



United States Patent Office.

WILLIAM SPRAGUE POST, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO JOHN M. ATWOOD AND FREDERICK S. POST, OF SAME PLACE, AND WILLIAM E. POST, OF MELROSE, MASSACHUSETTS.

MACHINE FOR MOISTENING, CLOSING, AND APPLYING STAMPS TO ENVELOPS.

SPECIFICATION forming part of Letters Patent No. 658,673, dated September 25, 1900.

Application filed November 6, 1899. Serial No. 735,945. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM SPRAGUE POST, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented new and useful Improvements in Machines for Moistening, Closing, and Applying Stamps to Envelops, of which the following is a specification.

The object of this invention is to produce a nachine for moistening and closing envelops

and for applying stamps thereto.

The invention consists in the combination and arrangement of parts set forth in the following specification, and particularly pointed

15 out in the claims thereof.

Referring to the drawings, Figure 1 is a perspective view of my improved machine for moistening, closing, and applying stamps to envelops, showing the same applied to a 20 table, said table being partly broken away to more clearly show the invention, the legs being broken off to save space in the drawings, and the slide 18 being shown broken off. and sectioned at its right-hand end, the 25 treadle 13 in said figure being shown depressed and the slide 10 raised from its normal position. Fig. 2 is a section taken on line 2 2, Fig. 1, this figure also being partly broken away for the sake of illustration. Fig. 30 3 is a vertical section, line 3 3, Fig. 2. Fig. 4 is a detail longitudinal section, line 4 4, Fig. 2.

Like numerals refer to like parts throughout the several views of the drawings.

In the drawings, 6 is a table, of any convenient and durable construction, to which the different portions of the machine are attached.

7 is a moistening-pad inserted in the sur-40 face of the table 6 and projecting through the top of said table and into a receptacle 8, containing water 9, by which the pad 7 is kept continually moistened.

The slide 10 slides in ways 11, fast to the table 6. Said slide is raised by means of a cord 12, attached to a treadle 13, pivoted by means of a hinge 14 to the floor. Said cord passes over a roller 15, which turns upon a pin 16, fast to a bracket 17 upon the table 6.

The slide 10 descends by its own weight when 50 the treadle 13 is released.

To moisten the gummed surface of the flap, the envelop is placed face upward, with the under surface of the flap, upon which the mucilage is ordinarily found, resting upon the 55 upper surface of the moistened pad 7. The treadle 13 is released, and the slide 10 descending presses the flap against the moistened pad 7, thus moistening the gummed surface thereof.

In the upper surface of the table 6 I provide a slide 18, said slide having slots 19 therein adapted to receive a metal gage 20. The object of said metal gage is to gage the position of the envelop with relation to the flap- 65 moistening device, hereinbefore described, and also to assist in carrying said envelop forward to the stamp-attaching device, as hereinafter described. The slide 18 moves in grooves or ways 21, formed in the top of the table 6, and 70 has a rack 22 fast to the under side thereof, with which meshes a pinion 23, fast to a shaft 24, said shaft turning in bearings 25, fast to the under side of the top of the table 6. The shaft 24 has a flanged pulley 26, around which 75 is coiled a cord 27, which connects said pulley to a treadle 28, pivoted by a hinge 29 to the floor. A spiral torsional spring 30 encircles the shaft 24, one end of said spring being fast to the flanged pulley 26 and the 80 other end to one of the bracket-bearings 25, so that when the treadle 28 is depressed the shaft 24 and pinion 23 will be rotated and the slide 18 carried to the right, Fig. 4. When the treadle 28 is released, the spiral spring 85 30 will rotate the flanged pulley 26 and pinion 23 in the opposite direction and the slide 18 will be carried to the left, Fig. 4.

The object of the slide 18 is to carry the envelop after it has been moistened from the 90 flap-moistening device to the stamp-attaching device, the metal gage 20 preventing the envelop from slipping upon the slide 18 when said slide is being moved to the right, Fig. 4.

The stamp-attaching device consists of two 95 parts, one for moistening the surface of the envelop, the other for attaching the stamp to the portion of the envelop thus moistened.

