

E. H. HOTCHKISS & C. BEACH.
MACHINE FOR AFFIXING STAMPS.
APPLICATION FILED APR. 12, 1909.

953,384.

Patented Mar. 29, 1910.

2 SHEETS—SHEET 1.

Fig. 1.

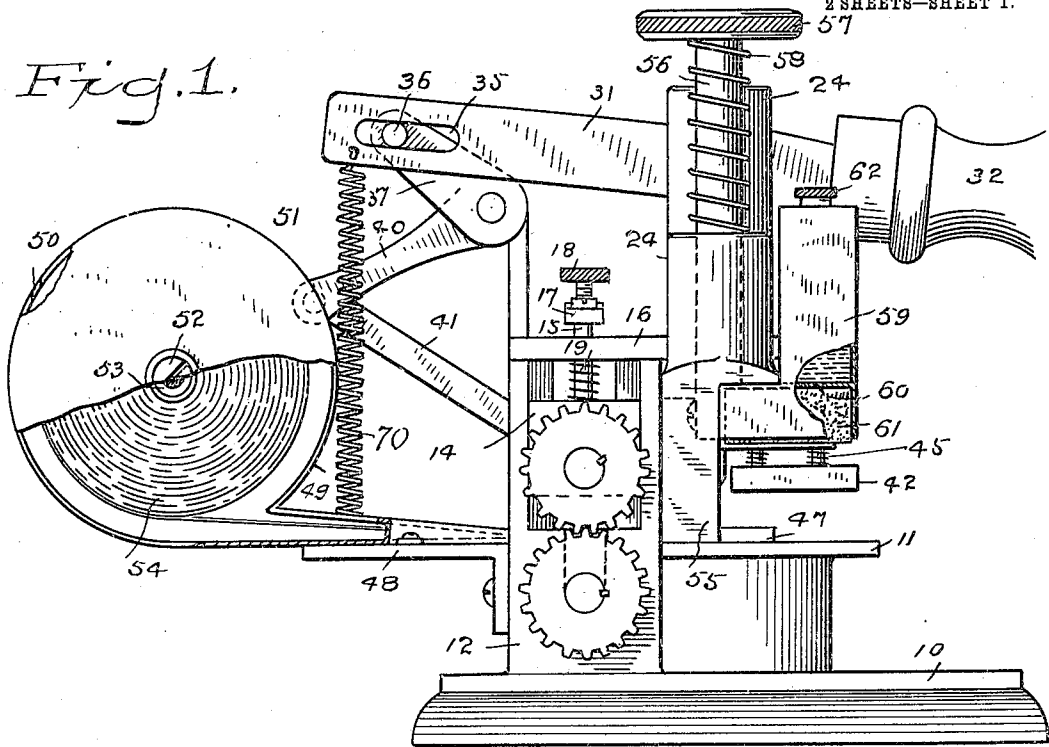
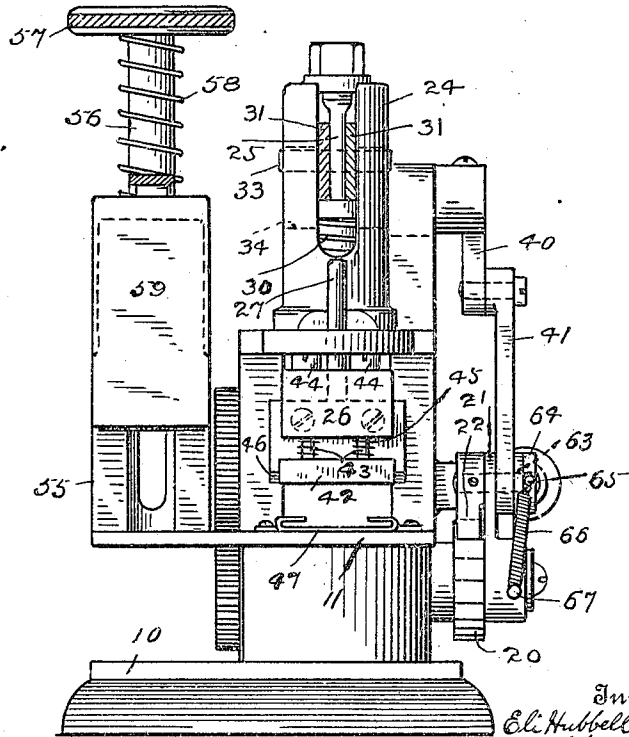


Fig. 2.



