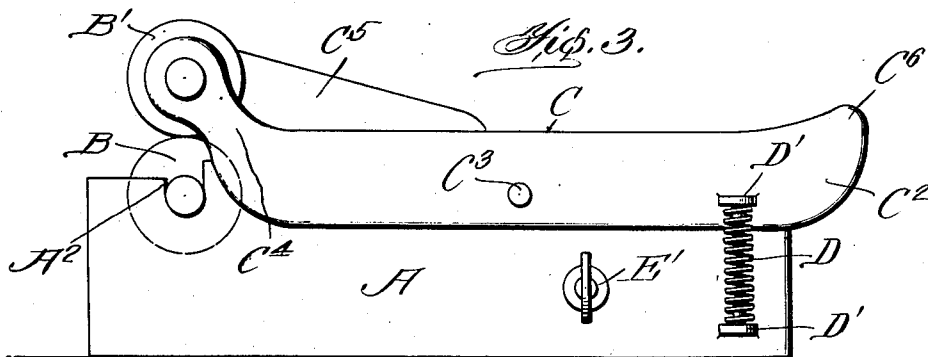
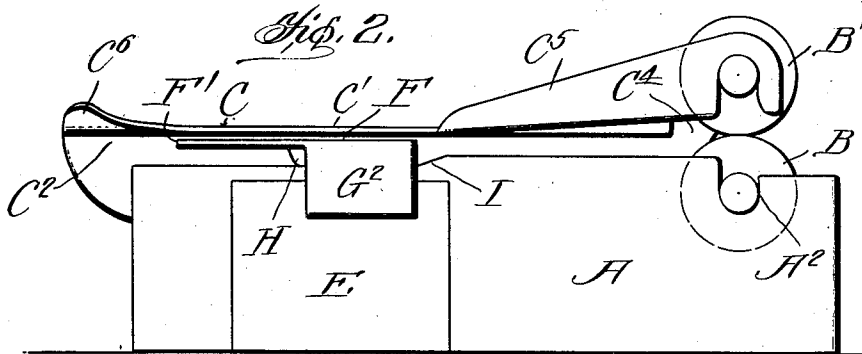
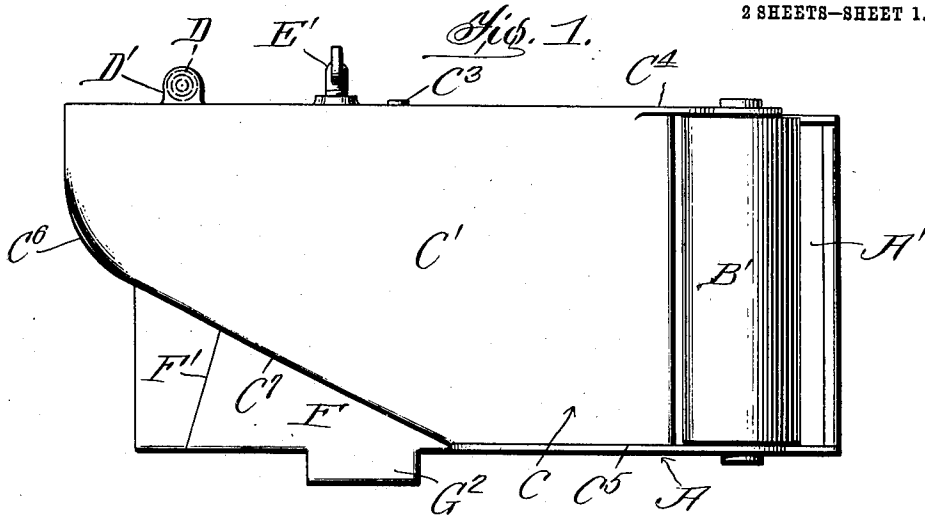


F. ROTH.  
 ENVELOP MOISTENER AND SEALER.  
 APPLICATION FILED APR. 27, 1908.

943,318.

Patented Dec. 14, 1909.

