C. F. G. UMBACH.

MACHINE FOR SEALING ENVELOPS.

APPLICATION FILED NOV. 3, 1905.

932,920.

Patented Aug. 31, 1909.

2 SHEETS—SHEET 1.

Fig. 1.

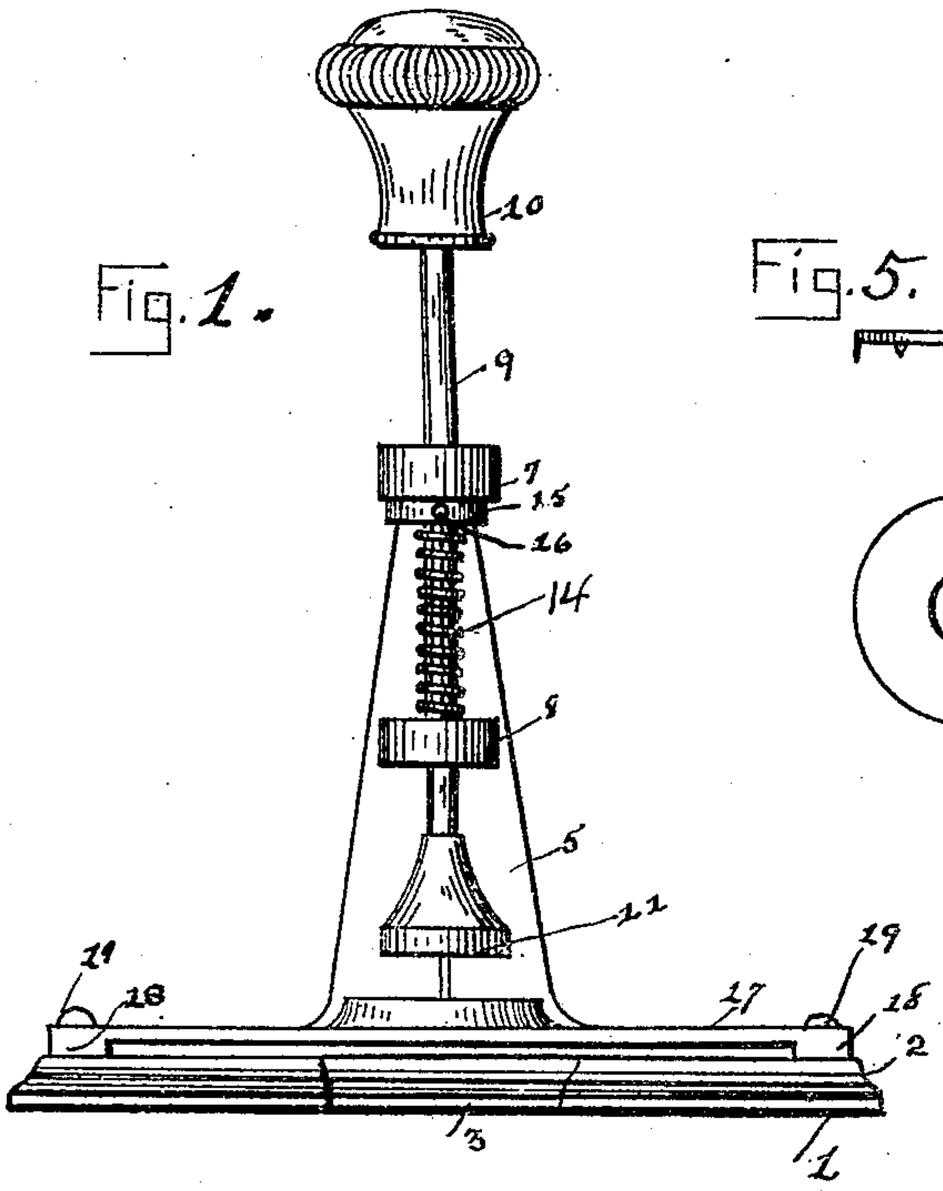


Fig. 5.

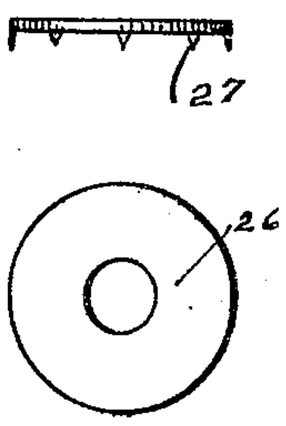


Fig. 3.