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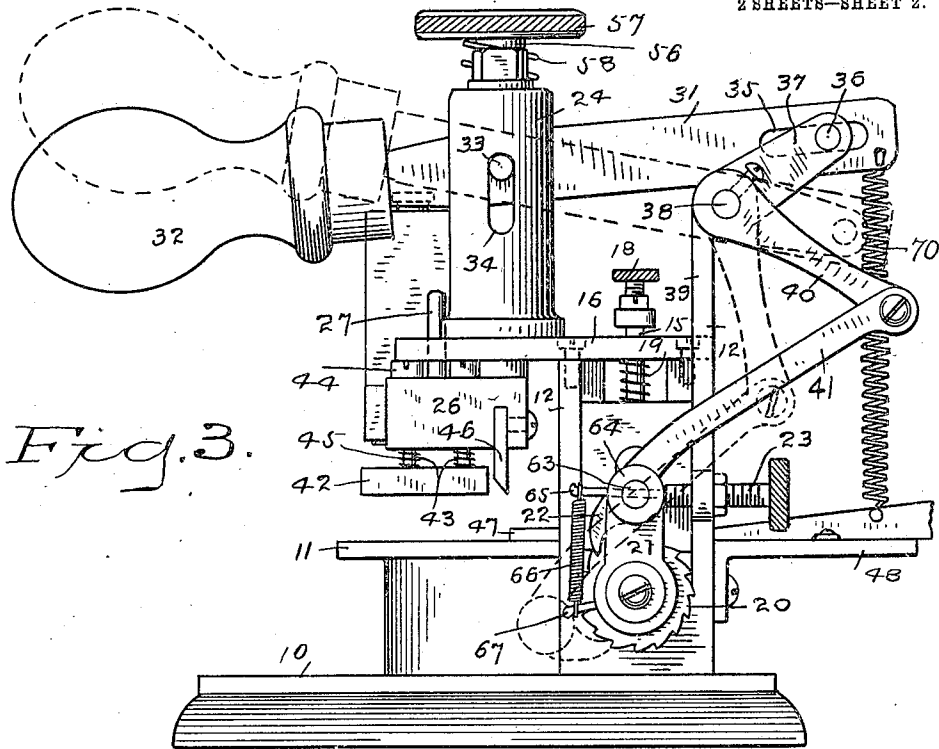


Fig. 3.

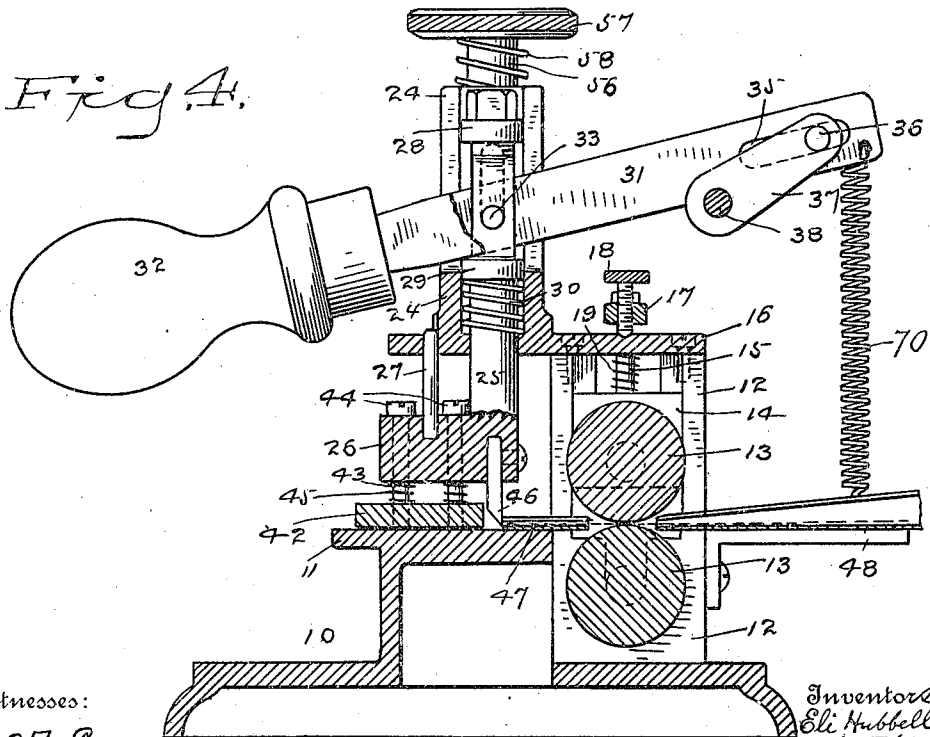


Fig. 4.

