

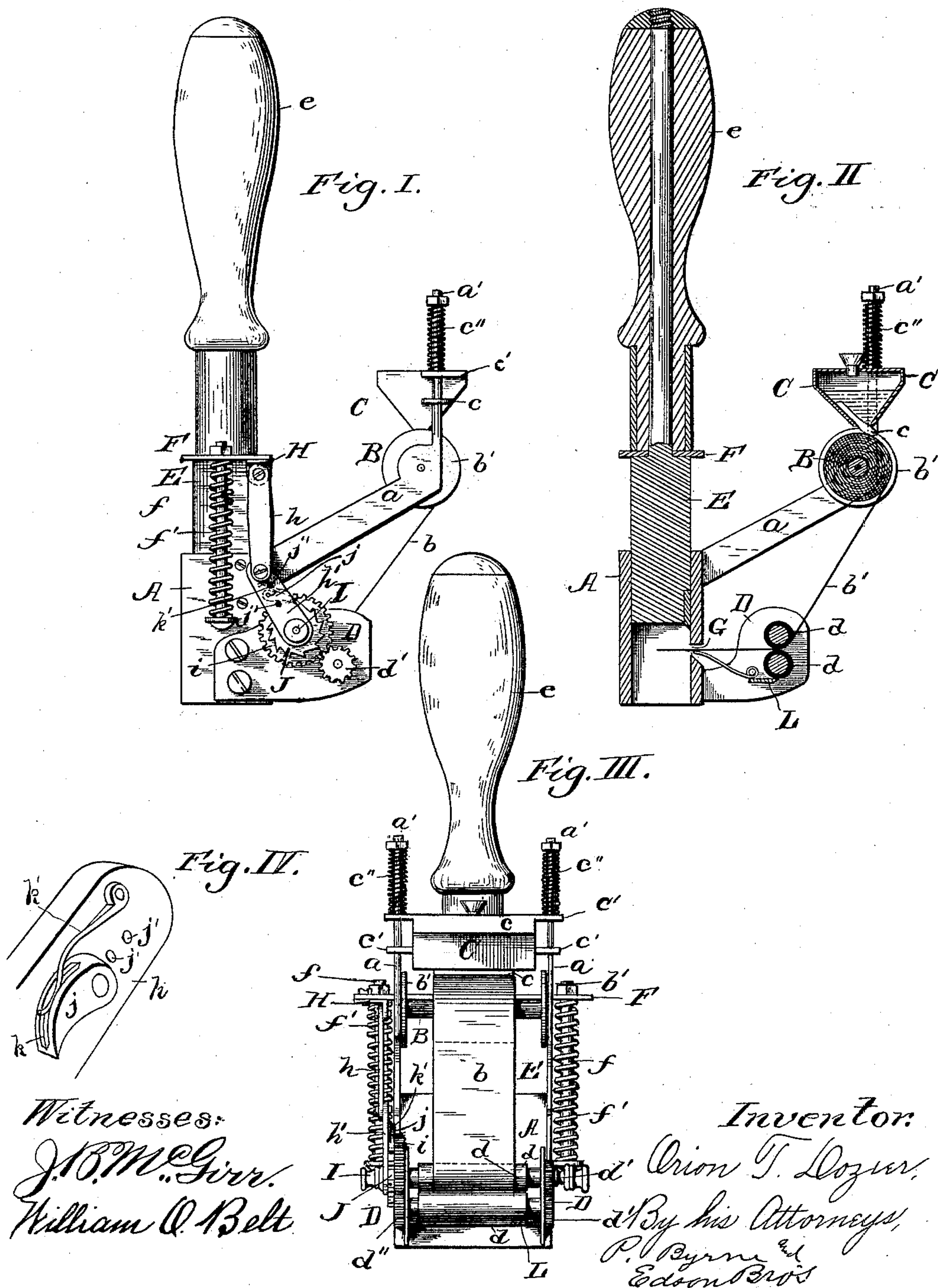
(No Model.)

O. T. DOZIER.

DEVICE FOR AFFIXING MAILING LABELS.

No. 465,092.

Patented Dec. 15, 1891.



UNITED STATES PATENT OFFICE.

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DEVICE FOR AFFIXING MAILING-LABELS.

