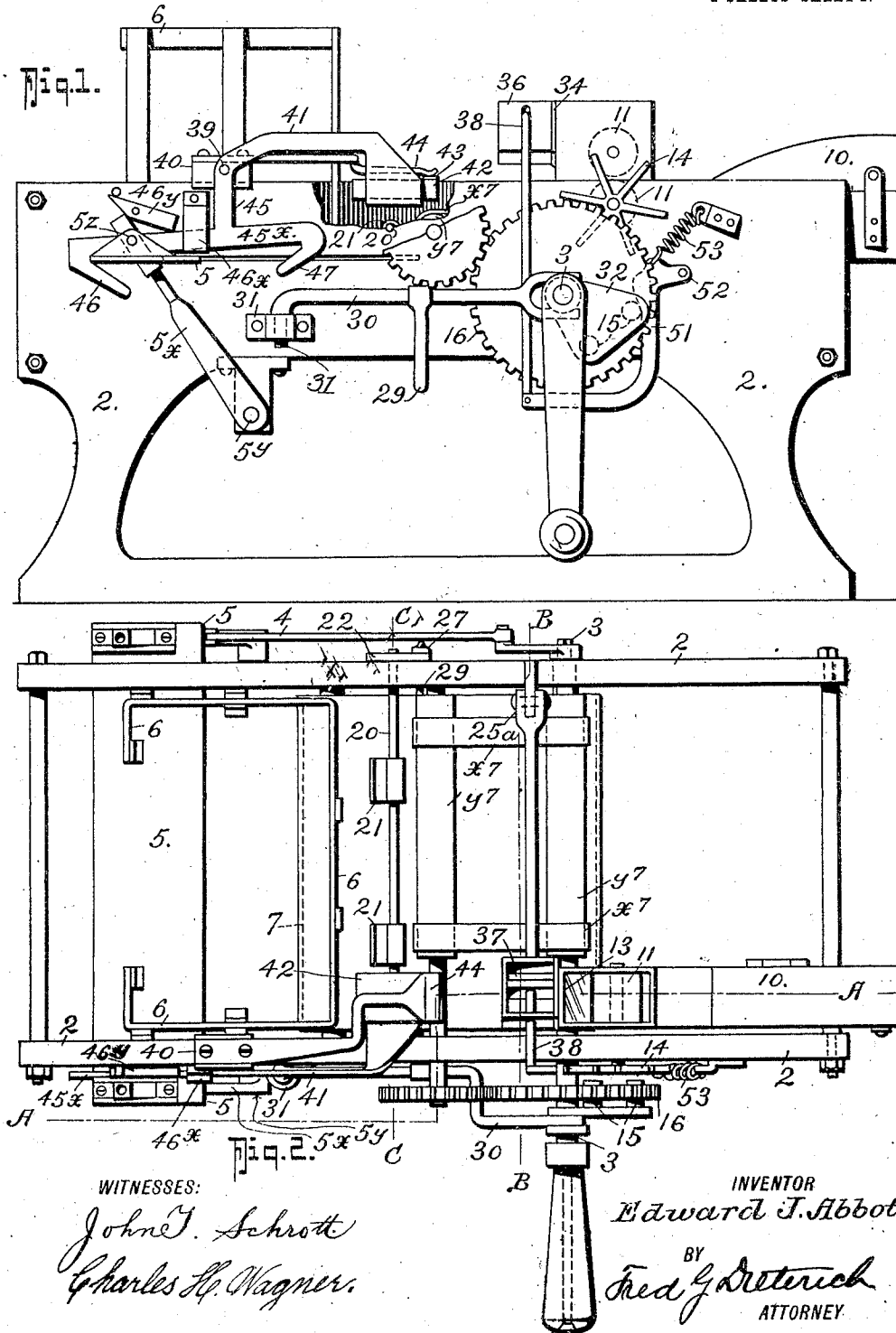


E. J. ABBOTT.
STAMP AFFIXING MECHANISM.
APPLICATION FILED FEB. 5, 1910.

973,465.

Patented Oct. 25, 1910.

