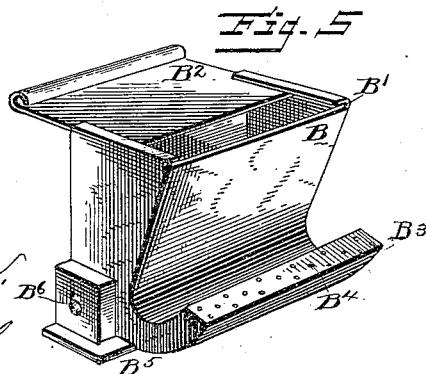
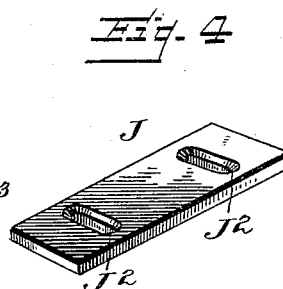
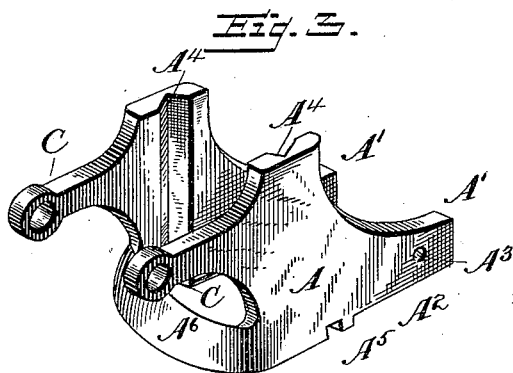
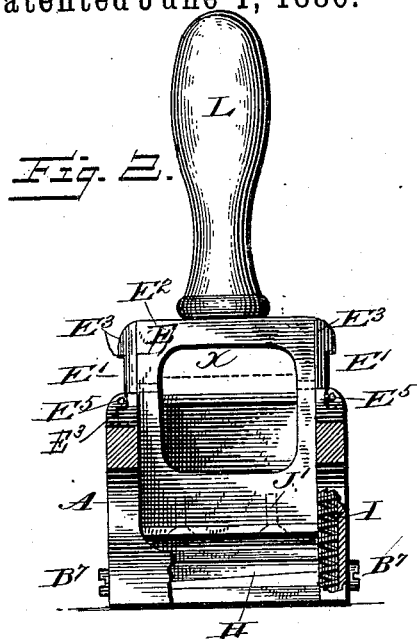


J. A. TRUESDELL.
ADDRESSING MACHINE.

Patented June 1, 1886.



WITNESSES:

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INVENTOR

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UNITED STATES PATENT OFFICE.

JULIUS A. TRUESDELL, OF ST. PAUL, MINNESOTA.

ADDRESSING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 343,091, dated June 1, 1886.

Application filed September 9, 1885. Serial No. 176,617. (No model.)

To all whom it may concern:

Be it known that I, JULIUS A. TRUESDELL, a citizen of the United States, residing at St. Paul, in the county of Ramsey and State of Minnesota, have invented certain new and useful Improvements in Addressing-Machines, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to that class of machines for addressing newspapers and magazines when the same series of names is repeated from time to time as the day of issue recurs, which machines are adapted to receive, paste, cut, and apply printed slips of paper bearing addresses which are placed in the machine in the form of a web or strip, my object being to provide a machine that will be simple in construction and light, durable, and effective, and one which may be manipulated easily with one hand, after the manner of hand-stamps.

The invention consists in certain features of construction hereinafter described, and particularly pointed out in the claims.

Referring to the drawings, Figure 1 represents a central vertical longitudinal section of a machine constructed in accordance with my invention. Fig. 2 is a front elevation with portions in section, the paper-reel and its arms being removed. Fig. 3 is a detail in perspective of the frame-work. Fig. 4 is a perspective of the reciprocating knife. Fig. 5 is a perspective of the paste-receptacle, the cover being shown partly open.

Like letters indicate like parts in all the figures of the drawings.

