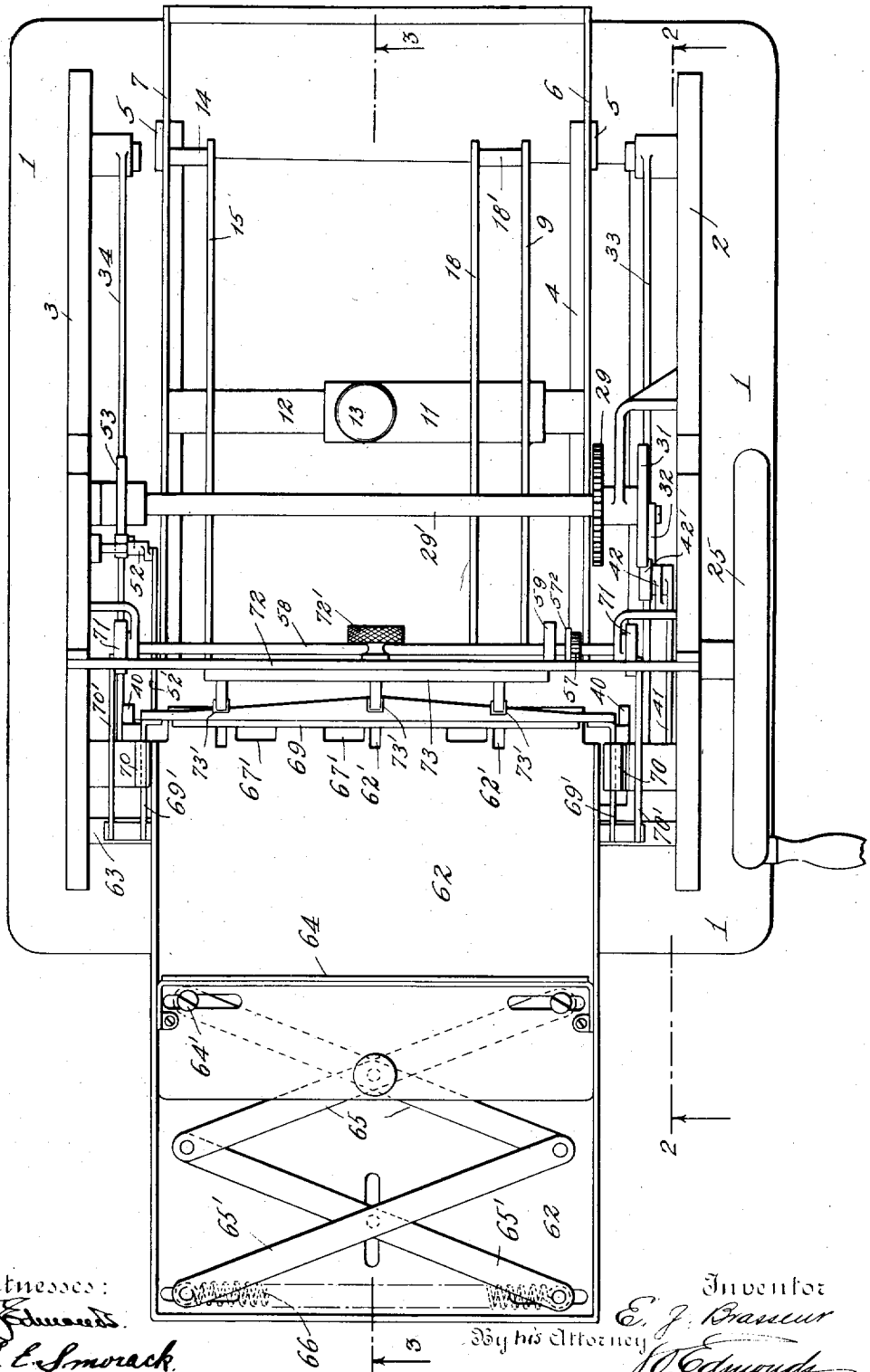


E. J. BRASSEUR.
MACHINE FOR SEALING ENVELOPS.
APPLICATION FILED MAR. 28, 1907.

945,745.

Patented Jan. 11, 1910.
4 SHEETS—SHEET 1.

Fig. 1.



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4 SHEETS—SHEET 2.

