

(No Model.)

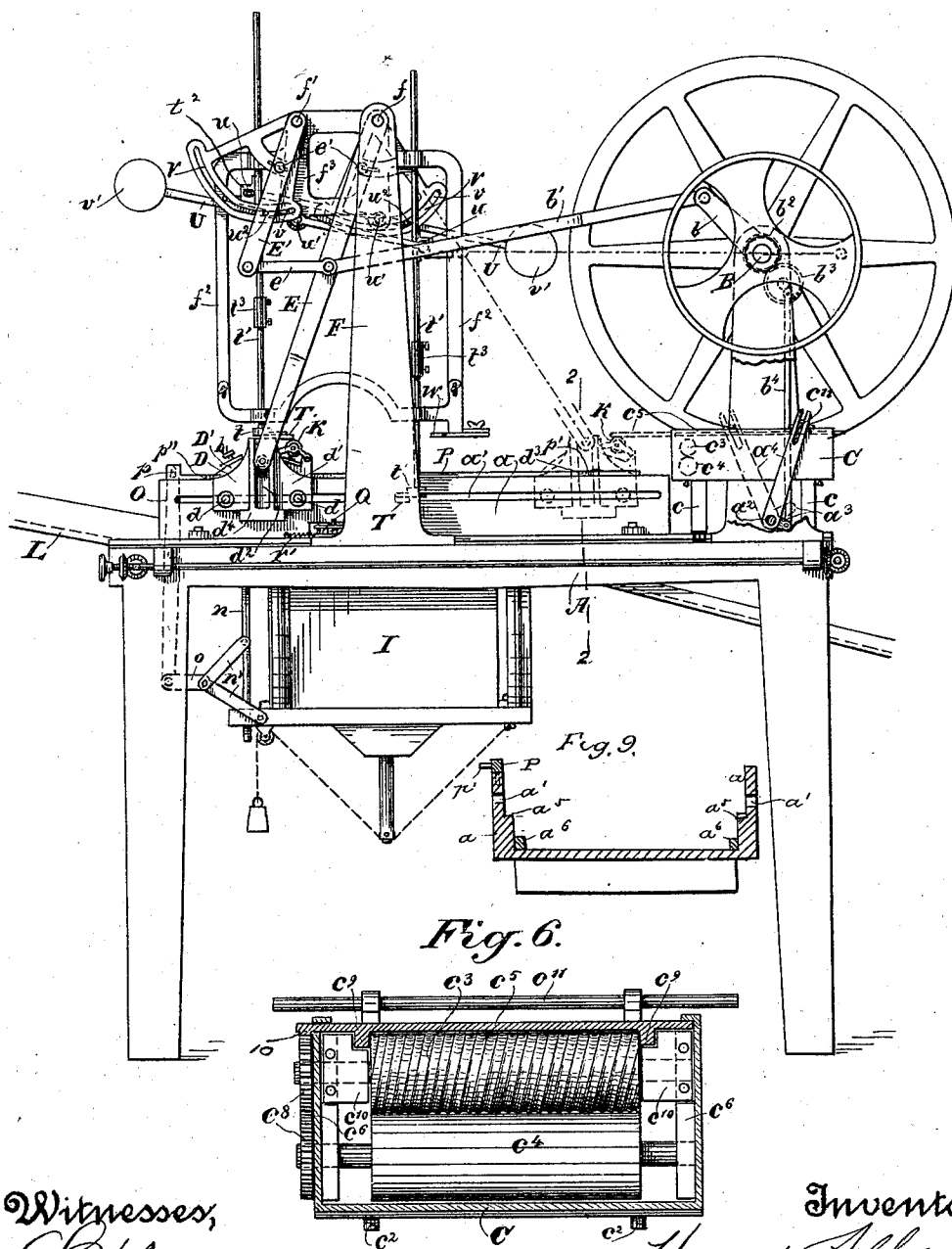
3 Sheets—Sheet 1.

H. ALBERT.
CAN LABELING MACHINE.

No. 542,433.

Patented July 9, 1895.

Fig. 1.



Witnesses,
J. H. Morse
J. F. Aschbeck

Inventor
Henry Albert
By Devey & Co
Atty.