2 SHEETS—SHEET 1.



Inventor

*Frederick Roth,*

By

*James & Brock*  
 Attorneys

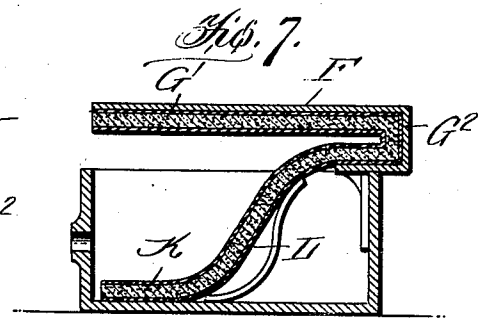
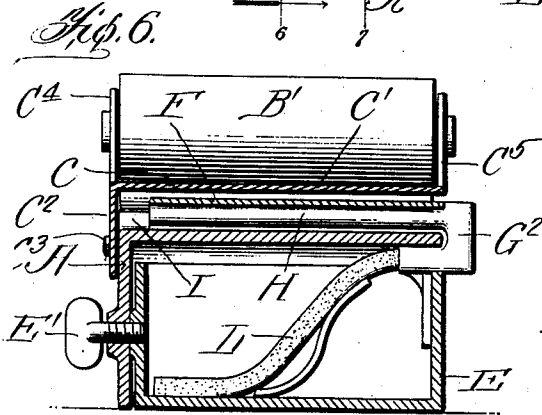
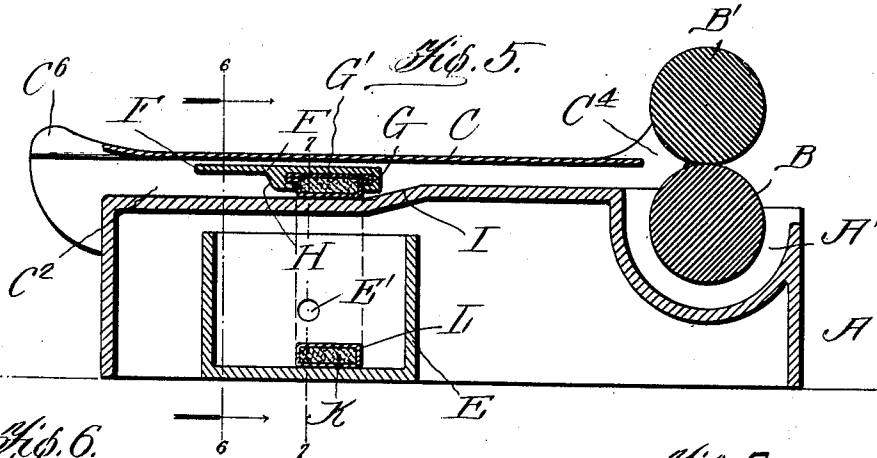
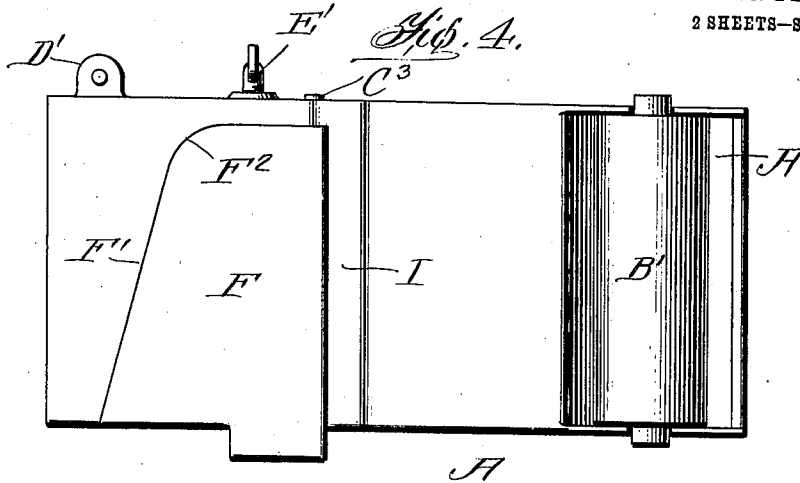
Witnesses

*Oliver W. Holmes*  
*E. B. McEach.*

F. ROTH.  
 ENVELOP MOISTENER AND SEALER.  
 APPLICATION FILED APR. 27, 1908.

943,318.

Patented Dec. 14, 1909.  
 2 SHEETS—SHEET 2.



Witnesses  
*Oliver W. Holmes*  
*E. B. McBeth*

Inventor  
*Frederick Roth*  
 By *Oliver W. Holmes*  
 Attorney

# UNITED STATES PATENT OFFICE.

FREDERICK ROTH, OF NEW YORK, N. Y.