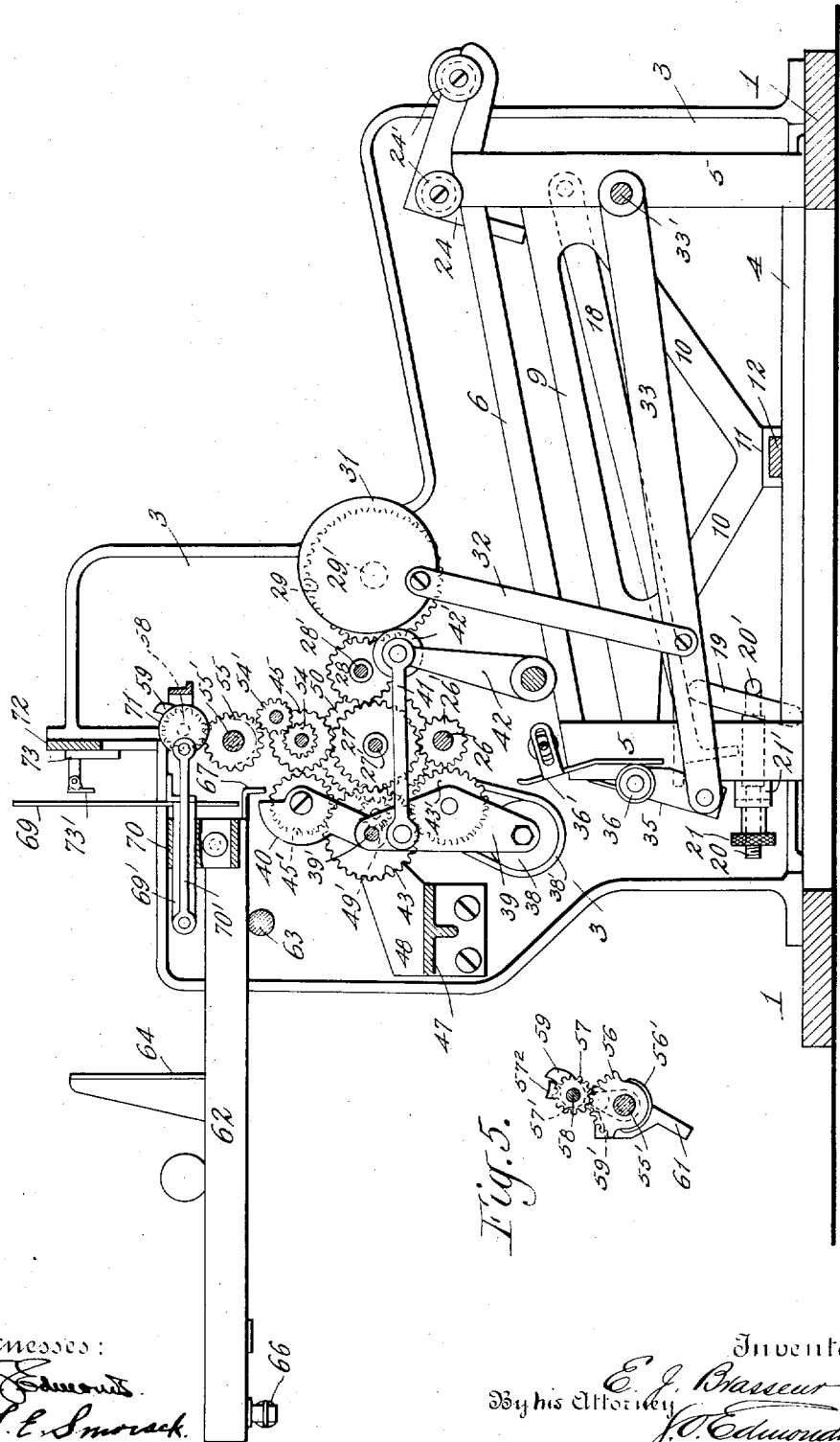
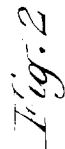


Fig. 5.

Witnesses :

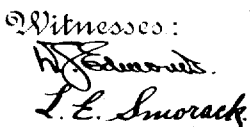
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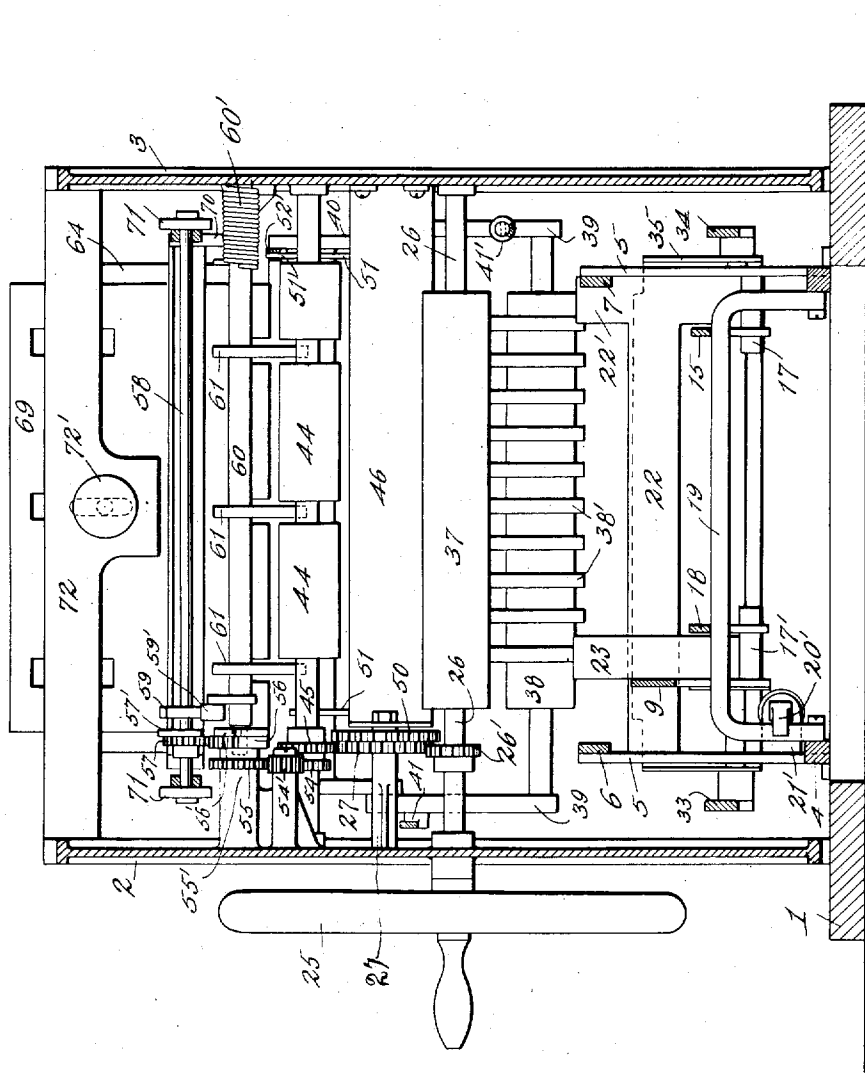
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4 SHEETS—SHEET 4.