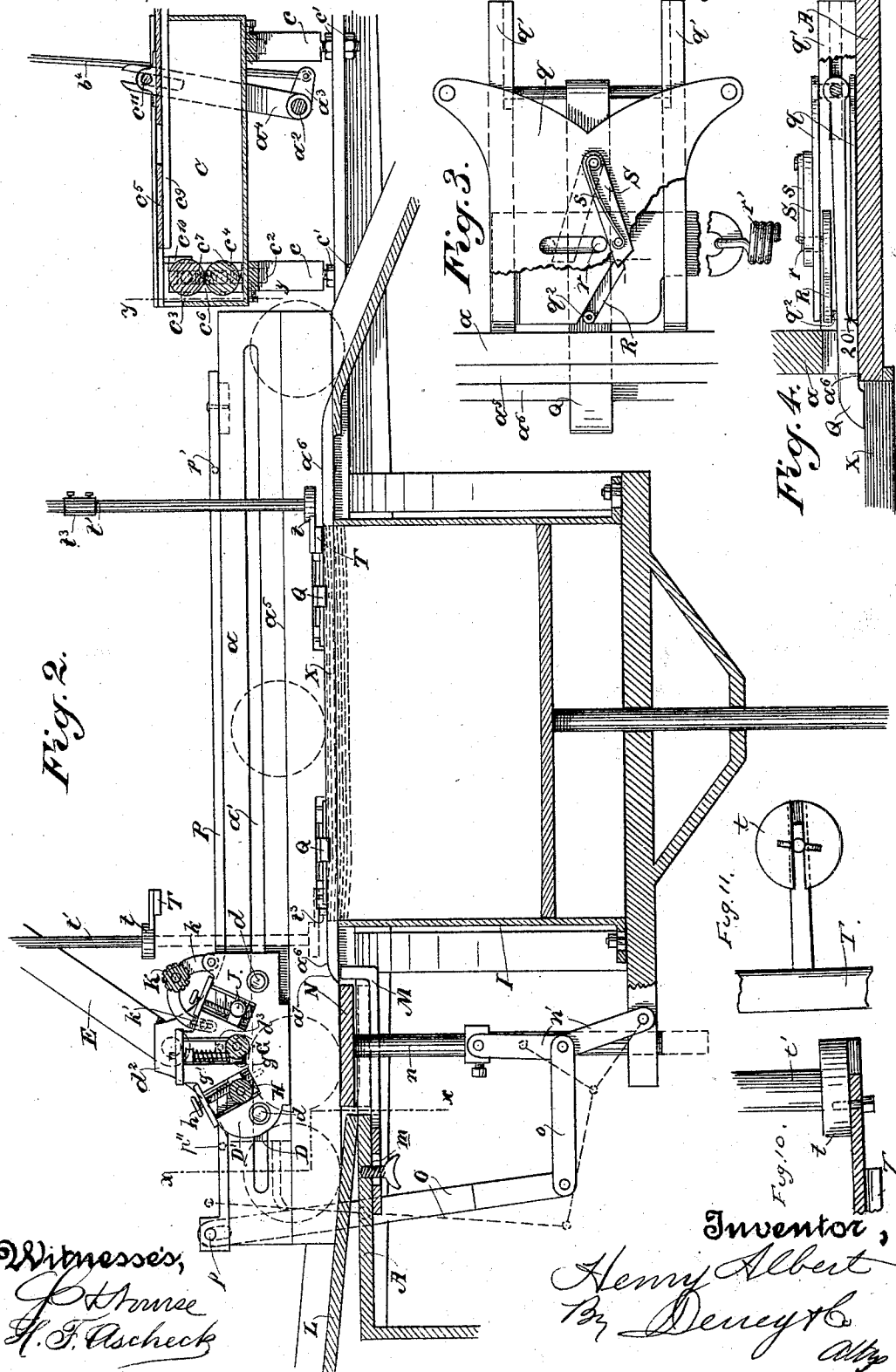
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3 Sheets—Sheet 2.

H. ALBERT.
CAN LABELING MACHINE.

No. 542,433.

Patented July 9, 1895.



UNITED STATES PATENT OFFICE.

HENRY ALBERT, OF CRESCENT CITY, CALIFORNIA.

CAN-LABELING MACHINE.

SPECIFICATION forming part of Letters Patent No. 542,433, dated July 9, 1895.

Application filed July 21, 1894. Serial No. 513,225. (No model.)

To all whom it may concern:

Be it known that I, HENRY ALBERT, a citizen of the United States, residing at Crescent City, county of Del Norte, State of California, have invented an Improvement in Can-Labeling Machines; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to a can-labeling machine.

It consists in certain details of construction, which will be more fully explained by reference to the accompanying drawings, in which—

Figure 1 is a side elevation of the machine. Fig. 2 is a longitudinal vertical section of the lower part of the machine enlarged. Fig. 3 is a plan view of the mechanism for actuating the locks and label-holders. Fig. 4 is a vertical transverse section of the same. Fig. 5 is a vertical transverse section taken through xx of Fig. 2. Fig. 6 is an enlarged transverse view of the paste-holder, showing rollers, platen, and attachments. Fig. 7 is a top view of the fat-edge scraper W . Fig. 8 shows a means for making the paste-edge stems adjustable. Fig. 9 is a sectional view through the runway on the line 2 2 of Fig. 1. Figs. 10 and 11 are details showing the holders for the paste-heads T .

