

(No Model.)

2 Sheets—Sheet 1.

S. W. ALDRICH & W. L. DINSMOOR.

MACHINE FOR AFFIXING STAMPS.

No. 582,609.

Patented May 18, 1897.

Fig. 1.

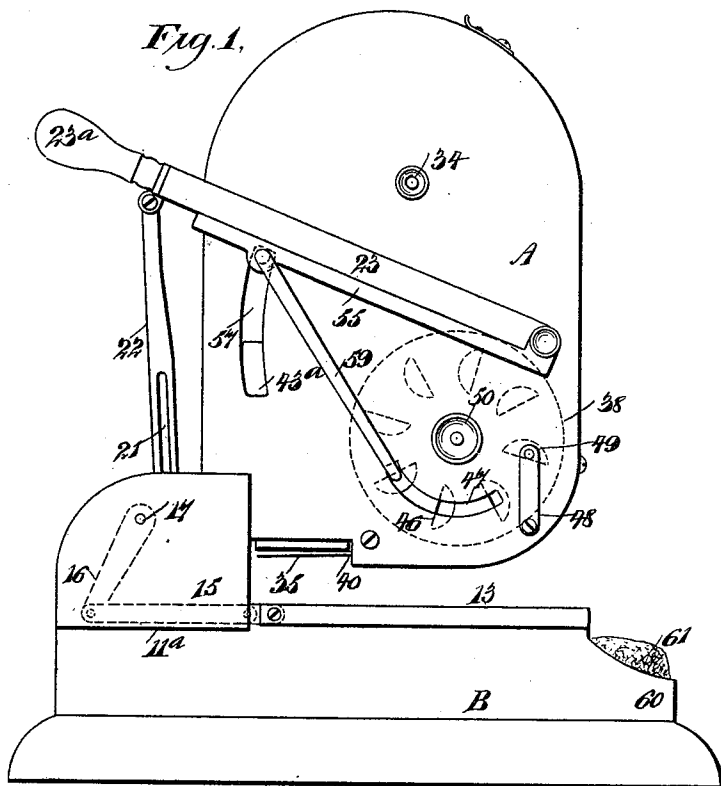


Fig. 2.

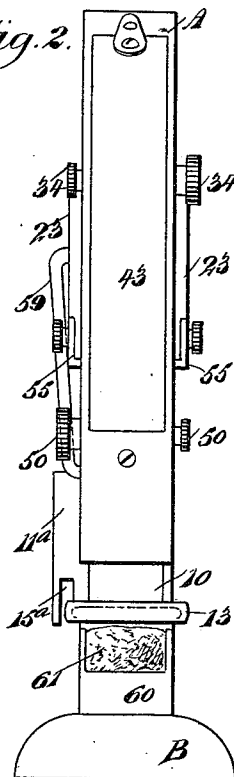
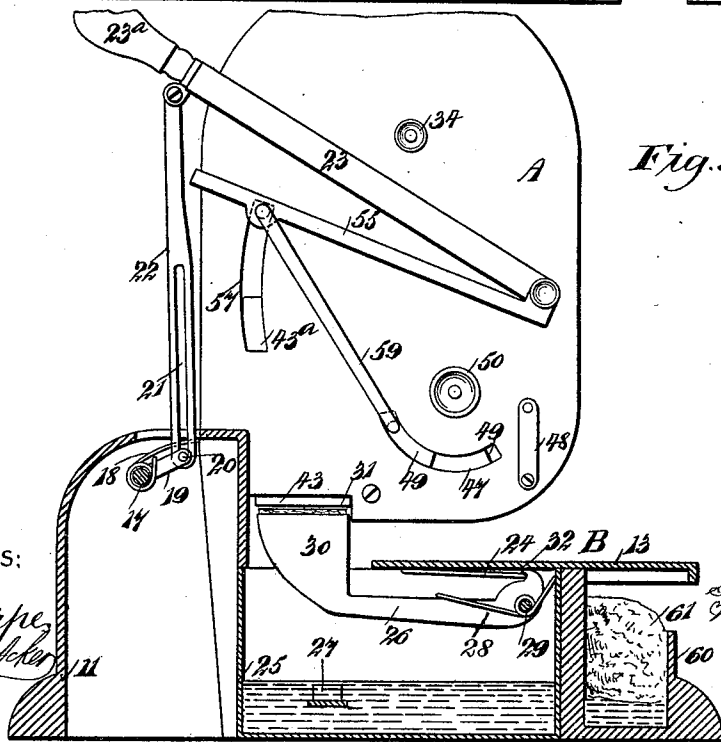


Fig. 3.