ENVELOP MOISTENER AND SEALER.

943,318.

Specification of Letters Patent.

Patented Dec. 14, 1909.

Application filed April 27, 1908. Serial No. 429,495.

*To all whom it may concern:*

Be it known that I, FREDERICK ROTH, a citizen of the United States, residing in New York, in the State of New York, have invented a new and useful Improvement in an Envelop Moistener and Sealer, of which the following is a specification.

This invention is an improved construction of envelop moistener and sealer, the object being to provide a moistener and sealer in which the envelop can be passed through with the face uppermost so that when delivered from the machine, it will be in a position convenient for affixing the stamps thereto.

Another object of the invention is to provide a combined moistener and sealer in which the envelop can be quickly and easily passed through the device without the necessity of arranging the flap in any particular position, the construction and arrangement of the parts being such that as the said envelop is passed through the device, the mucilage of the flap is first moistened, and then compressed to the body of the envelop as it passes between the pressing rolls at the end of the machine.

Another object of the invention is to provide a novel form of moistening device whereby a minimum quantity of water can be made to moisten and seal the maximum number of envelops, and evaporation reduced to a minimum.

Another object of the invention is to provide a device in which the parts will be of such simple construction and their arrangement or combination also of such simple form that danger of the parts getting out of order is entirely avoided.

A still further object is to provide a device in which the moistening apparatus can be quickly and easily removed for the purpose of replenishing the supply of water.

With these various objects in view my invention consists essentially in the employment of a base carrying one of a pair of pressing rolls, a cover and guide arranged above said base and carrying the other pressing roll, and a combined moistener and guide arranged between the base and guiding cover, said moistening device being connected with the base.

The invention consists also in the novel construction of the various parts and in the novelties of combination or arrangement, all

of which will be fully described hereinafter and pointed out in the claims.

In the drawings forming a part of this specification:—Figure 1 is a top plan view of a combined moistener and sealer constructed in accordance with my invention. Fig. 2 is a side view of the same. Fig. 3 is a view taken from the other side. Fig. 4 is a top plan view with the cover or upper guide removed. Fig. 5 is a vertical longitudinal sectional view of the complete device. Fig. 6 is a transverse sectional view on the line 6—6 of Fig. 5, and Fig. 7 is a sectional view of the moistening device taken on the line 7—7 of Fig. 5, of the tank and moistener only.

In constructing a moistener and sealer in accordance with my invention I employ a base A which is preferably made of cast metal and is hollow as shown, being open at the bottom and closed at the top, and at one end is constructed with a transverse trough-like depression A', the ends of said trough being cut out as shown at A<sup>2</sup>, to provide bearings for the journals of the lower pressing roll B.

A combined cover and top guide C comprising horizontal plate C' having the flange C<sup>2</sup> at the rear side, said flange being arranged upon the rear side of the base and pivotally connected to said base at C<sup>3</sup> as most clearly shown in Fig. 3. This plate also carries a flange C<sup>4</sup> on the rear side and a similar flange C<sup>5</sup> on the forward side, said flanges being notched to provide bearings for the journal of the upper roll B', and these rolls B and B' are held in contact by means of a spring D held between lugs D' carried by the base and rear flange of the cover, as shown in Figs. 3 and 6, said spring serving to hold the entrance end of the cover and guide elevated and the delivery end depressed, thereby binding or pressing the top roll down upon the bottom roll, and the pressure upon the roll will be evenly distributed from end to end. The base A is cut away at one side and in it fits the water tank or box E, said tank or box being rigidly secured to the base by means of a screw E' which passes through the opposite side of the base and screws into the end of the box or tank and securely fastens the said box or tank in the base.

This box or tank E has the lower guide and moistening device connected therewith,

and this guide and moistener may be integral with the tank or connected therewith in any suitable manner. This combined guide and moistener comprises a plate F, the edge F' tapering as shown and rounded at F<sup>2</sup>, and it will be noted that this plate F is of such length that it extends nearly to the rear edge of the base, leaving sufficient space to permit the fold of the flap to pass between the end of the plate and the flange C<sup>2</sup>. The underside of this plate is formed with a dovetail channel or passage G in which is located the moistening strip G' of peculiar construction as hereinafter more fully described, and this channel or passage G communicates with an angular or curved tubular portion G<sup>2</sup> through which the moistening strip is passed as most clearly shown in Figs. 6 and 7; the greater portion of said moistening strip being located in the water box or tank where it is continually absorbing water and feeding it to the upper portion thereof by capillary attraction, thereby maintaining the proper amount of moisture at all times to be communicated to the mucilage on the flap.

