April 19, 1960 G. E. COLE 2,933,216

LABEL DISPENSING MACHINE

Filed Dec. 20, 1955 3 Sheets-Sheet 1

Fig. 1.

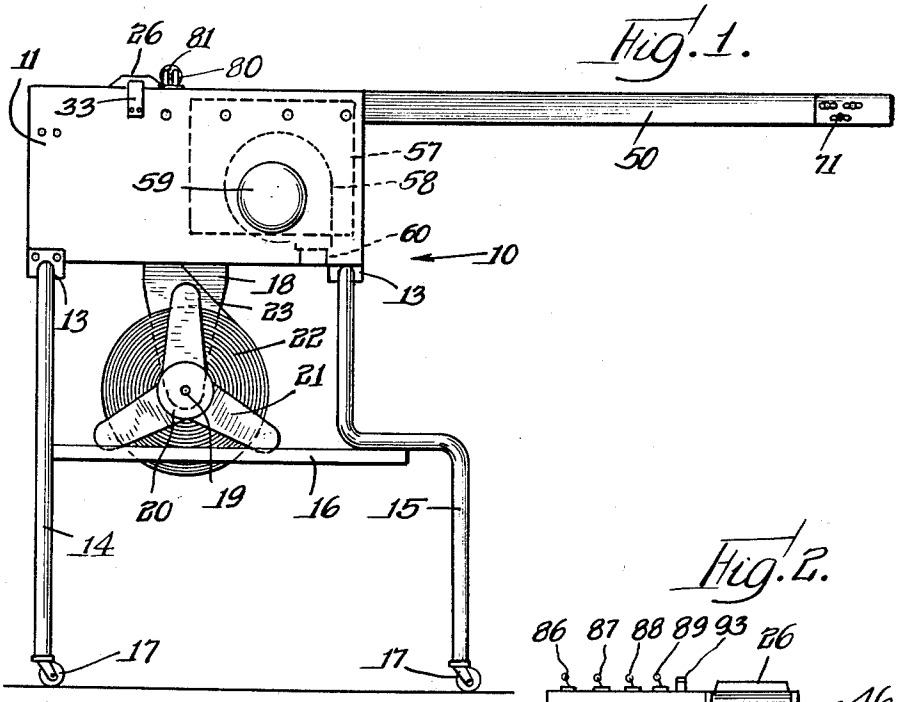


Fig. 2.

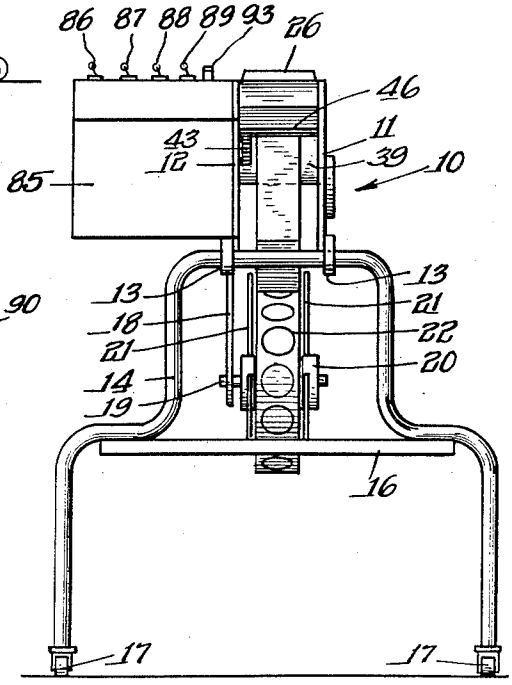
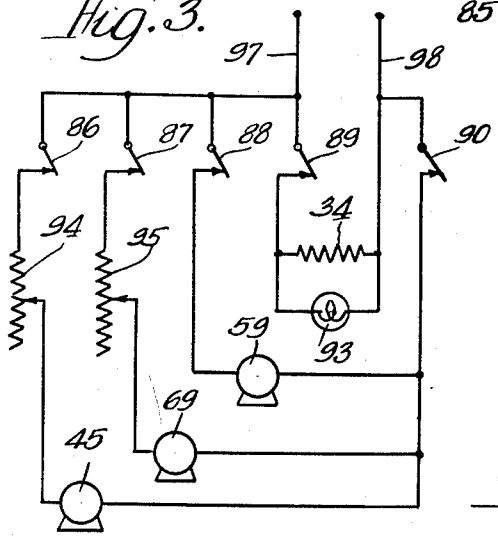


Fig. 3.