As before stated, one of the objects of my invention is to simplify the construction and reduce the machine to as few parts as possible, and for that purpose I form the main portion of my apparatus—the frame A—in a single casting. The casting is provided at what may properly be termed its “rear end,” with two rearwardly-projecting arms, A', which are adapted to receive and embrace a paste-receptacle, B, which is preferably formed of sheet metal, the top ends of which are projected and bent to form grooves or ways B', to receive a sliding cover, B². The bottom portion of the paste-receptacle is curved, and extends forwardly to form a transversespout,

B³, the top of which is preferably perforated, or it may be slitted, as at B⁴. The bottom of the paste-receptacle B is provided with outwardly-extending plates B⁵, adapted to snugly fit into recesses A² in the arms A', said arms being perforated, as at A³, to receive screws B⁷, which pass through the same into blocks or lugs B⁶ upon the sides of the paste-receptacle.

From the above it will be seen that in order to remove the receptacle it is only necessary to remove the retaining-screws B⁷. Any well-known equivalent fastening devices may be substituted for the screws B⁷.

At the end opposite the paste-receptacle the casting is formed with two forwardly-projecting arms, C, the ends of which are apertured, forming bearings for the axle D of the paper-reel.

Between the paste-receptacle and paper-reel, and about midway, the casting is provided at both sides thereof with vertical grooves or ways A⁴, of substantially V shape, and working within these grooves upon guides E', adapted to fit the same, is a spring-seated plunger, E. The plunger E is formed as a frame, E², provided at each side with the aforesaid guides E', at a suitable distance from the top of which are formed shoulders or stops E³, so that as the plunger is pushed down its movement will be arrested when the bottom thereof reaches the same plane with the bottom of the paste-receptacle.

Between the plunger and paste-receptacle, and for the purpose of compactness, partly within the space formed by the curved portion B³ thereof, I mount a feed-roll, F, (see Fig. 1,) at one end of which a ratchet, F', is mounted, and is adapted to be operated by a spring-pawl, K, mounted directly upon the plunger. The feed-roll is prevented from backward rotation by a holding-pawl, F², mounted on the frame. Immediately below and pressing against the roll F is a smaller roll, G, between which and the roll F the strip of paper Y passes on its way to the paster. For the purpose of preventing the paper from slipping and assuring a positive feed the feed-rolls F and G may be coated with rubber.

The paper passes from the reel D through an opening, X, in the frame-work of the plunger, over the roll F, between it and the roll G,

over the paster B³, where the under side of it is coated with a sufficient quantity of paste. The contact of the under surface of the paper with the paster is assured by reason of a strip, B³, between which and the paster the paper passes.

To the bottom of the frame A, within a recess, A⁵, and extending transversely across the frame under the paster, is a fixed cutter, H, the cutting-edge of which is in substantially the same vertical plane as is the side of the plunger operating adjacent thereto, and is of substantially triangular shape in cross-section and tapered longitudinally, so as to produce a shearing cut when the plunger is depressed.

Wholly within the V-shaped groove or way A⁴, and bearing against the lower end of the guides E', (which terminate at a distance above the lower end of the plunger to form pockets to contain the springs when the plunger is depressed to its lowest position,) are arranged coiled springs I, the tendency of which are to press the plunger upward after a depression thereof. At the bottom of the plunger, and secured thereto by proper adjusting-screws J', (see Fig. 2,) is a steel plate, J, the inner edge of which serves to cut when it passes in contact with the fixed cutter H. For the purpose of adjustably securing this plate I have formed in the same transverse slots J², for the passage of the attaching-screws J'. Mounted upon the plunger is a suitable operating-handle, L.

If desired, a guide-roll may be arranged transversely in the opening X of the plunger, as shown by dotted lines, Fig. 1, over which the paper may pass.

The paste-receptacle having been filled and the list of addresses rolled upon the paper roll or reel, the paper passing over the roll F and in between it and the smaller roll, G, and in between the paster and the strip above the same, down under the plate J, and a name having been advanced under the plate, the machine is ready for operation. This will be seen at a glance. The machine being grasped by the hand of the operator, (one hand being thus left free to present the matter to be addressed,) it is only necessary to press the handle down with a blow similar to a hand-stamp, when the plate J², with the knife-edge, will pass through the paper at the point where the stationary cutter H is located, and a shearing cut will be made, and the severed piece will be firmly pasted or attached to the article. At the time the plunger descends it carries with it the pawl K, which passes down and takes into the next succeeding tooth of the ratchet, by reason of its tendency to spring away from the plunger, and when the plunger returns by reason of the springs I the pawl K turns the roll F one notch, which in practice is so proportioned as to bring the next succeeding label under the plunger, to be treated in a like manner. It will also be seen that as the cut is being made and the plunger descends, were it not for the holding-pawl F² the paper might move backwardly.

