

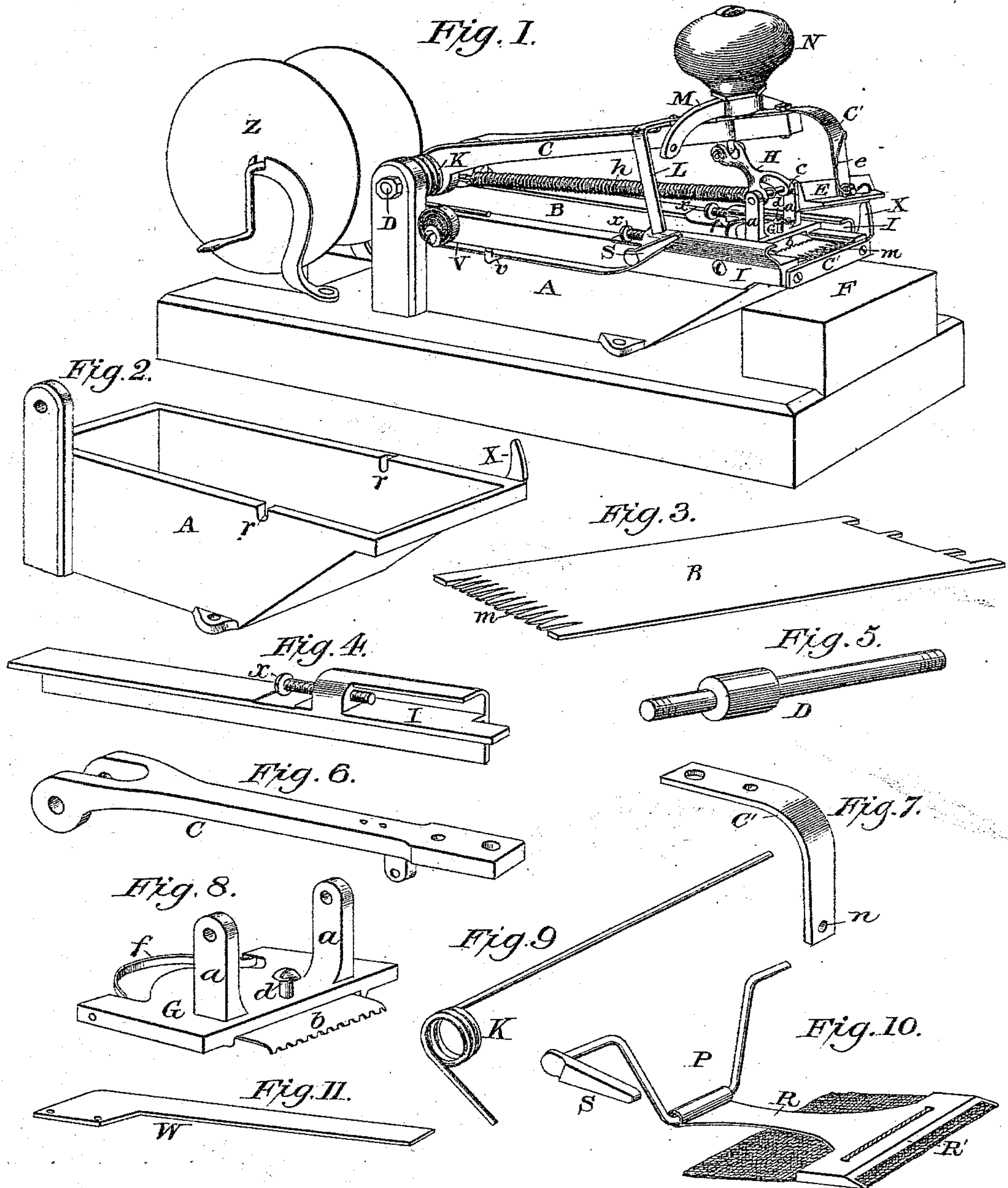
(No Model.)

H. PARKER & J. T. DRUMMOND.

ADDRESSING MACHINE.

No. 296,773.