2 SHEETS—SHEET 1.

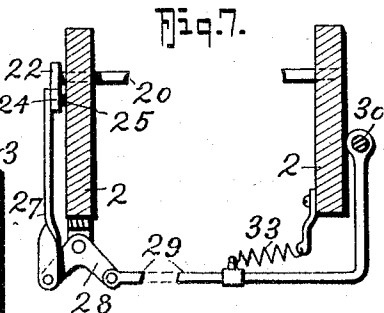
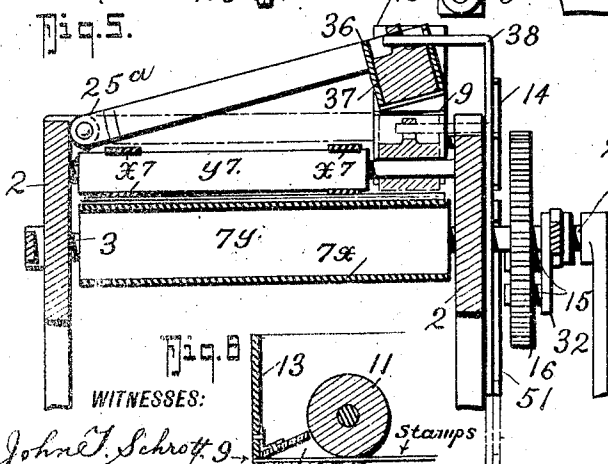
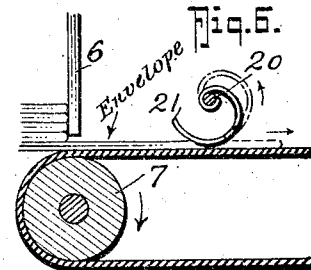
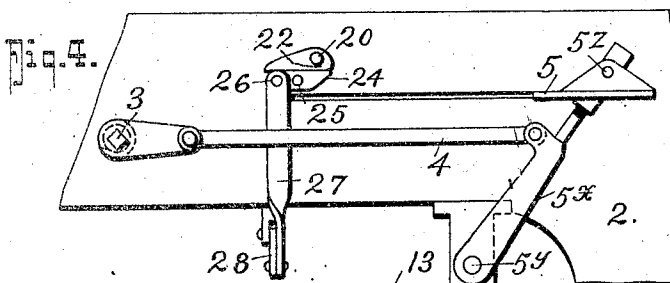
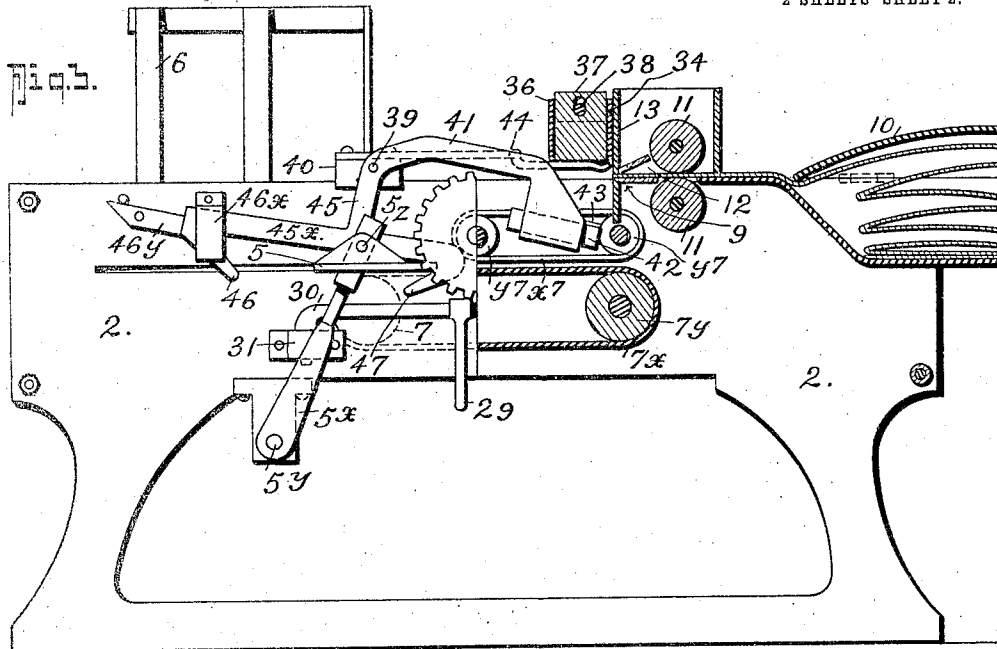


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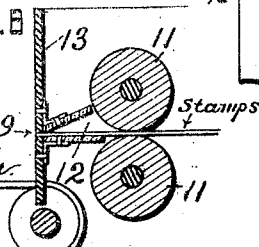
Patented Oct. 25, 1910.

2 SHEETS—SHEET 2.



WITNESSES:

John T. Schrott
Charles H. Wagner



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ATTORNEY

UNITED STATES PATENT OFFICE.

