

March 5, 1940.

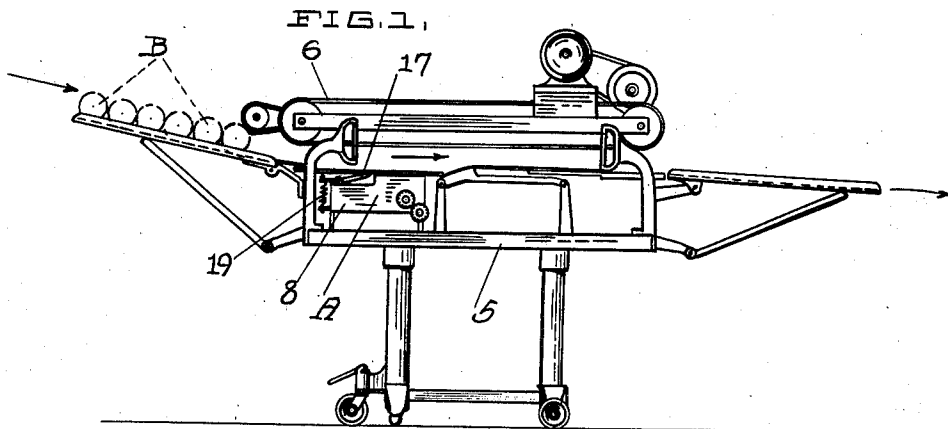
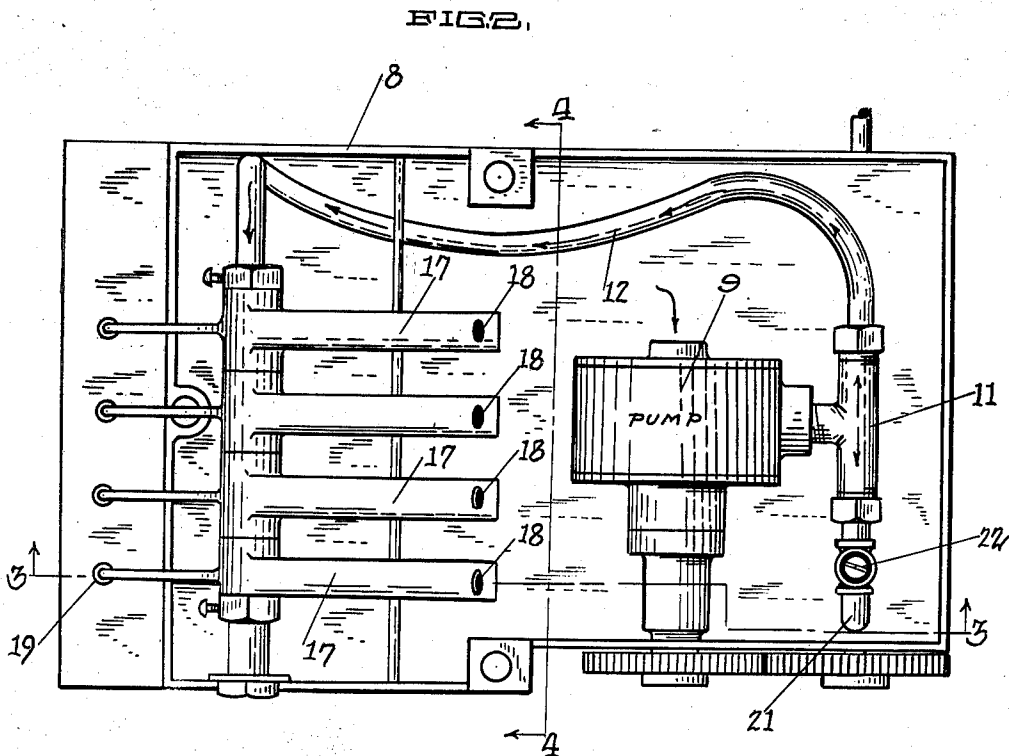
H. JOHNSON