The object of my invention is to provide an apparatus into which cans to be labeled are delivered; a means for placing said cans within a can-puller, which moves them over the chamber containing the labels to be applied; a means for applying paste to the ends of said labels, pressing the can down, so that the label will be applied and rolled upon it as it passes above the label-chamber, and in certain details of construction.

This invention is an improvement upon an apparatus for which Letters Patent were issued to me October 6, 1891, No. 460,738.

The apparatus consists of a runway, into one end of which the cans are delivered from an inclined chute in which they travel; a table upon which the cans are received singly from the chute; a means for elevating the table and can, so that the latter is delivered into the can-puller; a mechanism by which the can-puller is advanced along the runway, moving

the can with it; a paste-receptacle at the opposite end of the runway, with rollers by which the paste is delivered and distributed upon the under side of a horizontally-moving platen, from which the paste is distributed upon a roller carried by the can-puller, the paste being in turn delivered from this roller to vertically-reciprocating paste-heads, by which it is applied successively to the ends of the uppermost of the labels contained in the chamber, in which they are fed upwardly into the line of travel of the rolling cans, so that the cans will pick the labels up, roll them upon the cans, and apply them smoothly thereon, after which the cans are discharged at the end of the machine.

The can-puller D is adapted to reciprocate within the runway a . It is mounted in the runway by means of outwardly-extending slide-pins d or flat plates, if preferred, and these move freely in horizontal slots or tracks a' made in the sides of the runway. These slide pins or pieces extend outside of the slots in the runway and pass through vertically-slotted carriers which fit upon the outside of the runway and are secured to the screw-threaded ends of the pins by nuts, so that the can-puller and these carriers are connected and move together, the former on the inside and the latter on the outside of the runway.

The movement of the can-puller is effected by the following mechanism: A driving-shaft B has on one or both ends suitable driving mechanism and a central crank b , which is rotated when the shaft is turned. This shaft is supported upon standards near one end of the machine. In the present case it is shown above the paste-box. Near the other end of the machine are standards F , in the upper end of which a shaft f is journaled. From this shaft arms E extend downward just outside of the carriers D and have pins projecting inwardly into the vertical gutters or channels d^2 in these carriers. The arms E are connected with the crank b by a connecting rod or yoke b' , and as the crank revolves the arms E are caused to swing about their fulcrum-point and thus reciprocate the can-puller upon the runway on which it is guided. The vertical grooves or channels d^2 allow the inwardly-projecting pins, which are preferably

provided with antifriction-rollers to move up and down in the channels as the arms oscillate about their fulcrum-shaft at the top.

E' are corresponding swinging arms fulcrumed upon a shaft f' , which is journaled parallel with the shaft f and a short distance therefrom, as shown in Fig. 1, and the lower ends of the arms E' are connected with the arms E by a connecting-rod e , so that these

arms partake of the same swinging movement with the arms E when the crank revolves. The vertically-moving paste-heads are actuated by mechanism operated by these swinging arms, as will be hereinafter described.

The receptacle C for the paste consists of a suitable vessel of any material mounted near the discharge end of the machine upon adjustable supports c . The legs of these supports pass through the main frame and are provided with adjusting-nuts c' , so that the paste-receptacle may be raised and lowered with reference to the paste-roller upon the can-puller, so that the latter may pass under the sliding platen of the paste-box and make the proper contact therewith. The box itself has short legs c^2 , which enter holes in the support upon which it rests, and these allow the box to be taken off at any time for cleaning and returned to its place without the necessity of any further adjustment. The box can be made fast in its place by set-screws or other suitable locking mechanism. Within the box are journaled two transverse rollers c^3 c^4 . These rollers are supported in guides c^6 , which allow them to be easily removed and replaced, and they are retained in perfect contact with each other. The upper roller c^3 is formed with grooves or channels, and in the present case the lower roller is shown as being made plain. Each or both may be composed of or covered with rubber or other substance which will adapt them to readily take up the paste, and the grooves in the upper roller enable it to carry a sufficient amount and to transfer it readily to the sliding platen c^5 , which travels horizontally in guides on the top of the box. This sliding platen is moved forward and backward above the box and receives the paste from the upper roller when it moves over this roller and delivers it, as will be hereinafter described, to a roller upon the can-puller. The feed-rollers are held up by a small spring c^7 , mounted in blocks, so as to keep a holding pressure against the under side of the platen.