EDWARD J. ABBOTT, OF MISSION CITY, BRITISH COLUMBIA, CANADA.

STAMP-AFFIXING MECHANISM.

973,465.

Specification of Letters Patent.

Patented Oct. 25, 1910.

Application filed February 5, 1910. Serial No. 542,190.

To all whom it may concern:

Be it known that I, EDWARD J. ABBOTT, a citizen of the Dominion of Canada, residing at Mission City, in the Province of British Columbia, Canada, have invented a new and useful Stamp-Affixing-Mechanism, of which the following is a specification.

This invention relates to a means for affixing stamps to envelopes and is designed for an attachment to the envelop sealing and stamping machine on which an application was filed on the 10th of May 1909 under Serial No. 495,018 patented May 24, 1910, Patent No. 959,283. The stamp affixing means there revealed has not proved entirely satisfactory in that when the machine was in use stamps were issued from the magazine and cut off whether an envelop was there to receive them or not. It is to overcome this objection by making the stamp issuing mechanism cooperative with the delivery of a sealed envelop that the mechanism which is the subject of this application has been devised.

The invention also comprises improvements in the stamp issuing means and in the means for moistening a stamp after it is projected from the stamp delivery aperture in the knife plate; to all of which improvements attention will be drawn in the course of the following specification, reference being made to the drawings which accompany it.

In these drawings Figure 1 is a side elevation of the machine from the front side, Fig. 2, a plan of the machine showing the same, Fig. 3, a side elevation and part section of the envelop sealing machine showing the stamp issuing and moistening mechanism, the view being taken on the line A A in Fig. 2, Fig. 4, a side elevation of a part of the off side of the machine, and Fig. 5, a cross section of the machine showing the stamp cutting knife and its connected parts, on the line B, B, Fig. 6, a section showing the way-shaft and its connection to the front end of the envelop magazine and its slide plate, and Fig. 7, a section on the line C C showing the means for connecting the way-shaft movement across the machine.

In these drawings 2 represents the frame of the machine, 3 being the handle of the shaft by which the machine is operated, 4 the connecting rod at the back of the machine which operates the slide plate 5 by

which the envelops are withdrawn from their magazine 6 and delivered to the rolls between which the envelops pass and by which the moistened flap is closed, and 7 is the roller under the front edge of the envelop magazine between which and that edge the envelops pass as they are withdrawn from their magazine. The plate 5 projects through the machine crosswise and is pivoted at 5^x to the levers 5^y which are pivoted at 5^v to the frame, see Figs. 1, 2, 3 and 4. The envelops are placed in the magazine 6 with the flaps down with the flap edges facing to the right in Fig. 1. In the operation of the envelop moistening and sealing the plate 5 carries a moistening pad (not shown) on its under surface that engages the gummed part of the envelop flap as the plate 5 enters between the flap and the envelop body in moving from the position shown in Fig. 1 to the position shown in Fig. 3. In moving from left to right in Fig. 1 the plate 5 enters the flap of the envelop and pushes it into the position shown in Fig. 6, under the member 21 where it may be gripped by the belts 7^x and 7^y and conveyed toward the stamp affixing mechanism. The belt 7^y passes over the pulleys 7^z and the narrow belts 7^x pass over the pulleys 7^v.

The stamp magazine in which a ribbon of stamps is folded is represented by 10 and the rollers between which the stamps pass and by which they are withdrawn from the magazine and delivered to the outlet slit 9 in the knife plate 13 are indicated by 11. The stamp feed rollers 11 are rotated by means of a star wheel 14 from two pins 15 projecting from the face of the gear wheel 16 which operates the envelop sealing rolls. These pins 15 are endwise slidable through the wheel 16, and are normally withdrawn so that they will not engage the star wheel 14 but are projected from its face to operate the star wheel to feed stamps only when an envelop is passing from the magazine. This control in the position of the pins 15 by the passage of a sealed envelop is effected in the following manner: Extending across the width of the machine immediately in advance of the front edge of the envelop magazine 6 is a way-shaft 20 mounted in bearings in the side frame 2 of the machine. Projecting downward from this way-shaft toward each side of the envelop width are resilient arc segments 21 so placed in relation to the

envelop slide plate 5 that they will be clear of that plate as it passes backward and forward but if an envelop is on the slide plate the extra thickness of that envelop will cause the way-shaft 20 to be partially rotated by the contact of the segments 21 with the plate and its envelop as they pass to the closing rollers, the resilience of the members 21 permitting them to accommodate themselves to varying thickness of envelops. The way-shaft 20 projects through the off side frame of the machine and has there secured to it a small lever having a heel 22 which, when the shaft 20 is partially rotated, bears against one end of a lever 24 pivotally mounted at 25 in close proximity with the lever on the way-shaft 20 so that the levers are normally in contact with one another. The lever 24 is connected at 26 by a link rod 27 to one arm of a small bell crank lever 28 pivotally mounted in the side frame of the machine. The other arm of the bell crank lever has a rod 29 attached to it which extends across the machine to the front side and is there connected to a lever 30 pivoted at 31 and connected at the free end to the hub of a segment 32 in which segment are secured the pins 15 which project through the gear wheel 16.

