

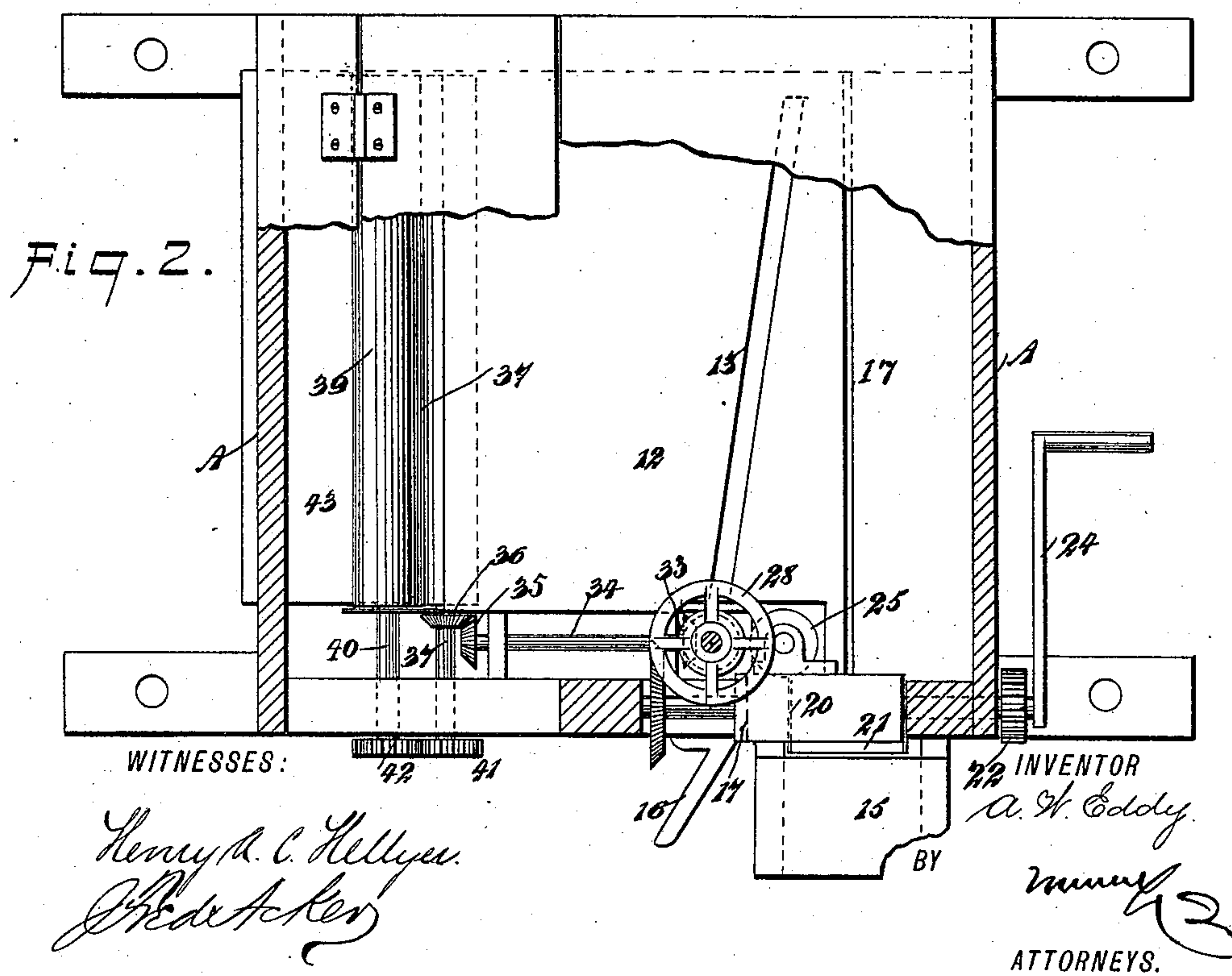