In order to insure the rotation of the paste-rollers, if found necessary, I have shown gear-wheels c^8 , secured upon the ends of their shafts and engaging with a toothed rack 10, formed upon the under side of the platen, so that as the latter reciprocates it will cause the rollers to rotate. Upon the under side of this platen are placed two scraping-strips c^9 . They are in such position that the upper roller just moves between them as it rotates, and any paste which is squeezed over the ends of this roller will be constantly scraped off and de-

livered into the box, so that the roller is always kept clean. On the inner side of the box are other scrapers c^{10} made to conform to the shape of the platen, and these, in conjunction with the scraper c^9 , serve to clear off any paste which may be squeezed out, technically termed "fat edges," thus keeping the rollers clean at each movement.

The movement of the slide-platen is effected by the following mechanism: Upon the main driving-shaft B is a gear-wheel b^2 , Fig. 5, and this engages a similar gear-wheel b^3 , which has a crank or eccentric pin in it, and this is connected by a rod b^4 with a rocker-arm a^3 , fixed upon the shaft a^2 , which is suitably journaled below the paste-box. From this shaft a^2 arms a^4 extend upwardly upon each side of the paste-box. These arms have their upper ends vertically slotted, and a rod c^{11} , which is fixed transversely upon the top of the platen, has its ends extended so as to enter these slots. When the machine is in motion the arms a^4 are caused to oscillate about their fulcrum shaft a^2 by the connections above described, and the platen will thus be reciprocated to pass inwardly over the paste-roller c^3 and then move outwardly over the end of the paste-box, so as to meet the can-puller, which is so actuated as to move in the opposite direction from the platen, meeting it when it is projected from the paste-box and receding from it when it again returns over the paste-box. These reciprocating movements of the platen also rotate the paste-rollers alternately in opposite directions and keep them always fully supplied with paste, while the scrapers previously described keep them clean and prevent any accumulation of paste upon them.

The can-puller consists of two side plates d^2 , which are connected with the carriers upon the outside of the runway, as previously described. Between these plates the top pressure-roller G is journaled, the ends being mounted in the radially-sliding block g and pressed down by springs g' , so that the roller will always exert a pressure upon the top of the can and at the same time yield to any inequalities in the surface upon which it bears. This pressure-roller insures a rolling motion of the can as it passes beneath it, and also smooths out all blisters and wrinkles upon the label when it is applied to the can, finally pressing the lap down, so that the label will be smoothly and properly applied. The sliding boxes are mounted in adjustable bearings in the sides of the can-puller and are adjusted by means of screws when the primary position of the pressure-roller is being determined.

Upon the inner surface of the side plates D' of the can-puller and forward of the pressure-roller is journaled the puller-roller H. In the present case I have shown a single roller extending entirely across between the sides, instead of having two short rollers which only press upon the ends of the can, as in my former patent. This puller-roller thus bears on the lap of the label as well as the

pressure-roller above and makes it adhere with more certainty by reason of its being pressed down twice. This roller also prevents the end of the label from springing up when released from the locking-bars and keeps the label down to its place until it is fully applied to the can, thus insuring its going on straight. The locking-bars Q will be herein-after more fully described. They are projected across the label-pile to hold the labels in place until the proper time, and when they are withdrawn the roller prevents the pile of labels beneath from springing up and the top-most one from curling or otherwise becoming displaced. The spindles of the puller-roller are journaled in carrier-blocks adjustable by screws *h* and movable radially toward the center of the can.

J are short stops on the can-puller, adapted to extend a little over the can, and they are set by screws in the frame of the can-puller, so as to prevent the can from rushing ahead when pulled by the can-puller.

The paste-roller K of the can-puller is journaled in segmental brackets *k*, which are pivoted at one end of the sides of the can-puller. At the opposite end they are slotted and have set-screws by which they may be adjusted, so as to raise or lower the roller and cause it to pass accurately beneath the slide-platen of the paste-box and also under the paste-heads.

The ends of the spindles of the paste-roller K are also provided with collars *k*², having set-screws, and by means of these the roller can always be adjusted transversely, so as to exactly pass between the scrapers *c*⁹ of the slide-platen, and thus any surplus paste that squeezes out at the ends of the paste-roller will be removed at each reciprocation of the parts. This roller may be covered with corrugated or other shaped rubber or any suitable material that will serve to distribute the paste properly. A corrugated metal roller serves very well, as these corrugations become filled with paste when passing under the slide-platen, and they in turn deliver it to the surfaces of the paste-heads when passing beneath these.

The paste-heads being covered with rubber have a tendency to take the paste from the metal surfaces, leaving the roller comparatively clean to return for a new supply from the slide-platen.

In my present apparatus, instead of raising the can-puller by means of diagonal track-grooves so that it passes above the can and is afterward dropped down to a lower level to engage the can, the can-puller moves in a single horizontal plane as it reciprocates, and the cans are delivered into the can-puller by a mechanism which I will now describe.

