

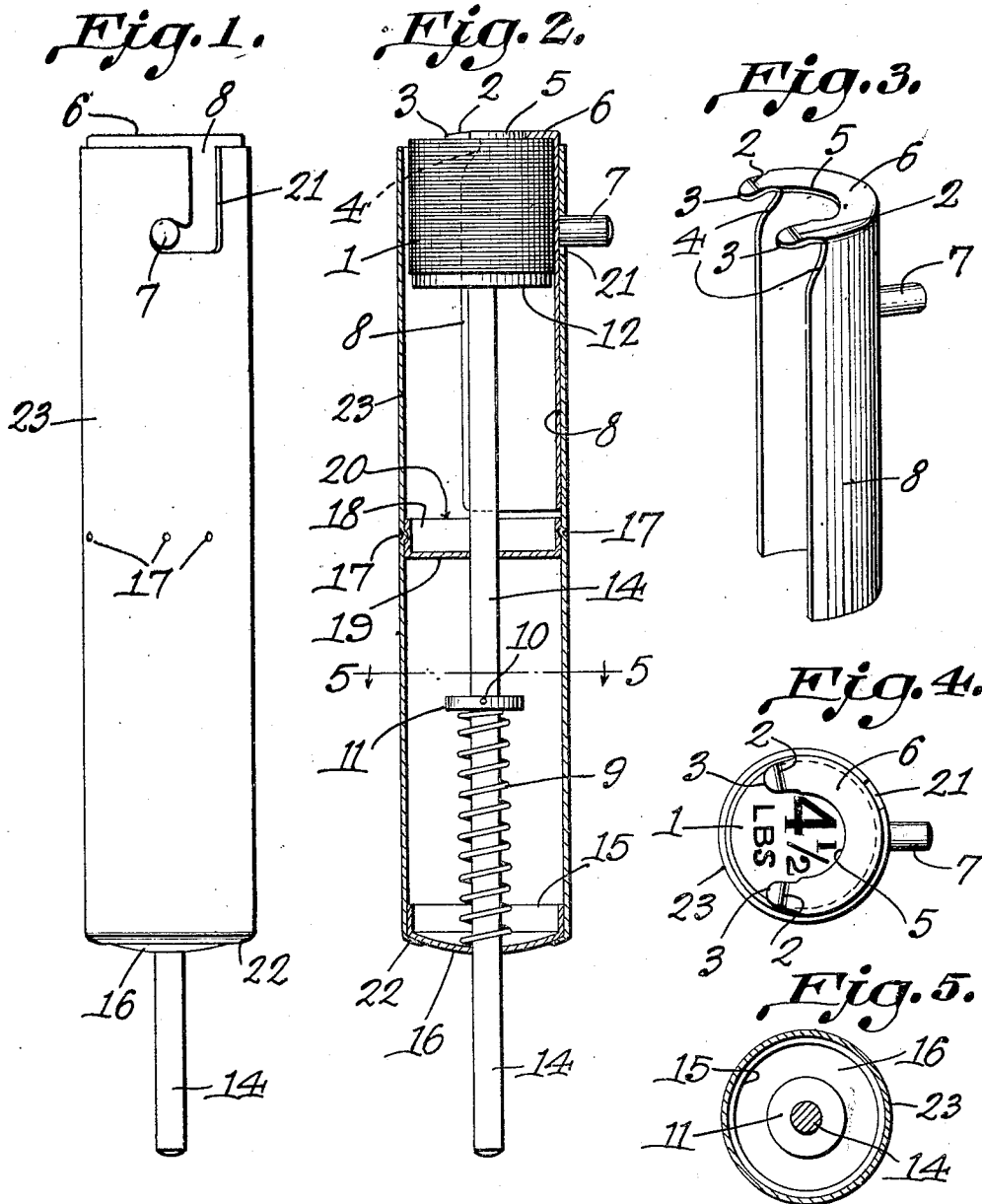
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WEIGHT STICKER TUBE

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UNITED STATES PATENT OFFICE

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WEIGHT STICKER TUBE

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The device forming the subject matter of this application is adapted to be employed for holding labels of any kind, for instance, labels indicating the weight of an article, in such a way that they may be removed readily, moistened, and be applied to the article. The invention aims to provide novel means for holding the labels, to provide novel means for feeding the labels, as one after another of them is removed, and to supply novel means whereby the labels may be introduced into the container, in which they are carried.

It is within the province of the disclosure to improve generally and to enhance the utility of devices of that type to which the present invention appertains.

With the above and other objects in view, which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes may be made in the precise embodiment of the invention herein disclosed, within the scope of what is claimed, without departing from the spirit of the invention.

In the accompanying drawings:

Figure 1 shows in side elevation, a device constructed in accordance with the invention;

Figure 2 is a longitudinal section;

Figure 3 is a perspective view of the receptacle which carries the labels;

Figure 4 is an end elevation;

Figure 5 is a cross section on the line 5—5 of Figure 2.

The device forming the subject matter of this application preferably is made of metal throughout. It includes an elongated cylindrical casing 23 provided at one end with a stop flange 22 of annular form. In the opposite end of the casing 23 there is a bayonet slot 21.

A transverse guide is located in the cylindrical casing 23 and is denoted as a whole by the numeral 20, the guide 20 comprising a transverse body 19 having a circumferential outstanding rim 18 fitting closely within the casing 23. Any suitable means may be provided for holding the guide 20 in the casing 23. A convenient way is to form indentations

17 in the casing 23 and in the rim 18 of the guide 20, by means of a punch or other tool, the indentations constituting interengaging elements on the casing and on the guide, for holding the guide rigidly in place in the casing.