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Fig. 4.

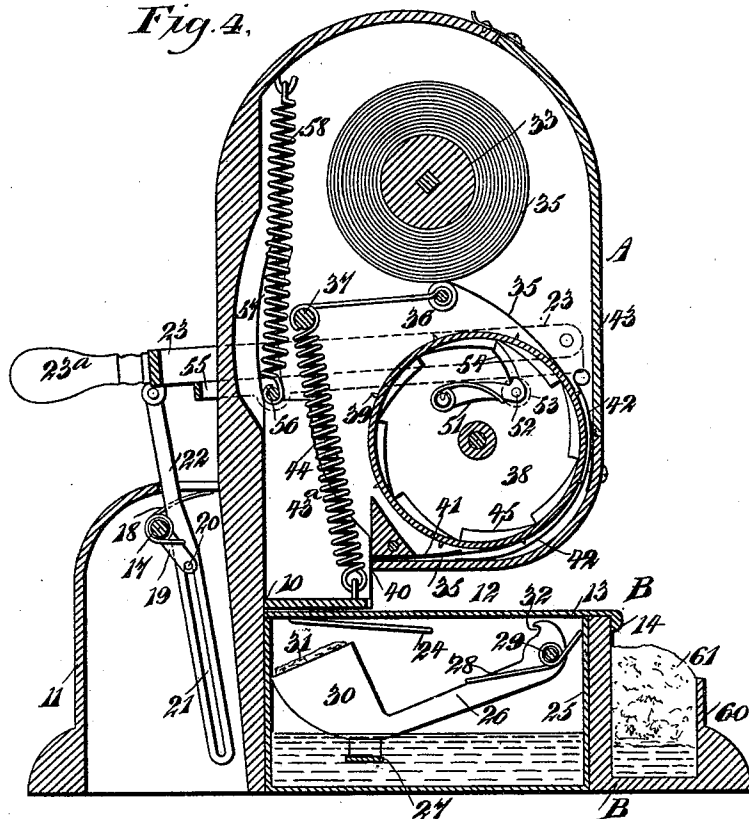


Fig. 5.

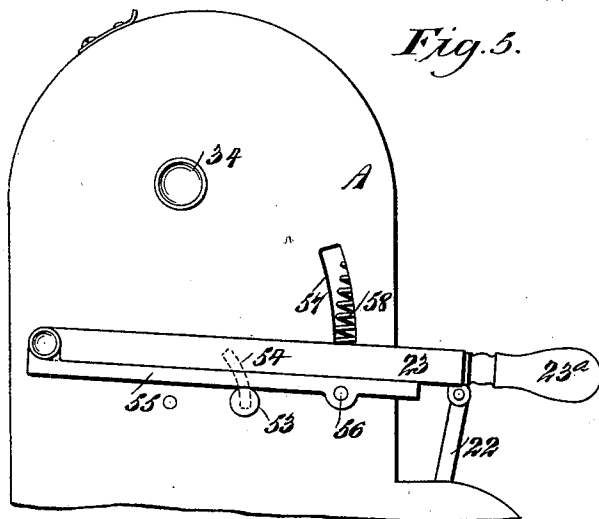
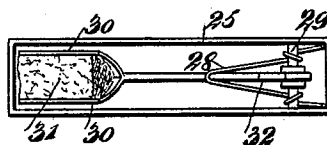


Fig. 6.



WITNESSES:

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Fig. 7.



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# UNITED STATES PATENT OFFICE.

STEPHEN W. ALDRICH AND WINFIELD L. DINSMOOR, OF PORTLAND,  
OREGON.

## MACHINE FOR AFFIXING STAMPS.

SPECIFICATION forming part of Letters Patent No. 582,609, dated May 18, 1897.

Application filed April 7, 1896. Serial No. 586,504. (No model.)

*To all whom it may concern:*

Be it known that we, STEPHEN W. ALDRICH and WINFIELD L. DINSMOOR, of Portland, in the county of Multnomah and State of Oregon, have invented a new and useful Improvement in Machines for Affixing Stamps, of which the following is a full, clear, and exact description.

Our invention relates particularly to an improvement upon the machine for affixing stamps for which Letters Patent were granted to W. L. Dinsmoor September 17, 1895, No. 546,588.

The object of the invention is to provide a machine adapted for applying stamps to envelopes or other packages to be mailed, the machine being operated by one hand, leaving the other hand of the operator free for the manipulation of the packages to be stamped.