The feed-chute L brings the cans to the apparatus and delivers them into the end of the runway, where they are allowed to roll upon a vertically-moving table N, and are arrested and prevented from going beyond it by means of a forked stop M, having a transversely-

extending part with a slot *m*, which is permanently bolted to the main frame of the machine. This slot allows of an adjustment for larger or smaller cans. The table N, upon which the cans are delivered from the feed-chute, has a downwardly-projecting stem *n*, movable in suitable guides, to insure a correct vertical motion. This stem is actuated by toggle-lever arms *n'*, one of which is pivoted to a collar upon the stem *n*, and the other to some stationary part of the frame. By means of a connecting-rod or pitman *o* the central joint of the toggle-lever is connected with an oscillating lever O, fulcrumed to the main frame, having its upper end connected at *p* with a horizontally-moving slide P, so that when this slide is reciprocated the table N will be alternately raised and depressed a short distance. When in its lowest position a can is allowed to roll upon the table and is stopped against the upwardly-projecting arms M. With the upward movement of the table the can is raised so as to be within the can-puller and in position to be moved along the runway. Meanwhile the edge of the table which is presented toward the feed-chute L is raised high enough to form a stop and prevent any more cans advancing until the one already in the can-puller has been carried back and the table again depressed, so as to allow another can to roll in upon it.

The slide P is moved as follows: A knob or projection *d*³ in the carriers impinges against a pin *p'* upon the slide when the can-puller moves toward the paste-box and thus reciprocates the slide and actuates the table, as previously described. The slide P has another pin *p''* near the lever O, as shown in Fig. 1. Now when the can-puller reaches the paste-receptacle its knob *d*³ will come in contact with the pin *p'* at that side and push it backward, causing the table N to be lowered with a can on top, and on its back travel, when arriving over the table again, will push the other pin *p''* forward and thus raise the table N and bring the can right under the rollers of the can-puller. The table raises the can high enough to pass it over the top of the stop M. From the table the can will advance upon the can-ledges *a*⁶, which are slightly above the level of the table and have their ends, which are adjacent to the table, beveled or inclined, so that a can can be rolled up these inclines upon the ledge. By reason of the table being lower than these ledges there will be no pressure of the pressure-roller upon the top of the can while it is on the table, but as soon as the can is advanced upon the ledges it will be raised to such a point that the pressure-roller then acts upon the surface of the can after the latter has fully left the lifting-table. When the table is raised, it is prevented from being accidentally lowered by reason of the toggle-lever joints passing slightly beyond the centers, or a straight line of the levers, which acts as a lock and retains the table in its proper position until the can-puller reaches the end

of its travel. This also prevents the pressure-roller from pressing upon the can while the latter is on the table.

As the tendency of metal moving over metal will be to slide, I have found it preferable to cover the can-ledges with rubber strips or any surface or substance to which the metal of the caps will adhere, so as to insure their rolling instead of sliding. The rubber also yields, so that the can is pressed slightly down into the rubber at all times and forms a frictional contact, which insures its rolling properly. This depression also compensates for the little difference in diameter caused by the thickness of the tin where the heads are put on to the body of the can and prevents the can advancing at a different rate of speed from the movement of the label, which would be the case if the larger diameter of the can ends should roll upon the ledges while the smaller diameter of the body of the can was picking up and placing the label upon itself.

The label-box I is situated beneath the runway and operates in a manner similar to that shown in my former patent. For convenience I have shown the box having one side hinged so as to turn outwardly to allow easy access to the inside of the box for the purpose of supplying it with labels. The box sides are also adjustable, forward or backward, by means of slots in the upper portion of the sides and corresponding projections, against which they bear. Bolts pass through the slots and fasten the sides into the can-ledge or other part of the machine-frame. These adjustments of the sides and ends are made to fit the different sizes of labels which may be used for cans of different sizes.

In order to form a stop for the label-pile, to hold them exactly in place and to relieve the topmost one, when necessary, I employ lugs or holders, consisting of bars Q, extending into the runway from each side and projecting over the top of the label-pile X, as is well shown in Figs. 3 and 4. At the end projecting over the label-pile these bars have a flat piece, which, when the bar is moved inwardly, holds the label-pile slightly below the top of the label-box, or, more correctly speaking, below the can-ledge, which is a continuation of the label-box. By thus being held below the top of the box they are prevented from being misplaced. There are four of these holders, two upon each side near the ends of the pile. The holders are carried in the frame *q*, having end guides *q'*, in which the locking-bars are adapted to have both a transverse and a vertical swinging movement. The locking-bars are raised vertically by simply passing first over a short incline formed in any suitable manner in the bottom of the frame *q*, as shown in Fig. 4, just behind the side *a*. A transversely-disposed slide is adapted to move in suitable guides at right angles to the movement of the holders. This slide engages the locking bars or holders by a pin or standard *q²* with an antifriction-roller fastened on the