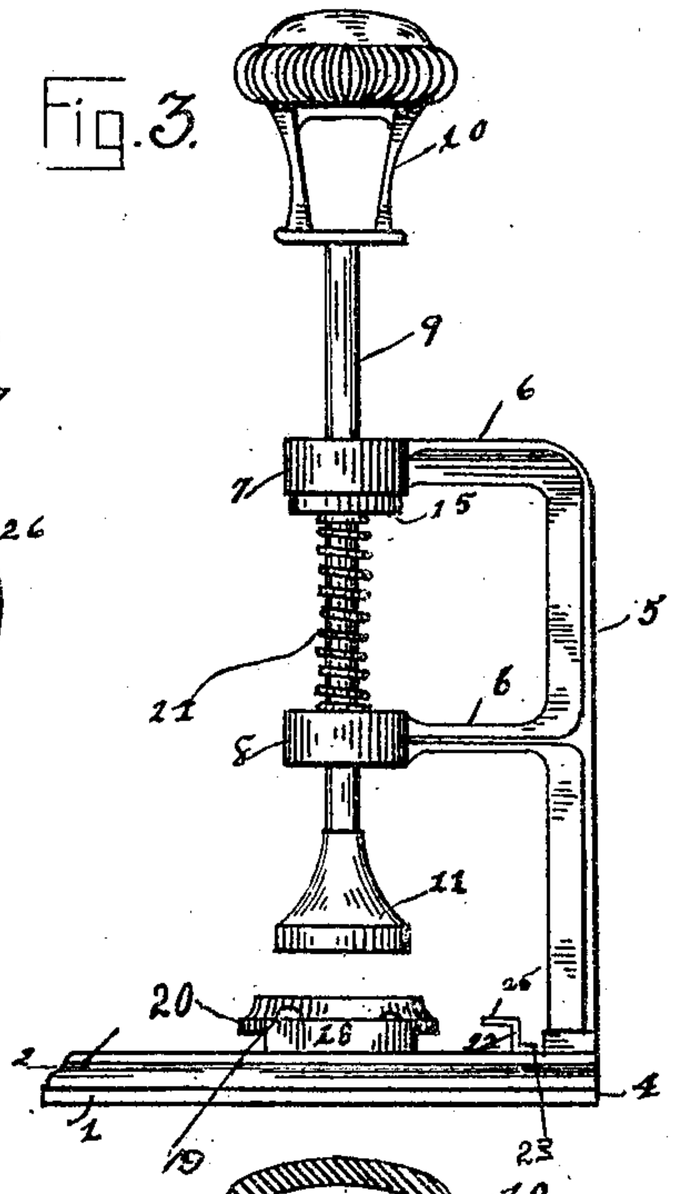


Fig. 2.

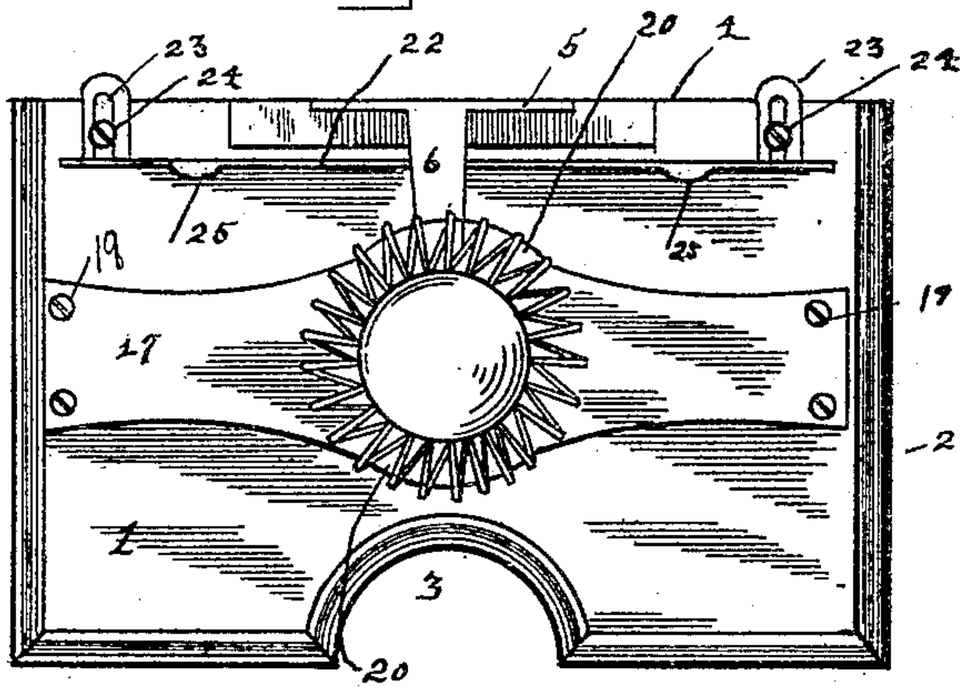


Fig. 4.