A further object of the invention is to so improve upon the construction of the machine above referred to that the entire operation of affixing the stamps will be automatic.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the 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 figures.

Figure 1 is an elevation of the right-hand side of the machine, illustrating the hand-lever in its normal position and the stamp in position to be affixed. Fig. 2 is a front elevation of the machine. Fig. 3 is an elevation of the upper right-hand side of the machine, the lower portion of the machine being in vertical section and the moistening-lever being shown as engaging with the stamp that is to be affixed at the next downward stroke of the hand-lever. Fig. 4 is a vertical section through the machine, illustrating the plunger in the position it occupies when affixing a stamp to an envelop or package, the hand-lever being in its lowest position. Fig. 5 is a view of the upper portion of the left-hand side of the machine, the hand-lever being in its lowest position. Fig. 6 is a plan view of the water-cup and moistening-lever removed from the machine, and Fig. 7 is a

plan view of the plunger removed from the machine.

In carrying out the invention the casing of the machine comprises, mainly, an upper or body portion A and a base B, the base and body being connected at the rear by a suitable bar 10 or its equivalent, and at the rear lower portion of the casing of the machine an auxiliary casing 11 is formed, being virtually a continuation of the base and the lower rear portion of the body; but at the right-hand side of the auxiliary casing an extension 11<sup>a</sup> is formed, as shown in Figs. 1 and 2.

The base is covered at the top by a sliding table 13, which may be provided with a cushioned or padded upper surface, if desired; and this table when in its closed position engages with the connecting-bar 10, and when the table is thus closed a lip 14 at its front end will engage with the front portion of the base. The right-hand rear portion of the table 13 is pivotally connected to a link 15, which is passed rearward through an opening 15<sup>a</sup> in the right-hand extension of the auxiliary casing 11, and the inner end of this link is pivotally attached to a crank-arm 16, which is attached to a shaft 17, journaled in and extending through the auxiliary casing 11 and within the extension of the same.

The shaft 17 is controlled by a spring 18 to the extent that the said spring will normally hold the shaft in such position as to maintain the crank-arm 16 at a downward and rearward inclination (shown in Fig. 1) and the table 13 closed over the base. A second and short crank-arm 19, having normally a downward and forward inclination, is attached to the shaft 17 within the auxiliary casing, and this shorter crank-arm is provided with a pin 20, which enters a slot 21, longitudinally produced in the lower end of the trip-arm 22, the lower portion of the trip-arm being within the auxiliary casing, as shown in Figs. 3 and 4, and the upper end of the arm extends upward through an opening in the top of the said auxiliary casing, being pivotally attached to a lever 23, provided with a handle 23<sup>a</sup>, adapted to be gripped by the hand. The body portion of this hand-lever is bifurcated or of yoke-like formation, and is made to straddle the body portion of the machine, and is piv-

oted to the said body portion at or near the front of the same, the pivot-pin entering the sides of the casing in any suitable manner.

A chamber is made in the base B, in which a cup 25 is introduced, the cup being adapted to contain water, as shown in Figs. 3 and 4. Within this cup a lever 26 is fulcrumed at or near one of its ends, and the lever normally rests upon a cushioned bar 27 in the bottom portion of the cup, being held firmly in engagement with the cushion on said bar by means of a spring 28, which is usually coiled around the pivot 29 of the lever. At or near the lower end of this lever a receptacle 30 is secured, being preferably open at the top, the front and the rear, and a portion of the bottom, and a sponge 31 or other absorbent material is secured in this receptacle, being held between the side plates of the same.

The cushion on the bar has its top surface substantially on a level with the water, so as to absorb a portion of the water and transfer the moisture thus absorbed to the absorbent material in the receptacle 30. Thus it will be seen that the material in the receptacle 30 will not come in direct contact with the body of the water, preventing an excess of moisture in the said material. In other words, the cushioned bar not only serves to limit the downward movement of the receptacle 30, but it also serves as a retarding device to prevent an excess of moisture in the material carried by the receptacle.

At or near the pivot end of the moistening-lever 26 a hook or recess 32 is made, which receives a tongue 24, secured upon the under face of the table 13 when the said table is moved outward, as shown in Fig. 3, and by means of the said tongue engaging with the hook-surface of the moistening-lever, which occurs when the table 13 is opened, the moistening material on the lever will be carried upward, as illustrated in Fig. 3, to an engagement with the exposed gummed surface of the stamp to be affixed.

