

Nov. 26, 1935.

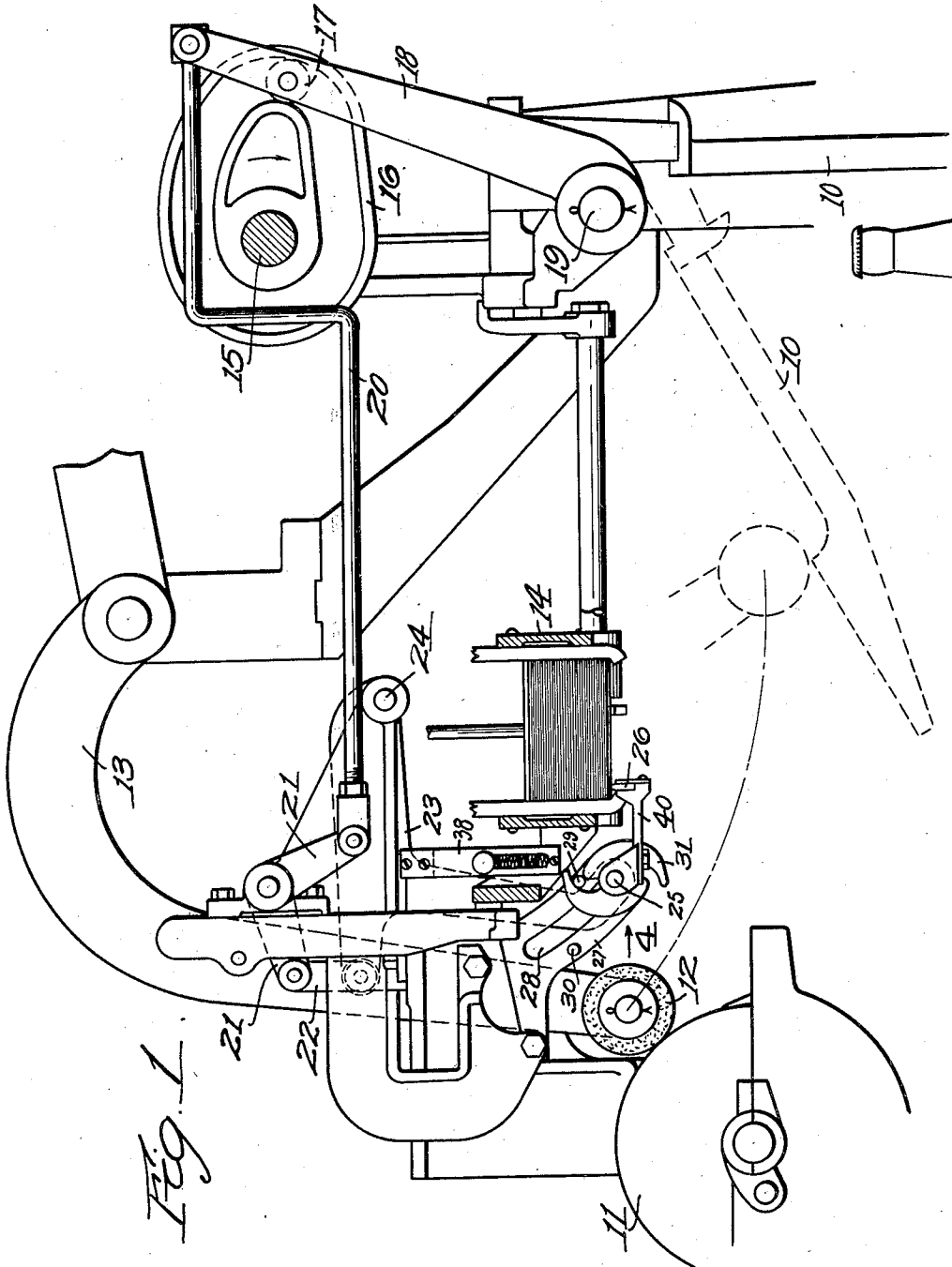
D. CARLSTEIN

2,022,310

DATING DEVICE FOR LABELING MACHINES

Filed Aug. 23, 1934

3 Sheets-Sheet 1



Nov. 26, 1935.