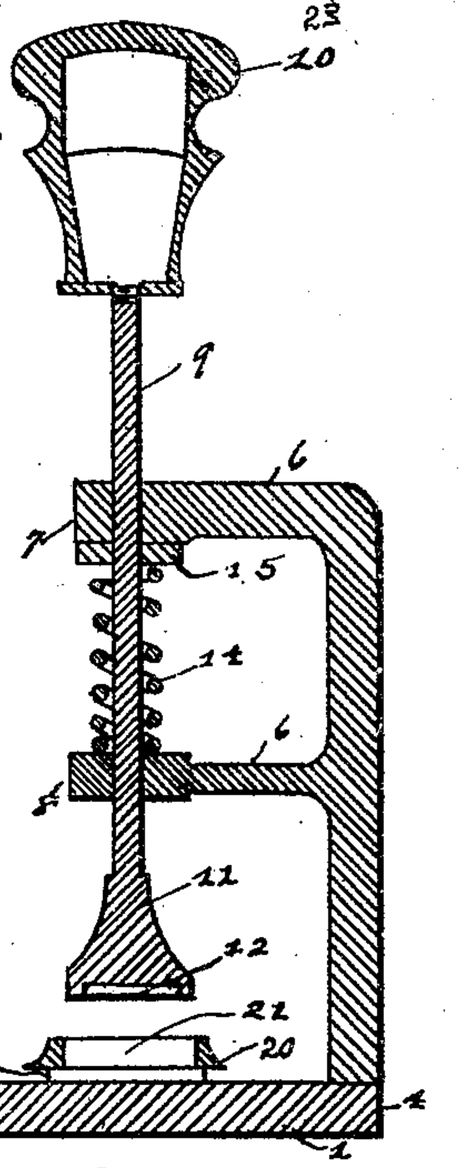
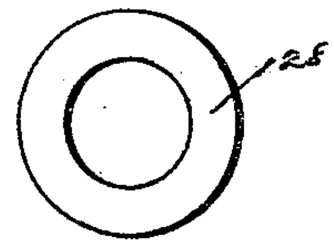


Fig. 6.



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2 SHEETS—SHEET 2.