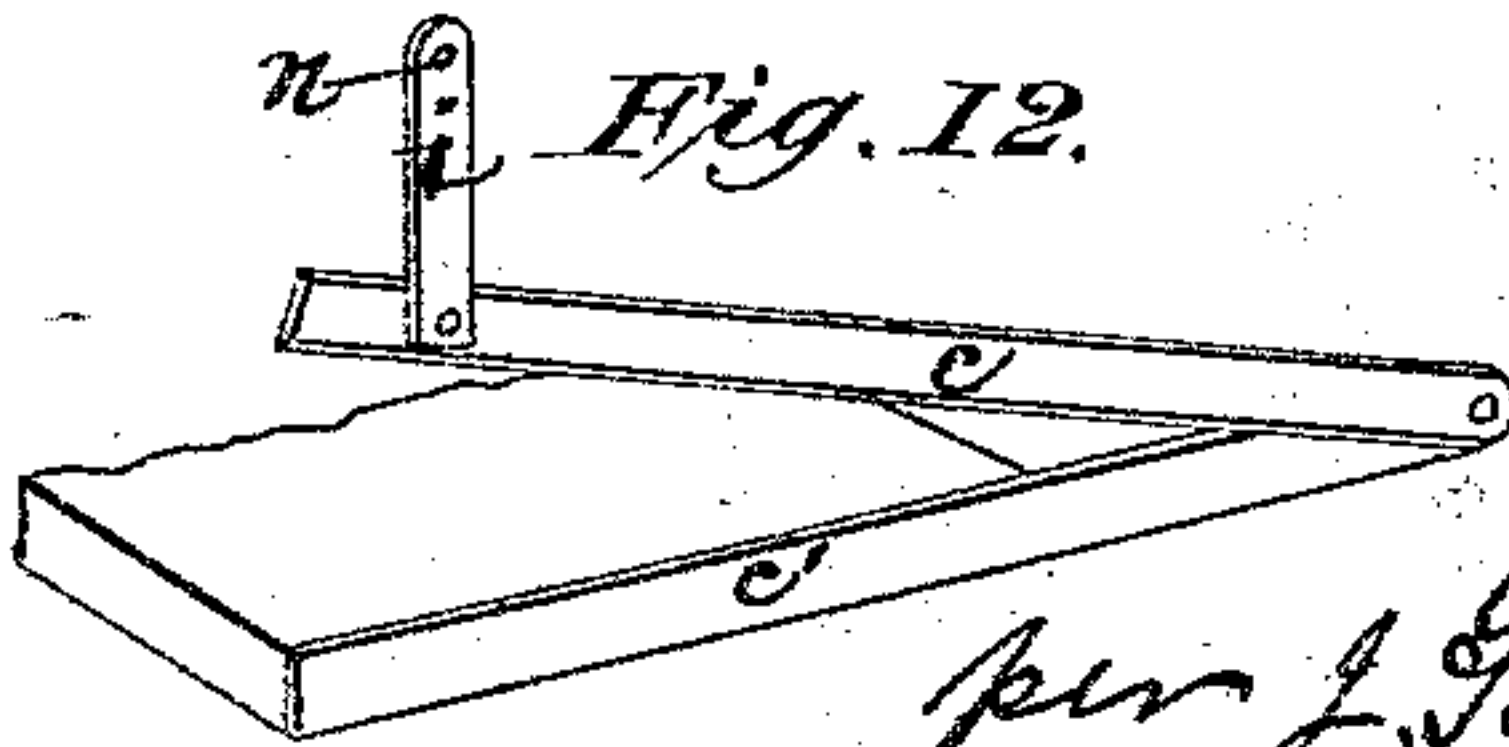
Patented Apr. 15, 1884.



Witnesses:

S. O. Grant
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Fig. 12.



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UNITED STATES PATENT OFFICE.

HIRAM PARKER AND JAMES T. DRUMMOND, OF MOUNT PLEASANT, IOWA.

ADDRESSING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 296,773, dated April 15, 1884.

Application filed May 26, 1883. (No model.)

