J. BIGELOW.

LABELING-MACHINE.

No. 185,719. Patented Dec. 26, 1876.

Fig. 1.

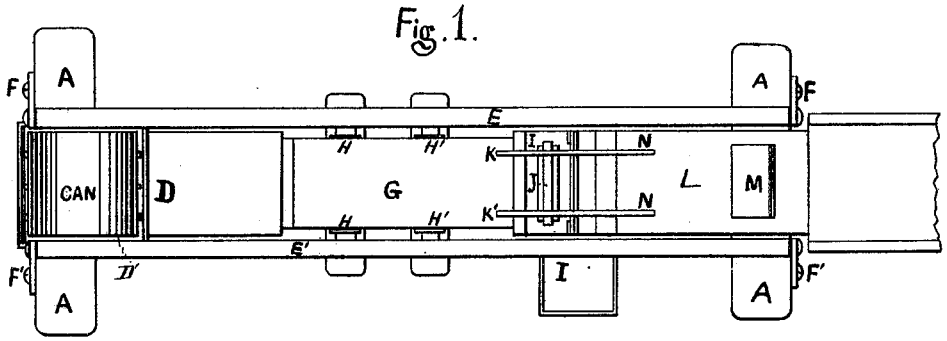


Fig. 4.

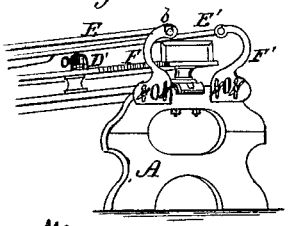


Fig. 2.

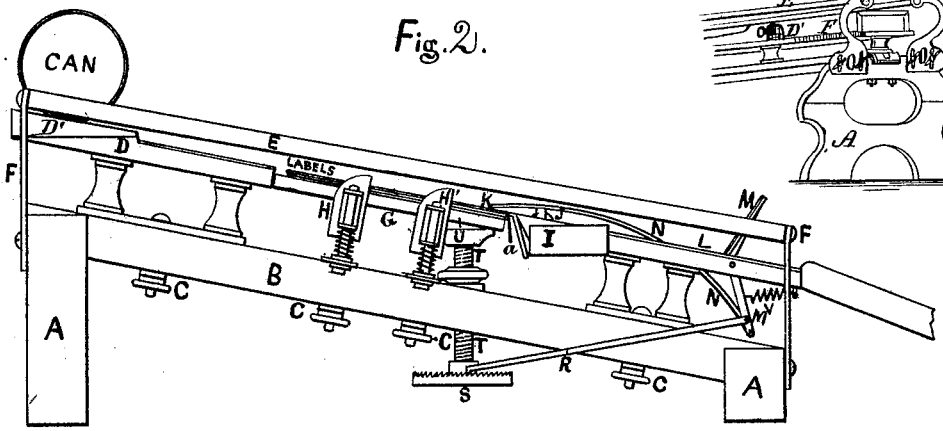
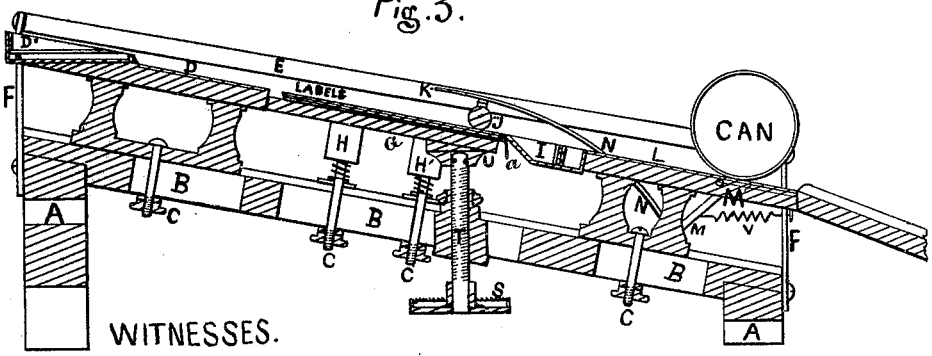


Fig. 3.



WITNESSES.

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JONATHAN BIGELOW, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN LABELING-MACHINES.

Specification forming part of Letters Patent No. **185,719**, dated December 26, 1876; application filed January 7, 1876.

To all whom it may concern:

Be it known that I, JONATHAN BIGELOW, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Labeling-Machines, of which the following is a specification:

Figure 1 is a top-plan view, Fig. 2 a side elevation, and Fig. 3 a vertical longitudinal section, of my improved labeling-machine. Fig. 4 is a detail perspective view.