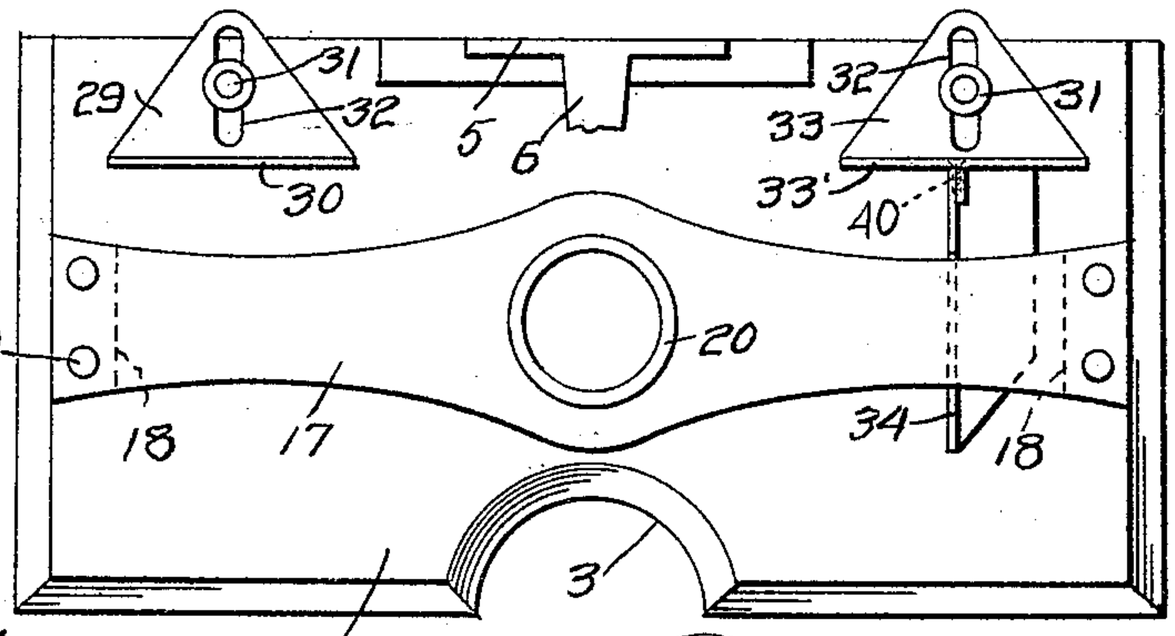

Fig. 12.

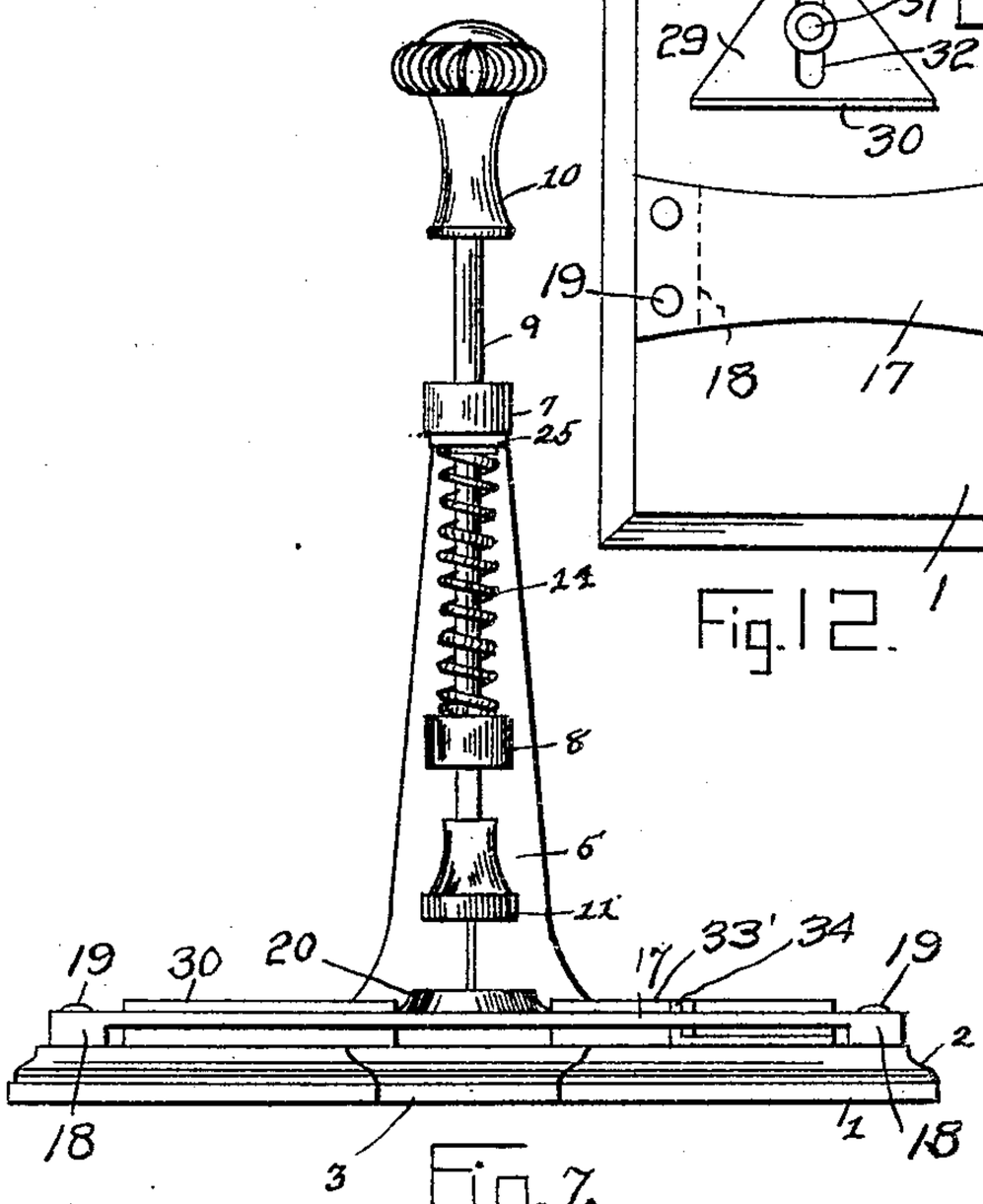

Fig. 7.