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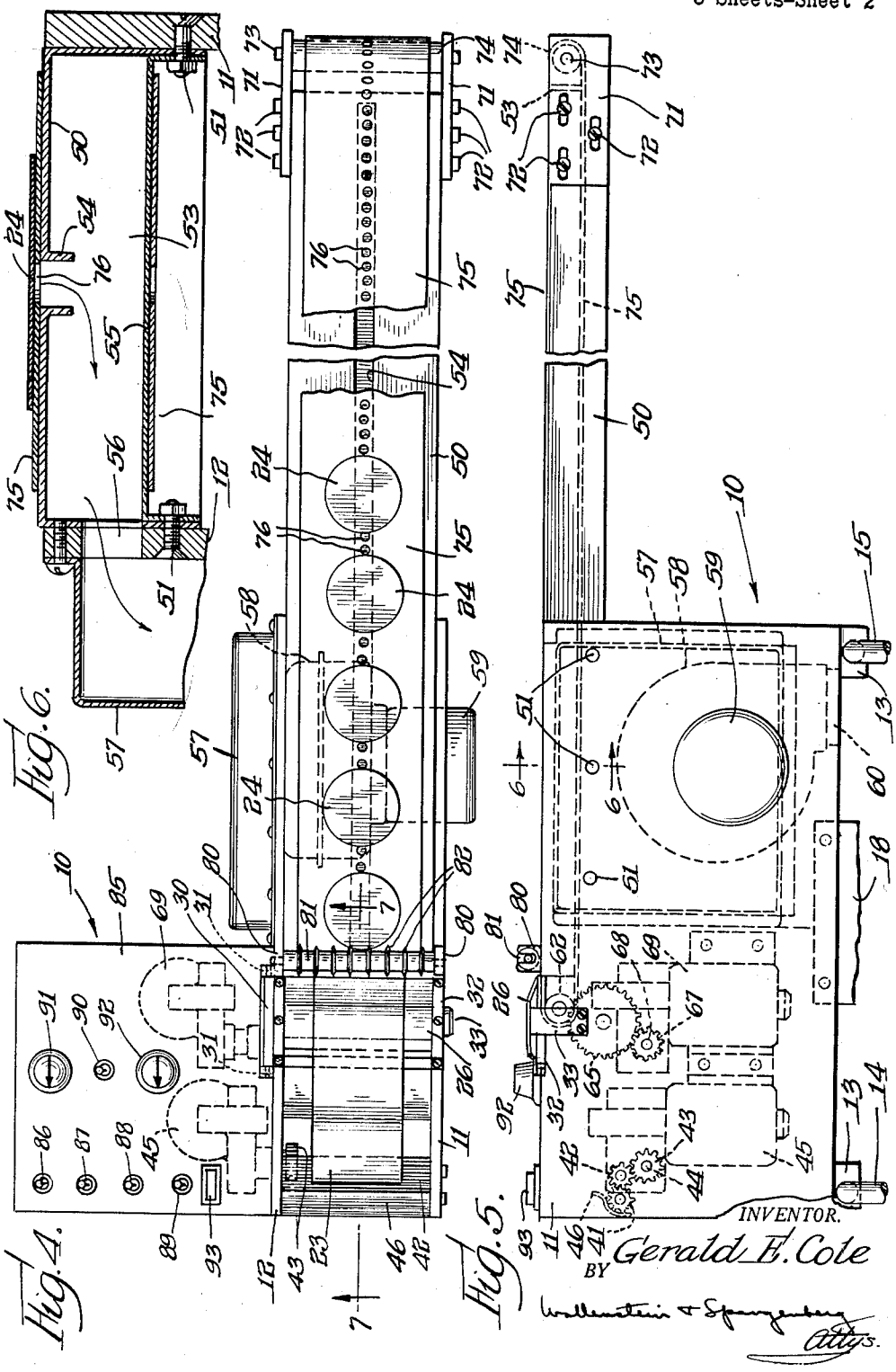


Fig. 6.

Fig. 4.

Fig. 5.

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Fig. 7.

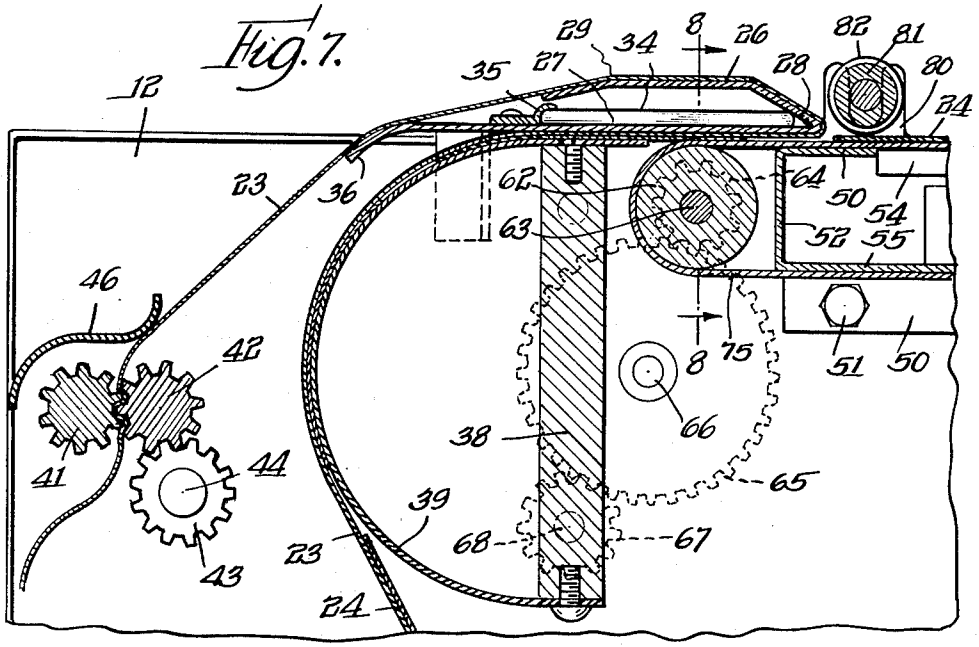


Fig. 8.

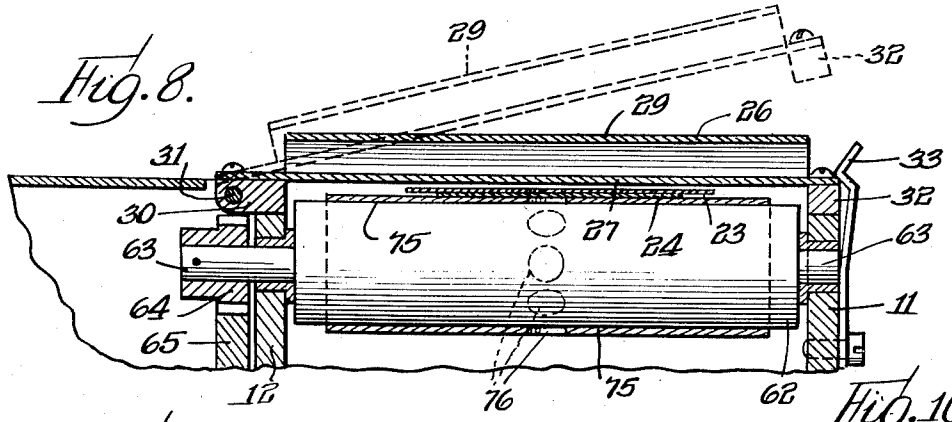


Fig. 10.