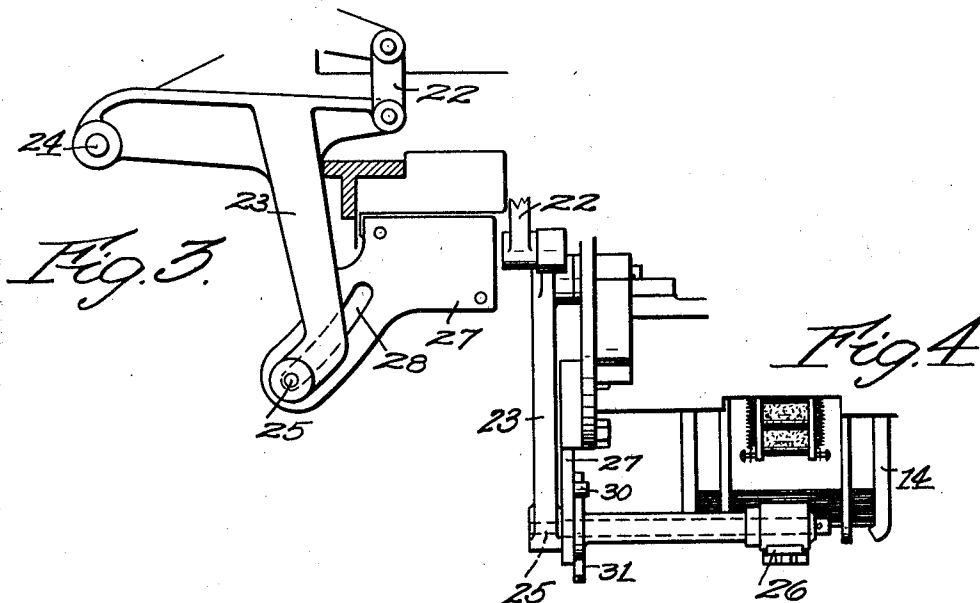
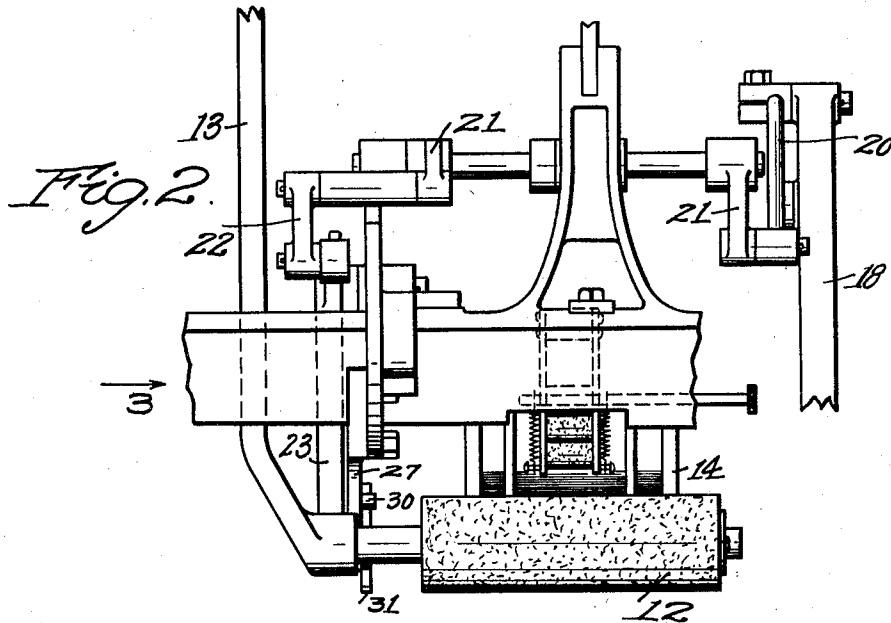
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3 Sheets-Sheet 2



