Feb. 14, 1939. L. MANDEL 2,147,262

BOTTLE LABELING APPARATUS

Filed Oct. 14, 1937 2 Sheets-Sheet 1

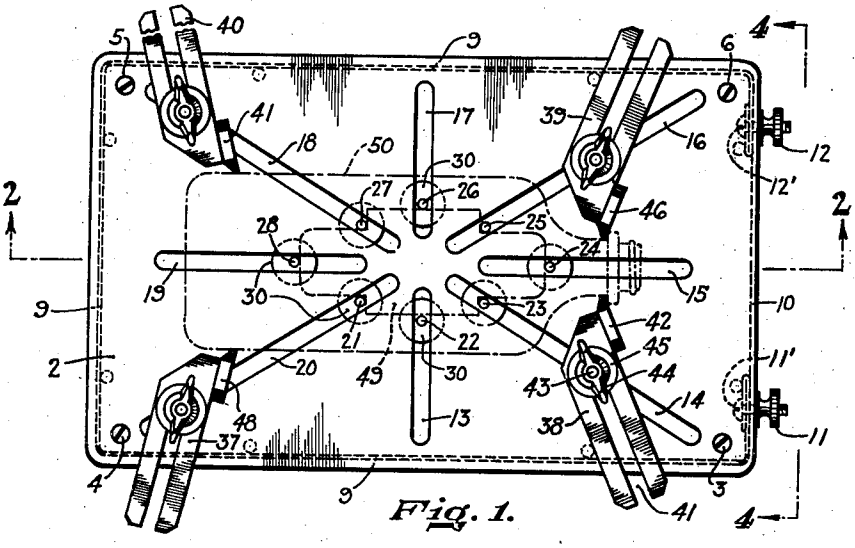

Fig. 1.

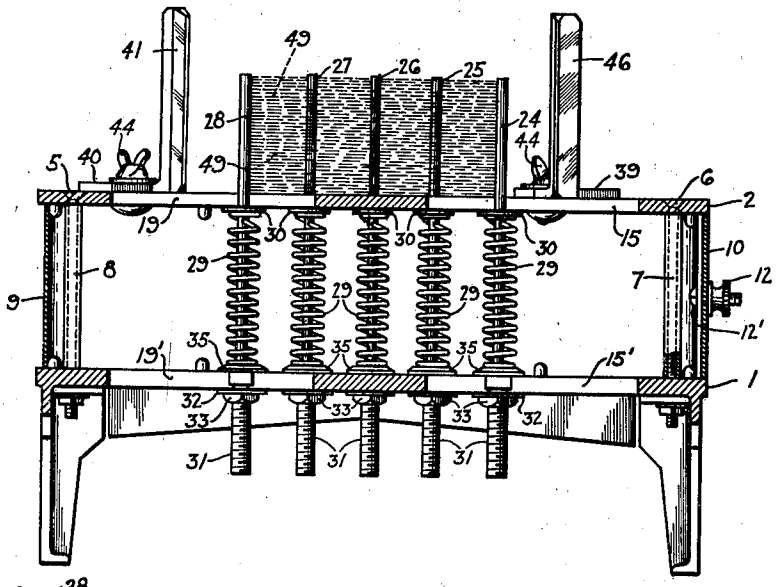

Fig. 2.

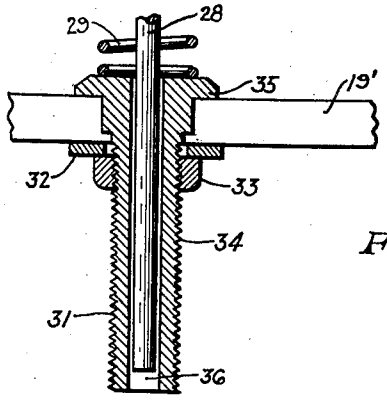

Fig. 3.

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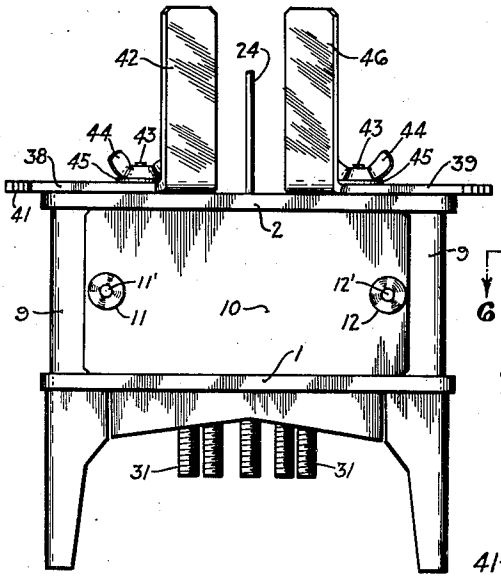


Fig. 4.