Fig. 4.



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UNITED STATES PATENT OFFICE.

ERNEST J. BRASSEUR, OF CHICAGO, ILLINOIS, ASSIGNOR TO A. B. DICK COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

MACHINE FOR SEALING ENVELOPS.

945,745.

Specification of Letters Patent.

Patented Jan. 11, 1910.

Application filed March 28, 1907. Serial No. 365,106.

To all whom it may concern:

Be it known that I, ERNEST J. BRASSEUR, a subject of the King of Belgium, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Machines for Sealing Envelops, of which the following is a specification.

This invention relates to machines for sealing envelops, and its object is to provide a machine for this purpose which is efficient and reliable in operation, which can be run at comparatively high speed, and which is entirely automatic in its operation.

In the machine is employed a receptacle for the unsealed envelops, in which the envelops are constantly pressed forward and which is provided with side-guides and bottom supports arranged to permit adjustment thereof in order to adapt the machine for operation with envelops of various sizes. A flap-turning member is arranged to reciprocate adjacent to the forward end of this receptacle and to turn the flap of the forward envelop each time it is reciprocated until that flap lies in substantially the same plane as the body-portion of the envelop. When in this position, the flap of the envelop is gripped by forwarding devices and carried through the machine, the flap being moistened as the envelop is so forwarded. These forwarding devices may consist of rolls which press the flap against the body-portion of the envelop to seal it, or such pressure on the flap may be exerted after the envelops are deposited in the sealed-envelop receptacle. The machine may be driven by hand or by a suitable power-operated device, and is entirely automatic in its action, the operator's sole duties being to insert stacks of envelops in the unsealed-envelop receptacle and remove them from the sealed-envelop receptacle when the latter is filled.

The preferred embodiment of the invention is illustrated in the accompanying drawings, in which—

Figure 1 is a top view of the machine; Fig. 2 is a section on line 2—2 of Fig. 1; Fig. 3 is a section on line 3—3 of Fig. 1; Fig. 4 is a transverse section on line 4—4 of Fig. 3; and Fig. 5 is a detail view hereinafter referred to.

Referring to the drawings, the machine

has a base 1 and side-frames 2 and 3 erected thereon; the operating parts of the machine all lie between and are supported upon these side-frames, with the exception of the receiver for the unsealed envelops, which rests upon the base 1 between the side-frames. This receiver consists of a frame 4 having upright posts 5 at the corners thereof, the two posts at the sides of the frame carrying rails 6 and 7 at their upper ends. Each of these rails is inclined throughout the greater portion of its length, and beyond the upper end of this inclined portion is provided with an extension the upper surface of which is concave. The rail 7 forms one side-guide for a stack of envelops 8 (Fig. 3); the other side-guide, 9, is adjustable toward and away from the guide 7, in order to adapt the machine for operation with envelops of varying sizes. This guide 9 consists of a rail having integral depending arms 10 carrying a member 11, which is adapted to slide back and forth upon a strip 12 extending between and secured at its ends to the sides of the frame 4. A set-screw 13 is threaded into the member 11 and is adapted to engage the strip 12 to lock member 11 and the guide 9 in any adjusted position.

Extending inwardly from one of the posts 5 at the side of the receptacle on which the rail 7 is mounted, is a stud 14 (Fig. 3) on which is pivotally mounted a support 15; the other end of this support has a depending finger 16 extending through a slot in a stud 17 on the forward post 5 at that side of the receptacle, to guide the support in its movements about its pivot, the stud 14. A similar support 18 is pivotally mounted upon a stud 18' extending inwardly from the side-guide 9, and the forward end of this support is similarly guided by a slotted stud 17' projecting from the rail 9. The forward ends of the pivoted supports 15 and 18 rest upon a bail 19, the ends of which are pivoted upon the frame 4. An adjusting device coöperates with this bail to turn it about its pivots and thus raise or lower the forward or free ends of the supports 15 and 18. This adjusting device consists of a rod 20 (Figs. 2 and 4) having a bent end 20' extending around one of the side members of bail 19 and a hand-nut 21 threaded upon the end of rod 20 and engaging the supporting

frame 21' therefor to move the rod axially and thus turn the bail 19 on its pivots. The envelops to be sealed and stamped are placed upon the supports 15 and 18 and by means of the adjustment device above described the upper edge of the forward envelop may be adjusted to the desired level, regardless of the size of the envelop.

Extending between the posts 5 at the forward end of the receptacle, is a plate 22 having an upwardly extending arm 22' at one side thereof. A corresponding arm 23 is secured to the forward end of the side-guide 9, so as to be laterally adjustable therewith. The supports 15 and 18 are so adjusted vertically that the flap of the end one of the unsealed envelops resting thereon will be free of plate 22 and will extend out over the same at a slight angle to the body portion of the envelop. All of the envelops are stacked in the receptacle with their flaps toward the plate 22 so that when the forward envelop is withdrawn the next succeeding one will assume this position. A follower-block 24 is adapted to move back and forth upon the rails 6 and 7, the block for this purpose having pairs of grooved rollers 24' at its sides adapted to run on the upper edges of the rails 6 and 7. This follower-block is of considerable weight and when its forward side bears against a stack of unsealed envelops resting upon the supports 15 and 18, as shown in Fig. 4, it presses the forward envelop against the plate 22 with considerable pressure. When placing a pile of envelops in position in the unsealed-envelop receptacle, the follower 24 may be drawn back to a position in which the rear rollers 24' rest upon the concave extensions at the rear ends of the rails 6, 7, so that the follower is held in this position.