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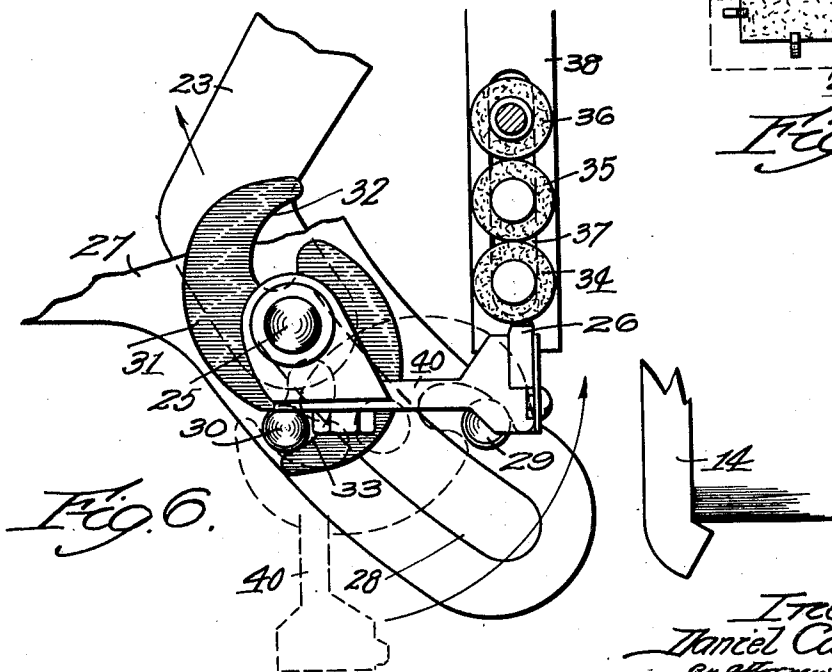
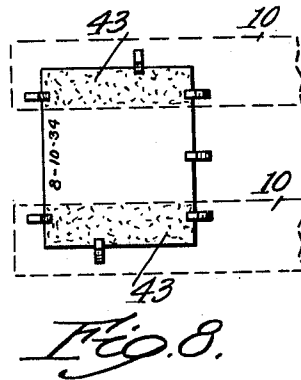
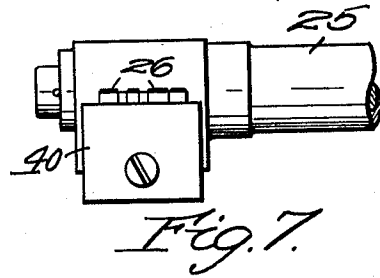
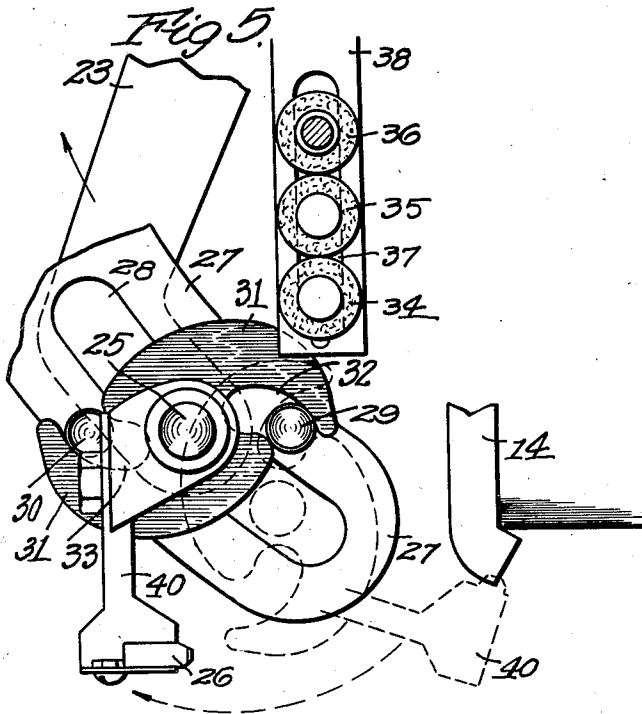
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DATING DEVICE FOR LABELING MACHINES

Filed Aug. 23, 1934

3 Sheets-Sheet 3



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UNITED STATES PATENT OFFICE

2,022,310

DATING DEVICE FOR LABELING MACHINES

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Application August 23, 1934, Serial No. 741,127

4 Claims. (Cl. 101—35)

This invention relates to a device for dating labels before they are attached to bottles or other packages.