SPECIFICATION forming part of Letters Patent No. 465,092, dated December 15, 1891.

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To all whom it may concern:

Be it known that I, ORION T. DOZIER, a citizen of the United States, residing at the city of Birmingham, in the county of Jefferson and State of Alabama, have invented certain new and useful Improvements in Devices for Affixing Mailing-Labels; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in machines for affixing labels adapted to contain names of subscribers for newspapers to prepare the latter for mailing; and the object is to provide a compact and simple device which is arranged to feed the slip of paper containing the list of names automatically and at the same time apply to the paper slip a coating of a mucilaginous substance, and the slip is cut on the desired lines and the cut parts attached to the newspapers by the simple operation of a plunger.

With these and other ends in view my invention consists of a suitable base having two projecting arms adapted to support a roll containing the strip of paper on which the list of subscribers names is printed, and a receptacle designed to contain an adhesive liquid is arranged above said roll to supply the mucilage or other adhesive liquid to the paper as it is fed forward and coat it so that it will readily adhere to the newspapers. The strip is carried forward between two feed-rollers beneath a plunger which is provided with a knife or cutting-edge to sever a slip of paper containing the name and address as the plunger descends and to press it on the newspaper or wrapper beneath. Suitable springs are arranged to return the plunger to its normal position after it has been operated, and a feed mechanism is provided which automatically feeds the strip of paper forward at each ascent of the plunger.

My invention consists, further, of certain details of construction and arrangement of parts which will more fully appear hereinafter.

To enable others to more readily understand my invention, I have illustrated the same in the accompanying drawings, in which—

Figure I is a side elevation of my improved machine for affixing labels from a continuous web of paper. Fig. II is a sectional view taken through the middle thereof, and Fig. III is a rear elevation of the machine. Fig. IV is a detail view of the pawl of the operating mechanism.

Referring to the drawings, in which like letters of reference denote corresponding parts in all the figures, A designates the hollow base, which is preferably polygonal in cross-section and forms a guide for the plunger. On either side of this base is secured a rigid arm *a*, which projects outwardly and upwardly a short distance and then turns in a vertical direction. At the bends in these arms a spool B is journaled, on which the web of paper *b* is wound, and the spool is provided with heads *b'* on either end within the journals, which prevent the paper from coming in contact with the journals.

As before mentioned, the arms *a* are provided with vertical extensions, as at *a'*, and a paste or mucilage box C is loosely secured on the vertical ends of the supporting-arms. This receptacle has a delivery-brush *c*, which is arranged in its lower side to contact with the web of paper *b* as it is fed to the cutting and affixing mechanism and to coat the strip with sufficient paste or other mucilaginous substance, so that it will readily adhere to the newspaper. This receptacle is triangularly-shaped in cross-section, and the brush *c* is fitted in the contracted bottom thereof. On either side of the box are secured the guides *c'*, and the box and the guides are adapted to slide vertically on the vertical extensions *a'* as the diameter of the spool of paper varies, and thereby hold the brush normally in contact with the paper, two coiled springs *c''* being arranged on the extensions above the guides, and they bear down on the same to force the receptacle into a position where the brush comes into proper contact with the paper.

On the lower rear portion of the base A, beneath the arms *a*, are two plates D, which project outward in rear of the base, and the two feed-rollers *d* are journaled in bearings in said plates, one directly above the other, so that the paper will be held firmly between them as it comes from the supply-roll. The shafts on which these rollers are secured pro-

ject through the plate D on one side of the base, and the gear-wheels d' are secured on the ends of the shafts, which wheels mesh with each other to adapt the rolls to turn simultaneously. The shaft of the lower roller also projects on the other side of the base through the plate D, and this end of the shaft is provided with a small gear-wheel d'' .

A plunger E is fitted snugly and arranged to move vertically in the hollow base A, and it is provided with a suitable handle e , by which the plunger can be operated by hand. A plate F is secured above the plunger, which projects on either side of the base and limits the downward movement of the plunger. Two upright posts f are secured in brackets on either side of the base about midway between the top and bottom thereof, which project upward through openings in the projecting edges of the plate F, and are suitably headed to prevent the plate from slipping off of the same. Coiled springs f' are fitted on the posts f between the brackets and the plate F, which force the plunger upward after it has been once depressed or operated in position for another operation.