holder and passing through the slide. This slide is designed to move the holders transversely, they being first raised in vertical planes by means of cam-surfaces 20, one of which is shown in Fig. 4. This slide is moved by a trigger-bar S, pivoted to the top of the frame and in the path of an operating-bar *d⁴*, shown in Figs. 1, 2, and 5 as projecting below the lower part of the slotted carrier by which the can-puller is operated, and also by a post or pin *r* fastened to the cam against which the trigger impinges. The operating-bar *d⁴* strikes the bar S on its outer inclined end and carries it along until *d⁴* is beyond the incline, and, consequently, releases it, pushing all the while the stud *r* on slide R ahead of it. A spring *s* on top of trigger-bar S serves to hold the latter always against stud *r*. The extent of projection of operating-bar *d⁴* toward the inclined end of S' causes a sooner or later release from the latter, and therefore determines the time and extent of time to operate the bars Q. When the operating-bar *d⁴* returns, it will take hold of trigger-bar S on its side and simply carry it away from stud *r* and before it until it has passed, when trigger-bar S will spring back again against stud *r* by means of its spring *s*. The length and position of this operating-bar of the carrier determine the time when the lock is opened and what length of time it is held open. A spring *r'*, carried by the slide, returns the cam to its normal position and also returns the holders to their places to hold the label-pile.

When the slide and the holder are in the position to hold the label-pile in the box, the holders are absolutely locked, cannot be opened by any upward pressure which may be exerted, and can only be opened by the movement of the trigger-bars, as before described. The rising movement of these holding and locking bars is for the purpose of carrying them first to a plane sufficiently high to insure their return above the labels without danger of catching the edges of the pile.

When the can-puller and the carrier-piece move forward to receive a new can, the operating-bar of the carrier swings the triggers out of the way, and a spring *s* returns it again against the post of the slide to be in readiness to open the lock when it returns with a can.

If desired, the lower surfaces of the holders which impinge upon the label-pile may be surfaced with rubber, so that the labels will be less liable to slip than if the surface was metal.

The locking mechanism being carried by the frame, I am enabled readily to adjust it to various lengths of labels in a manner similar to that shown in my former patent.

The paste-heads T, by which the ends of the labels are supplied with paste, are carried by dovetailed holders or seats *t*, (see Figs. 10 and 11), upon which they are adjustable and held when in proper position by set-screws. The dovetailed carrier or seat has an upwardly-

extending stem or rod t' , which is movable in suitable guides to give it a vertical reciprocation. These bearings are formed in an angle-iron which is supported by the two shafts $f f'$.

5 The guide-stems of the paste-heads have fastened upon them slot-pieces, also pieces forked at one end to overlap the part with the bearings of the stem, so as to prevent the stem from turning and to insure a true vertical movement. The slot-piece is for the purpose of attaching a pin u upon a lever U which enters the slot. The guide-stems are moved up and down alternately by the levers U , pivoted upon the angle-iron f^2 , as shown at u' . One end of the lever U has a counterweight v' . The other end has a pin u , which enters a slot t^2 , connected with the vertically-moving stem. Upon the opposite side of the fulcrum U' is another pin w^2 , which carries an antifricition-roller, and this enters a curved slot in the cam V . This cam is similar in appearance to a quadrant having converging sides extending from the curved portion of the cam and fulcrumed upon the shafts $f f'$.
10 A slotted opening is made in each at a point about midway between the fulcrum-shaft f or f' and the curved slotted end V , and through this passes a bolt e' , which connects the segmental cams with one of two oscillating arms $E E'$, and these arms are connected by a rod e , so that the cams are caused to swing backward and forward, as these arms are moved by the action of the crank b . The slot into which the pin or bolt e' enters allows of a suitable adjustment, so that the movement of the parts can be regulated. This adjustment serves to regulate the bearing of the paste-head upon the label-pile.

In order to allow an independent adjustment of the paste-head with relation to the paste-roller, I cut the stem t' in two and fit a sleeve t^3 over the two ends, and when set to the proper length I hold the ends firm in the sleeve by means of set-screws. By this arrangement the stem can be lowered or raised and any adjustment with relation to the paste-roller can be made. (Shown in Fig. 8.)

The curved slot or groove V is formed with two different radii. One part of this groove is circular, having its radius from the center upon which the device is fulcrumed—that is, the shaft f or f' . While the roller or pin which projects from the lever into the slot lies in this part of the curve, there is no movement of the lever or the paste-heads, and the head thus remains at a height sufficient to allow the paste-roller K of the can-puller to pass beneath it and apply the paste to it. The remainder of the cam-slot then deviates from the curvature of the first portion, so that when the pin from the lever U begins to travel in this portion of the slot it will be gradually raised and the end of the lever which carries the paste-head guide-stem will be depressed, so as to bring the paste-head down upon the end of the label and apply the paste thereto.