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UNITED STATES PATENT OFFICE.

ELI HUBBELL HOTCHKISS, OF NORWALK, CONNECTICUT, AND CHARLES BEACH, OF CATSKILL, NEW YORK.

MACHINE FOR AFFIXING STAMPS.

953,384.

Specification of Letters Patent.

Patented Mar. 29, 1910.

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To all whom it may concern:

Be it known that we, (1) ELI HUBBELL HOTCHKISS and (2) CHARLES BEACH, citizens of the United States, residing at (1) 5 Norwalk, county of Fairfield, State of Connecticut, and (2) Catskill, county of Greene, State of New York, respectively, have invented a new and useful Machine for Affixing Stamps, of which the following is a 10 specification.

This invention relates to hand controlled means for affixing gummed sheets to articles such as envelopes or cards, and the invention is especially designed for the purpose of affixing postage stamps to envelopes 15 or post cards.

One of the objects of the invention is to produce an improved apparatus of this character having means for moistening the envelope or other article to which the stamp 20 is to be applied, instead of moistening the stamp itself.

Other objects are to provide a simple, economical and easily operated device of 25 this character, a special feature being a hand operated lever which is moved in one direction by hand and returned to normal position by a spring, the first part of the hand movement cutting off a projected stamp 30 from a strip and pressing it upon a previously moistened area on the envelop or card, a continued movement throwing back a feed pawl and the return by the spring projecting another stamp to be cut off and 35 applied by the next hand movement.

To these ends, the invention consists in the construction and combination of parts substantially as hereinafter described and 40 claimed.

Of the accompanying drawings:—Figure 1 is a side elevation of a machine embodying our improvements, portions being broken 45 away to illustrate certain interior arrangements. Fig. 2 is an elevation from the right of Fig. 1, the lever being in section. Fig. 3 is an elevation from the side opposite that shown in Fig. 1, omitting the outer portion of the reel or stamp strip support. Fig. 4 is a view similar to Fig. 3 but showing 50 parts in section, and showing the hand lever in its lowest position to which it is shifted to affix a stamp.

Similar reference characters indicate the same or similar parts in all of the views.

A suitably formed base 10 supports a table 55 11 over which the stamps are fed. Uprights 12 rising from the base 10 are provided with bearings for the feed rolls 13. The lower feed roll is shown as supported in bearings which are not adjustable, but the upper 60 feed roll has its shaft or trunnions mounted in bearing blocks 14 mounted in vertical ways in the uprights 12. The bearing blocks 14 are provided with stems 15 which pass up through an upper plate 16 which is sup- 65 ported on the uprights 12. The two stems 15 are connected by a cross bar 17 through which an adjusting screw or thumb screw 18 passes, the lower end of said screw bearing 70 on the upper plate 16. Around each stem 15 is coiled a spring 19 confined between the top of the block 14 and the under side of the plate 16. The two springs 19 hold the upper roll 13 yieldingly against the lower roll 13, while the thumb screw 75 18 enables the upper roll 13 to be adjusted vertically so that it will not bear upon the lower roll if it should be desired to avoid direct contact of the rolls when there is no strip being fed between them. 80

We will now proceed to describe the means whereby the feed of the strip is effected by an intermittent rotation of the lower roll, it being understood that the upper roll is a pressure roll only and is not positively actu- 85 ated.

Secured to one end of the lower roll is a ratchet 20 and mounted on the shaft of said roll is a crank 21 having a pawl 22 to engage the ratchet 20. The motion of the 90 crank 21 in one direction is limited by a set screw 23 tapped through a portion of one of the uprights of the machine, the motion of said crank arm in the other direction, for feeding the strip, being effected by mechanism 95 which will be presently described.

The upper plate 16 is laterally extended over the table 11 and is provided with a tubular upright 24 in which is mounted a plunger 25 having a head 26 at its lower 100 end, said head having a guide pin 27 extending up through a suitable aperture in the upper plate 16 to prevent said head and plunger from rotating. The plunger 25 has two circular enlargements 28 and 29 fitting 105 the interior of the upright 24 to guide the plunger accurately in its vertical movement. A spring 30 coiled about the plunger 25 be-

tween the lower enlargement 29 and the bottom of the vertical boring in the upright normally presses the plunger upward and holds it in the position shown in Fig. 3.