To all whom it may concern:

Be it known that we, HIRAM PARKER and JAMES T. DRUMMOND, both citizens of the United States, and residing at Mount Pleasant, in the county of Henry and State of Iowa, have invented a new and useful Addressing-Machine, of which the following is a specification.

Our invention relates to a machine that may be used with equal advantage either for affixing stamps to letters or labels to commercial products, or for attaching addresses to newspapers and other printed matter.

The object of our invention is to provide a machine adapted to the several requirements above named, either by moistening mucilaginous gum already applied to a strip of stamps, labels, or newspaper addresses, one at a time, as being used, or otherwise to saturate said stamps, labels, or addresses in like manner with either mucilage or paste, and at the same motion of the machine to attach them to letters, papers, or other objects requiring the same.

Our invention consists of the mechanism, hereinafter described, and definitely pointed out by claims, for the accomplishment of the above-named objects.

In the accompanying drawings, constituting part of this specification, Figure 1 is a perspective of the whole machine embodying our invention. The other figures represent views of detached parts, of which Fig. 2 is a perspective of the main body of the machine, constituting a reservoir for holding the paste or moistening-fluid. Fig. 3 is a sliding lid for said reservoir. Fig. 4 is one of a pair of angulated slides, which, when fastened one to each of the upper side corners of the reservoir, and in connection with the edges of the same, form grooves in which the lid slides in opening and closing the reservoir, said slides being also provided with grooves, in which the feed-foot slides, and also lugs having set-screws working in them for regulating the feed or length of stroke of the feeding device. Fig. 5 is a wrist, serving as the pivot upon which the operating-arm works. Fig. 6 is the main operating-arm. Fig. 7 is an elastic or spring extension to said arm, to which a presser-foot for pressing the stamps or addresses to the intended object is attached. Said presser-foot

is also provided with a knife for clipping the stamps or addresses. Fig. 8 is a feed-foot and attachments for sliding the strips of stamps forward as they are being used. Fig. 9 is a spring for raising the operating-arm in the negative movement of the machine. Fig. 10 is the moistener and its operating mechanism. Fig. 11 is one of a pair of friction-springs for preventing the strip of stamps from prematurely moving or becoming deranged by the backward movement of the feed-foot; and Fig. 12 shows an additional means for arranging and operating the clipping-knives.

Similar reference-letters indicate like parts throughout.

A represents the bed or reservoir of the machine; B, the lid, which is provided with comb-like or perforated ends for allowing the moistening-fluid to pass from the moistener through said teeth or perforations in proper quantities to moisten the stamp or address at the time being used. Inasmuch as either end of said lid may be used at the forward end over the moistener, the perforations or teeth may be finer in one end than the other, so that for using paste or mucilage the coarser end may be used; and if water is used, the finer end may be used.

C is the operating-arm, which is pivoted at its back end to a wrist, D, said wrist being rigidly fastened to one or more uprights from the bed or reservoir A.

C' is an elastic or spring extension of the arm C, being connected with said arm at its forward end by means of bolts passing through both the arm and extension. The apertures for said coupling-bolts are made oblong, so as to adjust the extension C' suitable for a proper action of the clipping-knives *c* and *c'*, the apertures in the arm C being elongated lengthwise of said arm, and those in the extension C' transversely.

E is a presser-foot for pressing the stamps, labels, or addresses to the intended object at the downward movement of the arm C, it being adjustably attached to the lower extremity of the spring-extension C'. Said presser-foot may be varied in shape and dimensions suitable for any of the varied requirements above named.

c is a clipping-knife attached to the back

edge of the presser-foot, which knife, working in harmony shearswise with a stationary knife, *c'*, on the end of the bed *A*, clips one of the stamps, labels, or addresses from a strip of the same at each downward movement of the operating-arm. Said presser-foot *E* is pivoted to the end of said extension in such a manner that its point is allowed to assume a drooping position, and is provided with a spring, *e*, to press its point in said position when raised from the object being stamped, so that the clipping-knives will act shearswise, as above described, in severing said stamps before said foot strikes and adjusts itself to the plane of the object stamped. Said knives *c* and *c'* may, however, if preferred, be extended at one end beyond the limits of the reservoir *A*, and be pivoted together scissors fashion at that end, by substituting, in lieu of the pivot-coupling of the presser-foot with the extension *C'*, as above shown, an adjustable coupling-bar, *i*, connecting the knife *c* with said extension at the points *n n*. (See Figs. 12 and 7.)

