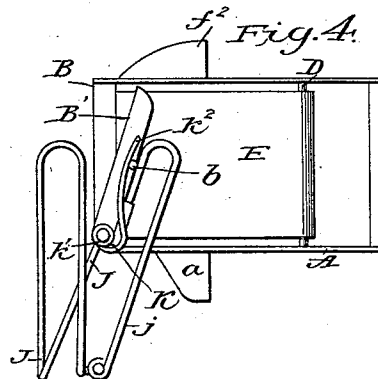
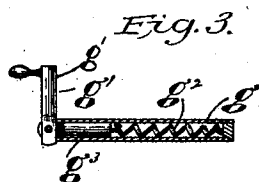
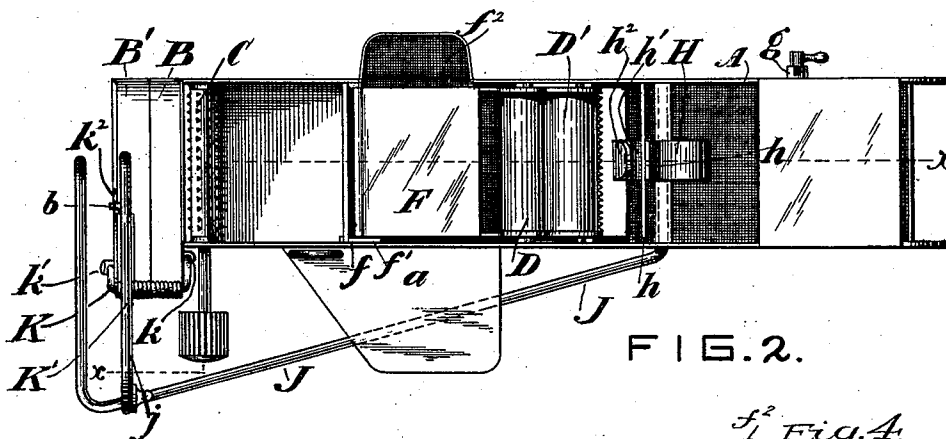
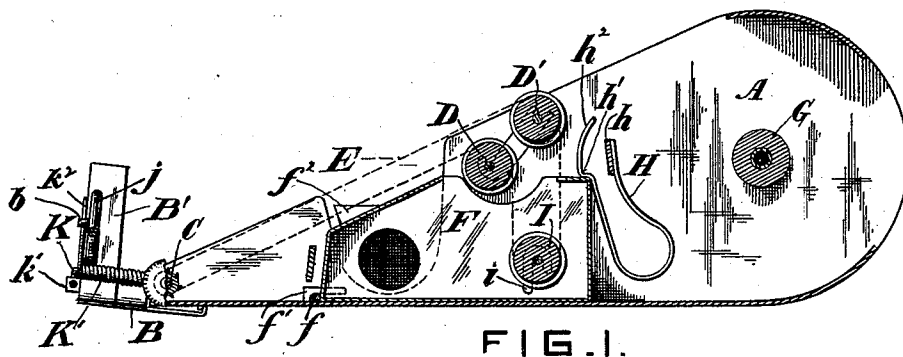


(No Model.)

F. D. RETTICH.
ADDRESSING MACHINE.

No. 581,010.

Patented Apr. 20, 1897.



WITNESSES

Frank Davis,
Emma Lyford

Inventor:

Frank D. Rettich
By Geo. Murray
his Atty

UNITED STATES PATENT OFFICE.

FRANK D. RETTICH, OF CINCINNATI, OHIO.

ADDRESSING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 581,010, dated April 20, 1897.

Application filed August 9, 1894. Serial No. 519,801. (No model.)

To all whom it may concern:

Be it known that I, FRANK D. RETTICH, a citizen of the United States, and a resident of Cincinnati, in the county of Hamilton and State of Ohio, have invented a certain new and useful Improvement in Addressing-Machines, of which the following is a specification.

My invention relates to that class of addressing-machines in which a strip of paper with the addresses printed upon it is intermittently fed forward over a paste-belt to cutting edges by which the separate addresses are severed and the slip with its addresses pressed by one of the cutting-blades upon the wrapper or other article to be addressed. Its object is to produce a cheap, simple, and reliable device, light and convenient for use and readily detached for cleansing.

The invention will be first fully described in connection with the accompanying drawings and then particularly referred to and pointed out in the claims.

Referring to the drawings, in which like parts are indicated by similar reference-letters wherever they occur throughout the various views, Figure 1 is a longitudinal section of an addressing-machine embodying my improvements, taken through irregular line *xx* of Fig. 2. Fig. 2 is a top plan view of the same. Fig. 3 is an edge detailed view, partially in axial section and partially in elevation, of the shaft upon which the winding-roll is mounted and crank-arm for revolving said shaft. Fig. 4 is a front end view showing the movable knife partly elevated.

The case A, with the handpiece *a* secured upon one side of it, the stationary severing-blade B, the removable severing-blade B', the toothed feed-roll C, guide-rolls D and D', and the paste-belt E, passing over these rolls, are substantially the same as those now employed in machines of this type and need not therefore be specifically described in their general construction and will only be referred to as they are modified to adapt them to my improvements.

My paste-receptacle F is made separate from the case A and adapted to be removably fitted within it. At the forward end of the paste-box is a wire rod *f*, the extended ends of which form journals to pass under L-shaped bearings *f'*, which are secured by sol-

dering or other means to the sides of the case. The front and part of the top of the box are incased, so as to prevent the paste from running out should the machine be tipped up on the forward end, and the side of the box is provided with a funnel *f*² to supply the box with paste without removing it from the machine, one side of the case being cut away to permit of the funnel passing through it and projecting to the outside, as clearly shown in Fig. 2.