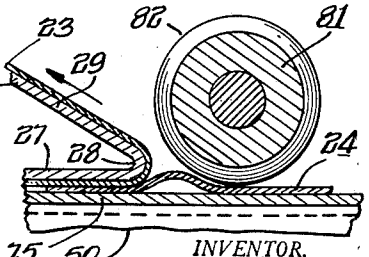
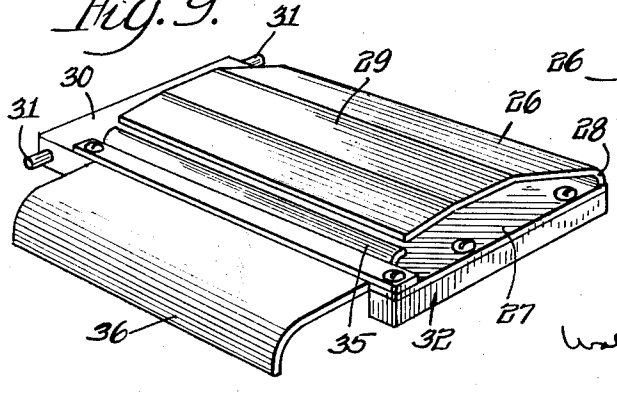


Fig. 9.



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2,933,216

LABEL DISPENSING MACHINE

Gerald E. Cole, Highland Park, Ill., assignor to Kleen-Stik Products, Inc., Chicago, Ill., a corporation of Illinois

Application December 20, 1955, Serial No. 554,230

20 Claims. (Cl. 221—73)

The principal object of this invention is to provide an improved machine for dispensing labels from a rolled backing strip having the labels adhesively mounted thereon wherein the labels are so dispensed that they may be readily applied to objects without need for handling the labels. In the past, in applying labels to objects, it has been necessary to manually pick up the dispensed labels and also the objects, and then manually apply the labels to the objects. These manual operations are largely reduced by the use of the machine of this invention, it not being necessary to pick up or manipulate the dispensed labels, thereby greatly reducing the time and effort required for labeling.

In accordance with this invention, the labels are sequentially dispensed from the backing strip with their adhesive sides facing upwardly onto a platform or conveyor. To apply the labels to the objects to be labeled, all that is required is to pick up the objects and press them against the labels disposed on the platform or conveyor, no handling of the labels being necessary. As an example, the machine of this invention is particularly useful in applying the labels to the ends of lipstick containers or the like.

Further objects of this invention reside in the details of construction of the label dispensing machine and in the cooperative relationships between the component parts thereof.

Other objects and advantages of this invention will become apparent to those skilled in the art upon reference to the accompanying specification, claims and drawings, in which:

Fig. 1 is a side elevational view of the label dispensing machine of this invention.

Fig. 2 is an end elevational view looking from the left in Fig. 1.

Fig. 3 is a wiring diagram illustrating the electrical connections to the various electrical parts of the machine.

Fig. 4 is a top plan view of the label dispensing machine, but drawn on a larger scale.

Fig. 5 is a side elevational view of the label dispensing machine as illustrated in Fig. 4.

Fig. 6 is a sectional view taken substantially along the line 6—6 of Fig. 5.

Fig. 7 is an enlarged sectional view taken substantially along the line 7—7 of Fig. 4.

Fig. 8 is an enlarged sectional view taken substantially along the line 8—8 of Fig. 7.

Fig. 9 is a perspective view of the breaker member utilized in the label dispensing machine.

Fig. 10 is an enlarged sectional view showing the manner in which a roller assists in dispensing the labels from the backing sheet.

The label dispensing machine is generally designated at 10 and it includes a frame having a pair of parallel side plates 11 and 12, which are suitably secured together in spaced-apart relation. The side plates 11 and 12 are provided at their bottoms with brackets 13 by which they are secured to a supporting base consisting of tubular

legs 14 and 15, which are braced by a tubular brace 16. The base may be provided with suitable casters 17 so that the machine may be readily moved from place to place if this be desired.

Secured to and depending from the side plate 12 is a bracket 18 having a bearing support 19, forming a support for a roll of backed labels. Mounted on the bearing support 19 is a reel having hub portions 20 and side members 21 for carrying the roll 22 of backed labels. The hub portions 20 are provided with tensioning means for resiliently opposing unwinding of the roll 22 of backed labels. The roll 22 includes a backing strip 23 on which labels 24 are secured. Preferably the labels 24 are provided with a pressure-sensitive adhesive by which the labels are secured to the backing strip 23 and by which the labels are secured to the objects to be labeled. As shown, the labels are secured on the outside of the backing strip when the backing strip is arranged in the roll 22.

Arranged on the top of the side plates 11 and 12, and above the supporting means for the roll of backed labels, is a breaker member 26, the breaker member being substantially horizontally arranged and having a bottom surface 27 and a top surface 29 terminating in a relatively sharp trailing edge 28. One end of the breaker member 26 is provided with a bracket 30 carrying pivot pins 31 for pivotally mounting the breaker member in suitable brackets carried by the side plate 12. The other end of the breaker member 26 is provided with a bracket 32 which rests upon the top of the side plate 11 when the breaker member is in the substantially horizontal position. The breaker member may be pivoted from the substantially horizontal position to a raised position as illustrated in Fig. 8 to assist in stringing the backing strip thereover and to provide access to the equipment below the breaker member when desired. The breaker member may be latched in the horizontal and operative position by a latch spring 33 carried by the side plate 11. A heater element in the form of an electrical resistance heater 34 is arranged within the hollow breaker member 26 and may be suitably held in place therein by a clip 35. The purpose of the heater 34 is to heat the lower surface 27 of the breaker member 26 for, in turn, heating the backing strip and label to assist in breaking the label from the backing strip. The bottom surface 27 is provided with a guide surface 36 for guiding the backing strip 23 toward the feeding means.