A platform, *F*, may be provided and placed immediately under the presser-foot as a support upon which the article stamped may rest. Said platform may be varied in form, dimensions, and arrangement, to suit the particular object to be stamped or labeled; or the machine may be used by holding it in one hand and applying it to the top one of a pile of papers, if preferred, thereby dispensing with said platform.

A feed-foot, *G*, is coupled to the operating-arm *C* by means of a connecting-arm, *H*, which arm has one end pivoted to a lug under the arm *C*, and the other end pivoted to upward-extending lugs or standards *a* from the said feed-foot, so that a vertical oscillation of the outer or forward end of said arm *C* will cause the feed-foot to slide horizontally in the grooves formed in the slides *I*. Therefore, as the arm *C* is raised, the feed-foot is drawn backward in said grooves, and, as it is depressed, the feed-foot is slid outward, thereby feeding or sliding the strip of stamps, labels, or addresses out over or beyond the knives *c* and *c'* for their action and the action of the presser-foot. Said feed-foot is provided with either a toothed rake, *b*, or a smooth-edged friction-rubber attached to its under side, which, by means of a rocking motion being given to said foot in its oscillations, owing to its coupling attachment being above the sliding grooves, presses downward on the strip of stamps at its outward movement, so as to slide the strip of stamps with it, and to lift off of said strip by said foot rocking backward at its backward movement, thereby preventing it from slipping the stamps backward at said movement. The feed-foot is also provided with one or more set-screws passing downward through its forward edge with its or their points pressing against said rake or friction-rubber, so as to press it sufficiently downward for proper action with the stamps. Said feed-foot may

also be provided with a friction-spring, *f*, having its ends extending and playing loosely through rearward projections on the end of said foot, with its ends bearing against the slides *I*, for the purpose of causing friction at those points, so that it will slide less freely, and thereby more certainly secure the rocking movement above described. A spirally-coiled wire spring-coupling, *h*, having one end attached to the pivot-rod used for coupling the arm *H* with the standards *a*, and the other end attached to the wrist *D*, between the forks of the arm *C*, is provided, which assists in producing said rocking motion of the feed-foot, and also assists in producing the negative or backward movement to the working parts of the machine, and in many instances would alone be sufficient for producing said backward motion, especially when using the machine by hand; but in the event of the spring *h* being insufficient from any cause to produce the said backward movement, a spring, *K*, is provided, it being coiled around the shaft or wrist *D*, with one end resting on the edge of the bed and the other end under the arm *L*, close beside the arm *C*, which, however, for light work by hand, when its power is not needed, may be sprung out from under said arm by bending the longer prong downward, so as to disengage it from its bearing.

For working the machine by foot-power, a transversely-arranged arm, *M*, having a hole in each end for attaching wire connections to a treadle is provided, being rigidly fastened to the arm *C*. A knob, *N*, for convenience in operating the arm *C* by hand with the machine fastened to a table, is also provided and fastened to said arm.

A moistening device, Fig. 10, for saturating the under side of stamps or addresses with water, mucilage, or paste as said stamps are made to pass over the small openings or toothed part *m* of the lid at the forward end of the reservoir, is provided, which consists of a rectangular-bent rock-shaft, *P*, which rock-shaft works in the reservoir *A*, with its bearings at *r r*. To its lower horizontal or middle section is loosely pivoted an arm, *R*, having attached to its upper or forward end a cross-head, *R'*, which has some porous or spongy substance fastened to it for transmitting the moistening-fluid—such as a piece of lamp-wick or sponge properly shaped—which, by means of a rocking motion of the shaft *P*, is made to slide up and down the sloping end of said reservoir, and by means of the capillary attraction of said spongy substance the liquid contained in said reservoir is absorbed and transmitted to the stamp at the time over the perforations or toothed openings *m* by means of the cross-head sliding upward directly under said teeth. The rock-shaft *P* is also provided with an arm, *S*, which arm serves as a means for working or rocking it. Said arm being rigidly fastened to one end of said shaft, and outside of the reservoir, is operated upward by a spring,

