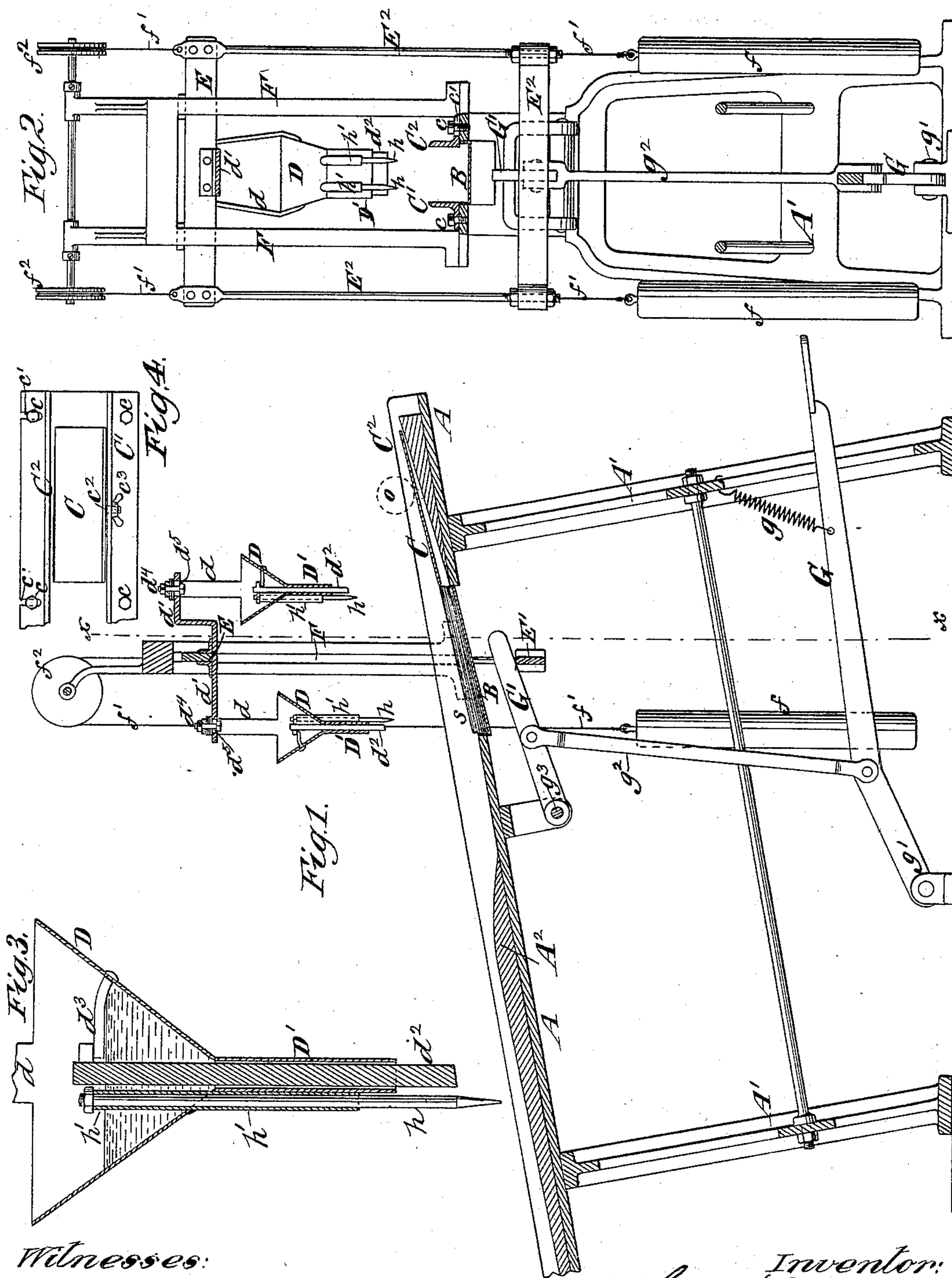


(No Model.)

H. HERMANN.  
MACHINE FOR LABELING CANS.

No. 391,968.

Patented Oct. 30, 1888.



Witnesses:

Cl. Sundgren.  
Joseph W. Roe.

Inventor:  
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# UNITED STATES PATENT OFFICE.

HENRY HERMANN, OF JERSEY CITY, NEW JERSEY.