The machine may be operated manually or by any suitable power-driven devices; in the drawings, I have shown a hand-wheel 25 for this purpose. This wheel is secured upon a shaft 26 (Fig. 2) extending across between the side-frames 2 and 3 and journaled in bearings therein, one end of the shaft being extended through the side-frame 2 to carry the hand-wheel 25 upon its end. The shaft 26 has a gear 26' secured thereon, meshing with a gear 27 mounted for rotation upon a stud 27' upon the side-frame 2, and gear 27 meshes with a pinion 28 similarly mounted for rotation upon a stud 28. This pinion 28 meshes with a gear 29 secured upon a shaft 29'; also secured upon the shaft 29' is a cam 31. A link 32 is pivotally connected eccentrically to the outer face of the cam 31 and at its lower end is connected to a lever 33 pivoted at 33' to the side-frame 2. A similar lever 34 is pivotally mounted upon the opposite side-frame 3. At their forward or free ends, these levers 33 and 34 carry a

pivoted flap-turning device 35 (Figs. 2 and 3) having a spring 35' coiled about one of the pivots thereof and arranged to press the upper edge of the member 35 toward the plate 22 or the body-portion of the forward envelop of the pile above the plate. Mounted upon the end of the member 35 is a roller 36 adapted to travel on a suitable way 36' and held against the same by spring 35'; this way is so shaped that when the levers 33 and 34 are turned about their pivots, the upper edge of the member 35 is moved vertically through a short distance until it enters between the flap and body-portion of the forward envelop and then is raised and moved away from the body-portion of the envelop, so that member 35 first moves under the flap and then moves the flap out from the body-portion and turns it until it projects upwardly from the body-portion of the envelop.

Between the side-frames 2 and 3, the shaft 26 carries a forwarding-roller 37. Directly opposite this roller is a cooperating forwarding-roller 37', and below the latter is a roller 38. A plurality of endless belts 38' run upon the rollers 37' and 38, the periphery of the roller 37' being preferably grooved circumferentially to receive these belts so as to provide a smooth surface upon the roller along the line of coaction with the roller 37. The rollers 37' and 38 are journaled at their ends in bearings formed in supports 39, (Figs. 2 and 3), which are pivoted at 39' to a guard 40 secured to the side-frames. A link 41 is pivotally connected at one end to one of the supports 39 and at the other end to the free end of a link 42 pivoted on a stud projecting inwardly from the side-frame 2, and mounted on the pivot connecting the links 41 and 42 is a roller 42' which bears upon the surface of the cam 31 on the shaft 29'. Roller 42' is held in engagement with cam 31 by a spring 41' (Fig. 3) on the opposite side of the machine, secured at one end to the member 39 and at the other to a stud projecting inwardly from the side-frame 3. Mounted for rotation upon the pivot 39' of the support 39, is a gear 43 which meshes with the gear 27 and is driven thereby, and this gear 43 also meshes with a gear 43' on the shaft of the forwarding-roller 37', so that rotary motion is communicated from gear 27 to the forwarding-roller 37' in any position of the supports 39 and from that roller to the roller 38 by the belts 38'. Above the forwarding-rollers 37 and 37' is another pair of forwarding-rollers 44 and 44' carried by shafts the ends of which are journaled in bearings in the side-frames 2 and 3 and the guard 40 secured to the frames. The shaft of roller 44 carries a gear 45 which meshes with the gear 27 and the shaft of roller 44' carries a gear 45' which meshes with the

gear 43, so that this pair of forwarding-rollers are driven whenever the forwarding-rollers 37 and 37' are driven. These rollers 44 and 44' are preferably rubber-covered and are of sectional form, as shown in Fig. 4. The sections of the roller 44' preferably have the shape of spools, so as not to press upon the envelopes too hard as the sealing of the envelopes is effected in the sealed-envelope receptacle, but if desired, these sections may be cylindrical and may effect the sealing. Between the two pairs of forwarding-rollers and extending between the two side-frames, is a vertically disposed plate 46, along which the envelopes are fed and which forms a guide therefor.

The moistener for the envelop flaps is mounted upon a bar 47 extending between the side-frames, and consists of a trough 48 for holding water, a wick 48' and a moistening-roller 49, to which the water is carried by the wick. The roller 49 has a soft absorbent surface and is mounted for rotation in the sides of the trough 48. At one end of the roller 49 the shaft thereof carries a pinion 49', which meshes with the gear 50 mounted for rotation upon the stud 27' adjacent to the gear 27. The trough 48 and parts carried thereby are secured in position upon the bar 47 by means of screws 50', so that they can be readily removed. Pivotally mounted upon the shaft of roller 44' and swinging loosely thereon, are two arms 51 carrying a presser-roller 52 adapted to hold the flap of an envelop against the moistening-roller 49. One of these arms 51 is extended upwardly, as shown at 51' Fig. 3, and is pivotally connected to a link 52', the opposite end of which is pivotally connected to one end of a link 52² pivoted upon the frame of the machine and carrying at its opposite end a roller bearing upon the periphery of a cam 53. The roller is held against the periphery of the cam by a spring 51² secured at one end to the link 52² and at the other to the frame. The cam 53 is mounted upon shaft 29 and therefore makes one revolution each time the flap-turning member is reciprocated.