The invention is an improvement in that class of labeling machines or apparatus in which the paste and label are applied to the can as it rolls down an inclined plane of which the paste-bed and label-holder form a part.

The invention relates to several features of improvement, as hereinafter set forth and claimed.

The frame B of the apparatus is supported upon legs A at an inclination of about ten degrees. The paste-bed D, label-holder G, and plane finishing-surface or ways L are severally secured to the frame B by means of clamp-bolts C, which pass through lengthwise slots, as shown in Fig. 3. Said parts D G L are, therefore, severally adjustable on the frame B. The cans are placed upon a tray or "fountain," D′, which is supported horizontally upon the upper end of the paste-bed D, and is likewise made adjustable thereon to vary its position with relation to the paste-bed, and thus enable the cans to be rolled over more or less of the surface of the latter as required to apply the paste to larger and smaller cans. For example, if the can to be pasted is of large size, it requires to roll over a longer paste-bed than a smaller can, in order to make a complete rotation, and thus apply the paste to its entire circumference. The adjustment of the holder D′, therefore, practically lengthens or shortens the paste-bed D, as required, according to the size of cans to be pasted. The bed is covered by suitable material for absorbing a quantity of paste and transferring it to the cans as they roll over it. The labels are laid in a pack upon the holder G, with their lower ends against the inclined plate *a*, by which their upper ends are caused to successively project or overlap each other, from the upper one of the pack to the lowermost thereof. By this arrangement of the labels I avoid the annoyance and loss of material heretofore caused by the cans picking up more than one label—in other words, by the adhesion of two labels to the same can simultaneously—since, in the present case, the upper edge of the topmost label will alone come in contact with and adhere to the can as it rolls over the pack. In addition to the plate *a* for holding the labels in place, I employ the guides H H′, which press against the sides of the labels. The same are beveled or curved on the upper edge and supported on springs, to enable the can to pass over and depress them as it rolls over the label-pack. The lower end U of the holder G is supported upon a screw, T, provided with a ratchet-wheel, S, which is rotated intermittently by the pawl R and levers M immediately after a can has passed over the labels and taken up the top one of the layer, thus raising the holder G sufficiently to bring the next label up to the proper height to be received by the next can. The paste is applied to the lower end of the labels by a roller, J, attached to curved rods or arms N, which are pivoted to levers M. The latter project above the bed or ways L, and, as the can strikes against them in its descent, they are depressed, as shown in Fig. 3, thus operating the ratchet S and causing the roller J to pass up the inclined side of paste-trough I and roll over the contiguous end of the uppermost label. When the can has passed off the ways L the retracting-spring V causes the levers M and roller J to resume their former position, Fig. 2, and thus remain until the next can causes a repetition of the operation. In such position the ends K of the rods N rest on the labels and enable the can to pass over the roller J without difficulty. The object of thus pasting the end of the top label is to enable it to adjere when overlapping the other end on the can. The can is guided in its descent over the inclined bed or frame by means of parallel rods E E′, supported by curved arms F F′, which are attached to the ends of the frame by means of clamp-nuts and bolts passing through slots, as shown in Fig. 4, to adapt the rods for adjustment toward or from each other according to the size of the cans being labeled. One set of arms, F, is provided with inclined slots *b*, in order to allow the rod E to have suf-

ficient play to yield to inequalities and projections on a can, and yet resume its original position as soon as such can has passed.

What I claim is—

1. The can-holder, made adjustable, as described, in combination with the paste-bed, as and for the purpose specified.

2. The combination, with cam-guides, of supporting-arms having inclined slats, as shown and described, for the purpose specified.

3. The combination, with the label-holder, of the inclined plate *a* for supporting the lower ends of the labels and causing their upper ends to overlap, as specified.

4. The combination of the spring-supported side guides with the label-holder, substantially as described, for the purpose specified.

5. The combination of the paste-trough I, paste-roll J, fingers K K′, bent levers M M, and arms N N with the label-holder G and paste-bed D, arranged substantially in manner described, as and for the purposes set forth.

6. The combination and arrangement of the paste-trough I, paste roll J, fingers K, ways L, bent levers M, arms N, rod R, ratchet-wheels S, and screw-shaft T with the paste-bed D and label-holder G, all being constructed and arranged to operate substantially as and for the purposes set forth.

JONATHAN BIGELOW.

Witnesses:

SYLVENUS WALKER,

H. S. TALBOT.