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The stamp moistening and attaching device is particularly shown in Figs. 1, 2, and 3, in which 31 is a bracket fast to the upper surface of the table 6 and having two hollow cyl-5 inders 32 and 33 formed upon the end of said bracket. The cylinder 32 contains water 34 and has a piston 35 therein, having a piston-rod 36 projecting through the top of the cylinder 32 and having a top 37 thereon, to said piston 35 being kept up in position shown in Fig. 3 by a spiral spring 38, one end of which bears against the under side of the top 37 and the other end of which bears against the top of the cylinder 32. The cylinder 33 15 contains a piston 39, said piston being formed as a hollow cylinder with the lower end perforated at 40, the upper end of said hollow cylindrical piston being open. The pistonrod 41, having a flange 42 fast thereto, is 20 raised by a spiral spring 43 and depressed by pressing upon the top 44, fast to said pistonrod 41. The flange 42 is free to slide within the hollow piston 39, and upon depressing the piston-rod by means of the top 44 it will be 25 seen that the flange 42 will first descend, expelling the air from the hollow piston 39, until said flange strikes the lower perforated end of said hollow piston 39, when both flange and piston will descend together until the 30 lower surface of the piston 39 comes in contact with the upper stamp of the series of stamps 45, contained in the stamp-holder 46, fast to the table-top 6. The said stampholder consists of a tube 46, closed at the bot-35 tom and open at the top, with the exception of a small inwardly-projecting flange 47. A spiral spring 48, contained within the tube 46, forces a disk 49 and the stamps 45 upward, the flange 47 preventing said stamps 40 from being forced out of the tube 46. Upon releasing the top 44 of the piston-rod 41 the spring 43 will carry said piston-rod and the flange 42, attached thereto, upwardly, creating a vacuum in the hollow piston 39 and 45 drawing the upper stamp of the series of stamps 45 against the lower face of the hollow piston 39. Upon the upper end of the hollow piston 39 is an inwardly-projecting flange 50, against which the flange 42 im-50 pinges when said flange has traveled upward inside the hollow piston 39 to a sufficient distance, whereupon the flange 42 and hollow piston 39 will rise together, drawing the upper stamp of the series with them by means 55 of suction and holding it suspended until the envelop, which has been moistened at the proper place by the piston 35, as hereinbefore described, is brought forward under the stamp by means of the sliding carrier 18, 60 whereupon the stamp is carried downwardly and pressed upon the moistened surface of the envelop by depressing the top 44, flange 42, and hollow piston 39. After the stamp has been attached to the envelop, as herein-65 before described, and the gummed surface of the flap moistened the envelop is lifted by hand and carried between the feed-rolls 51,

said rolls being rotated by the crank-handle 52 and gears 53, Fig. 1, and the flap rolled down upon the body of the envelop, so as to 70 close and seal the same.

The operation of the device as a whole is as follows: The treadle 13 being first depressed and the slide 10 raised, as shown in Fig. 1, the envelop is placed under the 75 slide 10, with the gummed surface of the flap resting upon the moistening-pad 7 and the gage 20 resting against the left-hand side of said envelop, as viewed from the front of the table 6, Fig. 1. The treadle 13 is then re- 80 leased, allowing the slide 10 to descend and press the flap of the envelop against the moistening-pad 7. The treadle 13 is next depressed, raising the slide 10, and the treadle 28 depressed, carrying the slide 18 toward 85 the right, Fig. 4, and the envelop forward with it by means of the gage 20 until the upper right-hand corner of said envelop is brought under the piston 35. The top 37 is then depressed by hand, moistening the en- 90 velop in the upper right-hand corner. The top 44 is next depressed by hand and released, picking up the stamp from the stamp-holder 46, as hereinbefore described, and carrying it up a slight distance above the surface of 95 the table 6. The treadle 28 is then depressed sufficiently to carry the envelop forward to the position shown in dotted lines, Fig. 1, wherein the moistened surface in the righthand upper corner of the envelop is brought 100 directly beneath the stamping device. The stamp is then applied to the moistened surface of the envelop by depressing the top 44, as hereinbefore described. The stamp being thus applied to the surface of the envelop, as 105 hereinbefore described, and the gummed surface of the envelop moistened the envelop is then taken by the operator from the slide 18 and fed between the rollers 51, said rollers being rotated by means of the crank-handle 110 52 and gears 53, closing the flap and pressing both stamp and flap to the main body of the envelop and firmly affixing the stamp thereto and sealing the envelop.

Having thus described my invention, what 115 I claim, and desire by Letters Patent to se-

cure, is—

1. In a machine of the character described, a moistening-pad and mechanism for pressing the flap of an envelop against said pad, 120 a device for moistening a portion of the surface of the body of said envelop, a stampholder, and mechanism for removing a stampfrom said stamp-holder and applying it to the moistened surface of the body of said en-125 velop, and a reciprocating slide, whereby said envelop is carried from said moistening to said stamp-attaching device.

2. In a machine of the character described; a moistening-pad and mechanism for press- 130 ing the flap of an envelop against said pad, a device for moistening a portion of the surface of the body of said envelop, a stampholder, and mechanism for removing a stamp

from said stamp-holder and applying it to the moistened surface of the body of said envelop, an envelop-carrying slide, a gage attached thereto and mechanism for imparting a reciprocating motion to said envelop-carrying slide, whereby said envelop is carried from said moistening to said stamp-attaching device.

3. In a machine of the character described, 10 a stamp-holder, a reciprocating stamp-picking device located above said stamp-holder, whereby the stamps in said holder may be removed one at a time therefrom and applied to the moistened surface of an envelop placed under the reciprocating device.

4. In a machine of the character described,

a device for moistening a portion of the body of an envelop, a stamp-holder, a reciprocating device located above said stamp-holder whereby the stamps in said holder are removed one at a time therefrom and applied to the moistened surface of an envelop placed thereunder and a reciprocating slide, whereby said envelop is carried from said moistening to said stamp-attaching device.

In testimony whereof I have hereunto set my hand in presence of two subscribing wit-

nesses.

WILLIAM SPRAGUE POST.

Witnesses:

CHARLES S. GOODING, F. M. JOHNSON.