On the shaft of the roller 44, alongside the gear 45, is a pinion 54 meshing with an idler-pinion 54', which meshes with a gear 55 mounted on a stub-shaft 55' on the side-frame 2. This stub-shaft also carries a mutilated gear 56 and a notched disk 56'. The mutilated gear 56 is adapted to mesh with a pinion 57 secured on a shaft 58 mounted for rotation in suitable bearings secured on the side-frames. At the side of the gear 57, is a disk 57' having a tooth 57² (Fig. 5) which coacts with the notched disk 56' on the stub-shaft 55', to lock shaft 58 against rotation after it has made one complete revolution, due to the coacting of the mutilated gear 56 and the pinion 57. Secured on

shaft 58 is a finger 59, which, when the shaft is rotated, engages a stud 59' on a rock-shaft 60, one end of which is mounted for rotation in a bearing formed by countersinking the inner end of the stub-shaft 55' and the other end of which is similarly mounted in a bearing supported on the side-frame 3. A spiral spring 60' is coiled about one end of shaft 60 and arranged to rock it in the direction opposite to that in which it is rocked by the finger 59. Secured on shaft 60 are a plurality of lifters 61, adapted to be moved under the lower edge of an envelop just as that edge is passing out from between the forwarding-rollers 44 and 44' and lift the envelop to the level of the sealed-envelope receptacle. The shape of these lifters is shown in Figs. 3 and 5 from which it will be seen that each has a finger adapted to rest upon the shaft of the forwarding-roller 44 between the sections of that roller. The lifters 61 are normally held in the position in which they are shown in Fig. 3 by the spring 60', but when the mutilated gear 56 engages the pinion 57 and rotates shaft 58 through one complete revolution, the finger 59 engages the stud 59' and rocks shaft 60 against the tension of spring 60' through nearly a quarter of a revolution. At the conclusion of this movement of the lifters, the fingers at the ends thereof pass through slots in the forward edge of the sealed-envelope receptacle 62, these slots being shown at 62' Fig. 1.

The tray 62 consists of a sheet-metal plate flanged upwardly at its rear and lateral edges, supported upon the side-frames of the machine and upon a bar 63 extending between the frames. A vertically disposed rear wall-plate 64 is adapted to move over the upper face of the tray 62 and is pressed forwardly by a spring. For this purpose, the wall-plate 64 has an integral horizontal extension at the lower edge thereof, in which are slots to receive and permit movement of a pair of screws 64' secured upon the ends of a pair of links 65 which are pivotally connected at their rear ends to the ends of a pair of similar links 65'. The rear ends of these links have studs thereon passing through slots in the tray 62 and connected by a spiral spring 66. Also, the links 65' are pivotally connected at the center thereof and this pivot extends through a slot in the tray 62 extending lengthwise thereof. By means of this construction, the spring 66 acts upon the links to draw them toward a position of parallelism and thus constantly press the wall-plate 64 forwardly upon the tray 62. At its forward edge, the tray 62 has a downwardly turned flange 67, and, directly in rear of this, a plurality of openings 67' (Fig. 1). One member of a hinge 68 is secured to the rear side of the flange 67, adjacent to each of the openings 67', and the movable

member of each hinge is pressed upwardly through the opening 67' by a suitable spring. The forward wall-plate 69 of the sealed-envelop receptacle is movable from a position to the right of the hinges 68 in Fig. 3 as shown by the dotted lines, to the position shown in that figure in full lines to the left of the hinges, and for this purpose is carried by arms 69' adapted to reciprocate in guides 70 formed on the side-frames. Pivotaly connected to the ends of these arms are links 70' (Figs. 1 and 3), the ends of which are pivotaly connected, eccentrically, to disks 71 on the ends of the shaft 58. Extending between the side-frames, directly above the shaft 58, is a bar 72, having a slot therein through which extends the shank of a hand-nut 72' for securing to the bar 72, in any adjusted position, a strip 73 having arms extending outwardly therefrom and carrying pivoted fingers 73' which can be turned about their pivots upwardly from the position shown in Fig. 3, but not downwardly. The vertical wall-plate 69 has openings therein, as shown in Figs. 3 and 4, through which the fingers 73' may pass when the wall-plate is reciprocated.