The casting A, in order to be sufficiently strong, is preferably formed of a single piece, to prevent the necessity of tie-bars and accurate fitting to secure direct opposition in position of the bearings for the reel and the guides for the plunger. The casting is formed with the integral connecting or bridge piece A⁶, the parts being properly tapered to permit of the ready withdrawal of the pattern from the sand, in which it is placed in an inverted position. In case a two-part pattern or mold is used, the parting-line may be arranged along the upper edges of the complete casting or at a convenient point below the same, and other variations may be made, which will suggest themselves to parties conversant with molding irregular castings.

If desired, the paper reel may be upon the same side of the plunger as is the pasting and feeding mechanism; but to balance the machine and to provide increased space for larger reels I provide the opening in the plunger and pass the web through the same, said opening being of such proportions that in any position that the plunger assumes in use or when at rest it does not come in contact with the paper.

The pins E⁵ are passed transversely across the ways A⁴, so as to come into contact with the lower shoulders, E³, to limit the upward movement of the plunger. By my peculiar manner of attaching and covering the paste-receptacle I obviate the danger of the displacement of the article and its cover by reason of the sudden reaction which occurs after each downward blow of the entire machine in the act of applying an addressed label.

It will be observed that the reaction of each blow of the machine tends to force the paste in jets through the perforations B⁴ of the outlet B³ of the paste-receptacle, thus assuring the application of the paste to the under surface of the paper, and also assuring the prevention of clogging of paste at the perforations.

Having described my invention and its operation, what I claim is—

1. An addressing-machine frame comprising a single casting having rearwardly and forwardly projecting arms and intermediate guides or ways, substantially as specified.

2. In an addressing-machine, the combination of a casting or frame-work formed with rearwardly and forwardly projecting arms, a paper-reel and pasting device mounted in said arms, and intermediate feeding and cutting devices, substantially as specified.

3. In an addressing-machine, the combination of the casting A, formed with the forwardly-projecting arms C C, the rearwardly-projecting arms A' A', and the vertical grooves A⁴ A⁴, with the curved paste-receptacle B, paper-reel D, plunger E, feeding-rollers arranged in the curved portion of the paste-receptacle, and a pawl rigidly connected to the plunger for feeding the paper, substantially as specified.

4. In an addressing-machine, the combination, with the casting or frame-work thereof, a paste-receptacle arranged at one end and a

paper-reel at the other end, of a plunger the frame of which is slotted or open to form a passage for the paper to the feed mechanism, substantially as specified.

- 5 5. The combination of the herein-described casting or frame having a paste-receptacle mounted in one end and a paper-reel at the other end, of an intermediately-mounted plunger, said plunger being provided with guides
10 or gibs working in ways in said casting, shoulders formed on said guides, adapted to abut against pins arranged across said ways, and lifting-springs arranged in said ways, whereby the movement of the plunger is limited,
15 substantially as specified.

6. The plunger E, having the guides E' and shoulders or stops E'', coiled springs I, arranged at the sides thereof, a plate secured to the bottom thereof, in combination with a fixed knife,
20 feed-rolls arranged above the same and at the

side of the plunger, a ratchet mounted upon one of said rolls, and a lifting-pawl secured to said plunger, substantially as specified.

7. The plunger provided with guides terminating above its lower edge, in combination 25 with a frame-work provided with ways and with lifting-springs arranged in the ways, substantially as specified.

8. The removable paste-receptacle having a projecting bottom arranged to bear against the 30 lower edge of the paste-receptacle-holding arms of the frame, and securing devices for retaining the receptacle within the arms, substantially as specified.

In testimony whereof I affix my signature in 35 presence of two witnesses.

JULIUS A. TRUESDELL.

Witnesses:

E. B. STOCKING,
WM. S. DUVALL.