

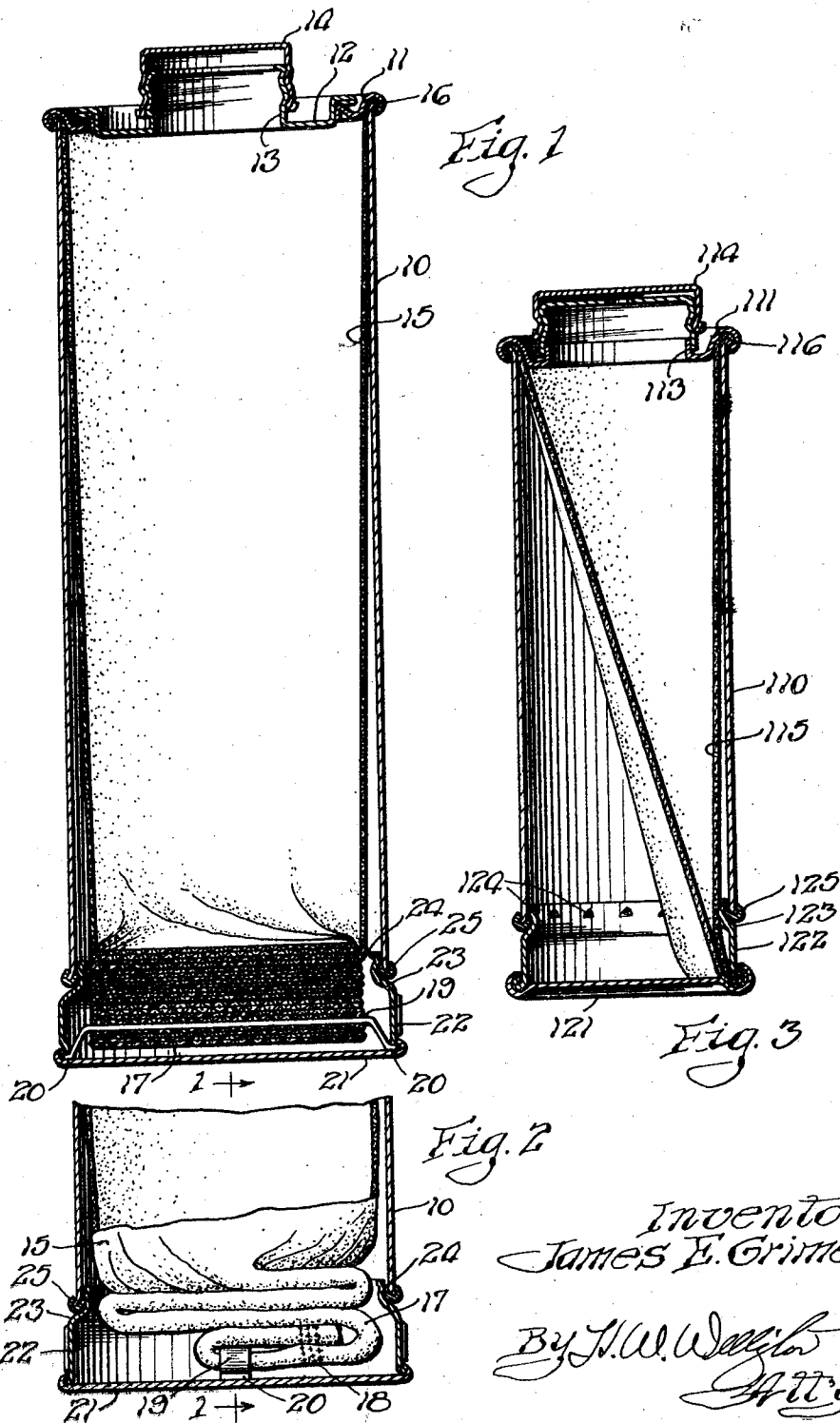
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CONTAINER

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UNITED STATES PATENT OFFICE

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CONTAINER

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The present invention relates to a container in which a pliable or flexible envelope is secured within a casing and which casing is provided with means for facilitating the discharge of the envelope.

An object of the present invention is to provide an improved container for plastic substances.

Another object of the invention is to provide a container in which a plastic substance may be retained and from which it may be expelled by improved discharge means.

Another object of the invention is to provide an improved means for discharging a flexible envelope contained in a protective or other casing.

These objects and such other object as may hereinafter appear are attained by means of the improved combination, the unique arrangement, and novel construction of the several elements illustrated in the accompanying sheet of drawings in which two forms of the present invention are disclosed and in which:

Figure 1 is a vertical section of one form of the improved container illustrating its general structure.