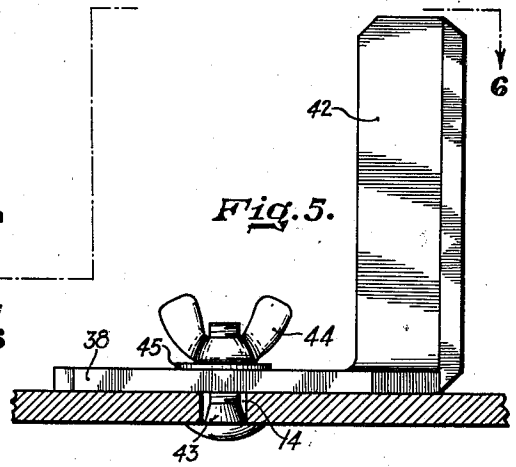


Fig. 5.

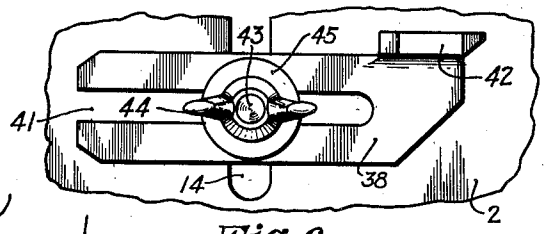
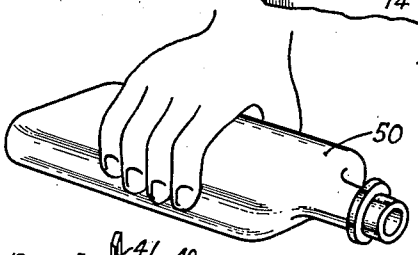


Fig. 6.



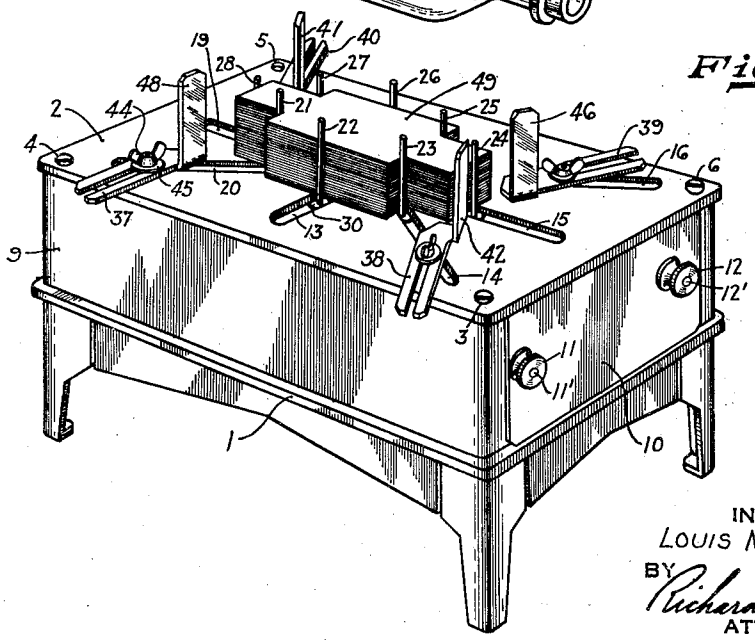


Fig. 7.

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BOTTLE LABELING APPARATUS

Louis Mandel, Newark, N. J.

Application October 14, 1937, Serial No. 168,880

6 Claims. (Cl. 216—42)

It is an object of my invention to construct a bottle labeling apparatus for use in the manual application of gummed or ungummed labels to the outer surface of bottles. In applying labels to bottles, it is desirable to locate the label in a definite predetermined position on the surface of the bottle. By the use of my apparatus it is possible to always locate the label at the desired location on the bottle.

A further object of my invention is to provide mechanism whereby the particular location of the label on the bottle can be varied at the will of the operator.

A further object of my invention is the provision of a simply constructed and rugged bottle labeling apparatus with few parts, which are not likely to get out of order.

A further object of my invention is to provide a bottle labeling apparatus which can be used with bottles of various shapes and also with labels of various designs and shapes.