2,192,833

LABELING MACHINE

Filed Aug. 30, 1938

2 Sheets-Sheet 1



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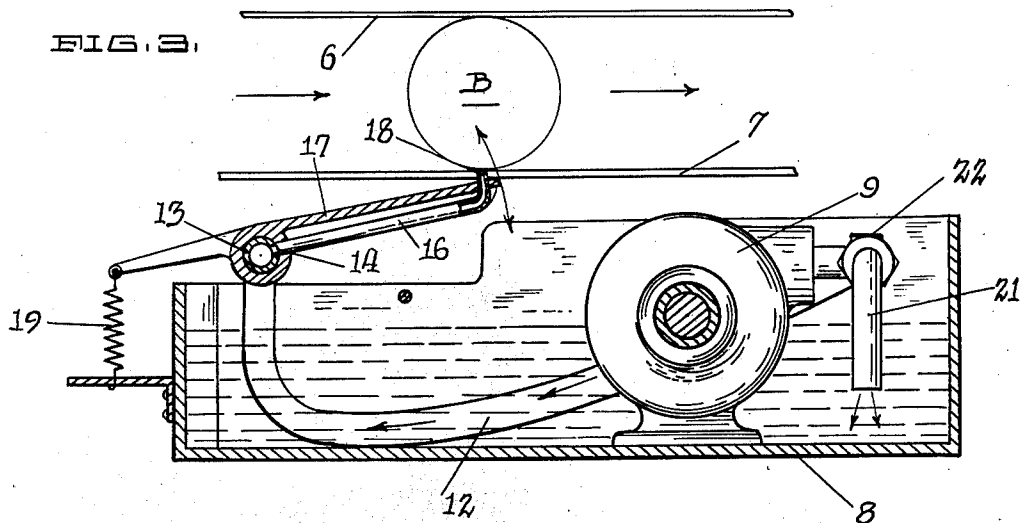
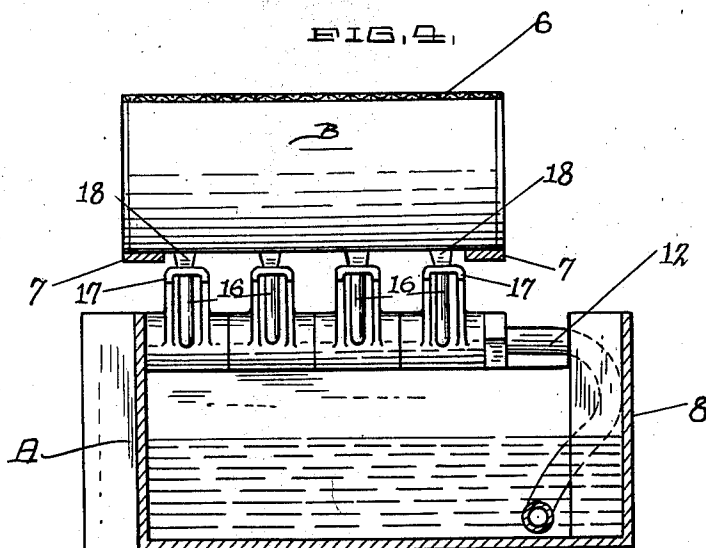
H. JOHNSON

2,192,833

LABELING MACHINE

Filed Aug. 30, 1938

2 Sheets-Sheet 2



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UNITED STATES PATENT OFFICE

2,192,833

LABELING MACHINE

Hoadley Johnson, San Francisco, Calif.

Application August 30, 1938, Serial No. 227,578

8 Claims. (Cl. 91—12)

This invention relates to improvements in labeling machines and has particular reference to means for distributing glue to cans and other objects passing through the labeling machine.

A further object is to produce a device of this character which may be employed with the standard labeling machine without materially altering its construction.

A further object is to produce a device of this character which will deliver glue to the surface of the can or other object being labeled, irrespective of its contour, as for instance, a dented can.

Other objects and advantages will be apparent during the course of the following description.

In the accompanying drawings forming a part of this specification and in which like numerals are employed to designate like parts throughout the same,

Fig. 1 is a side elevation of a labeling machine having my invention applied thereto;

Fig. 2 is an enlarged top plan view of my glue distributing mechanism and on an enlarged scale;

Fig. 3 is a cross sectional view taken on the line 3—3 of Fig. 2; and

Fig. 4 is a cross sectional view taken on the line 4—4 of Fig. 2.

In applying labels to cans, bottles, and similar objects, it is customary to have these objects roll down an incline and to then be engaged by a moving belt which rolls the object across a support where glue is applied thereto by revolving rollers. This arrangement is not entirely satisfactory for the reason that a great many cans are dented, which is particularly true of large size cans, wherein the vacuum within the can draws the side inwardly, sometimes producing very big dents or hollows. Therefore, an ordinary roller will not enter these dents, and, consequently, a label will not be properly glued to the can or other object.

With my device I employ a plurality of glue applying fingers which will follow the contour of the can as it passes thereover.