The rear face of the base A is provided with an opening G, substantially in line with the feed-rollers, and as the web of paper is fed forward through these rollers it enters the opening G, and by means of mechanism hereinafter described the web of paper is fed forward a distance equal to the space devoted to the name and address of one subscriber, the feed being automatic at each operation of the plunger, the end of the paper projecting through the opening in the hollow base in such a position that the plunger will cut off a slip of paper containing the name and press it firmly on the newspaper beneath the machine. For the purpose of cutting the slip off the web of paper quickly the lower edge of the opening G is sharpened and a blade or strip of steel is secured on the side of the plunger adjacent to the opening in the base, which blade may be readily sharpened, as desired.

On one side of the plate F is secured a bracket H, which projects downward beneath the plate, and a link h is pivoted to said bracket and pivoted to a crank-arm h' . This crank-arm is secured on a stub-axle I, which is carried by and projects outward from the fixed plate D, just above or on one side of the shaft of the upper feed-roller. This axle carries a gear-wheel i , which meshes with the gear-wheel d' on the shaft of the lower roller. Secured on this axle between the gear i and the crank-arm h' is a ratchet-wheel J, and a pawl j is secured on the inner side of the crank-arm h' and arranged to engage with the toothed wheel J.

By the feed mechanism intermediate of the connected plunger and the feed-roller it will be readily seen that as the plunger is depressed the link h and the crank-arm h' are depressed

with it, and the pawl j is drawn back by the crank-arm and engages with the succeeding tooth on the ratchet J. As the plunger is elevated by the recoil of the spring, the pawl turns the ratchet J one tooth forward, which turns the gears i d' and the feed-rollers to move the web of paper forward the proper distance, which is equal to the width of the slip of paper containing the name and address of a newspaper subscriber.

In order to adjust the machine to feed a larger or smaller web of paper, the crank-arm h' is provided with a series of holes or openings j' , and the link h can thus be adjusted accordingly to feed the paper properly by simply securing the lower end of the link h to the lever at the proper point. The pawl j is grooved on its upper edge at k , and a spring-arm k' is secured on the inner side of the crank-arm h' and fits in the groove to press the pawl into engagement with the ratchet-wheel J.

Suitable handles are secured on the axles l and d' , by means of which the rollers may be operated by hand when it is desired to adjust the web of paper without operating the plunger.

It is obvious that the lower feed-roller will become coated with the paste from constant contact with the coated side of the paper, and to remove this I provide a scraper L beneath the same, which contacts with said roller and removes the surplus paste therefrom.

The operation of my machine is obvious to those skilled in the art from the foregoing description, taken in connection with the drawings; but it should be observed that the strip of paper is severed from the web and affixed to the newspapers at one stroke of the plunger, and at the same time the feeding mechanism is operated to adjust the web of paper forward a sufficient distance to bring a new slip of paper into position to be cut on the next descent of the plunger.

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

1. In a device for affixing mailing-labels, the supply-spool and the triangular mucilage-receptacle having a brush c in its contracted end arranged to contact with the supply-spool, substantially as described.

2. In a device for affixing mailing-labels, the combination of a hollow base, the arms projecting outward from said base and having the vertical extensions, the triangular paste-box adjustably supported on said extensions, and the supply-spool arranged beneath the paste-box, substantially as described.

3. In a device for affixing mailing-labels, the combination of a hollow base, the arms projecting from said base and having the vertical extensions, the supply-spool, the paste-box loosely secured on said vertical extensions and carrying a brush adapted to contact

with the supply-spool, and the springs arranged to hold the brush in contact with said spool, substantially as described.

4. In a device for affixing mailing-labels,
5 the combination of a hollow base, a plunger, the arms projecting outward from said base and carrying the supply-spool and paste-box, the plates D, secured on said base, the feed-
10 rollers journaled in said plates and geared together, the ratchet-and-pawl mechanism,

the crank-arm, and the link connecting the crank-arm with the plunger, substantially as described.

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

ORION T. DOZIER.

Witnesses:

H. HERZFELD,

H. SIMON,

EDWIN I. SIMON.