A light spring 33 secured between the cross rod 29 and the side frame 2 of the machine, normally holds this mechanism with the pins 15 withdrawn within the gear wheel and in the out-of-action position, but the resistance of this spring is overcome when an envelop is carried by the slide plate 5 out of the magazine and the mechanism is operated to project the pins 15 to the position where they will engage and operate the star wheel of the stamp feed.

The stamps drawn by the rollers 11 are delivered into a tapered chute 12 the top and bottom of which are of glass, to lessen the frictional resistance and to afford a view as to whether a stamp is in the chute or not, and they are therefrom projected through the outlet 9 in the knife plate 13 against the edge of which outlet the knife cuts them off. Before being cut from the strip and applied to the envelop, the projected stamp is moistened with water by a mechanism which is operative by the slide plate 5 that withdraws each envelop from the envelop magazine.

Slidably mounted on the upper edge of the frame 2 so as to be susceptible of endwise motion on it is a small slide 40 in which is pivoted at 39 a lever one arm 41 of which crosses to the inside of the frame and has secured to it a small water receptacle 42 having an exposed pad 43 extending across its forward end. Secured to the slide 40 and extending forward to a position immediately over the water vessel 42 is a presser plate 44 against which the pad 43

of the water vessel is pressed when the slide 40 is drawn back. The lever 41 is carried downward as at 45 to a position adjacent to the end of the plate 5 which is here carried through the frame. At 46 it is bent downward and angled forward to engage the back end of the slide plate 5 and at 47 is bent downward and backward to engage the front edge of the slide. Sufficient distance is left between the width of the slide and the space between the hooks 46 and 47 to afford the necessary pause while the moistening pad is at the forward limit of its movement to allow the stamp to be projected if one is required. The lever 41 has its portion 45* guided by a guide bracket 46* on the frame and a pivoted latch stop 46* serves to hold the lever in the position shown in Fig. 3, until drawn down by the plate 5 engaging the portion 46 of said lever, as will be clearly understood by reference to Figs. 1 and 2 of the drawings. Thus as the slide 5 moves forward its front edge engages the hook 47 and by the means of the incline of that hook draws downward the front end of the lever 41 to which the water receptacle is secured, and thereafter carries the moistening pad and presser plate in that open condition close up to the aperture from which the stamp is to be projected when required. Further movement of the machine feeds the stamp through the aperture and when in the backward movement of the plate 5 its back edge engages the hook 46 the incline of that hook first pulls down that end of the lever and lifts the moistened pad of the water receptacle tightly against the presser plate with its interposed stamp. Further movement of the plate after this is accomplished draws back the slide 40 with its connected presser plate and moistening pad tightly closed on one another so that if a stamp is between them it is effectually moistened during that backward movement. After the stamp has been projected through the aperture in the knife plate and has been moistened in the manner just described, it must be cut from the band and applied to the passing envelop for which it is intended.

The knife 34 by which the cutting is performed, is secured to a knife lever pivoted at 25* on the other side of the machine, see Fig. 5, and is slidable in close contact with the knife plate 13 through which the stamp is projected. It is operated by a lever 51 pivoted at 52 which lever is engaged by one of the pins 15 which operates the stamp feed and is situated farther from the center of the shaft than the other, and during the rotation of the shaft carries the lever quickly down against the resistance of a spring 53 which when the pin disengages from the lever, carries the lever quickly up again. A rod 38 connects the end of this lever 51 to

the knife lever so that the knife is drawn down across the aperture through which the stamp is projected to cut off the stamp.