Secured between the side plates 11 and 12 is a transverse plate 38 which carries a substantially semi-circular guide member 39, the upper end of this guide member extending below and closely adjacent to the bottom surface 27 of the breaker member 26. The backing strip 23, with the labels 24 secured thereto, extends from the roll 22 of backed labels in the supporting means therefor and passes upwardly over the guide means 39 which guides the backing strip against the bottom surface 27 of the breaker member 26 as shown more clearly in Fig. 7. The backing strip 23 extends beyond the bottom surface 27 of the breaker member and over the relatively sharp trailing edge 28 and along the top surface 29 and the guide surface 36 of the breaker member to the feeding means. As the backing strip 23 is gripped and pulled by the feeding means, the backing strip is bent sharply over the relatively sharp trailing edge 28 of the breaker member and this sharp bending of the backing strip operates to break the labels 24 therefrom, the labels being dispensed substantially horizontally, as illustrated in Fig. 7 with their adhesive sides facing upwardly. The heater element 34 operates to heat the adhesive to assist in breaking the labels from the backing strip.

The feeding means for gripping and pulling the backing strip over the breaker member 26, is located adjacent the front of the machine and includes a pair of

toothed rollers 41 and 42 which are journaled for rotation in the side plates 11 and 12. The teeth on these toothed rollers 41 and 42 intermesh and operate to grip the backing strip 23 firmly therebetween. The toothed rollers 41 and 42 are driven by a gear 43 meshing with the toothed roller 42 and carried by a shaft 44 driven by a motor 45 mounted on the outside of the side plate 12. Thus, as the motor 45 is operated, the toothed rollers 41 and 42 of the feeding means are rotated to grip and pull the backing strip 23. A guard 46 is secured between the side plates 11 and 12 over the toothed rollers 41 and 42 to prevent any possible injury therefrom.

The labels 24 which are sequentially dispensed with their adhesive sides facing upwardly are dispensed onto a platform which may take the form of an endless belt conveyor. Here, the platform or conveyor includes a channel-shaped supporting member 50 having a top surface and downwardly depending legs which are secured by screws and nuts 51 to the side plates 11 and 12, as shown more clearly in Figs. 4 to 7. The ends of the channel-shaped supporting member 50 are bent downwardly as indicated at 53 and a bottom plate 55 is secured between the legs of the supporting member 50 to define an enclosed vacuum chamber. The top of the channel member 50 is provided with a longitudinally extending opening having downwardly extending legs 54 for providing a support to the center portion thereof. This opening communicates with the interior vacuum chamber. The vacuum chamber communicates through an opennig 56 in the channel member 50 and the side plate 51 with a housing 57 suitably secured to the outside of the side plate 12. This housing 57 communicates with the inlet side of a blower 58 mounted on the inside of the side plate 12, this communication being afforded by a suitable opening through the side plate 12. The blower 58 is driven by an electric motor 59 carried thereby and, as illustrated, a portion of this motor 59 extends through an opening in the side plate 11 by which it is also supported. The blower 58, when operated by the electric motor 59, creates a vacuum within the vacuum chamber in the channel-shaped supporting member 50, the blower discharging through an outlet passage 60 therein.

A roller 62 carried by a shaft 63 is journaled for rotation between the side plates 11 and 12 as shown more clearly in Figs. 7 and 8. A gear 64 is secured to the end of the shaft 63 extending through the side plate 12, and meshing with this gear 64 is a gear 65 mounted on a shaft 66 also carried by the side plate 12. The gear 65 is driven by a gear 67 mounted on a shaft 68 which is driven by an electric motor 69 suitably secured to the side plate 12. Thus, as the electric motor 69 is operated the gears 67, 65 and 64 operate to rotate the roller 62 in a clockwise direction as illustrated in Fig. 7.

The outer end of the channel-shaped supporting member 50 has a pair of brackets 71 adjustably secured thereto by screws 72 extending through slots in the brackets. A roller 74 is rotatably mounted by a shaft 73 extending between the brackets 71 and extending over the rollers 62 and 74 and about the vacuum chamber formed within the supporting member 50 is an endless belt 75. Thus, as the roller 62 is rotated, the belt 75 is driven to convey the labels 24 away from the breaker member 26. Preferably, the roller 62 is made of resilient material such as rubber or the like to provide a good driving connection between it and the belt 75 and since the brackets 71 are adjustable, desired tension may be maintained in the belt 75. The belt 75 is centrally provided with a plurality of perforations 76 which communicate with the central opening in the channel-shaped supporting member 50. Since a vacuum is maintained in the vacuum chamber, the perforations 76 in the belt 75, which communicate with the vacuum chamber, operate to hold the dispensed labels 24 in desired position upon the belt 75 as they are being advanced thereby. Accordingly, accidental displacement of the labels 24 on the belt 75 is eliminated.

Carried by the upper edges of the side plates 11 and 12, adjacent the trailing edge 28 of the breaker member 26, is a pair of bifurcated brackets 80, in which there is journalled for rotation a roller 81 having annular ribs 82. The roller, by its own weight, is urged toward the endless belt 75 and the purpose of this roller is to assist in the removal of the labels 24 as they are broken from the backing strip 23. The manner in which this is accomplished is illustrated more clearly in Figs. 7 and 10. The annular ribs 82 on the roller 81 engage the adhesive sides of the labels 24 as they are dispensed from the backing strip 23 and operate effectively to prevent the labels from continuing around the trailing edge 28 with the backing strip 23 and to assure the positive dispensing of the labels on the endless belt 75. Because only the annular ribs 82 engage the adhesive sides of the labels 24, the labels do not tend to adhere thereto.

The electric motors 45 and 69, for driving the feeding means and the conveyor, respectively, are enclosed within a housing 85 secured to the outside of the side plate 12. This housing 85 also contains electrical control equipment, including snap switches 86, 87, 88, 89 and 90 for controlling the operation of the motor 45 for the feeding means, the motor 69 for the conveyor, the motor 59 for the blower and the electrical resistance heating element 34. The housing 85 also carries a pair of knobs 91 and 92 for operating rheostats 94 and 95, respectively, for the purpose of independently regulating the speed of operation of the motors 45 and 69. The housing 85 also carries an indicating lamp 93 for indicating the operation of the heating element 34.