In the accompanying drawings wherein for the purpose of illustration is shown a preferred embodiment of my invention, the numeral 5 designates a labeling machine as a whole having my invention applied thereto which is designated in Fig. 1 by the letter A. The cans to be labeled are designated in dotted lines at B and engage a conveyor belt 6 which rolls the cans along as shown in Fig. 3. The can passes over supporting rails 7 mounted above a receptacle 8 in which glue is placed and heated in any convenient manner. Within the receptacle 8 I place a pump 9

which delivers glue from the receptacle to a T 11 and from one side of this T through a pipe 12 to a manifold pipe 13, mounted above the receptacle and having ports 14 formed therein, which ports register with pipes 16 carried upon the rocker arms 17 and having the tip of the pipe extending through the rocker arm so as to form an applicator 18. One end of the rocker arm is held by a spring 19, as best illustrated in Fig. 3. A by-pass pipe is shown at 21 in which is located a by-pass valve 22.

The result of this construction is that when my device is applied to a labeling machine and the same is in operation, glue will be pumped by the pump 9 into the pipe 12, into the manifold 13. If the pipes 16 are in alignment with the ports 14, the glue will be forced through the pipes 16, out of the applicators 18, and into contact with anything passing over the applicator. The springs 19 tend to swing the rocker arms 17 upwardly when a can is out of contact with the applicators and in this manner the ports 14 are shut off, and no glue is expelled. As soon as the can rolls over the applicator, the glue is expelled therefrom and applied to the can during its movement thereover.

It will be apparent that this hinged arrangement permits the applicator to enter any depressions which may be formed in the surface of the can. It is also apparent that when the ports 14 are closed, the pump will deliver the glue through the by-pass valve 22 and pipe 21 back into the receptacle.

It is to be understood that the form of my invention herewith shown and described is to be taken as a preferred example of the same and that various changes relative to the material, size, shape and arrangement of parts may be resorted to without departing from the spirit of the invention or the scope of the subjoined claims.

Having thus described my invention, I claim:

1. In a device of the character described, a receptacle, a pump positioned therein, a manifold mounted thereabove, pivoted members supported on said manifold means for conveying objects above the pivoted members and in engagement therewith, means for discharging material from said manifold to a point adjacent the extremity of said pivoted members, whereby an object engaging the point of discharge will receive a deposit therefrom.

2. In a device of the character described, a receptacle, a manifold positioned above said receptacle and having ports formed therein, a plurality of rocker arms mounted on said manifold

means for conveying objects above the pivoted members and in engagement therewith, a pipe carried by each of said rocker arms and capable of being moved into registry with said ports, each of said pipes terminating in an applicator end adjacent the end of said rocker arms, means for normally maintaining said rocker arms in the path of movement of the object moving through the cord of an arc of the pivotal action of said rocker arms, and means for delivering material from said receptacle to and through said manifold.

3. In a device of the character described, a receptacle, a manifold positioned above said receptacle and having ports formed therein, a plurality of rocker arms mounted on said manifold means for conveying objects above the pivoted members and in engagement therewith, a pipe carried by each of said rocker arms and capable of being moved into registry with said ports, each of said pipes terminating in an applicator end adjacent the end of said rocker arms, means for normally maintaining said rocker arms into the path of movement of the object moving through the cord of an arc of the pivotal action of said rocker arms, means for delivering material from said receptacle to and through said manifold, and by-pass means for relieving the flow of material when said pipes are out of registry with said ports.

4. In a device of the character described, comprising a frame, means for conveying objects in a continuous stream therein, a plurality of independently movable applicator members spring held in engagement with the objects on the conveying means, and means for supplying adhesive material to said applicator members.

5. In a device of the character described, comprising a frame, means for conveying objects in a continuous stream therein, a manifold below

the conveying means, a plurality of independent movable applicator members carried by the manifold and spring held in engagement with the objects, and means for supplying adhesive material to said manifold to supply the applicator members with adhesive material.

6. In a device of the character described, comprising a frame, means for conveying objects in a continuous horizontal stream therein, a manifold below the conveying means, a plurality of independently movable applicator members receiving adhesive material from the manifold and spring held in engagement with the objects on the conveyor, and means for supplying adhesive material to the manifold under pressure.

7. In a device of the character described, comprising a frame, means for conveying objects in a continuous horizontal plane therein, a manifold below said conveying means, a plurality of independently movable applicator members receiving adhesive material from the manifold and spring held in engagement with the objects, independent means carried by each applicator member for cutting off the supply of adhesive material thereto, and means for supplying adhesive material to the manifold under pressure.

8. In a device of the character described, comprising a frame, means for conveying objects in a continuous stream therein, a manifold carried by the frame below the conveying means, a plurality of independently movable applicator members pivotally mounted upon said manifold and having ports registering with ports in the manifold for allowing the adhesive material to pass to the applicator members when the same are in their downward position, spring means for holding said applicator members in engagement with the objects on the conveying means, and means for supplying adhesive material to said manifold under pressure.

HOADLEY JOHNSON. 40