On the back of the knife plate is a rectangular box-like casing 36 in which is freely slidable normal to the plane of movement of the envelopes a presser block 37. The end of the connecting rod 38 is connected to the knife lever by bending that rod at right angles and by passing the inwardly turned end through an aperture in the casing 36 and loosely connecting it to the upper side of the presser block against which it bears. As the lever is drawn down and as the lever reaches the downward limit of its movement the presser block is through the action of the angularity of the knife lever and the inwardly turned ends of the connecting rod pressed out below the lower edge of the knife and presses the cut and moistened stamp upon the envelop,

It will be noted that the stamp moistening means is operative with the machine whether an envelop passes out or not but the knife and the stamp feed being controlled by the pins 15 are not operative unless an envelop passes out of the receptacle to receive a stamp.

The envelop sealing mechanism consists generally of the parts numbered 6, 5 and belts or conveyers 7^x and 7^y and their supporting parts, together with the devices that reciprocate the plate 5 and move the belts 7^x and 7^y, as will be more clearly apparent with reference to my patent hereinbefore referred to.

Having now particularly described my invention and the manner of its operation and use, I hereby declare that what I claim as new and desire to be protected in by Letters Patent, is:

1. As a stamp affixing means, the operative mechanism with a machine for sealing envelopes, of means for feeding moistening, cutting off and applying a postage stamp to the passing envelop, means for rendering the stamp feeding, cutting and applying means cooperative with the passage of an envelop said means comprising a rocker shaft extending over the path of the passing envelop said rocker having depending from it resilient contact segments that will be engaged by the passage of an envelop whereby the shaft may be rotated, and means for applying such movement to throw into action the stamp feeding and cutting mechanism.

2. As a stamp affixing means, the operative combination with the mechanism that withdraws an envelop from the magazine and seals its flap, of a stamp feeding mechanism operative by a projection rotatable with the envelop sealing mechanism, means for holding said projection normally out of engagement with the stamp feeding mechanism

and means cooperative with the passage of an envelop from the magazine for moving said projection into a position where it will actuate the stamp feed.

3. In an envelop sealing machine, the operable combination therewith of a stamp affixing means, said means comprising a stamp magazine in which the stamps may be folded in a ribbon, feed rollers between which the stamp is passed, means for rotating said rollers from the mechanism which operates the envelop sealing, a tapered glass passage through which the stamp is delivered to an aperture in the knife plate, means cooperative with the envelop sealing mechanism for moistening the projected stamp, means for severing the stamp from the ribbon and means for pressing the severed stamp upon a passing envelop.

4. As a means for affixing stamps to envelopes, the combination with a mechanism by which envelopes are sealed, of a stamp containing magazine, feed rollers through which the ribbon of stamps from the magazine may pass, a star wheel and gears by which the feed rollers may be rotated, means for rotating said star wheel by means of pins projecting from a rotatable part of the envelop sealing mechanism, means for holding said pins normally out of engagement with the star wheel, means for moving said pins into a position of engagement with the star wheel when an envelop is passing through the sealing means said means comprising downwardly depending resilient rockers projecting in the path of a passing envelop and means whereby the movement of said rockers may be communicated to the pins by which the star feed is rotated to place them in a position where they will rotate the star wheel, a passage through which the stamps may be passed from the feed rolls and projected through an aperture in the knife plate, a moistening means comprising a moistened pad beneath the aperture in the knife plate through which the stamp is projected, a plate opposed to said pad above the aperture, means cooperative with the envelop sealing mechanism for closing the moistened pad upon the opposed plate and the interposed stamp and means for drawing the moistened pad and its opposed plate off the projected stamp, means for severing the stamp from the strip and means for applying it to the passing envelop.

5. In a stamp affixing means the combination with a stamp magazine, of feed rollers between which the stamps pass, an apertured plate through which they are delivered, means for moistening the delivered stamp, a knife slidable against the knife plate through which the stamp is projected said knife plate being secured to a pivotally mounted lever, means for normally holding the lever out of action, means for drawing

down the knife lever to cut off a stamp, a box-like casing at the back of the knife, a presser block vertically movable in said box-like casing at the back of the knife, and means for projecting the presser block below the knife edge as the knife is drawn down.

6. In a device for fixing stamps to envelopes, the combination with a stamp magazine and means for feeding stamps therefrom and projecting them as required through an apertured knife plate, a knife slidably movable in contact with the knife plate across the aperture, means for normally holding the knife out of action and means for drawing the knife down across

the aperture said means comprising a lever pivotally mounted on the frame the free end of which lever is connected to the knife, a projection from a rotatable part of the machine which projection draws down the lever and releases it, means for withdrawing said projection from operable engagement with the lever and means for pressing the severed stamp onto the envelop.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

EDWARD J. ABBOTT

Witnesses:

ROWLAND BRITAIN,
ALEXANDER SMITH.