These and other objects which will become apparent as the description proceeds, are obtained by the construction illustrated in the attached drawings, said construction representing a preferred embodiment of my invention, in which:

Fig. 1 is a top plan view of my apparatus.

Fig. 2 is a sectional elevation view taken through the plane 2—2 of Fig. 1.

Fig. 3 is a sectional view of a detail of my invention.

Fig. 4 is an end elevational view taken in the direction of arrows 4—4 in Fig. 1.

Fig. 5 is an elevational view illustrating the construction of one of my bottle guide members.

Fig. 6 is a top plan view of Fig. 5, taken in the direction of arrows 6—6 in Fig. 5.

Fig. 7 is a perspective view of my bottle labeling apparatus showing it in actual use, with labels and a bottle to receive a label.

In Figs. 1 and 2 it will be seen that my bottle labeling apparatus comprises a leg supported base 1. Mounted above the base 1 is a table top 2. The table top 2 is attached to the base 1 by means of corner bolts 3, 4, 5 and 6, and spacing sleeves surrounding said bolts; such sleeves being represented by characters 7 and 8 in Fig. 2.

The table top 2 has a series of grooves, designated by numerals 13 to 20 inclusive. The base 1 has corresponding grooves positioned directly below the table grooves 13 to 20 inclusive. Corresponding grooves in table 1, bear the same numerals as their grooves in table 2, except that a prime is attached to the grooves of base 1 to designate them from the upper grooves of table 2. Thus will be seen in Fig. 2 the upper grooves 15 and 19 in table 2, and located directly beneath them in base 1 are the grooves 15' and 19'.

Provision is made on the table 2 to receive a pack of labels designated by the character 49, in Figs. 2 and 7. The position of the labels on the table 2 is determined by label guide pins 21 to 28 inclusive. For the purpose of description, the particular structure associated with the guide pin 28 will be specifically defined. It should be understood that the structure associated with the remaining guide pins 21 to 27 inclusive is analogous to the structure herewith defined for label guide pin 28.

As shown in Figs. 2 and 3, the slot 19' receives an extended bolt member 31. This bolt member 31 is of special design, insofar as it has a hollow through passage 36 to receive the lower portion of the guide pin 28. The exterior of the bolt 31 is screw threaded at 34 to receive the hex nut 33. The top of the bolt 31 has a head 35 which spans the slot 19'. As is evident from Fig. 3, the bolt member 31 is fixed in its determined position in the slot 19' by means of the washer 32 and the hex nut 33.

In the space between the base 1 and the table top 2 and surrounding the pin 28, is a coil spring 29. The lower end of this coil spring bears upon the head 35 of the threaded bolt 31. The upper portion of the coil spring is fixedly attached to the guide pin 28. In normal position, a loose washer 30 is mounted over the guide pin 28 and the top of the coil spring 29 bears against the bottom of the loose washer 30. It will be seen from Figs. 2 and 3, that the guide pin 28 can be depressed against the tension of the coil spring 29. The lower portion of the guide pin 28 will pass through the hollow passage 36 of the bolt member 31. All of the guide pins 21 to 27 inclusive, operate in a similar manner as the guide pin 28.

Also supported upon the table top 2 is a series of bottle guide members designated by the numerals 37, 38, 39 and 40. All of these bottle guide members are of similar construction, and for the purpose of description, a detailed definition of the bottle guide member 38 will be made only. Thus from Figs. 1, 4, 5 and 6, it will be seen that the guide member 38 comprises a horizontal base portion having a slot 41. This slot 41 is open at one end to receive a bolt 43. By means of the bolt 43, nut 44, and washer 45, the bottle guide member 38 is fixedly attached within the slot 14 to the table top 2. The particular position and location of the guide member 38 on the table top

2 can also be varied by adjustment within the slot 41. It should also be apparent that the bottle guide member 38 can be adjusted in its axial position about the bolt 43. The guide member 38 also has a vertical portion 42, which portion of the guide member comes in direct contact with the contour of the bottle which is to receive the label. I have shown in my Fig. 1, bottle guide members arranged to guide the bottle 50 in positional relationship with respect to the stack of labels 49. It will be noted that the two foremost guides 38 and 39 have their vertical portions 42 and 46 engaging the contour of the bottle directly beneath a lip on the neck of the bottle. The two rear bottle guide members 37 and 40 are so positioned that the vertical portions 48 and 47 are directed against the sides of the bottle, as more clearly illustrated in Fig. 1. In this manner a bottle of the contour shown by dotted lines in Fig. 1, will always assume a definite predetermined position on the table top 2. Assuming that the stack of labels 49 has been properly located by means of the label guide pins 21 to 26 inclusive, a positional relationship will then exist between the labels 49 and the bottle 50, as shown in Fig. 1.