As thus constructed, the pile of unsealed envelops is placed in the receptacle therefor as above described and pressed forwardly therein by the follower-block 24. The drive-shaft 26 is then rotated by means of the hand-wheel thereon, and through the gearing 26', 27, 28 and 29, drives the cam 31, and by means of the link 32 and levers 33 reciprocates the flap-turning member 35. This member when raised vertically catches under the flap of the forward envelop and then moves outwardly and upwardly, turning the flap about the body-portion of the envelop. As these movements progress, the cam 31 actuates link 41 to turn the members 39 about their pivots 39' and thus move the rollers 37' and 38 away from the roller 37. At the same time, the rollers 37' and 38 are rotated by means of the gears 27, 43 and 43', and the belts 38'. The end of the flap of the envelop, when turned outwardly by the member 35, is caught by the belts 38' and carried upwardly thereby until it lies in substantially the same plane as the body-portion of the envelop. The rollers 37' and 38 are then moved to the right in Fig. 3 by the spring 41, this movement being permitted by the cam 31, and the end of the envelop flap is gripped between the forwarding-rollers 37 and 37'. The rotation of these rollers being continued by the gearing as above described, the envelop is drawn upwardly from the envelop pile in the receptacle and passed upwardly along the plate 46. As the body-portion of the envelop enters between the forwarding-rollers 37 and 37', the flap, being then released, turns at a slight angle to the plane of the body-portion and passes between the moistening-roller 49 and the presser-roller 52, it being guided, if necessary, by the edge of the moistener tray, and when a portion of the body of the envelop has passed between the rollers 37 and 37' the entire gummed portion of the flap has passed between the moistening and pressing rollers. The roller 52 is then moved to the left in Fig. 3 by the cam 53, as hereinbefore described, to cause the gummed portion of the flap to move down upon the roller 49, which is kept moist by the wick 48' and water supply in the trough 48. The pressure of the roller 52 upon the flap is very light, it being only necessary to insure a good contact of the gummed portion of the flap with the moistening-roller 49. The moistening-roller 49 is rotated throughout this movement of the envelop by gear 50 and pinion 49', this rotation of the roller insuring proper moistening of the gum upon the flap. The continued rotation of the forwarding-rollers 37 and 37' causes the body-portion of the envelop to move vertically upward along the plate 46 and between that plate and the presser-roller 52, the flap of the envelop being drawn from between the presser-roller and the moistening-roller as the upward movement of the body-portion progresses. Finally, the upper edge of the envelop is gripped between the forwarding-rollers 44 and 44', and the envelop is carried along in its upward movement thereby. The pressure of these two forwarding-rollers upon the envelop need not be sufficient to effect a reliable sealing of the envelop, this sealing being performed in the sealed-envelop receptacle. As the body-portion of the envelop is gripped by the forwarding-rollers 44 and 44', the forward wall plate 69 of the receptacle is in the forward position, as indicated by the dotted lines in Fig. 3, so that the envelop can pass up in rear of this plate. Just as the lower edge of the envelop passes from between the rollers 44 and 44', the mutilated gear 56 comes into mesh with the pinion 57 and thus actuates shaft 58 to make one revolution. At the beginning of this revolution, the member 59 engages the stud 59' on shaft 60 and rocks that shaft against the tension of spring 60', this rocking movement of shaft 60 causing the fingers 61 to turn about the axis of the shaft as a pivot. In making this turning movement, the fingers at the lower ends of the lifters 61 take under the lower edge of the envelop and raise the envelop until the fingers pass through the slots 62' in the plate 62. As the turning movement of shaft 58 continues, the wall-plate 69 is moved rearwardly by means of the disks 71, links 70' and arms 69', and carries the envelop with it to the position shown in full lines in Fig. 3. As the wall-

plate 69 is thus moved, the envelop engages the fingers 73' and the movable members of the hinges 68 and turns these parts upon their pivots, but as soon as the envelop at the rear side of plate 69 passes them they return to their initial positions, the fingers 73' under the influence of gravity and the movable members of the hinges 68 under the tension of their springs. As the one revolution of shaft 58 is completed, the plate 69 is returned to its initial position, that shown in dotted lines in Fig. 3; but the envelop is not returned with it, as its lower edge is caught by the hinges 68 and its upper edge by the fingers 73'. As soon as the wall-plate 69 has moved the envelop upon the plate 62, the stud 59' is released by the member 59 and the rock-shaft 60 carrying the lifters 61 is then returned to its original position by the spring 60', the fingers of the lifters then resting upon the shaft of roller 44 between the sections of that roller. All the parts are then in position to receive and forward the next succeeding envelop. As the pile of envelops upon the plate 62 increases, the rear wall-plate 64 is moved backward against the tension of spring 66, and this spring at all times presses plate 64 forward and exerts sufficient pressure upon the envelops to insure effectually sealing them.

The machine as thus constructed is well adapted for use inconjunction with an automatic stamp-affixing mechanism, particularly one of the type in which the stamps are fed successively from sheets each consisting of a plurality of rows of stamps and a plurality of stamps in each row, as postage-stamps are sold in large quantities. I wish it understood, however, that whether the machine is so used or is used for sealing envelops only, many modifications may be made in the construction and arrangement of the parts without departing from the spirit of my invention, and all such modifications I aim to cover by the terms of the appended claims.

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

1. In a machine for sealing envelops, the combination of a support for the unsealed envelops, means for turning the flaps of the envelops on said support successively, a pair of rollers for gripping the flap of each envelop when turned and forwarding the flap and body of the envelop between them, and means for sealing the envelop flaps, substantially as set forth.

2. In a machine for sealing envelops, the combination of a support for the unsealed envelops, a flap-turning member, means for reciprocating the same to turn the flaps of the envelops on said support successively, a pair of rollers, means for rotating the same

to grip the flap of each envelop when turned and forward the envelop, and means for sealing the envelop flap, substantially as set forth.

3. In a machine for sealing envelops, a support for the unsealed envelops, a flap-turning member and means for moving said member between the flap and body of an envelop and then away from the body of the envelop to turn the flap relatively thereto, substantially as set forth.

4. In a machine for sealing envelops, a support for the unsealed envelops, a reciprocating flap-turning member, means for moving said member between the body and flap of an envelop and then away from the body of the envelop to turn the flap relatively thereto, devices for gripping the envelop flap when turned and forwarding the envelop, and means for sealing the envelop flaps, substantially as set forth.

5. In a machine for sealing envelops, a support for the unsealed envelops, means for turning the flaps of the envelops successively, a pair of rollers, means for moving said rollers relatively to grip the flap of an envelop between them when the flap is turned, and means for rotating said rollers to forward the envelop, substantially as set forth.

6. In a machine for sealing envelops, the combination of a support for the unsealed envelop, a flap-turning member, a pair of rollers, operating mechanism for separating said rollers, moving said member to turn the flap of an envelop, bringing said rollers together to grip the flap of the envelop and rotating said rollers to forward the envelop, and means for sealing the envelop flaps, substantially as set forth.