The numeral 16 marks a foot which is bulged outwardly, to a slight extent, the foot resting against the stop flange 22. The foot 16 is provided with a peripheral rim 15 fitting within the casing 23. The foot 16 is not held in place, otherwise than by contact with the stop flange 22, and no tools are required for inserting it.

The machine embodies a feeder for the labels which are to be applied, the feeder comprising a plunger 14 and a head 12 on the inner end of the plunger. The plunger 14 is mounted for reciprocation in the foot 16 and in the guide 19.

The plunger 14 of the feeder is supplied intermediate its ends with a shoulder 11, which may be a ring, secured on the plunger 14 in any suitable way, as indicated at 10. A compression spring 9 surrounds a portion of the plunger 14, one end of the spring abutting against the shoulder 11 on the plunger, and the opposite end of the spring abutting against the foot 16. The spring 9, in addition to serving as a means for advancing the feeder 14—12, serves, also, to hold the foot 16 in place against the stop flange 22.

Figures 2 and 3 show that the device comprises a trough-shaped receptacle 8 for the labels which are to be dispensed. The receptacle 8, as to cross section, fits closely but removably in the casing 23, the head 12 of the feeder being small enough in diameter so that it can slide longitudinally of the receptacle 8, when the receptacle is in place, as shown in Figure 2. The means for holding the receptacle 8 in place may be of any desired sort.

In the present embodiment of the invention, the receptacle 8 has a laterally projecting pin 7 adapted to be engaged in the bayonet slot 21 of the casing 23, as described in Figure 1.

On the outer end of the receptacle 8 there is a rigid U-shaped abutment 6 having an

opening 5. Near to the abutment 6, the receptacle 8 is cut away at its edges as shown at 4 to form fingers 3 at the ends of the U-shaped abutment 6. The fingers 3 are slightly inclined inwardly, that is longitudinally the axis of the casing 23, as shown at 2.

In practical operation, assuming that the receptacle is out of the casing 23, as shown in Figure 3, any desired number of labels 1 are placed in the receptacle 8, in engagement with the abutment 6, and then the receptacle is slipped into one end of the casing 23, the receptacle 8 receiving the head 12 of the plunger 14. Then the projection 7 on the receptacle 8 is received in the bayonet slot 21 of the casing 23, to hold the receptacle 8 in place, removably, and the spring 9 is compressed, because the plunger 14 is forced backwardly by the stack of labels, as shown in Figure 2, the feeder 14—12 serving to press the stack of labels 1 forwardly, and to keep a label always in place at the opening 5 of the abutment 6. The operator holds the machine in one side, and with his finger draws out the outermost label at the opening 5, across the ends of the casing 23, in a way which will be understood readily when Figure 2 of the drawings is noted. Because the fingers 3 are inwardly inclined, as shown at 1, the labels are not scraped by a surface representing the entire area of the abutment 6, as the labels are removed. This prevents injury or soiling of the labels, and also renders the labels easy of removal.

Although the machine is shown as used for handling labels on which weight is inscribed, as shown in Figure 4, it can, of course, be used in connection with any sort of a label. The machine may be assembled with a minimum amount of tool work, since the foot 16 is held in place only by the spring 9 and since the receptacle 8 is held in place by the simple pin and bayonet slot construction shown at 7—21, it being necessary, merely, to fasten the head 12 on the plunger 14 in some appropriate way, to fasten the shoulder 11 on the plunger 14, and to secure the guide 20 in place in an appropriate manner, for instance, through the instrumentality of the indentations 17.

It is to be observed, referring to Figures 1 and 2, that the plunger 14 is long enough so that it protrudes from one end of the casing 23. The operator, therefore, can retract the feeder 14—12, either to loosen up the labels 1 whilst they are in a stack, in the machine, as shown in Figure 2, or to facilitate the introduction of the receptacle 8 into the casing 23, after the receptacle has been loaded with labels.

Having thus described the invention, what is claimed is:—

1. In a device of the class described, a casing provided with a stop, a foot resting re-

movably against the stop, a guide in the casing, a plunger slidable in the foot and in the guide, a shoulder on the plunger, a compression spring about the plunger and engaging the shoulder, the spring constituting means for advancing the plunger and for holding the foot against the stop, and means in the casing for holding labels in the path of the plunger.

2. In a device of the class described, a casing, a guide in the casing, the guide comprising a body and a marginal outstanding rim, the rim fitting within the casing, the rim and the casing having indentations which hold the guide in place, a plunger slidable in the guide, a trough-shaped receptacle in the casing, means for holding the receptacle removably in the casing, and a label abutment carried by the receptacle, the plunger constituting means for forcing labels against the abutment.

3. In a label holder, an elongated tubular casing, a trough-shaped label receptacle insertible into one end of the casing, the inner end of the receptacle being open, and the outer end of the receptacle being provided with a transverse abutment forming a label stop which is located outwardly of said end of the casing, whereby a label may be slid out from beneath the abutment, across said end of the casing, means for holding the receptacle detachably in the casing, and a feeder operating through the open inner end of the receptacle, the feeder being disposed within the casing and cooperating with the abutment to retain a stack of labels in the receptacle.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature.

THOMAS E. JOHNSON.