The manner in which these various electrical devices are connected together is illustrated in Fig. 3. Here, electrical energy is supplied by line wires 97 and 98, leading from a suitable source of electrical power not shown. The indicating lamp 93 is connected in parallel with the resistance heater 34 and when the snap switch 89 is closed the heater 34 is energized, which energization is indicated by the lamp 93. The snap switch 88 is connected in series with the blower motor 59 so that when it is closed the blower is operated. The snap switch 87 and the rheostat 95 are connected in series with the conveyor motor 69 and when the snap switch 87 is closed, the conveyor is operated and it is operated at a speed determined by the adjustment of the rheostat 95. The snap switch 86 and the rheostat 94 are connected in series with the motor 45 for driving the feeding means and when the snap switch 86 is closed, the feeding means is operated and it is operated at a speed dependent upon the adjustment of the rheostat 94. The snap switch 90 is located in series with all of the motors 45, 69 and 59 so as to de-energize all of them when it is opened so that all of the motors may be simultaneously stopped if this be desired.

Accordingly, when the snap switches 86 to 90 are closed, the feeding means is placed in operation, the conveyor is placed in operation, the blower is placed in operation and the heater 34 is energized. As a result, the backing strip 23 the heater 34 is energized. As a result, the backing strip 23 is gripped and pulled over the breaker member 26 to cause the labels 24 to be broken therefrom and sequentially dispensed onto the moving conveyor belt 75. The heater element 34 and the roller 81 assist in breaking the labels from the backing strip and in dispensing the same onto the moving conveyor belt with their adhesive sides facing upwardly. The blower, operating to create a vacuum in the vacuum chamber, co-operates with the perforations in the conveyor belt 75 to maintain the labels in proper position upon the conveyor belt. In using this label dispensing machine, all that is necessary is to press the objects to be labeled onto the adhesive sides of the labels as they are being ad-

vanced along the conveyor, it not being necessary to manually manipulate the labels. The machine, being portable, may be wheeled up to a work bench with the conveyor extending over the work bench so that the labels are sequentially and conveniently brought to the operator and the objects on the work bench. Motions required for placings the labels on the objects are, therefore, reduced to a minimum and considerable time in labeling the objects is saved. By adjusting the rheostat **94** through the knob **91**, the rate at which the labels are dispensed may be varied as desired and by adjusting the rheostat **95** through the knob **92**, the speed of the conveyor and hence the spacing of the dispensed labels along the conveyor may be varied as desired. In other words, by adjusting the rate of label dispensing and the spacing of the labels along the conveyor, the machine may be regulated to suit the convenience of the operator and the type of objects to be labeled.

While for purposes of illustration, one form of this invention has been disclosed, other forms thereof may become apparent to those skilled in the art upon reference to this disclosure and, therefore, this invention is to be limited only by the scope of the appended claims.

I claim as my invention:

1. In a machine for dispensing labels with their adhesive sides up from a rolled backing strip having the labels adhesively mounted thereon, a substantially horizontally arranged breaker member having a bottom surface and a top surface terminating in a relatively sharp trailing edge, supporting means including tension means arranged below the breaker member for supporting a roll of said backed labels, guide means for guiding the backing strip from the supporting means along the bottom surface of the breaker member with the labels facing downwardly, said backing strip extending therebeyond over the trailing edge and the top surface of the breaker member, feeding means for gripping and pulling the backing strip along the bottom surface over the trailing edge and along the top surface of the breaker member for sharply bending the backing strip over the trailing edge thereof to break the labels from the backing strip with their adhesive sides facing upwardly, and a platform adjacent to and extending from beneath the trailing edge of the breaker member for receiving the labels dispensed from the backing strip with their adhesive sides up.

2. In a machine for dispensing labels with their adhesive sides up from a rolled backing strip having the labels adhesively mounted thereon, a substantially horizontally arranged breaker member having a bottom surface and a top surface terminating in a relatively sharp trailing edge, supporting means including tension means arranged below the breaker member for supporting a roll of said backed labels, guide means for guiding the backing strip from the supporting means along the bottom surface of the breaker member with the labels facing downwardly, said backing strip extending therebeyond over the trailing edge and the top surface of the breaker member, feeding means for gripping and pulling the backing strip along the bottom surface over the trailing edge and along the top surface of the breaker member for sharply bending the backing strip over the trailing edge thereof to break the labels from the backing strip with their adhesive sides facing upwardly, and an endless belt conveyor adjacent to and extending from beneath the trailing edge of the breaker member for receiving and conveying away the labels dispensed from the backing strip with their adhesive sides up.

3. In a machine for dispensing labels with their adhesive sides up from a rolled backing strip having the labels adhesively mounted thereon, a substantially horizontally arranged breaker member having a bottom surface and a top surface terminating in a relatively sharp trailing edge, supporting means including tension means arranged below the breaker member for supporting a roll of said backed labels, guide means for guiding the backing strip from the supporting means along the bottom surface of the breaker member with the labels facing downwardly, said backing strip extending therebeyond over the trailing edge and the top surface of the breaker member, feeding means for gripping and pulling the backing strip along the bottom surface over the trailing edge and along the top surface of the breaker member for sharply bending the backing strip over the trailing edge thereof to break the labels from the backing strip with their adhesive sides facing upwardly, a perforate endless belt conveyor adjacent to and extending from beneath the trailing edge of the breaker member for receiving and conveying away the labels dispensed from the backing strip with their adhesive sides up, and a vacuum box in communication with the perforate endless belt conveyor for maintaining the dispensed labels in position upon the conveyor.

4. In a machine for dispensing labels with their adhesive sides up from a rolled backing strip having the labels adhesively mounted thereon, a substantially horizontally arranged breaker member having a bottom surface and a top surface terminating in a relatively sharp trailing edge, supporting means including tension means aranged below the breaker member for supporting a roll of said backed labels, guide means for guiding the backing strip from the supporting means along the bottom surface of the breaker member with the labels facing downwardly, said backing strip extending therebeyond over the trailing edge and the top surface of the breaker member, feeding means for gripping and pulling the backing strip along the bottom surface over the trailing edge and along the top surface of the breaker member for sharply bending the backing strip over the trailing edge thereof to break the labels from the backing strip with their adhesive sides facing upwardly, an endless belt conveyor adjacent to and extending from beneath the trailing edge of the breaker member for receiving and conveying away the labels dispensed from the backing strip with their adhesive sides up, means including adjusting means for operating the feeding means at a desired speed for dispensing labels from the backing strip at a desired rate, and means including adjusting means for operating the conveyor at a desired speed for regulating the spacing of the dispensed labels along the conveyor.