A drum 33 is mounted to revolve in the upper portion of the body-chamber A, and may be operated from the exterior of the chamber through the medium of a button 34 (shown in Fig. 1) or a like device. A tape 35, made up of stamps, is wound upon this drum, the said tape of stamps being constructed by tearing the stamps in single rows from the sheet in which they come and connecting the ends of the rows.

The roll of stamps on the drum is engaged by a friction-roller 36, mounted on a spring-shank, the said shank being attached to a support 37, secured within the body-chamber of the machine. Beneath the roll or drum of stamps a wheel 38 is mounted to revolve in the bottom portion of the body-chamber A, and this wheel is provided with peripheral teeth 39, located at such intervals apart that the teeth will enter the perforations between the stamps, since the tape of stamps after leaving the tension-roller 36 is passed around

the wheel 38, and the lowermost stamp is adapted to extend partially out through an opening 40 in the bottom of the body-chamber, as shown in Fig. 1, being guided to the said opening by a spring throat-plate 41, slotted for the passage of the pins 39 of the stamp-wheel.

A spring-guide 42 is secured to the casing in front of and preferably above the said stamp-wheel 38, and this spring-guide extends downward along the front peripheral portion of the wheel, engaging with the stamps and holding them in place, tension being applied to the spring-guard by the pressure of a door 43, closing an opening in the front edge of the casing, through which opening the stamps are introduced to be placed upon the drum 33.

A plunger 43<sup>a</sup> is held to slide in the body-chamber A of the casing back of the stamp-wheel 38, the said plunger being adapted to travel out through the bottom of the body of the casing immediately in front of the opening 40, through which the stamps pass, and the plunger may be forced downward sufficiently to engage with the cushion or upper face of the table 13. The plunger is held normally within the body of the casing through the medium of a spring 44, which is placed under tension when the plunger is forced downward.

The stamp-wheel 38 is hollow, and within the stamp-wheel at the peripheral portion thereof ratchet-teeth 45 are produced. Preferably on the front side surface of the stamp-wheel a series of recesses 46 is produced, the said recesses being radially arranged and somewhat near the margin or periphery of the wheel, and these recesses, as is shown in Fig. 1, have a straight wall, which is in direction of the rotation of the wheel, and the opposingsurfaces of the recesses are given a greater inclination outward toward the direction from whence the wheel revolves.

A segmental slot 47 is produced in the outer front face of the body-casing of the machine, as shown in Figs. 1 and 3, and as the stamp-wheel is turned the recesses 46 therein will be exposed at the aforesaid slot 47. A spring-detent 48 is secured upon the outer front side face of the body-casing, as shown likewise in Figs. 1 and 3, and the said detent is provided with a pin 49, which extends through an opening in the casing and is adapted to enter the aforesaid wheel-recesses 46.

The stamp-wheel may be turned by hand whenever desired through the medium of a thumb-nut 50, secured upon one or both ends of the spindle on which the said wheel is mounted. A spring-controlled pawl 51 is pivoted, preferably, upon the inner face of the back side of the said wheel, as shown in Fig. 4, and the said pawl is adapted to normally engage with the straight surface of one of the inferior teeth 45, attached to the said wheel. At the head of said pawl 51 a spindle 52 is secured, carrying a friction-roller

53, and the said spindle extends downward through a slot 54 in the back side of the body portion of the casing, the friction-wheel being at the outside of the casing, as shown in Fig. 5. The pawl 51 prevents the stamp-wheel from revolving in a rearwardly direction, and the detent 48 serves to hold said stamp-wheel stationary after it has revolved a distance equivalent to that between two opposing recesses 46 in the wheel.

A yoke-lever 55 is made to span or straddle the body-casing at a point immediately below the hand-lever 23, and the said yoke-lever is fulcrumed upon the same pin employed for pivoting the hand-lever to the body of the casing. A pin 56 extends from one side member of the yoke-lever to the other side member and out through segmental slots 57, produced vertically in the sides of the casing near the rear edge of the same, and a spring 58 is secured at one end to the said pin 56, being attached at its opposite end to a point at the upper end of the body-casing, the said spring acting to normally draw the yoke-lever to an upward position or to carry the pin 56 of the lever to the upper end of its guide-slots 57. The pin of the yoke-lever is so placed that when the lever descends the said pin will engage with the top of the plunger 43<sup>a</sup> and depress the same, placing its spring 44 under tension. A lever-arm 59 is pivoted to the front member of the yoke-lever 55, and the said arm at its lower end is shaped to enter the slot 47 and also enter the recesses 46 in the stamp-carrying wheel, as shown in Figs. 1 and 3.