## MACHINE FOR LABELING CANS.

SPECIFICATION forming part of Letters Patent No. 391,968, dated October 30, 1888.

Application filed February 3, 1888. Serial No. 262,858. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY HERMANN, of Jersey City, in the county of Hudson and State of New Jersey, have invented a new and useful Improvement in Machines for Labeling Cans, of which the following is a specification.

My invention may be employed for labeling cylindric tin cans of any sizes which may be used for packing liquids, semi-liquids, or solids, and it may also be employed for labeling cylindric boxes which are of about the same shape as such cans, or for labeling bottles and jars.

The object of my invention is to provide a simple machine in which the only manual labor required is simply to place the cans upon a track, which is usually inclined, and allow them to roll forward over the pile of labels, which are placed face downward, and also usually to depress a treadle for actuating the paste-applying device or devices to apply paste to the back of the topmost label in the pile.

The invention will be hereinafter described, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a sectional longitudinal elevation of a machine embodying my invention. Fig. 2 is a sectional elevation of the same upon about the plane indicated by the dotted line *x x*, Fig. 1. Fig. 3 is an elevation of one of the paste holders and its appurtenances upon a larger scale; and Fig. 4 is a plan of a portion of the track over which cans are rolled, and side guards or flanges, which prevent the can from rolling crooked or movement endwise.

Similar letters of reference designate corresponding parts in all the figures.

A designates a table or bed, which is supported upon a suitable frame-work, A', and, as here represented, is at a considerable inclination relatively to the horizontal. In this bed or table I have inserted a seat or bed, B, for a pile of labels, *s*. As here shown, this seat or bed B is formed of sheet metal and is inserted in a mortise in the inclined table A, and upon this seat or bed B the labels may be placed in a pile with their inner or blank sides upward.

C designates a track, which is here shown as inclined, and over which the can (shown by dotted lines at *o*) will roll automatically to and across the pile of labels *s*, and at opposite sides of the track C are side guards or flanges, C' C',

which may be secured by bolts or screws *c* to the table A. As shown best in Figs. 2 and 4, one of these side guards or flanges, C', may be formed with slots *c'*, which receive the bolts or screws *c*, and which provide for shifting that side guard C' toward and from the side guard C', in order to adapt the apparatus for properly guiding cans of different lengths.

I have here represented the inclined track C as supported by a pivot, *c'*, in the side guard C', and to this pivot I have shown a thumb-nut, *c''*, as applied. This means of supporting the inclined track C provides for tilting it at different angles, so that its front edge will be maintained about coincident with the topmost label of the pile. As the pile of labels is reduced in height, the inclined track C may be tilted, so as to lower it at the front end, and thus enable the can *o* to roll across the pile of labels without striking against the edge of the pile with sufficient force to displace the labels. In order to secure the best results, I now deem it preferable to apply the paste to the topmost label of the pile, which will enable the can *o*, when rolling over the pile, to pick up the topmost label and wrap it around itself, the label being stuck at its opposite edges to the can by paste.

The paste-applying devices here represented consist of paste-holders or hopper-like vessels D, which are supported by hangers *d* from arms *d'*, projecting from the cross-bar E, which form part of a movable frame. The cross-bar E, and also a lower cross-bar, E', are connected by rods E'', so as to form a frame which is vertically movable in suitable side guides, F. This frame may be counterbalanced by weights *f*, suspended by cords or chains *f'*, which pass over pulleys *f''* and are attached to the vertically-movable frame, as shown in Fig. 2.

G designates a treadle, which may be raised by a spring, *g*, and is fulcrumed at *g'*, and this treadle is connected by a rod, *g''*, with a lever, G', which is fulcrumed at one end at *g'''* and near its other end lies upon the cross-bar E' of the vertically-movable frame. When the treadle G is depressed by the foot, the vertically-movable frame carrying the paste-holders will be drawn down, and when the treadle G is released the weights *f* and the spring *g* will return said parts to the position shown in Fig. 1.