Each of the paste-heads is operated in the

same manner and alternately, so that one is first depressed upon one end of the label and the other one afterward depressed upon the other end.

The counterbalance-weights v' , previously described, are sufficient to counterbalance the weight of the paste-heads and their guide-stems and connections.

In order to prevent paste from being applied to any more than the uppermost label at the end which is first picked up by the can, either by displacement of the labels or by any paste which may be squeezed out, the paste-heads are so set that they will apply the paste a little distance away from the extreme end of the label, as shown in my former patent, and when the end of the label is picked up it is drawn outward by the act of the paste-head letting go the label, so that it is distributed to the extreme end after the label has been raised from the pile.

In order to prevent any accumulation of paste which will become squeezed out and produce what is called a "fat edge," I provide a device consisting of a plate W , which is secured in such a manner that when the paste-head rises from the label it passes with its edges in close proximity to this plate, and the paste is thus scraped off and prevented from accumulating upon the paste-head, and when the paste-roller of the can-puller passes under the paste-head it spreads out the paste which has just been scraped off, so that the paste-head always returns to the label with its edges scraped and clean, thus preventing any such undesirable accumulation of paste. This device I find to be more necessary at the end of the label which is first picked up than at the opposite end, where it is of a certain advantage to allow the end of the label to become well pasted, so as to insure a better lap when the label is put around the can.

The device W for scraping the paste-heads is secured by set-screws, so as to have any necessary adjustment to adapt it exactly to the parts with which it is to operate.

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

1. In a can labeling machine, a can puller adapted to reciprocate within a horizontal runway, a mechanism by which said reciprocation is accomplished, a paste-box having a sliding platen movable above it, and rollers whereby paste is supplied from the box to the lower surface of the platen, a paste roller journaled upon the can puller adapted to receive paste from the platen in its reciprocations and paste-heads beneath which the roller upon the can puller travels so as to supply paste to these heads.

2. In a can labeling machine, a can puller, with mechanism by which it is movable within a horizontal runway a paste-box, a horizontal slidable platen movable above the box and rollers whereby paste is delivered from the box upon the surface of the platen, a roller

journaled upon the can puller adapted to receive paste from the platen when the two are brought into contact, vertically reciprocating paste-heads beneath which said roller travels so as to deliver paste upon the lower surfaces of the paste-heads, a label box situated in the line of travel of the can puller over which the can is caused to roll, said paste-heads being alternately depressed so as to apply paste to the ends of the label before the label is picked up and rolled upon the can in its movement over the pile.

3. A can puller movable in guides upon a runway having pins projecting through guiding slots in said runway, carriers exterior to the runway connected by said pins with the can puller and having vertical channels made in their exterior surfaces, swinging arms fulcrumed to standards above the runway having in them rollers entering and movable in the vertical channels of the carriers, a rotary crank shaft and a connecting rod extending from the crank to the swinging arms whereby the latter are oscillated and the can puller reciprocated upon the runway.

4. The can puller adapted to reciprocate within a horizontal runway, a mechanism for reciprocating said can puller, a paste-box having a sliding platen and means for applying paste thereto, a paste roller on the can puller adapted to receive paste from the platen, guide ledges within the runway upon which the ends of the can travel, a chamber situated between said guide ledges and beneath the runway, adapted to contain the labels which are to be applied to the cans, a roller adjustably journaled across the can puller adapted to form contact with the can and cause the latter to roll along the ledges above the label pile, and a pressure roller journaled across the can puller adapted to press upon the upper side of the can and to apply and smooth the label thereon.

5. The combination of a paste box having a sliding platen, means for applying paste thereto, can puller movable in guides upon the horizontal runway above a chamber containing labels which are to be applied to cans, guide ledges upon which the ends of the can travel, and rollers by which the can is caused to move over said ledges and pressure applied thereto to smooth and apply the label, the paste heads and a paste roller adjustably connected with the can puller, and adapted to receive paste from the sliding platen whereby paste which has been first applied to said roller is transferred to paste heads beneath which said roller passes during the reciprocation of the can puller.

6. The paste container, the paste rollers journaled transversely therein adapted to form contact with each other, a sliding platen movable horizontally across the top of the paste container so as to form contact with the uppermost of the rollers and receive paste therefrom at each reciprocation, in combination with a horizontally traveling can puller

having a paste roller adapted to contact with the platen and receive paste therefrom, and mechanism for operating the can puller and platen in unison.