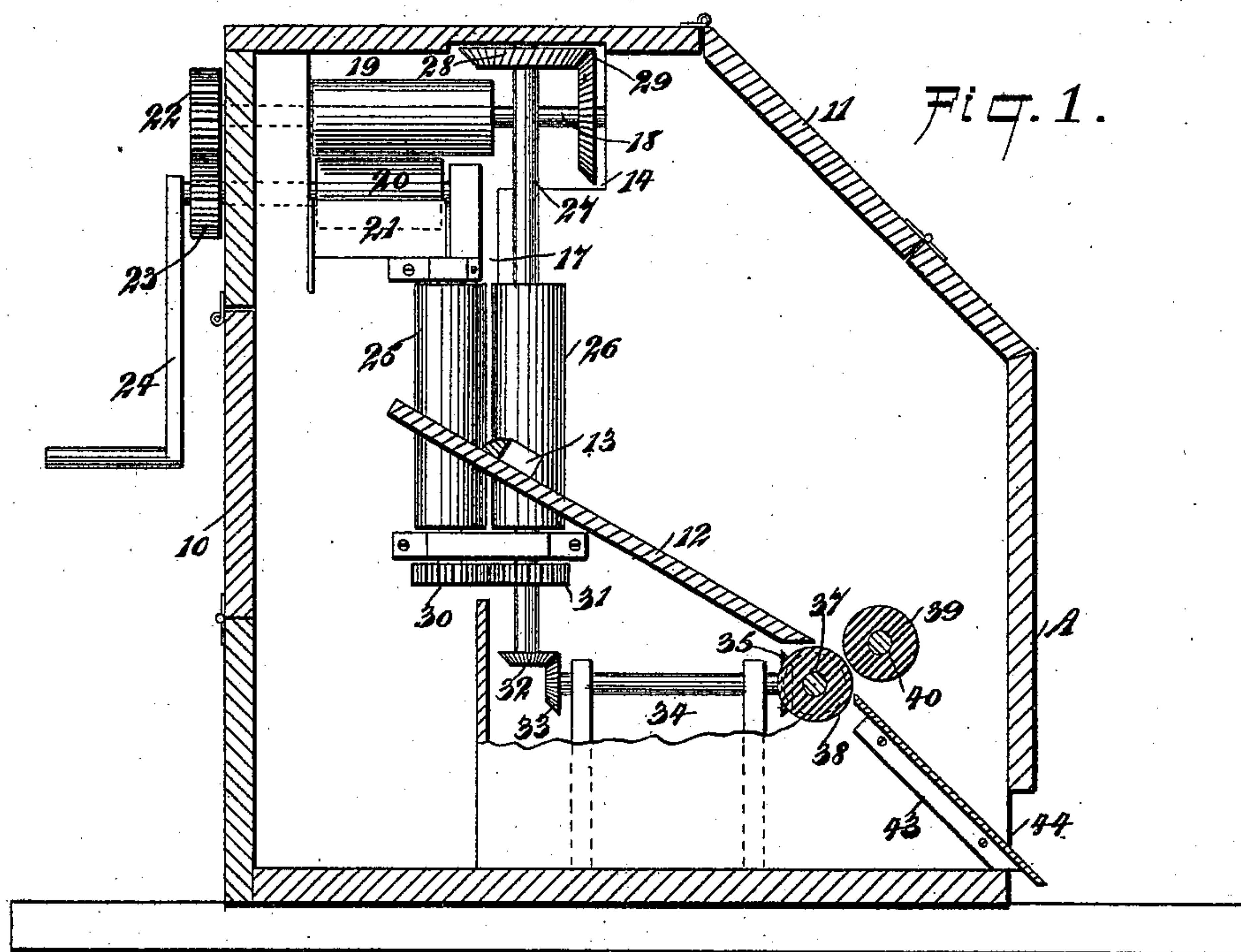
(No Model.)