5. In a machine for dispensing labels with their adhesive sides up from a rolled backing strip having the labels adhesively mounted thereon, a substantially horizontally arranged breaker member having a bottom surface and a top surface terminating in a relatively sharp trailing edge, supporting means including tension means arranged below the breaker member for supporting a roll of said backed labels, guide means for guiding the backing strip from the supporting means along the bottom surface of the breaker member with the labels facing downwardly, said backing strip extending therebeyond over the trailing edge and the top surface of the breaker member, feeding means for gripping and pulling the backing strip along the bottom surface over the trailing edge and along the top surface of the breaker member for sharply bending the backing strip over the trailing edge thereof to break the labels from the backing strip with their adhesive sides facing upwardly, a platform adjacent to and extending from beneath the trailing edge of the breaker member for receiving the labels dispensed from the backing strip with their adhesive sides up, and a roller adjacent the trailing edge of the breaker member and urged toward the platform for engaging the adhesive sides of the labels to assist in dispensing the same from the back strip onto the platform.

6. In a machine for dispensing labels with their adhesive sides up from a rolled backing strip having the labels adhesively mounted thereon, a substantially horizontally arranged breaker member having a bottom surface and a top surface terminating in a relatively sharp trailing edge, supporting means including tension means

arranged below the breaker member for supporting a roll of said backed labels, guide means for guiding the backing strip from the supporting means along the bottom surface of the breaker member with the labels facing downwardly, said backing strip extending therebeyond over the trailing edge and the top surface of the breaker member, feeding means for gripping and pulling the backing strip along the bottom surface over the trailing edge and along the top surface of the breaker member for sharply bending the backing strip over the trailing edge thereof to break the labels from the backing strip with their adhesive sides facing upwardly, a heater arranged within the breaker member for heating the backing strip and labels as they are pulled along the bottom surface of the breaker member to assist in breaking the labels from the backing strip, and a platform adjacent to and extending from beneath the trailing edge of the breaker member for receiving the labels dispensed from the backing strip with their adhesive sides up.

7. In a machine for dispensing labels with their adhesive sides up from a rolled backing strip having the labels adhesively mounted thereon, a substantially horizontally arranged breaker member having a bottom surface and a top surface terminating in a relatively sharp trailing edge, supporting means including tension means arranged below the breaker member for supporting a roll of said backed labels, guide means for guiding the backing strip from the supporting means along the bottom surface of the breaker member with the labels facing downwardly, said backing strip extending therebeyond over the trailing edge and the top surface of the breaker member, feeding means for gripping and pulling the backing strip along the bottom surface over the trailing edge and along the top surface of the breaker member for sharply bending the backing strip over the trailing edge thereof to break the labels from the backing strip with their adhesive sides facing upwardly, a heater arranged within the breaker member for heating the backing strip and labels as they are pulled along the bottom surface of the breaker member to assist in breaking the labels from the backing strip, a platform adjacent to and extending from beneath the trailing edge of the breaker member for receiving the labels dispensed from the backing strip with their adhesive sides up, and a roller adjacent the trailing edge of the breaker member and urged toward the platform for engaging the adhesive sides of the labels to assist in dispensing the same from the backing strip onto the platform.

8. In a machine for dispensing labels with their adhesive sides up from a rolled backing strip having the labels adhesively mounted thereon, a substantially horizontally arranged breaker member having a bottom surface and a top surface terminating in a relatively sharp trailing edge, supporting means including tension means arranged below the breaker member for supporting a roll of said backed labels, guide means for guiding the backing strip from the supporting means along the bottom surface of the breaker member with the labels facing downwardly, said backing strip extending therebeyond over the trailing edge and the top surface of the breaker member, feeding means for gripping and pulling the backing strip along the bottom surface over the trailing edge and along the top surface of the breaker member for sharply bending the backing strip over the trailing edge thereof to break the labels from the backing strip with their adhesive sides facing upwardly, an endless belt conveyor adjacent to and extending from beneath the trailing edge of the breaker member for receiving and conveying away the labels dispensed from the backing strip with their adhesive sides up, and a roller adjacent the trailing edge of the breaker member and urged toward the conveyor for engaging the adhesive sides of the labels to assist in dispensing the same from the backing strip onto the conveyor.

9. In a machine for dispensing labels with their adhesive sides up from a rolled backing strip having the labels adhesively mounted thereon, a substantially horizontally arranged breaker member having a bottom surface and a top surface terminating in a relatively sharp trailing edge, supporting means including tension means arranged below the breaker member for supporting a roll of said backed labels, guide means for guiding the backing strip from the supporting means along the bottom surface of the breaker member with the labels facing downwardly, said backing strip extending therebeyond over the trailing edge and the top surface of the breaker member, feeding means for gripping and pulling the backing strip along the bottom surface over the trailing edge and along the top surface of the breaker member for sharply bending the backing strip over the trailing edge thereof to break the labels from the backing strip with their adhesive sides facing upwardly, a perforate endless belt conveyor adjacent to and extending from beneath the trailing edge of the breaker member for receiving and conveying away the labels dispensed from the backing strip with their adhesive sides up, a roller adjacent the trailing edge of the breaker member and urged toward the conveyor for engaging the adhesive sides of the labels to assist in dispensing the same from the backing strip onto the conveyor, and a vacuum box in communication with the perforate endless belt conveyor for maintaining the dispensed labels in position upon the conveyor.