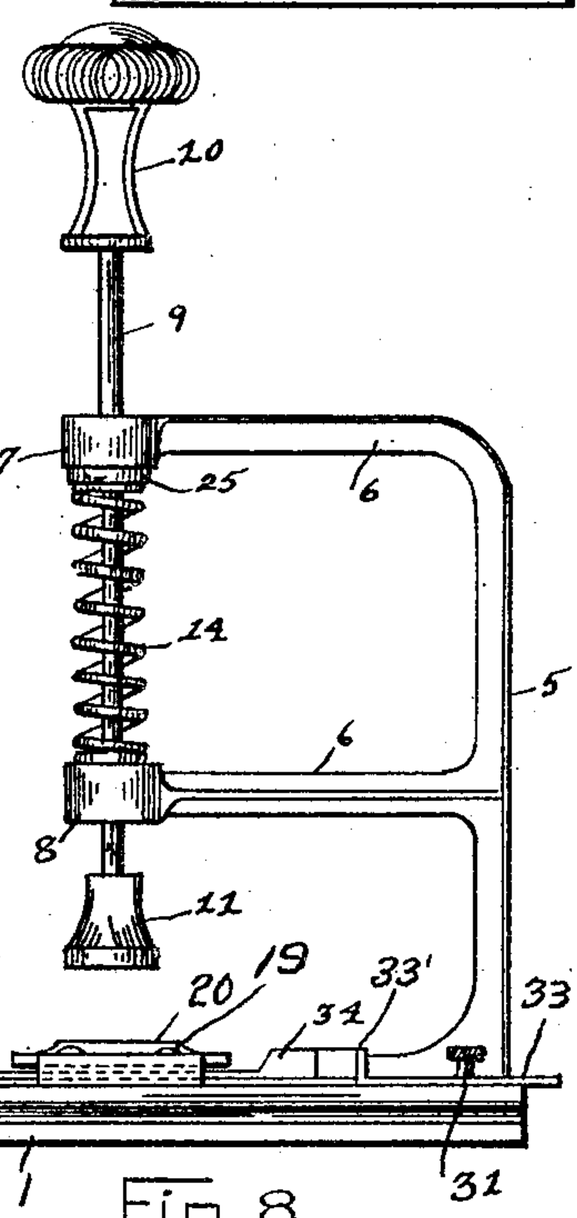

Fig. 8.

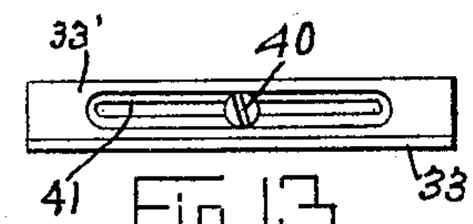

Fig. 13.

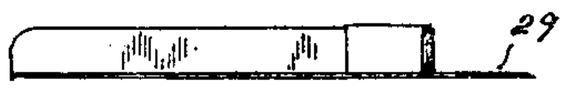

Fig. 9

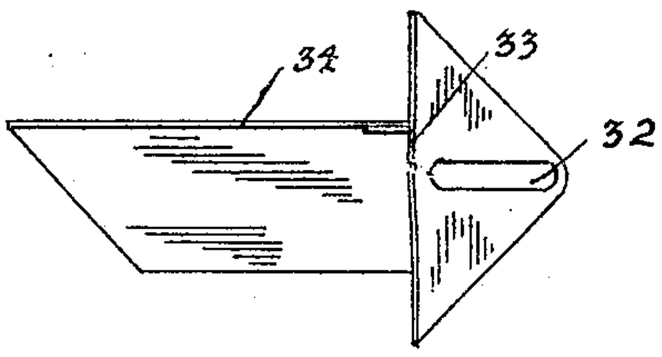

Fig. 10.