5 The upright 24 is slotted to permit the passage through it of the lever 31, said lever having a handle 32 and preferably comprising two parallel bars or members which pass on opposite sides of the upper portion of
10 the plunger 25, said upper portion being reduced in thickness as best shown in Fig. 2. A pin 33 passes through the reduced or thin portion of the plunger and through the two members of the lever 31 the ends of said pin
15 entering vertical guide slots 34 in the tubular upright 24. The end of the lever 31 is longitudinally slotted as at 35 to receive a pin 36 projecting laterally from an arm 37 of a rock shaft 38 mounted in suitable bearings
20 at the upper end of a bracket or standard 39 rising from the uprights 12 above the horizontal plate 16. Said rock shaft 38 has another arm 40 which is connected by a link 41 with the end of the crank 21.

25 The head 26 of the plunger is provided with a yielding presser 42 said presser being secured to the lower ends of screws or pins 43 which pass freely through the head 26 and have heads 44 above it to limit the
30 downward movement of the presser 42 relatively to the head, this relative movement being effected by springs 45 coiled about the pins or screws 43 between the upper surface of the presser and the under surface of the
35 head 26. The head 26 is also provided with a cutter 46 adapted to sever a stamp from a strip which is supplied between the feed rolls, the edge of said cutter co-acting with the end of a strip guide 47 mounted on the
40 table 11. Said strip guide has its edges turned over and inward toward each other as shown in Fig. 2, leaving an open space between said edges which will enable the finger of the operator, or any suitable instrument, to be employed for starting the
45 end of the strip through the machine when preparing it for use.

As shown in Fig. 1 a bracket 48 is secured to the uprights 12, said bracket supporting
50 the strip reel or coil casing 49. Said casing has an opening 50 for a purpose which will be presently described and, in practice, is provided with a removable side 51 which is held in place by a screw 52 entering a stud
55 53 projecting from the opposite wall of the casing. As shown in said Fig. 1 a strip 54 in coil form is mounted on the stud 53 and is held in the casing 49 by the cap or side member 51, the end of said strip being led
60 through the outlet from the casing to and between the feed rolls. The purpose of the slot 50 is to enable a loose strip in other than coil form to be employed. In this case, sup-
posing there is no coil in the casing, one end

of a strip of any desired length is pushed 65 through the slot 50 and down and through the outlet from the casing to the feed roll.

Before describing the operation of the feed rolls and of the affixing plunger, the means for applying moisture to the envelop 70 or card will first be referred to.

As shown in Fig. 2, a lateral extension of the table 11 affords a support for vertical ways 55 in which is mounted a plunger 56 having a knob or hand pressure member 57 75 at its upper end and being normally elevated by a spring 58. Connected to the lower end of the plunger 56 is a reservoir 59 for water or other moistening fluid, said reservoir having a small aperture 60 (see Fig. 80 1) in its bottom and having a pad 61 of felt or other suitable absorbent material below said aperture, the pad projecting slightly below the lower edge of the walls which in-
close it. A suitable filling opening in the 85 reservoir is provided with a stopper 62.

The pin 63 which connects the link 41 with the crank 21 passes loosely through both and has the pawl 22 secured to its inner end. On the outer end of the pin 63 is secured a col- 90 lar 64 by a cotter pin 65. A spring 66 connects said cotter pin with a stud or pin 67 projecting from the hub of crank 21 and serves to keep the pawl in engagement with the ratchet. A spring 70 is connected to the 95 end of lever 31 and to a suitable fixed part such as the bracket 48, and acts to normally hold the lever in the position shown by dotted lines in Fig. 3.

In use, the operation may be as follows:— 100
The envelop or card is first laid on the lateral extension of the table 11, under the moistener, and then the plunger 56 is depressed so that the pad 61 will apply moisture to the upper surface of such envelop or 105 card. The area of moistened surface will preferably be somewhat greater than that of the stamps which are used so that no great care need be exercised in properly locating the envelop or card for the stamp to be 110 affixed thereto. After a portion of the envelop or card has been moistened, as described, the article is shifted along the table to bring the moistened portion in front of the strip guide 47 and under a stamp pro- 115 jecting from the guide 47. The operator then grasps the handle 32 of the lever which normally rests in the dotted line position shown in Fig. 3 and depresses it to cut off the stamp and affix it as shown in Fig. 4. 120 This rocks the shaft 38 and, through the link 41, partially rotates the crank 21 and shifts the pawl 22 to the position shown by full lines in Fig. 3. On release of the handle the spring 70 returns the parts to the posi- 125 tion shown by dotted lines in Fig. 3, so that the pawl 22 causes the lower roll 13 to feed the strip the exact distance according to the

size of the stamp so as to project another stamp to position to be affixed to the next moistened article.