10. In a machine for dispensing labels with their adhesive sides up from a rolled backing strip having the labels adhesively mounted thereon, a substantially horizontally arranged breaker member having a bottom surface and a top surface terminating in a relatively sharp trailing edge, supporting means including tension means arranged below the breaker member for supporting a roll of said backed labels, guide means for guiding the backing strip from the supporting means along the bottom surface of the breaker member with the labels facing downwardly, said backing strip extending therebeyond over the trailing edge and the top surface of the breaker member, feeding means for gripping and pulling the backing strip along the bottom surface over the trailing edge and along the top surface of the breaker member for sharply bending the backing strip over the trailing edge thereof to break the labels from the backing strip with their adhesive sides facing upwardly, a perforate endless belt conveyor adjacent to and extending from beneath the trailing edge of the breaker member for securing and conveying away the labels dispensed from the backing strip with their adhesive sides up, a vacuum box in communication with the perforate endless belt conveyor for maintaining the dispensed labels in position upon the conveyor, means including adjusting means for operating the feeding means at a desired speed for dispensing labels from the backing strip at a desired rate, and means including adjusting means for operating the conveyor at a desired speed for regulating the spacing of the dispensed labels along the conveyor.

11. In a machine for dispensing labels with their adhesive sides up from a rolled backing strip having the labels adhesively mounted thereon, a substantially horizontally arranged breaker member having a bottom surface and a top surface terminating in a relatively sharp trailing edge, supporting means including tension means arranged below the breaker member for supporting a roll of said backed labels, guide means for guiding the backing strip from the supporting means along the bottom surface of the breaker member with the labels facing downwardly, said backing strip extending therebeyond over the trailing edge and the top surface of the breaker member, feeding means for gripping and pulling the backing strip along the bottom surface over the trailing edge and along the top surface of the breaker member for sharply bending the backing strip over the trailing edge thereof to break the labels from the backing strip with their adhesive sides facing upwardly, an endless belt conveyor adjacent to and extending from beneath the trail-

ing edge of the breaker member for receiving and conveying away the labels dispensed from the backing strip with their adhesive sides up, a roller adjacent the trailing edge of the breaker member and urged toward the conveyor for engaging the adhesive sides of the labels to assist in dispensing the same from the backing strip onto the conveyor, means including adjusting means for operating the feeding means at a desired speed for dispensing labels from the backing strip at a desired rate, and means including adjusting means for operating the conveyor at a desired speed for regulating the spacing of the dispensed labels along the conveyor.

12. In a machine for dispensing labels with their adhesive sides up from a rolled backing strip having the labels adhesively mounted thereon, a substantially horizontally arranged breaker member having a bottom surface and a top surface terminating in a relatively sharp trailing edge, supporting means including tension means arranged below the breaker member for supporting a roll of said backed labels, guide means for guiding the backing strip from the supporting means along the bottom surface of the breaker member with the labels facing downwardly, said backing strip extending therebeyond over the trailing edge and the top surface of the breaker member, feeding means for gripping and pulling the backing strip along the bottom surface over the trailing edge and along the top surface of the breaker member for sharply bending the backing strip over the trailing edge thereof to break the labels from the backing strip with their adhesive sides facing upwardly, a perforate endless belt conveyor adjacent to and extending from beneath the trailing edge of the breaker member for receiving and conveying away the labels dispensed from the backing strip with their adhesive sides up, a roller adjacent the trailing edge of the breaker member and urged toward the conveyor for engaging the adhesive sides of the labels to assist in dispensing the same from the backing strip onto the conveyor, a vacuum box in communication with the perforate endless belt conveyor for maintaining the dispensed labels in position upon the conveyor, means including adjusting means for operating the feeding means at a desired speed for dispensing labels from the backing strip at a desired rate, and means including adjusting means for operating the conveyor at a desired speed for regulating the spacing of the dispensed labels along the conveyor.

13. In a machine for dispensing labels with their adhesive sides up from a rolled backing strip having the labels adhesively mounted thereon, a substantially horizontally arranged breaker member having a bottom surface and a top surface terminating in a relatively sharp trailing edge, supporting means including tension means arranged below the breaker member for supporting a roll of said backed labels, guide means for guiding the backing strip from the supporting means along the bottom surface of the breaker member with the labels facing downwardly, said backing strip extending therebeyond over the trailing edge and the top surface of the breaker member, feeding means for gripping and pulling the backing strip along the bottom surface over the trailing edge and along the top surface of the breaker member for sharply bending the backing strip over the trailing edge thereof to break the labels from the backing strip with their adhesive sides facing upwardly, a heater arranged within the breaker member for heating the backing strip and labels as they are pulled along the bottom surface of the breaker member to assist in breaking the labels from the backing strip, and an endless belt conveyor adjacent to and extending from beneath the trailing edge of the breaker member for receiving and conveying away the labels dispensed from the backing strip with their adhesive sides up.

14. In a machine for dispensing labels with their adhesive sides up from a rolled backing strip having the labels adhesively mounted thereon, a substantially horizontally arranged breaker member having a bottom surface and a top surface terminating in a relatively sharp trailing edge, supporting means including tension means arranged below the breaker member for supporting a roll of said backed labels, guide means for guiding the backing strip from the supporting means along the bottom surface of the breaker member with the labels facing downwardly, said backing strip extending therebeyond over the trailing edge and the top surface of the breaker member, feeding means for gripping and pulling the backing strip along the bottom surface over the trailing edge and along the top surface of the breaker member for sharply bending the backing strip over the trailing edge thereof to break the labels from the backing strip with their adhesive sides facing upwardly, a heater arranged within the breaker member for heating the backing strip and labels as they are pulled along the bottom surface of the breaker member to assist in breaking the labels from the backing strip, a perforate endless belt conveyor adjacent to and extending from beneath the trailing edge of the breaker member for receiving and conveying away the labels dispensed from the backing strip with their adhesive sides up, and a vacuum box in communication with the perforate endless belt conveyor for maintaining the dispensed labels in position upon the conveyor.

15. In a machine for dispensing labels with their adhesive sides up from a rolled backing strip having the labels adhesively mounted thereon, a substantially horizontally arranged breaker member having a bottom surface and a top surface terminating in a relatively sharp trailing edge, supporting means including tension means arranged below the breaker member for supporting a roll of said backed labels, guide means for guiding the backing strip from the supporting means along the bottom surface of the breaker member with the labels facing downwardly, said backing strip extending therebeyond over the trailing edge and the top surface of the breaker member, feeding means for gripping and pulling the backing strip along the bottom surface over the trailing edge and along the top surface of the breaker member for sharply bending the backing strip over the trailing edge thereof to break the labels from the backing strip with the their adhesive sides facing upwardly, a heater arranged within the breaker member for heating the backing strip and labels as they are pulled along the bottom surface of the breaker member to assist in breaking the labels from the backing strip, an endless belt conveyor adjacent to and extending from beneath the trailing edge of the breaker member for receiving and conveying away the labels dispensed from the backing strip with their adhesive sides up, and a roller adjacent the trailing edge of the breaker member and urged toward the conveyor for engaging the adhesive sides of the labels to assist in dispensing the same from the backing strip onto the conveyor.