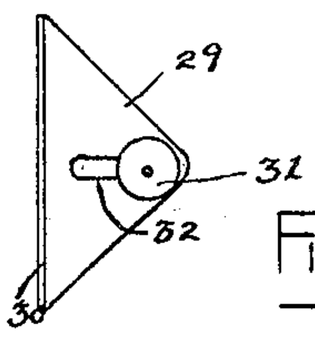

Fig. 11.

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UNITED STATES PATENT OFFICE.

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MACHINE FOR SEALING ENVELOPS.

932,920. Specification of Letters Patent. Patented Aug. 31, 1909.

Application filed November 3, 1905. Serial No. 285,771.

To all whom it may concern:

Be it known that I, CLEMENS F. G. UMBACH, citizen of the United States of America, residing at Allegheny, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Machines for Sealing Envelops, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to certain new and useful improvements in machines for sealing envelops, and the invention relates more particularly to a novel form of machine or punch adapted to be used for securing fasteners in an envelop.

The present invention relates particularly to a machine or punch employed for sealing envelops, the machine being constructed to receive the envelop to be sealed, and in conjunction with the fastener, to seal the envelop when the machine is operated, and with means for adjusting the machine to envelops of various sizes.

To this end, my improved machine or punch is employed in connection with the fasteners or closures illustrated, described and claimed in my pending application for patent, filed Sept. 1, 1905, Serial No. 276,728, the present invention being wholly generic to the above mentioned application.

In my pending application a closure is described as consisting of an annulus having a series of depending teeth, these teeth being adapted to engage the flaps of an envelop and firmly secure them together. The closure or annulus when placed in engagement with an envelop will prevent a person from opening or tampering with the former without breaking the seal or envelop.

The present invention aims to provide a machine or punch which will temporarily position and then affix the fastener or closure to an envelop placed in the machine or punch.

Another object of the invention is to provide a simply constructed gage device whereby the machine is readily adapted to envelops of various sizes.

With the above and other objects in view, which will more readily appear as the nature of the invention is better understood, the same consists in the novel construction, combination and arrangement of parts to be hereinafter more fully described and then specifically pointed out in the claim, and referring to the drawing accompanying this application, like numerals of reference designate corresponding parts throughout the several views, in which:—

Figure 1 is a front elevation of my improved device, Fig. 2 is a top plan view of the same, Fig. 3 is an end view, Fig. 4 is a vertical sectional view of the device, Fig. 5 is a detail view of the fastener employed in connection with the device, Fig. 6 is a similar view of a ring employed in connection with the fastener illustrated in Fig. 5, Fig. 7 is a front elevation of a machine illustrating a modified form of construction, Fig. 8 is a side elevation of the same, Fig. 9 is a side elevation of one of the adjustable guide strips used in connection with the machine, Fig. 10 is a plan of the same, Fig. 11 is a plan of another guide strip employed in connection with the machine, Fig. 12 is a plan view showing the base, guide strip and gages, Fig. 13 is an end view of the gages.

To put my invention into practice, I construct my improved device or machine of a base 1, which is made of wood or the like material, said base being provided with ornamental edges 2, and with a semi-circular recess 3 in its front edge. The rear edge 4 of the base is provided with an upwardly extending bracket 5 having outwardly extending arms 6, 6 the ends of the arms being provided with pierced bosses 7 and 8. In the pierced bosses is mounted a vertically disposed plunger 9 carrying a conventional form of knob or handle 10 upon its upper end, while its lower end is provided with an annular cap 11, said cap having an annular recess 12 formed in its bottom. The plunger 9 is retained in the pierced bosses 7 and 8 by a coiled spring 14 which surrounds the plunger and is interposed between the pierced boss 8 and a washer 15 secured upon the plunger by a set screw 16. The washer 15 limits the upward movement of the plunger, and by adjusting the washer, the tension of the spring 14 can be increased or decreased as desired.

Upon the base 1 of the device is mounted a longitudinally disposed plate 17 of thin material, the ends of said guide plate being provided with depending lugs 18, 18 whereby when said plate is secured by screws 19 to the ends of the base 1, the plate will be

slightly elevated above the base to permit the insertion of the envelop between the guide plate and the base. The central portion of the guide plate 17 is enlarged as at 20 and provided with a vertically disposed opening 21.

The rear edge of the base 1 is provided with a guide strip 22, the ends of said strip being provided with rearwardly extending slotted lugs 23, 23, whereby said guide strip may be adjustably secured to the base 1 by set screws 24, 24. The upper edge of the guide strip is provided with forwardly extending spaced lugs 25, the object of which will be presently described.