The upper guide and cover C' extend forwardly beyond the forward end of the base and said extending end is curved upwardly as shown at C<sup>6</sup>, and this combined guide and cover is cut off upon an oblique line as shown at C' in order to provide ample space for the introduction of the envelop.

In operation the envelop is fed into the device with the right hand with the face or addressed side uppermost, and the upper edge of said envelop will contact with the depending flange C<sup>2</sup> and then as the envelop is drawn through the device the upper edge of the envelop continues to bear against the depending rear flange of the combined cover and upper guide. The curved extended portion C<sup>6</sup> insures the proper direction and position of the envelop as it enters the device, and in passing the envelop through the device the upper face continues to bear against the combined cover and guide and the inherent elasticity of the flap causes it to spring down and travel along the top face of the base, and as it does so the guide-plate F passes in between the body of the envelop and the flap as the envelop is moved along, and inasmuch as the bottom of this plate F carries the moistening strip as before described, the face of this strip will be brought into contact with the gummed portion of the flap and will moisten the same, and it will be noted that an inclined face H is arranged upon the bottom of the plate just in advance of the moistening strip which serves to gradually open the flap so that it will pass freely beneath the moistening strip, and it will also be noted that the base A is constructed with a transverse inclined portion I just to the rear of the combined lower

guide and moistener, so that the moment the flap passes beneath the moistener, the sealing operation will begin, and as the envelop is carried along still bearing upon the under side of the combined cover and guide plate, it is caused to travel directly between the spring pressed rolls B and B', and it will be noted that the point of contact of these rolls is coincident with the bottom of the plate C', so that the envelop with the moistened flap will be easily directed between the said rolls. The envelop is held in the hand at the lower edge as it is passed through the device and as it emerges from the pressing rolls it will be delivered with the address side uppermost, ready for the stamp to be affixed, thereby greatly facilitating the mailing operations. It will thus be seen that I provide a combined moistener consisting of very few parts, all substantially constructed and not at all liable to get out of order.

In practice I prefer to construct the moistening strip from a piece of baize cloth, felt or other material capable of absorbing a large quantity of water and holding the same, and this piece of cloth or felt K is preferably enveloped in a piece of farmer's satin L, or some other similar material which parts with its water more rapidly than the felt, and this fabric being on the out or bottom side imparts the proper amount of moisture to the flap of the envelop, said moisture being supplied by the inner heavier filling of baize or felt. Whenever it is desired to replenish the water supply, the screw E' is released, thereby disconnecting the box E and base A and said box can then be quickly and easily withdrawn, refilled, replaced and screwed up again, and as this box is screwed tightly into its place, it also brings the combined guide and moistener into its proper position with relation to both the base and the upper guide.

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

1. An envelop moistener and sealer comprising a base carrying a roll at one end, a water tank arranged within the base and connected thereto, a guide plate connected with said water tank and extending over the base, a moistening strip arranged upon the under side of the guide plate and extending into the water tank, an upper guide having a rear flange connected to the base, said upper guide carrying a roll adapted to contact with the roll carried by the base together with means for holding said rolls in position, as set forth.

2. In an envelop moistener and sealer, a base carrying a roll, a combined cover and guide also carrying a roll, said cover being pivotally connected to the base, a spring for

holding the base and cover apart at one end, and the rolls in contact at the other end, and a combined lower guide and moistener arranged between the base and cover, said  
5 lower guide having a water tank, said tank being arranged in and connected with the base.

3. An envelop moistener and sealer comprising a hollow base having a trough at one  
10 end and a roller journaled in said trough, a top guide plate tapering toward the forward end and curved upwardly and carrying a roll at its rear end, said plate being pivotally supported above the base, a lower guide

plate arranged between the base and top  
15 guide plate, a water tank to which said guide plate is connected, said water tank being arranged in and connected with the base, the lower guide plate tapering toward its rear free end, and provided with a channel in its  
20 lower face, and a moistening strip arranged in said channel and extending into the water tank, as set forth.

FREDERICK ROTH.

Witnesses:

JULIUS HAUROWITZ,  
ISAAC LEVIN.