Preferably at the front portion of the base of the machine a cup 60 is constructed, adapted to contain water and likewise a sponge 61 or equivalent absorbent material, the sponge being adapted for wetting the gummed surface or flap of an envelop prior to sealing the same.

In the operation of the machine, the various parts being in their normal position, as shown in Fig. 1, the stamp will be exposed beneath the plunger 43<sup>a</sup>, its gummed surface facing downward. The first movement is to carry the hand-lever upward to the position shown in Fig. 3, in which the hand-lever will lift the yoke-lever 55, and the shaft 17 in the extension 11 of the casing will be rocked in such direction as to force the crank-arm 16, connected with the said shank, forwardly, thereby carrying the table 13 in direction of the front and exposing a portion of the base. As the table moves to the front its tongue 24 engages with the hook end of the moistening-lever 26 and will carry the rear end of the said lever containing the dampening-sponge upward and will bring the said sponge in engagement with the gummed surface of the stamp, dampening the same. The hand-lever is then carried downward, and as the hand-lever travels the distance between the extremity of its upward stroke and the yoke-lever 55 the slotted portion of the arm 22 will have entered

the extension 11 of the casing a sufficient distance to permit the spring 18 to act on the shaft 17 in a manner to draw the table 13 entirely over the base, as shown in Fig. 4, and the table in its closing movement will disconnect from the moistening-lever, permitting the spring of the latter to act to carry the said lever to its downward or lower position. At this period the envelop or package adapted to receive the stamp is placed upon the table 13. The hand-lever 23 is then carried farther downward, depressing the yoke-lever 55 and bringing the pin 56, connected therewith, in engagement with the plunger, forcing the plunger downward. As the plunger travels downward its serrated edge 43<sup>b</sup> will separate the exposed stamp from the tape of stamps, and the plunger will carry the moistened and disconnected stamp downward and place it in position on the article adapted to receive it. At the downstroke of the yoke-lever 55 the lever-arm 59 will be carried forward a sufficient distance to enter the recess 46 in the stamp-wheel in advance of that with which it had been in engagement previously, and upon the upward movement of the hand-lever 23 the spring of the plunger, together with the spring attached to the yoke-lever 55, will act to carry both of these parts to their upper or normal position, and the lever-arm 59 will then turn the stamp-wheel a sufficient distance to carry another stamp out beneath the plunger and over the table, the detent 48 serving to prevent a possible back movement of the wheel.

It may be here stated that as the yoke-lever 55 is carried downward it engages with the friction-roller 53, attached to the pawl 51, carrying said pawl from engagement with the teeth 45 of the stamp-wheel, permitting the said wheel to revolve at the outward movement of the said yoke-lever; but before the wheel has made the necessary movement the pawl will engage with the inclined surface of the adjacent tooth of the stamp-wheel and will travel up in position to engage with the straight surface of that tooth when the yoke-lever is at its full upper position, preventing the wheel from moving farther than is absolutely necessary to bring a stamp in proper registry with the table.

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

1. In a machine for stamping envelops, packages, &c., the combination with a moistening-lever, means for operating said lever, and a sliding table over the lever, of a stamp-wheel adapted to guide and move a tape of stamps, the said wheel being provided with interior teeth, a spring-controlled pawl pivoted within the said wheel and adapted normally for engagement with the teeth thereof, the said pawl being provided with an extension carried through to the exterior of the machine and adapted to have movement in an opening therein, a spring-controlled lever

fulcrumed in the path of the projection from  
said pawl, and adapted to carry the pawl out  
of engagement with the teeth of the stamp-  
wheel when the lever is moved in a direction  
5 to place its spring under tension, and means  
for sliding the table by a movement of the  
lever, as and for the purpose specified.

2. In a machine for stamping packages, en-  
velops, &c., the combination, with a moisten-  
10 ing-lever, a sliding table located over the  
moistening-lever and adapted to raise the  
moistening portion thereof when the table is  
moved over said lever, a spring-controlled  
plunger, a stamp-carrying wheel, a hand-le-

ver, and a spring-controlled yoke-lever adapt- 15  
ed to be depressed by the hand-lever, of a  
spring-controlled shaft, a crank connection  
between the said shaft and table, and an arm  
carried by the hand-lever, controlling the  
movement of the said spring-controlled shaft 20  
when the hand-lever is manipulated to move  
the table from over the moistening-lever, as  
and for the purpose specified.

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Witnesses:

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