The principal objects of the invention are to
5 provide means for manipulating the dating stamp so that it will engage the label before the paste is applied to it and print a date or other matter on the back side of the label and so that the dating stamp can be moved from the stamping
10 or dating position to a position against an ink roller or pad to receive its ink; to provide means whereby the dating stamp will meet both the label and ink pad by a motion at right angles to the surface thereof; to provide a construction
15 that can be mounted on any ordinary labeling machine and will not delay the operation thereof, and to provide a construction for these purposes which will be simple, easily installed on a previously built machine, and durable.

20 Other objects and advantages of the invention will appear hereinafter.

Reference is to be had to the accompanying drawings, in which

25 Fig. 1 is an end view, partly in section, showing the position of the parts when the stamping or dating is being accomplished;

Fig. 2 is a side view of a part of the same;

30 Fig. 3 is an elevation of the mechanism shown in Fig. 2, taken in the direction of the arrow 3 in Fig. 2;

Fig. 4 is an elevation of the same mechanism taken from the side of Fig. 3;

35 Fig. 5 is a view of the mechanism for manipulating the dating stamp on enlarged scale, and showing the stamp in an intermediate position;

Fig. 6 is a view similar to Fig. 5 but showing the position of the stamp when it engages the inking roll;

40 Fig. 7 is an elevation of the dating stamp showing how it is mounted, and

Fig. 8 is a bottom plan view of the label as it is removed from the label holder by the pickers and after it has been dated and gummed.

45 This invention is designed chiefly to provide a bottle or can label with a date or other mark showing the date of manufacture or any other data on the under side of the label where it does not disclose the information to the dealer or consumer. This device is intended to be operated on
50 a labeling machine of any desired design and to operate without delaying or reducing the production of that machine. In other words, it operates during the operation of the machine without affecting it. While the label is still in the label
55 holder this machine prints a date or code in the

center of the back or gummed side of the label before the label is fixed to the bottle or other container. By this means the date of manufacture, or any other information, may be ascertained by loosening this portion of the label and
5 reading it.

The invention is shown as used on a labeling machine which is provided with pickers 10 for cooperating with a gum roll 11 and a movable transfer roll 12. The transfer roll is carried on a lever 13 to swing from the full line position in Fig. 1 to the dotted line position and then move along the picker to provide the picker with gum for labeling purposes. This operation is all old and the particular means for imparting the
15 necessary motions to the picker and roll are not shown in detail.

An ordinary label holder 14 is shown in which the labels are located and from which they are removed downwardly by the picker in the usual
20 way.

A shaft 15 on the machine is provided with a cam 16 which operates on a cam roll 17 on an arm 18 pivoted at 19. As this cam rotates it swings the arm 18 back and forth and takes
25 with it a rod 20 connected by two arms 21 with a link 22. This link is pivoted at the bottom to a lever 23 which is pivoted at 24. At the bottom the lever 23 is provided with a shaft 25 oscillatable on it which carries an arm 40 bearing
30 26 of a removable and replaceable kind which constitutes the stamp or type holder to be used. No particular form of type or type holder is necessary.

A bracket 27 is mounted on the frame of the
35 machine and provided with an arcuate slot 28 through which the shaft 25 passes. On this bracket on opposite sides of the slot 28 are a pair of cam operating pins 29 and 30. Fixed on the shaft 25 is a double cam 31 having two
40 opposite slots 32 and 33 both arcuate and both open at the end. These slots are for encountering the pins 29 and 30 and being actuated by the pins as the frame 23 swings back and forth.

The inking device comprises, in the form
45 shown, three rolls 34, 35, and 36 having studs projecting through opposite vertical slots 37 in a frame 38. The slots are altogether a little longer than necessary to support the three pairs of studs with the three rolls resting vertically
50 one upon the other. Ink is dropped on the top roll by a hand manipulated device of any desired character and the top roll is rotated by hand occasionally to spread the ink.

In the position shown in Fig. 6 it will be seen 55

that the lever 23 is swung upwardly as far as it will go, and at this time the pin 30 is in the slot 33 and holds the cam 31 in the position shown in that figure. At the same time it holds the type 26 in its highest position where it engages the bottom roll 34 of the inking device.