A. W. EDDY.

DEVICE FOR MOISTENING AND SEALING ENVELOPS, &c.

No. 574,892.

Patented Jan. 12, 1897.



UNITED STATES PATENT OFFICE.

ASAHEL W. EDDY, OF COLERIDGE, NEBRASKA.

DEVICE FOR MOISTENING AND SEALING ENVELOPS, &c.

SPECIFICATION forming part of Letters Patent No. 574,892, dated January 12, 1897.

Application filed April 21, 1896. Serial No. 588,466. (No model.)

To all whom it may concern:

Be it known that I, ASAHEL W. EDDY, of Coleridge, in the county of Cedar and State of Nebraska, have invented a new and Improved Device for Moistening and Sealing Envelops and Similar Packages, of which the following is a full, clear, and exact description.

The object of the invention is to provide a machine in which an envelop containing a letter or other matter may be introduced into the machine and the gummed flap evenly moistened and sealed down upon the body of the envelop, the envelop leaving the machine in condition for mailing after stamping the same.

A further object of the invention is to construct a machine of this character which will be exceedingly simple, durable, and economic.

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 both the figures.

Figure 1 is a longitudinal vertical section through the entire machine; and Fig. 2 is a plan view of the machine, a portion of the top being broken away.

In carrying out the invention a casing A is employed and ordinarily the front upper portion thereof is inclined, as shown in Fig. 1, and at the back of the casing a door 10 is provided, as is likewise a second door 11, located in the front portion, preferably at the inclined section of the same, in order that the interior of the casing may be fully exposed when necessary. A downwardly and forwardly inclined partition 12 is located within the aforesaid casing, and preferably a space is made to intervene the front and the rear ends of the said partition and the adjacent walls of the casing, as is fully shown in Fig. 1. A guide-strip 13 is preferably adjustably placed on the partition 12 near its upper end, and the said guide-strip usually occupies a diagonal position on the aforesaid partition, as illustrated in Fig. 2, the rear portion of the strip 13 being more or less convexed, as shown in Fig. 1.

In one side of the casing, usually near the

top, an opening 14 is made, and a table 15 is located horizontally on the exterior of the casing near one end of the said opening, the top of the table being usually so placed as to be in alinement with a point between the top and the bottom of the aforesaid opening, and at one side of this table an angular flange or guard 16 is adjustably secured to the exterior of the casing, which is made to diverge from the table 15, and in the space intervening the inner end of the guard 16, which is perpendicularly placed, and the table 15 a vertical slot 17 is made in the aforesaid casing, connecting with the end opening 14.

A horizontal shaft 18 is journaled in the end walls of the opening 14, and on this shaft a roller 19 is firmly secured, and this roller is made to engage with a lower roller 20, preferably of less length than the upper roller, and the lower roller 20 is mounted to revolve in a fluid-receiving receptacle 21, adapted to contain water in such quantities that the roller 20 as it revolves will be moistened. The shaft 18 extends out beyond the periphery of the casing, as does likewise the shaft upon which the roller 20 is secured, and the shaft of the roller 19 at its outer end has a gear 22 secured to it, which meshes with a gear 23 on the outer end of the shaft of the moistening-roller 20, and the shaft of the moistening-roller 20 is preferably provided with a crank 24, by means of which it is revolved, and consequently the upper roller 19 is also revolved.

A vertical roller 25 is located at one side of the vertical slot 17, the said roller being contained within the casing and at one end of the partition 12, near its upper end, while a second parallel roller 26 is located at the opposite side of the said vertical slot 17, the shaft 27 of this latter roller being carried downward a predetermined distance below the partition and preferably to the upper portion of the casing. The upper end portion of the partition 12 likewise crosses this second roller 26. These two rollers are adapted for feeding the envelop into the casing.

At the upper end of the shaft 27 a gear 28, preferably a beveled gear, is secured, which meshes with a similar gear 29, secured on the upper horizontal roller-shaft 18, and at or

near the lower ends of the two vertical rollers 25 and 26 gears 30 and 31 are secured to their shafts, the said gears being in mesh, so that when the upper rollers 19 and 20 are set in motion the vertical rollers 25 and 26 will also be turned.

A horizontal shaft 34 is journaled in suitable bearings below the inclined partition 12, and this shaft is provided at one end with a small miter-gear 33, meshing with a similar gear 32, secured to the perpendicular roller-shaft 27, and at the forward end of the shaft 34 a second miter-gear 35 is secured, which meshes with a corresponding gear 36, secured to a shaft 37, journaled horizontally in the casing at a point immediately below the lower end of the inclined partition 12, the said lower end of this partition being inclined or beveled so that the upper face of the partition will be practically flush with the upper portion of the periphery of the roller 38, secured on the aforesaid shaft 37, and immediately above and in front of the roller 38 and in close proximity thereto a second roller 39 is secured upon the shaft 40, the shaft being also journaled in suitable bearings in the casing. The shaft 37 at its outer end has a gear 41 secured thereto, which meshes with a gear 42, secured upon the same end of the upper horizontal roller 39.