7. In a machine for sealing envelops, the combination of a support for the unsealed envelops, a flap-moistener, means for feeding the envelops successively from said support to the moistener, a pressing member, means for moving the same forward and away from the moistener to insure contact of the gummed portion of the flaps with the moistener, and means for sealing the envelop flaps, substantially as set forth.

8. In a machine for sealing envelops, the combination of a support for the unsealed envelops, a flap-moistener, means for turning the flaps of the envelop successively into substantially the same plane as the body- portions of the envelops, means for forwarding the envelops to the moistener, a pressing member, means for operating the same to insure contact of the gummed portion of the flaps with the moistener, and means for sealing the envelop flaps, substantially as set forth.

9. In an envelop-sealing machine, the combination of means for forwarding an envelop with the flap thereof lying in substan-

tially the same plane as the body-portion, means for holding the flap and forwarding the body-portion of the envelop to turn the flap relatively to the body-portion, and devices for sealing the envelop flaps, substantially as set forth.

10. In an envelop sealing machine, the combination of means for forwarding an envelop with the flap thereof lying in substantially the same plane as the body portion, flap-moistening devices into coaction with which the flap of the envelop is carried, said flap being held by the flap-moistening devices to turn it relative to body portion, and devices for sealing the envelop flaps, substantially as set forth.

11. In an envelop-sealing machine, the combination of means for forwarding an envelop with the flap thereof lying in substantially the same plane as the body-portion, a flap-moistener, a pressing member, means for operating the same to insure contact of the gummed portion of the flap with the moistener, means for forwarding the body-portion of an envelop while the flap thereof is held by said moistener and member to turn the flap relatively to the body-portion, and devices for sealing the envelop flaps, substantially as set forth.

12. In an envelop-sealing machine, the combination of a support for the unsealed envelops, means for turning the flaps of the envelops successively relatively to the body-portions thereof, devices for forwarding the envelops successively with the flaps thereof lying in substantially the same plane as the body-portions, means for holding the flap and forwarding the body-portion of each envelop to turn the flap relatively to the body-portion, and devices for sealing the envelop flaps, substantially as set forth.

13. In an envelop-sealing machine, the combination of a support for the unsealed envelops, a reciprocating member for turning the flaps of the envelops successively relatively to the body-portions thereof, forwarding rollers movable to grip the flaps of the envelops successively and forward the same with the flaps thereof lying in substantially the same plane as the body-portions, a moistener arranged to hold the flap of each envelop while the body-portion thereof is forwarded to turn the flap relatively to the body-portion, and devices for sealing the envelop flaps, substantially as set forth.

14. In an envelop-sealing machine, a pair of forwarding rollers, a receptacle, a plurality of pivotally mounted fingers, and means for operating said fingers intermittently to cause them to carry an envelop from said rollers to said receptacle, substantially as set forth.

15. In an envelop-sealing machine, a pair of forwarding rollers, a receptacle having slots therein, a plurality of pivotally mount-

ed fingers, and means for operating said fingers intermittently to move them from a position adjacent to said rollers to a position in which they enter said slots, substantially as set forth.

16. In an envelop-sealing machine, a pair of forwarding rollers, a receptacle having slots therein, a plurality of pivotally mounted fingers, means for operating said fingers intermittently to move them from a position adjacent to said rollers to a position in which they enter said slots, and a member movable to carry an envelop from said fingers upon said receptacle, substantially as set forth.

17. In an envelop-sealing machine, a pair of forwarding rollers, a receptacle having slots in the forward edge thereof, a plurality of fingers, a forward wall-plate for said receptacle, and means for automatically operating said fingers to move their ends from positions adjacent to said rollers to positions in which they enter said slots and for operating said wall-plate to move an envelop from said fingers upon said receptacle, substantially as set forth.

18. In an envelop-sealing machine, a pair of forwarding rollers having circumferential grooves therein, a receptacle having slots in the forward edge thereof located above said rollers, a plurality of fingers, a forward wall-plate for said receptacle, and means for operating said fingers to move their ends from positions in which they enter said grooves to positions in which they enter said slots and for operating said wall-plate to move an envelop from said fingers upon said receptacle, substantially as set forth.

19. In an envelop-sealing machine, a receptacle, a wall-plate therefor movable adjacent to one edge thereof, rollers for positively forwarding an envelop between said plate and said edge, means for rotating said rollers and means for moving said plate past said edge, substantially as set forth.

20. In an envelop-sealing machine, a receptacle, a wall-plate therefor movable adjacent to one edge thereof, rollers for positively forwarding an envelop between said plate and said edge, gearing for rotating said rollers, means for moving said plate past said edge, a second wall-plate, and a spring for pressing the same toward said first-named wall-plate, substantially as set forth.

21. In an envelop-sealing machine, a receptacle, a wall-plate therefor adjacent to one edge thereof, means for forwarding an envelop between said plate and said edge, means for reciprocating said plate to carry the envelop upon the receptacle, and pivotally mounted devices coacting with opposite edges of each envelop for preventing backward movement thereof with the wall-plate, substantially as set forth.

22. In an envelop-sealing machine, a re-

ceptacle, a forward wall-plate therefor adjacent to one edge thereof, means for forwarding an envelop along the face of said plate, means for reciprocating the plate to move the envelop upon the receptacle, and pivotally mounted devices coacting with opposite edges of each envelop for preventing backward movement thereof with the wall-plate, substantially as set forth.

23. In an envelop-sealing machine, a receptacle, a forward wall-plate therefor adjacent to one edge thereof, means for forwarding an envelop along the face of said plate, means for reciprocating the plate to move the envelop upon the receptacle, a second wall-plate, a spring for pressing the same toward said first-named wall-plate, and pivotally mounted devices coacting with opposite edges of each envelop for preventing backward movement thereof with the first-named wall-plate, substantially as set forth.