In Fig. 5 of the drawing, the fastener which I employ in connection with the improved device, is illustrated, said fastener consisting of a metallic annulus 26 having peripheral depending prongs 27. In connection with the fastener, a ring 28 is used (see Fig. 6), this ring having one face provided with a suitable adhesive material such as cement or mucilage.

When it is desired to seal an envelop, the ring 28 is placed upon the inside of the envelop and secured by pressure to the flaps of the body of the envelop. The sealing flap is then dampened and placed upon the flaps of the body portion and the envelop placed in the improved device. In this operation, the envelop passes beneath the plate 17, the guide strip 22 having been positioned to limit the inward movement of said envelop and to correctly position the apex of the sealing flap directly beneath the opening 21 of the plate 17. Said lugs 25 assist in positioning the envelop by receiving the envelop thereunder and preventing it from accidentally passing over the top of the guide strip 22. The fastener illustrated in Fig. 5 of the drawing, is now placed in the opening 21, the prongs thereof protruding downwardly. By striking the knob or handle 10 of the plunger 9 a sharp blow, the head 11 of the plunger travels downwardly into the opening 21 of the plate 17, forcing the fastener 26 into engagement with the flaps of the envelop. As the fastener is driven into the flaps, the prongs 27 of the annulus will be bent into a plane parallel with the body of the envelop when they have engaged the ring 28, said ring being employed to prevent the prongs from passing entirely through the envelop. The spring 14 which surrounds the plunger will immediately return the plunger to its normal position when released.

The adjustable guide strip 22 can be moved upon the base 1 to correctly position the sealing flaps directly beneath the center of the plate 17, and in order that an envelop may be easily placed beneath the plate 17 and removed therefrom, the front edge of the base 1 is provided with the recess 3, which permits of a person easily gripping an envelop to remove or place the same in position.

The plate 17, guide strip 22 and the bracket 5 and its appurtenant parts are preferably constructed of strong and durable metal, while the base is preferably made of wood.

In Figs. 7 to 11 inclusive I have illustrated a form of the improved device wherein a novel form of gage device is employed, the remainder of the machine being identical with the machine illustrated in Figs. 1 to 4 inclusive. The gage device illustrated in Figs. 7 to 11 inclusive is employed for large and oblong envelops. A gage member 29 is mounted at one end of the base 1 near the rear edge thereof, this gage member being angular in cross section to provide a vertical edge 30 against which the edge of an envelop is adapted to abut. The gage member 29 is adjustable by a set screw 31 extending through a slot 32 formed in the horizontal portion of the gage member 29. Upon the opposite end of the base 1 adjacent to the rear edge is mounted a similar gage member 33, having a vertical front edge 33′. Upon the vertical edge of said last mentioned gage member, I slidably mount an end gage 34, this end gage being adapted to bear against the end of an envelop and correctly position it beneath the plunger of the machine.

For the purpose of this description the gage members 29—33 will be referred to as the rear gages and the gage member 34 will be referred to as the end gage. The rear gages 29—33 are disposed in alinement and longitudinally of the guide plate 17 and parallel thereto and adjustable toward and away from the guide plate by their slots and clamp screws, as will be obvious, while the end gage 34 extends at right angles to one of the rear gages and is adjustable longitudinally thereof, as shown. The end gage 34 is slidably mounted upon the vertical edge 33′ by means of the screw 40, working within the slot 41 provided in the edge 33′ and threaded into said gage as shown in Figs. 12 and 13.

It is thought from the foregoing that the construction, operation and advantages of the herein described machine for sealing envelops will be apparent without further description, and various changes in the form, proportion and minor details of construction may be resorted to within the scope of the appended claim without departing from the spirit of the invention.

What I claim and desire to secure by Letters Patent, is:—

In a machine for applying fasteners to envelops, the combination of a base, a thin guide plate provided at each end with an integral depending lug, said lugs secured to the opposite ends of the base and adapted to

support said plate in spaced relation thereabove, said plate having its central portion flaring outwardly at opposite points, said flaring portion provided with an integral collar having a circular central vertical opening therethrough, said base having one side provided with a circular excision at a point opposite said collar, the opposite side of said base supporting a standard, a plunger carried by said standard, and envelop guiding means carried by the base.

In testimony whereof I affix my signature in the presence of two witnesses.

CLEMENS F. G. UMBACH.

Witnesses:
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