A downwardly-inclined chute 43 is located below the lower roller 38 of the lower horizontal set, and the said chute 43 extends outwardly through an opening 44, made in the front lower portion of the casing, as illustrated in Fig. 1.

In operation the body of the envelop is introduced into the casing through the slot 17, so that it will be engaged by both of the perpendicular rollers 25 and 26, and the flap of the envelop containing the gummed surface will be passed between the upper horizontal rollers 19 and 20, the gummed surface of the flap being in engagement with the moistening-roller 20. By turning the crank-arm 24 the envelop is fed into the casing, the gummed surface of the flap being evenly moistened while the inward feed is carried on. As the envelop is fed into the casing it will engage with the rear face of the guide-strip 13, and the moment that the envelop is released from the perpendicular rollers 25 and 26 it will fall upon the partition 12 face downward, with its gummed flap edge facing the lower sealing-rollers 38 and 39, and as the envelop is passed between these rollers the flap will be firmly sealed to the body of the envelop and the envelop will slide down the chute 43 and out through the opening 44 in the casing, ready to receive the stamp. The driving connection between the shafts of one roller of each set insures all of the rollers operating simultaneously.

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

1. In an envelop moistening and sealing machine, a casing, a moistening-roller adapted to receive the gummed flap of the envelop, feed-rollers arranged below the moistening-roller and in such relation thereto as to receive the body of the envelop while its flap is in engagement with the aforesaid moistening-roller, sealing-rollers between which the envelop in its moistened condition is to be passed, and a conducting device located between the guide-rollers and the sealing-rollers, as and for the purpose specified.

2. In an envelop moistening and sealing machine, a casing, a moistening-roller adapted to receive the gummed flap of the envelop, feed-rollers arranged below the moistening-roller and in such relation thereto as to receive the body of the envelop while its flap is in engagement with the aforesaid moistening-roller, sealing-rollers between which the envelop in its moistened condition is to be passed, a conducting device located between the guide-rollers and the sealing-rollers, and a guide partition located upon the said conducting device at a point between the space intervening the guide-rollers and the sealing-rollers, as and for the purpose specified.

3. In a machine for moistening and sealing envelops and like packages, the combination, with a casing, a moistening-roller and a guide-roller located above the moistening-roller, the casing being provided with an opening adjacent to one end of the moistening-roller and at an angle to the said roller, of feed-rollers located at each side of the aforesaid slot, an inclined partition extending across the feed-rollers, and sealing-rollers located at the lower end of the aforesaid partition, as and for the purpose specified.

4. In a machine for moistening and sealing envelops and like packages, the combination, with a casing provided with a moistening-roller, and a guide-roller substantially in contact with the moistening-rollers, the two rollers being horizontally located and the casing being provided with a vertical slot adjacent to one end of the moistening-roller, of perpendicular guide-rollers located one at each side of the said perpendicular slot, an inclined partition crossing the feed-rollers, sealing-rollers located at the lower end of the said partition, and means, substantially as described, for driving one of the rollers, and a driving connection between all of the rollers, whereby motion may be simultaneously imparted to all of the rollers upon operating one of them, as and for the purpose specified.

5. In a machine for moistening and sealing envelops, the combination, with a casing, a moistening-roller located in the said casing, a guide-roller adapted to turn in conjunction with the moistening-roller, the casing being provided with a slot at an angle to one end of the moistening-roller, guides exteriorly located on the casing, one leading to the space between the moistening and guide rollers and

the other to the said slot, of guide-rollers located one at each side of the said slot, an inclined partition crossing the said guide-rollers and provided with a diagonal guide-partition
5 upon its upper face and adjacent to one of the guide-rollers, sealing-rollers located at the lower end of the said partition, and a driving

mechanism operated on by the said rollers, as and for the purpose specified.

ASAHEL W. EDDY.

Witnesses:

C. R. APPELGATE,
J. C. BEAL.