the rod, and a lever pivoted to the plunger-shank having one end provided with a notch to receive the projection from the head of the rod and its opposite end engaged in a slot in the casing, the said slot having an offset between its ends, substantially as specified.

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Witnesses:

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