24. In an envelop-sealing machine, a sealed-envelop receptacle comprising a base-plate, a wall-plate movable over the same, paired links pivotally connected and having pin-and-slot connections to said wall-plate, and a spring acting on said links to draw them to a position of parallelism and move said wall-plate over said base-plate, substantially as set forth.

25. In an envelop-sealing machine, a receptacle, a forward wall-plate therefor adjacent to one edge thereof, means for forwarding an envelop along the face of said plate, means for reciprocating the plate to move the envelop upon the receptacle, devices coacting with opposite edges of an envelop for preventing backward movement of the envelop with the wall-plate, and means for adjusting said devices toward and away from each other to coact with opposite edges of envelops of different sizes, substantially as set forth.

26. In an envelop-sealing machine, a receptacle, a spring-pressed pivoted member mounted at the forward edge thereof, a wall-plate movable adjacent to said edge and having an opening therein through which said member may pass, means for forwarding an envelop along the face of said wall-plate, and means for reciprocating said wall-plate to carry the envelop past said member, the movement of the envelop effected by said plate carrying it into engagement with said member, turning the member on its pivot against the tension of its spring and then releasing the member, substantially as set forth.

27. In an envelop-sealing machine, a receptacle, a wall-plate movable adjacent to one edge thereof having an opening there-through, an arm extending through said opening, a finger pivotally mounted upon the end of said arm, means for feeding an envelop along the face of said wall-plate and

means for reciprocating the plate to carry the envelop past said finger, substantially as set forth.

28. In a machine for sealing envelops, an unsealed-envelop receptacle comprising side-guides, means for adjusting the same toward and away from each other, supports on which the envelops rest, and means for adjusting said supports vertically, substantially as set forth.

29. In a machine for sealing envelops, an unsealed-envelop receptacle comprising two side-guides, means for adjusting the same toward and away from each other, two supports on which the envelops rest each mounted stationarily with respect to one of said side-guides, and means for adjusting said supports vertically, substantially as set forth.

30. In a machine for sealing envelops, an unsealed-envelop receptacle comprising side-guides, means for adjusting the same toward and away from each other, supports on which the envelops rest pivotally mounted at one end, and means for holding said supports in various angular positions about their pivots, substantially as set forth.

31. In a machine for sealing envelops, an unsealed-envelop receptacle comprising side-guides, means for adjusting the same toward and away from each other, supports on which the envelops rest pivotally mounted at one end, a pivotal bail on which the free ends of said supports rest, and means for holding said bail in various angular positions, substantially as set forth.

32. In an envelop sealing machine, a receptacle, an envelop-forwarding device adjacent to one edge thereof, means for moving an envelop between said device and said edge, means for reciprocating said device to carry the envelop upon the receptacle and means coacting with opposite edges of the envelops for preventing backward movement thereof with the envelop forwarding device, said means coacting with the opposite edges of the envelops being relatively adjustable to cooperate with envelops of various sizes, substantially as set forth.

33. The combination of envelop forwarding means, a flap moistener, flap sealing devices, a support for the sealed envelops, movable stops at one end of said support, means for moving the envelops upon said support and in front of said stops, a wall movable over said support, a lazytongs connected to said wall and a spring acting on said lazytongs to move said wall in the direction to press the envelops against said stops, substantially as set forth.

34. The combination of envelop forwarding means, a flap moistener, flat sealing devices, a support for the sealed envelops, stops mounted above one end of said support, means for adjusting said stops toward and away from said support, means for forward-

ing the envelops upon said support in front of said stops, a wall movable over said support and a spring acting on said wall to press the envelops on the support against said stops, substantially as set forth.

35. In a machine for sealing envelops, the combination of means for supporting the unsealed envelops, means for turning the flaps of the envelops successively, devices coacting with the flaps of the envelops when turned for forwarding the envelops successively with the flap of each envelop in substantially the same plane as the body-portion thereof, and means for sealing the envelop flaps, substantially as set forth.

36. In a machine for sealing envelops, the combination of means for supporting the unsealed envelops, means for turning the flaps of the envelops successively, devices for forwarding the envelops successively each with

the flap thereof in substantially the same plane as its body-portion, and means for sealing the envelop flaps, substantially as set forth.

37. In a machine for sealing envelops, the combination of means for supporting the unsealed envelops, means for turning the flaps of the envelops successively, devices for forwarding the envelops flap foremost successively; a flap moistener, means for turning the envelop flaps to carry them into contact with the body portions of the envelops and flap sealing devices, substantially as set forth.

This specification signed and witnessed this 23rd day of March, 1907.

ERNEST J. BRASSEUR.

Witnesses:

M. H. BURKART,
JOSEPH TEAL.

Corrections in Letters Patent No. 945,745.

It is hereby certified that in Letters Patent No. 945,745, granted January 11, 1910, upon the application of Ernest J. Brasseur, of Chicago, Illinois, for an improvement in "Machines for Sealing Envelops," errors appears in the printed specification requiring correction, as follows: Page 5, lines 98 and 119, the word "envelop" should read *envelops*; and that the said Letters Patent should be read with these corrections therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 8th day of February, A. D., 1910.

[SEAL.]

E. B. MOORE,

Commissioner of Patents.

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37. In a machine for sealing envelops, the combination of means for supporting the unsealed envelops, means for turning the flaps of the envelops successively, devices for forwarding the envelops flap foremost successively; a flap moistener, means for turning the envelop flaps to carry them into contact with the body portions of the envelops and flap sealing devices, substantially as set forth.

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