Each paste-holder D has an outlet spout or nozzle, D', in which works a vertically-movable pad or blade,  $d^2$ . This pad or blade nearly fills the spout D' and prevents the paste from flowing from the holder in any quantity; but sufficient paste will pass downward along the pad or blade  $d^2$  to keep the end thereof moistened. The pad or blade  $d^2$  projects below the outlet-spout D', and is sustained by a stop,  $d^3$ , within the paste-holder D, as shown in Fig. 3; but when the paste-holder is lowered the pad or blade  $d^2$  strikes the topmost label of the pile s and is free to rise upward relatively to the holder D, so that no exactness in the length of downward movement which is given to the movable frame is required. The paste-holders D are attached to the projections or arms  $d'$ , so that when depressed the pads or blades  $d^2$  will strike the topmost label across its back very near and parallel with its opposite edges, thus depositing thereon a line of paste along each edge.

To prevent the topmost label from adhering to the ends of the pads or blades  $d^2$  and being lifted by them, I provide each paste-holder with a weight or weights, which are hung loosely in said holder and are free to rise therein relatively to the pads or blades  $d^2$ . As here represented, these weights consist of plungers or rods h, which have taper ends and which rest loosely in sockets h', provided upon the paste-holders D. As shown in Fig. 3, these sockets h' extend upward above the level of paste in the holders D, and consequently the weight-rods h work dry, or, in other words, no paste comes upon them or within their sockets h'. These rods h project below the pads or paste-blades  $d^2$ , and as the paste-holders D are depressed the rods h first strike the paper and rise relatively to the paste-holders D, in which they are supported, while as the paste-holders D recede from the paper or rise the rods h rest with their weight upon the paper until after the paste pads or blades  $d^2$  have been withdrawn out of contact with the paper, and as the paste-holders D continue to rise the weight-rods are finally lifted, and thus the application of paste to the label is accomplished without in any way disturbing the position of the label.

In applying the labels the workman first depresses the treadle, so as to apply paste to the topmost label, and, having meanwhile, by his hand, placed a can c upon the track C, he releases the can and allows it to roll downward across the pile of labels and down the table A to a horizontal table or receiving-bed. (Not here shown.) As the can strikes the pile of labels, the front edge of the topmost label adheres to it and is picked up by the rolling can and wrapped around the can, and as the back or lower edge of the label comes against the can it adheres thereto and the label is held securely to the can. The labels may be of such relative sizes in proportion to the cans to which

they are to be applied that they will wrap the entire circumference of the can and be secured with one end lapping over the other end of the label, or of such length that they will cover only a portion of the circumference of the can. Upon the table A, below the label seat or bed B, I have shown a filling of wood, A<sup>2</sup>, applied, which serves to break the incline and prevents the delivery of the can at so great a velocity.

As best shown in Fig. 1, the stirrup or hanger d, which supports each paste-holder D, is secured by a bolt,  $d^4$ , to the arm or bracket  $d'$ , which projects from the vertically-movable frame, and this arm or bracket may be slotted, as shown at  $d^5$ , to receive the bolt, and thus permit of the adjustment of the paste-holders toward and from each other. This is desirable, as the labels s may be of different lengths from their front to their back edges, and as it is desirable to apply the paste to them as near their front and back edges as possible.

It will be observed that the machine is very simple in its construction and operation, and I find by practical use that by it labels may be applied to cans as fast as the cans can be picked up by the operator and rolled down the inclined table A.

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

1. The combination, with a seat or bed for a pile of labels and a track leading thereto, of a vertically-movable paste-holder and a pad or blade hanging loosely therein and projecting below said holder, so as to come in contact with and deposit paste on the topmost label of the pile when said holder is lowered and preparatory to the rolling of a can over the pile of labels, substantially as herein described.

2. The combination, with a seat or bed for labels and a track leading thereto, of a vertically-movable paste-holder, D, having an outlet-tube, a paste-applying pad or blade resting loosely in the outlet-tube and projecting below the same, and a label-holder or weight loosely supported upon said paste-holder, so as to rise relatively thereto on striking the labels, and which has a normal projection below the end of the said pad or blade, so as to remain pressing with its weight upon the labels until the pad or blade is lifted from the labels, substantially as herein described.

3. The combination, with the label seat or bed and the can-track leading thereto, of a vertically-movable frame and a treadle and balance for operating it, and a paste holder or holders, D, upon said frame, each having a paste pad or blade loosely hung in its outlet, and each carrying a loosely-hung weight having a projection below said pad or blade, substantially as herein described.

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Witnesses:

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