It is to be understood that while we have illustrated and described the invention in what we consider to be its preferred embodiment, we do not limit ourselves to all of the details of construction since we may variously modify the same within the limits of mechanical skill.

Having now described our invention, what we claim is:

1. A machine of the character described comprising a plunger provided with a cutter and a presser, an operating lever fulcrumed in said plunger and having its ends free to swing, and means operatively connected with one end of said lever for feeding material under said cutter and presser.

2. A machine of the character described comprising a plunger provided with a cutter and a presser, an operating lever fulcrumed in said plunger and having its ends free to swing, rolls for feeding material under said cutter and presser, and means connected with one end of said lever for operating said rolls.

3. A machine of the character described comprising a plunger provided with a cutter and a presser, an operating lever fulcrumed in said plunger and having its ends free to swing, yielding means for holding one of said ends normally depressed, and means operatively connected with the depressed end of the lever for feeding material under said cutter and presser.

4. A machine of the character described comprising a plunger provided with a cutter and a presser, an operating lever fulcrumed in said plunger and having its ends free to swing, yielding means for holding one of said ends normally depressed, rolls for feeding material under said cutter and presser, and means connected with the depressed end of said lever for operating said rolls.

5. A machine of the character described comprising a plunger provided with a cutter and a presser, an operating lever fulcrumed in said plunger and having its ends free to swing, feed rolls one of which is provided with a ratchet, a crank having a pawl engaging said ratchet, and means operatively connected with one end of said lever for operating said pawl.

6. A machine of the character described comprising a plunger provided with a cutter and a presser, an operating lever fulcrumed in said plunger and having its ends free to swing, feed rolls, one of which is provided with a ratchet, a crank having a pawl engaging said ratchet, means operatively connected with one end of said lever

for operating said pawl, and means for limiting the movement of the crank in one direction.

7. A machine of the character described comprising a tubular upright provided with slots, a plunger working in said upright and provided with a cutter and a presser, a lever fulcrumed on a pin carried by said plunger, said pin engaging said slots, and means operatively connected with one end of said lever for feeding material under said cutter and presser.

8. A machine of the character described comprising a tubular upright provided with slots, a plunger working in said upright and provided with a cutter and a presser, a lever, a fulcrum pin for said lever mounted in said plunger between said enlargements and engaging said slots, and means operatively connected with one end of said lever for feeding material under said cutter and presser.

9. A machine of the character described comprising a plunger provided with a cutter and a presser, an operating lever fulcrumed in said plunger and having its ends free to swing, a rock shaft having an arm operatively connected with one end of said lever, a feed roll, and means actuated by said rock shaft for operating said feed roll.

10. A machine of the character described comprising a plunger provided with a cutter and a presser, an operating lever fulcrumed in said plunger and having its ends free to swing, a rock shaft having an arm operatively connected with one end of said lever, a feed roll having a ratchet, a pawl engaging said ratchet, and a link connected with said rock shaft for actuating said pawl.

11. A machine of the character described comprising a plunger provided with a cutter and a presser, an operating lever fulcrumed in said plunger and having its ends free to swing, one of said ends being provided with a slot, a rock shaft provided with an arm carrying a pin engaging said slot, a feed roll provided with a ratchet, a crank having a pawl engaging said ratchet, and a link operated by said rock shaft and connected with said crank.

12. A machine of the character described comprising a plunger provided with a cutter and a presser, an operating lever fulcrumed in said plunger and having its ends free to swing, means for yieldingly holding one of said ends normally depressed, feed rolls one of which is provided with a ratchet, a pawl engaging said ratchet and means operatively connected with the depressed end of said lever for operating said pawl.

13. A machine of the character described comprising a plunger provided with a cutter and a presser, an operating lever fulcrumed in said plunger and having its ends

free to swing, means for yieldingly holding
one of said ends normally depressed, a rock
shaft having an arm operatively connected
with the depressed end of said lever, and
5 means operated by said rock shaft for feed-
ing material beneath said cutter and plunger.

14. A machine of the character described
comprising a base having a table, uprights
above said table and having a top plate,
10 feed rolls the upper one of which is mounted
in vertically yielding bearings in said up-
right, stems leading from said bearings

above the top plate said stems being con-
nected by a cross bar, and a thumb screw
passing through said cross bar and bearing 15
on the top plate.

In testimony whereof we affix our signa-
tures, in presence of two witnesses.

ELI HUBBELL HOTCHKISS.
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Witnesses:

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