7. A paste container having transversely journaled rollers adapted to take up the paste, a platen movable longitudinally above the container so as to travel in contact with the uppermost of said rollers, a mechanism by which it is reciprocated consisting of rocker arms fulcrumed upon an oscillating shaft having the movable ends connected with the platen, and a connecting rod and crank mechanism whereby power is derived from the main driving shaft to reciprocate the platen, in combination with a horizontally traveling can puller, a paste roller mounted therein and adapted to receive paste from the platen and mechanism for operating the can puller simultaneously with the platen so that they approach each other.

8. In a can labeling machine, a paste container situated at one end of the machine having a horizontally movable platen adapted to travel above it, and rollers whereby paste is delivered from the container upon the under surface of the platen, a can puller adapted to receive cans from a supply chute and to roll them in a horizontal runway above a chamber containing labels which are to be applied to the cans, a paste roller, vertically reciprocating paste-heads movable above the ends of the labels so as to apply paste alternately to these ends, a paste roller mounted upon the can puller and adapted to roll beneath the paste heads when the can puller is reciprocated, and mechanism whereby the can puller and the platen of the paste receptacle are caused to reciprocate in opposite directions so that paste is delivered from the platen upon the paste roller of the can puller when the two approach each other, and is delivered from the paste roller of the can puller upon the paste heads when the can puller returns.

9. The paste receptacle having a platen adapted to reciprocate horizontally above it, rollers journaled to rotate within the receptacle whereby paste is delivered and distributed upon the under surface of the platen, and scrapers adjusted with relation to the rollers and platen so as to scrape off any accumulations of paste at each reciprocation of the apparatus, in combination with a horizontally traveling can puller having a paste roller adapted to pass under the platen and mechanism for causing the platen and can puller to approach and recede from each other simultaneously.

10. A paste receptacle having a platen and mechanism whereby it is reciprocated horizontally above the receptacle, rollers journaled transversely across the receptacle adapted to distribute paste therefrom upon the lower surface of the reciprocating platen, gear-wheels fixed upon the outer ends of the roller shafts engaging with each other, and a toothed rack formed upon the lower surface

of the platen engaging the uppermost of the gear-wheels whereby the rotation of the wheels is effected by the reciprocation of the platen.

11. A table upon which cans are received from the delivery chute, a mechanism by which said table is raised and depressed consisting of toggle levers connected with a vertically moving stem upon which the table is supported, an oscillating lever connected with the toggles at one end having the other end connected with a horizontally moving slide and contact pins fixed respectively upon the slide and upon the carriers by which the can puller is moved whereby the table is reciprocated to alternately receive a can from the chute and to deliver it into the can puller to be carried into the runway.

12. In a can labeling machine, a paste receptacle situated at one end having a horizontally sliding platen moving above it, and rollers by which paste is supplied to the platen, a can puller reciprocating from the opposite end of the machine having a roller adapted to pass beneath the platen and receive paste therefrom and to deliver it to vertically reciprocating paste heads which in turn apply the paste to the label ends, and collars upon the ends of the paste roller shaft, with means for adjusting the collars so that the paste roller may pass between the downwardly projecting cleaning edges of the platen.

13. In a can labeling machine, the paste receptacle with rollers, and the horizontally reciprocating platen adapted to receive paste from the rollers, a can puller having a paste roller adjustably journaled upon it adapted to pass beneath the platen and receive paste therefrom, vertically reciprocating paste heads beneath which the can puller roller is adapted to pass so as to deliver paste thereon to be subsequently applied to the ends of the labels, and plates fixed with relation to the paste-heads so that any paste which is

squeezed out beyond the edges of the heads, will be removed and accumulation thereon prevented.

14. In a can labeling machine, a paste receptacle having distributing rollers, vertically reciprocating paste-heads, a slidable platen above the rollers by which paste is conveyed from the paste receptacle, a can puller having a roller which receives paste from the platen and transmits it to the paste heads, a label containing chamber situated below the paste heads, and seats or holders to which the paste heads are attached, with means for adjustment and holding said heads with relation to the position of the labels beneath.

15. In a can labeling machine, paste-heads situated above a label containing chamber, means for applying paste to said heads, and a device for reciprocating the paste-heads, consisting of oscillating levers connected with the stems of the paste-heads, and mechanism connected with the main crank shaft whereby the levers are oscillated and the paste-heads are alternately depressed upon the opposite ends of the labels.

16. In a can labeling machine, paste-heads situated above a label containing chamber, means for applying paste to said heads, and a device for alternately depressing the paste heads to apply paste to the opposite ends of the labels, consisting of segmental fulcrumed cams, an intermediate connection between said cams and the stems of the paste-heads, and oscillating levers driven from the main crank shaft, through which the cams are moved.

In witness whereof I have hereunto set my hand.

HENRY ALBERT.

Witnesses:

JOHN L. CHILDS,
DAVID LEISHMAN.