The rear wall of the paste-receptacle at its top is bent in at a right angle to bear against the paste-belt E, the edge of the inner projection being serrated to scrape off the surplus paste and only allow a sufficient quantity to pass above it to properly supply the strip passing from the winding-roll G over the belt to the cutters B and B'. The paste-belt is yieldingly held to its place by a flat spring H, one end of which is secured to a transverse strip *h*, secured to the sides of the case. The spring H extends down into the case, is turned into a loop near the bottom of the case, and its upper end is turned or bent to form a catch at *h'* to pass over the top rear corner of the paste-box and hold it yieldingly in position.

To the inside of the paste-box, near its rear end, upon each side are secured bearings *i* to receive the journals of the tension-roll I. The paste-belt passes under this roll, and were it not for the spring which holds the box down the paste-belt would pull the box up and out of its proper position so soon as the feed-roll was started, while if the box were fixed on the bottom, so that it could not rise, the paste-belt would have to be regulated to the exact tension required for the proper operation of the device, and there would be no provision for its stretching or shrinking in use. When it is desired to remove the paste-box for cleansing, it is only necessary to first remove the guide-rolls D and D' and throw the latch of the spring H off of the rear upper corner of the box by pressing back upon the upwardly-extending portion *h*², when the box can be readily lifted out, cleansed, and replaced.

In practice it has been found that the crank-arm used for the winding-roll G, when made of a sufficient length to enable the strip to be wound rapidly and truly upon the roll, pro-

jects so far beyond the box that it is liable to be turned or interfered with by the clothing of the operator when holding the box in position for use. In order to overcome this objection, I have mounted the winding-roll G, which is preferably of wood, upon the tubular shaft *g* (shown clearly in Fig. 3) and have provided a jointed crank-arm *g'* to slide within the tubular shaft and be turned and held within it by a spiral spring *g²*, one end of which is secured to a plug in the end of the tubular shaft *g* and the opposite end secured to the end of the member *g³* of the jointed crank-arm *g'*, the tendency of the spring being to draw the crank-arm within the tubular shaft when its outer hinged member is turned in line with the other member *g³*, which is within the tubular shaft *g*. The outer end of the member *g³* is slotted, and the member *g'* has its end reduced to a tenon to enter said slot. The end of the tubular shaft *g* is slotted to receive the edge of the tenon upon the member *g'* when the arm is drawn out and turned to the position shown in Fig. 3, thus serving as a key to turn the shaft *g* and the roll G, which is secured upon it.

The actuating member for the movable knife is the wire rod J, one end of which is bent at a right angle and passes through the case in the rear of the paste-box. The opposite end extends to the front of the machine and is bent into a loop, its extreme end being upwardly bent and furnished with a journal-pin and the rod *j*, which has one end bent in an eye to receive the journal-pin on the end of the rod J and the opposite end bent into a U-shaped loop which is coupled to the top of the movable knife. This arrangement for actuating the knife on its downward stroke is not new, but the means for returning the knife B' to its elevated position after the machine has been lifted is my invention. This consists of a U-shaped loop K, having downwardly-turned ends, one of which enters a socket *k* on the inside of the stationary knife and the other enters a hole in the head *k'*, upon which the movable knife B' is pivoted, and the coil-spring K', one end of which is secured to the loop K, the spring being coiled around the bar of said transverse loop, and its free end *k²* brought under a stud-pin *b*, which projects from the side of rod J.

The operation of the machine is like those in common use, but may be made much lighter

and cheaper, as there are fewer parts and the tension of the belt is more uniform.

It is obvious that there may be many mechanical changes made in the various parts of the machine without departing from the spirit or scope of my invention, and hence, without limiting myself to the precise details shown,

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

1. In an addressing-machine, the combination of the case, having severing-knives at its forward end, the guide-rolls, a feed-roll for the paste-belt journaled in said case, the removable paste-box within the case, the tension-roll of the paste-belt journaled in bearings secured to the paste-box, the belt, E, passing around the feed-roll, the tension-roll and over the guide-rolls, and the spring to bear upon the paste-box for the purpose of regulating the tension of the belt, substantially as shown and described.

2. The case, A, having one side cut away to pass the funnel of the paste-box, the paste-box removably fitted within the case, having a funnel projecting through the side thereof and bearings at its forward end to allow the rear end to vibrate, bearings secured to the side walls of the paste-box for the tension-roll, bearings secured to the side of the case for the guide-rolls, the toothed feed-roll at the forward end of the case, the guide-rolls journaled in bearings in the side of the case, the tension-roll journaled in bearings secured in the side of the paste-box, the paste-belt passing around said rolls, the cross-brace, *h*, secured to the sides of the case, the spring, II, having one end secured to said cross-brace and the opposite end bearing upon the upper corner of the paste-box to regulate the tension of the belt, substantially as shown and described.

3. In an addressing-machine, the combination of the case, the guide and feed rolls journaled therein, the removable spring-pressed paste-box fitted to vibrate within said case and having its rear upper end turned in and serrated to bear against the paste-belt, the paste-belt passing around said rolls, and the tension-spring to regulate the tension of the belt, substantially as shown and described.

FRANK D. RETTICH.

Witnesses:

GEO. J. MURRAY,
FRANK S. DAVIS.