16. In a machine for dispensing labels with their adhesive sides up from a rolled backing strip having the labels adhesively mounted thereon, a substantially horizontally arranged breaker member having a bottom surface and a top surface terminating in a relatively sharp trailing edge, supporting means including tension means arranged below the breaker member for supporting a roll of said backed labels, guide means for guiding the backing strip from the supporting means along the bottom surface of the breaker member with the labels facing downwardly, said backing strip extending therebeyond over the trailing edge and the top surface of the breaker member, feeding means for gripping and pulling the backing strip along the bottom surface over the trailing edge and along the top surface of the breaker member for sharply bending the backing strip over the trailing edge thereof to break the labels from the backing strip with their adhesive sides facing upwardly, a heater arranged within the breaker member for heating the backing strip and labels as they are pulled along the bottom surface

of the breaker member to assist in breaking the labels from the backing strip, a perforate endless belt conveyor adjacent to and extending from beneath the trailing edge of the breaker member for receiving and conveying away the labels dispensed from the backing strip with their adhesive sides up, a roller adjacent the trailing edge of the breaker member and urged toward the conveyor for engaging the adhesive sides of the labels to assist in dispensing the same from the backing strip onto the conveyor, and a vacuum box in communication with the perforate endless belt conveyor for maintaining the dispensed labels in position upon the conveyor.

17. In a machine for dispensing labels with their adhesive sides up from a rolled backing strip having the labels adhesively mounted thereon, a substantially horizontally arranged breaker member having a bottom surface and a top surface terminating in a relatively sharp trailing edge, supporting means including tension means arranged below the breaker member for supporting a roll of said backed labels, guide means for guiding the backing strip from the supporting means along the bottom surface of the breaker member with the labels facing downwardly, said backing strip extending therebeyond over the trailing edge and the top surface of the breaker member, feeding means for gripping and pulling the backing strip along the bottom surface over the trailing edge and along the top surface of the breaker member for sharply bending the backing strip over the trailing edge thereof to break the labels from the backing strip with their adhesive sides facing upwardly, a heater arranged within the breaker member for heating the backing strip and labels as they are pulled along the bottom surface of the breaker member to assist in breaking the labels from the backing strip, an endless belt conveyor adjacent to and extending from beneath the trailing edge of the breaker member for receiving and conveying away the labels dispensed from the backing strip with their adhesive sides up, a roller adjacent the trailing edge of the breaker member and urged toward the conveyor for engaging the adhesive sides of the labels to assist in dispensing the same from the backing strip onto the conveyor, means including adjusting means for operating the feeding means at a desired speed for dispensing labels from the backing strip at a desired rate, and means including adjusting means for operating the conveyor at a desired speed for regulating the spacing of the dispensed labels along the conveyor.

18. In a machine for dispensing labels with their adhesive sides up from a rolled backing strip having the labels adhesively mounted thereon, a substantially horizontally arranged breaker member having a bottom surface and a top surface terminating in a relatively sharp trailing edge, supporting means including tension means arranged below the breaker member for supporting a roll of said backed labels, guide means for guiding the backing strip from the supporting means along the bottom surface of the breaker member with the labels facing downwardly, said backing strip extending therebeyond over the trailing edge and the top surface of the breaker member, feeding means for gripping and pulling the backing strip along the bottom surface over the trailing edge and along the top surface of the breaker member for sharply bending the backing strip over the trailing edge thereof to break the labels from the backing strip with their adhesive sides facing upwardly, a heater arranged within the breaker member for heating the backing strip and labels as they are pulled along the bottom surface of the breaker member to assist in breaking the labels from the backing strip, a perforate endless belt conveyor adjacent to and extending from beneath the trailing edge of the breaker member for receiving and conveying away the labels dispensed from the backing strip with their adhesive sides up, a roller adjacent the trailing edge of the breaker member and urged toward the conveyor for engaging the adhesive sides of the labels to assist in dispensing the same from the backing strip onto the conveyor, and a vacuum box in communication with the perforate endless belt conveyor for maintaining the dispensed labels in position upon the conveyor, means including adjusting means for operating the feeding means at a desired speed for dispensing labels from the backing strip at a desired rate, and means including adjusting means for operating the conveyor at a desired speed for regulating the spacing of the dispensed labels along the conveyor.

19. In a machine for dispensing labels from a rolled backing strip having the labels adhesively mounted thereon and facing downwardly from the bottom face thereof as the backing strip is advanced, means including guide means, a breaker member and feeding means for pulling and advancing the backing strip with the labels facing downwardly from the bottom face of the backing strip from underneath, around and over the breaker member for dispensing labels at the breaker member from the bottom face of the advancing backing strip with their adhesive sides facing upwardly, and an endless belt conveyor extending from beneath the breaker member for receiving and conveying away the labels dispensed with their adhesive sides up.

20. In a machine for dispensing labels from a rolled backing strip having the labels adhesively mounted thereon and facing downwardly from the bottom face thereof as the backing strip is advanced, means including guide means, a breaker member and feeding means for pulling and advancing the backing strip with the labels facing downwardly from the bottom face of the backing strip from underneath, around and over the breaker member for dispensing labels at the breaker member from the bottom face of the advancing backing strip with their adhesive sides up facing upwardly, an endless belt conveyor extending from beneath the breaker member for receiving and conveying away the labels dispensed with their adhesive sides up, means including adjusting means for operating the feeding means at a desired speed for dispensing labels from the backing strip at a desired rate, and means including adjusting means for operating the conveyor at a desired speed for regulating the spacing of the dispensed labels along the conveyor.

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