It is apparent that different shaped labels might be used, in which instance the label guide pins 21 to 28 will be adjusted to fit the contour of the particular label. Also a different shaped bottle might be used, in which instance the bottle guide members 37 to 40 inclusive will be adjusted, so as to fit the outer contour of the particular bottle and so as to secure a definite positional relationship between the bottle and the labels.

A metal casing 9 is interposed between the base 1 and the table top 2 and houses the structure therebetween. This casing is removably attached by a plate 10. The bolts 11', 12' and cooperating nuts 11, 12 secure such attachment.

In actual use if a stick of gummed labels 49 is used, the outer surface of the bottle 50 which is to receive the label has been previously moistened or dampened upon a pad. The bottle is then located upon the table top 2 by means of the vertical portions 42, 46, 47 and 48 of the bottle guide members. With the bottle thus properly positioned, it is moved downwardly on top of the table guide pins 21 to 28 inclusive. On further depressing the bottle 50, the guide pins 21 to 28 inclusive will be lowered against the tension of their respective coil springs. In this manner the upper gummed label on the stack 49 will come in contact with the moistened portion of the bottle 50. As the bottle 50 is then removed or lifted vertically from the labeling apparatus, the top label of the stack 49 will have become attached to the bottle 50. It is also apparent that ungummed labels might be used in the stack 49. In such a case, the surface of the bottle 50 will have been provided with a paste or adhesive, so that when said surface comes in contact with the top ungummed label of the stack 49, said label will attach itself to the surface of the bottle.

It is apparent that various modifications can be made by one skilled in the art, without materially deviating from the spirit of my invention as disclosed. What I claim as new and desire to cover by Letters Patent is as follows:

1. A bottle labeling apparatus comprising a support, means for definitely locating a stack of labels on said support, said means being adjustable in the plane of the table to define the outlines of various shapes of labels, bottle guide members for engagement with the contour of a bottle so as to always locate the labels for attachment at a definite predetermined position on the bottle surface and means for adjusting said guide members so as to fit the same to the contour of the particular bottle.

2. A bottle labeling apparatus comprising a support, a series of resiliently mounted pins for definitely locating a stack of labels on said support, said pins being depressible by contact with a bottle surface moved into position over the stack of labels so as to engage the uppermost label of said stack, bottle guide members for engagement with the contour of said bottle so as to always locate the labels for attachment at a definite predetermined position on the bottle surface and means for adjusting said guide members so as to fit the same to the contour of the particular bottle.

3. A bottle labeling apparatus comprising a support, a series of resiliently mounted pins for definitely locating a stack of labels on said support, said pins being depressible by contact with a bottle surface moved into position over the stack of labels so as to engage the uppermost label of said stack, means for adjusting said pins in the plane of the support so as to fit the contour of any selected label, bottle guide members for engagement with the contour of said bottle so as to always locate the labels for attachment at a definite predetermined position on the bottle surface and means for adjusting said guide members so as to fit the same to the contour of the particular bottle.

4. A bottle labeling apparatus comprising a support, means for definitely locating a stack of labels on said support, a plurality of guide members for engagement with the contour of a bottle so as to always locate the labels for attachment at a definite predetermined position on the bottle surface, and means for adjusting said guide members so as to fit the same to the contour of the particular bottle.

5. A bottle labeling apparatus comprising a support, means for definitely locating a stack of labels on said support, a plurality of vertical guide members for engagement with the contour surface of a bottle so as to always locate the labels for attachment at a definite predetermined position on the bottle, said support and said guide members being slotted, and locking bolts extended through said slots to adjustably fit the guide members to the contour of the particular bottle.

6. A bottle labeling apparatus comprising a support, spring mounted pins on said support for definitely locating a stack of labels, said pins normally projecting above the stack of labels and being depressible by contact with the bottle surface moved into position over the stack of labels so as to engage the upper-most label in said stack, said support having a plurality of slots to receive said pins, locking means for adjustably locating the pins in their respective slots so as to fit the contour of the particular label, guide members for engagement with the contour of the bottle so as to always locate the labels for attachment at a definite predetermined position on the bottle surface, and means for adjusting said guide members so as to fit the same to the contour of the particular bottle.

LOUIS MANDEL.