The type 26 is held in a holder 40 which is fixed to the shaft 25 on which the cam 31 is fixed. Therefore the type holder will turn with the cam 31 and the position of the parts shown in Fig. 6 can be considered as the beginning of the stroke of the type holder. As the frame 23 moves downwardly, taking the shaft 25 with it along the slot, it will come to the position shown in dotted lines in Fig. 6 and the full lines in Fig. 5. In this position the cam slot 33 is just moving downwardly, so that the pin 30 can be said to be just coming out of it. On the other side, the pin 29 is just entering the cam slot 32 by the motion of the cam. This brings the support 40 down to the vertical position shown in full lines in Fig. 5. It will be remembered that the type therein are all sufficiently inked at this time. Pursuing the course of the lever 33 downwardly, it will be seen that the shaft 25 moves from full line position in Fig. 5 to the dotted line position in Fig. 5. While doing so the pin 30 has no further influence, because the cam 31 is moving beyond it, but the pin 29 now controls the angular location of the cam and brings it into the dotted line position. The holder 40 therefore swings upwardly as shown in dotted lines in Fig. 5, and finally comes to its printing position where its arm is horizontal as shown in Fig. 1. At this point the type prints or stamps letters or numbers to the label in the position indicated in Fig. 8 between the two lines 43 of glue that are immediately applied to the label by the pickers 19. It will be observed that when this label is applied to a bottle or package, the date or other characters shown in Fig. 8 will be behind the label and covered by it so that they cannot be inspected without tearing the label, but then can be shown fully and accurately.

In this way the dating is done in a very simple manner. The inking is of the simplest character, and the mechanism for operating the type holder is of a simple and accurate character which can be applied to a machine already in use without taking up much space or involving much time for its application thereto. After being placed in position it works automatically without attention with the ordinary operations of the machine and does not delay the operation of the labeling machine.

Having thus described my invention and the advantages thereof, I do not wish to be limited to the details herein disclosed, otherwise than as set forth in the claims, but what I claim is:—

1. In a dating device for a labeling machine, the combination with an inking device having a surface from which the ink can be delivered,

a label holder adapted to deliver labels from the same side, a swinging lever having a stud thereon, adapted to oscillate on its own axis, a cam carried by said stud, an ink stamp movable at all times with the stud and cam, said cam having a cam groove, and a pin adapted to cooperate with the cam groove and located in such position that, as the stud and cam move forwardly, the cam and stamp will be swung out of the way of the inking device and be advanced and then moved so that the stamp engages the end label in the label holder.

2. In a dating device for a labeling machine, the combination with an inking device having a bottom surface from which the ink can be delivered, a label holder adapted to deliver labels from the bottom, a swinging lever having a stud thereon, adapted to oscillate on its own axis, a cam carried by said stud, an ink stamp movable at all times with the stud and cam, said cam having a pair of cam grooves on opposite sides, and a pair of pins on opposite sides of the cam adapted to cooperate with the cam grooves and located in such position that, as the stud and cam move forwardly, the cam and stamp will be swung backwardly out of the way of the inking device and be advanced and then swung forwardly so that the stamp engages the bottom label in the label holder.

3. In a dating device for a labeling machine, the combination of a pivoted lever, a stud oscillatably mounted on the lever and movable therewith, a guide for the stud, a cam fixed to the stud and having projecting in opposite directions from the stud two curved cam surfaces open at the opposite ends, and a pair of pins fixed on the guide for engaging said cam grooves in order, located on opposite sides of the stud, one forward of the other in such a position that as the stud moves forwardly one of said pins will engage in one cam groove and turn the cam and thereafter, during the movement of the stud, the other pin will engage in the other cam groove and turn the cam and the dating stamp carried by said stud in the opposite direction.

4. In a dating device for a labeling machine, the combination of a label holder delivering labels from the bottom, an inking device comprising an inking pad accessible from the bottom, a stationary bracket having a cam guide, a pivoted lever, means for moving the lever back and forth, a cam oscillatably carried by the lever and movable along the guide, a dating stamp mounted to move with the cam, and means whereby, as the lever moves through its stroke in one direction, the cam will move the dating stamp from a position in which the stamp engages the bottom of the inking device, backwardly through an arc, then forwardly through another arc to a position in which the stamp engages the bottom label in the label holder.

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