V, which rocks the rock-shaft, so as to slide the moistener up against the perforated opening at *m*, and hold it there until the stamp or address being used shall have been entirely moistened, by passing over the moistener in being fed forward by the feed-gear. When thus moistened the end of the arm L, at the downward movement of the arm C, strikes the arm S, and thereby rocks the shaft P backward, which withdraws the moistener at the instant the stamp is moistened, thereby leaving the next stamp dry. By a further downward movement of the arm C said moistened stamp or address is severed by the knives and pressed to the intended object by the presser-foot. When the downward pressure by the attendant ceases, the arm C is again raised, and the feed-arm and feed-foot drawn back by means of the springs *h* and K, and the moistener again raised by the action of the spring V. If, however, it is desired to stop working for a while, the moistener may be left down by withdrawing the pin *v* from under the spring V, or an eccentric may be used instead of said pin, and the pressure applied or relieved at pleasure by partly turning said eccentric.

W are the friction or retaining springs, for securing the strip of stamps against prematurely moving, as above described. They are fastened to the slides or guides I, one on either side of the machine, with their points extending forward over the sides of the lid B to knife *c'*, and are made to press gently downward upon the strip of stamps, passing under and between them and the said lid.

X is a guide, serving to direct the knife *c* and presser-foot, so that the edges of the two knives will strike properly beside each other. *x*, Fig. 4, are screws for gaging the feed, they being connected with the slides I on each side of the machine, so that the feed-foot G will strike their points in its backward motion. Therefore, by turning said screws farther in, the feed will be shortened, or vice versa.

Z is a spool for winding strips of stamps or addresses on, for convenience in passing them through the machine. In using the device, the forward ends of said strips are passed forward on the lid B and under the feed-foot G and springs W to the knife *c'*, when, by operating the arm C, as above described, the objects are accomplished.

Having thus fully described our invention, so as to enable others skilled in the art to which it appertains to understand the same, what we claim as new, and desire to secure by Letters Patent, is—

1. The combination of the reservoir A, lid B, operating-arm C, elastic extension C', oscillating feed-arm H, feed-foot G, slides I, presser-foot E, knives *c* and *c'*, guide X, the moistening device, consisting of the rock-shaft P, bar R, provided with a cross-head R' and a porous moistener attached thereto, and operating-arm S, the springs K, *h*, and V, and the angular bent arm L, all arranged substantially as herein shown, for the purposes specified.

2. The combination, with the knives *c* and *c'*, of the operating-arm C, having an elastic extension, C', adjustably coupled to it for the purpose of properly operating the knife *c* with the knife *c'*, causing their edges, respectively, to rub each other in their movements, so as to cut shearswise, substantially as shown, for the purpose specified.

3. In combination with the operating-arm C, the oscillating arm H, and the grooved slides I, the oscillating feed-foot G, provided with adjustable teeth *b*, substantially as shown, for the purpose specified.

4. In combination with the operating-arm C and the feed-foot G, the oscillating arm H, having one end pivoted to a lug on the under side of said arm C and the other end pivoted to the upper end of standards or lugs *a*, attached to said foot, substantially as shown, for the purpose specified.

5. In combination with the grooved slides I and the sliding feed-foot G, the friction-spring *f*, substantially as shown, for the purpose specified.

6. In combination with the reservoir A and the reciprocating moistening device, herein shown, the lid B, provided with toothed or perforated ends, substantially as shown, for the purpose specified.

7. In combination with the lid B and guides or slides I, the retaining-springs W, substantially as shown, for the purpose specified.

8. In combination with the reservoir A, spring V, and arms C and L, the automatic moistening device, consisting of the rock-shaft P, pivoted bar R, cross-head R', provided with a dauber attached thereto, and the arm S, all substantially as shown, for the purposes specified.

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