Figure 2 is a fragmentary section at right angles to Figure 1; and

Figure 3 is a vertical section of a second form of the invention.

Like reference characters are used to designate similar parts in the description and drawings.

Reference should be had first to Figures 1 and 2. A casing 10 of cylindrical form is provided with a flanged top 11 in which a slip cover 12 is disposed, said cover carrying a threaded neck 13 covered by a threaded cap 14.

An envelope 15 of pliable material, i. e., waterproofed cloth, is secured between the cylinder 10 and top 11, the crimping 16 providing a secure joinder or attachment therefor. Any suitable plastic substance may be inserted into the envelope 15 through neck 13 or better by removing cover 12.

The bottom 17 of envelope 15 is suitably closed. In the present instance said bottom is sewed at 18, the sewed portion providing a

loop through which a transverse key 19 is threaded. Said key 19 extends diametrically across the bottom of the device in an elevated plane, the ends 20 being downwardly bent to be seated in and secured to a bottom plate 21.

Bottom plate 21 closes an annular member 22 which has a constricted top section 23, the upper part of which is shouldered or beaded at 24 to be seated in and held within the bottom of cylinder 10 by a peripheral band 25 crimped upon and about the edge of cylinder 10 so that the inner edge of said band 25 engages the annular shoulder or beading 24, thereby holding member 22 partly within and freely rotatable upon cylinder 10.

As will be noted, the material of envelope 15 is quite full in body and lends itself readily to folding upon itself about and above key 19. This volume of material permits of the bag or envelope 15 being filled substantially to the capacity of cylinder 10, and facilitates complete discharge by rotating member 22 and its appendages relatively to cylinder 10, as is hereinafter pointed out.

By such rotation, the envelope 15 is twisted from its bottom upwardly, forcing the material confined therein, by constriction, toward and through neck 13.

As the twisting of envelope 15 continues, the material adjacent key 19 is first affected. Further twisting forces the bottom of the envelope to constrict, and eventually the material of the envelope 15 will become a stiff cone, continually decreasing in altitude as member 22 is additionally rotated. Eventually all, or nearly all, of the material is forced from the container.

By a reversed rotation, the pressure on the material being expelled is reduced so that a part thereof may be retracted when excessive discharging rotation has been initially had.

The twisting of the envelope 15 in a manner mentioned normally shortens the envelope. Additional length of the envelope to compensate for the shortening of the envelope by twisting is secured by the excess material at the bottom 17 of the envelope,

heretofore referred to. This excess material compensates for the amount of material taken up by the discharging twist.

In Figure 3, there is illustrated an envelope 115 of rubber or other highly flexible material. This is disposed in a casing 110, having any suitable spout or neck 113 imposed upon a top plate 111. Cover 114 closes neck 113. Bag 115 is secured about the top of cylinder 110 by crimping 116. The bottom of the device comprises the plate 121 and an annular member 122. These are crimped one to another to provide a beaded bottom peripheral edge.

The bottom of bag 115 may be closed but if not, it is sealed and secured to bottom plate 121 and member 122 by the crimping of the bag 115 therebetween, so that the bag 115 will be twisted when bottom members 122 and 121 are rotated relatively to cylinder 110.

The structure of annular member 122 is substantially the same as that of part 22 except that buttons or detents 124 are substituted upon constricted section 123 for the continuous shoulder 24 of Figures 1 and 2. A band 125 secures the cylinder 110 and the annular member 122 in connected rotation admitting of relative rotary movement therebetween. With the relative rotation of said parts, bag 115 is twisted and its contents removed, the elasticity of the rubber of said bag 115 compensating for the shortening of the material incidental to such twisting.

Having thus described the invention, what is claimed as new is:

1. A container for plastic material consisting of a rigid casing, a flexible envelope therein housed being rigidly attached to the upper end of the casing and having a plurality of folds of material wherewith it is attached to the lower end of the casing, said lower end of the casing being freely rotatable.

2. A container for plastic material consisting of a rigid casing, a flexible envelope therein housed being rigidly attached to the upper end of said casing and having a plurality of folds terminating in a loop, a freely rotatable bottom on said casing, and means for securing said loop to said bottom.

3. A container for plastic material consisting of a rigid casing, a flexible envelope therein housed being rigidly attached to the upper end of the casing, said envelope being considerably longer than the said casing and being provided with a plurality of folds at the end opposite to that attached to the top of the casing, said folds terminating in a loop, a freely rotatable bottom on said casing, and means for securing said loop to said bottom.

4. A package for dispensing plastic material comprising a substantially rigid casing, a flexible bag therein attached to the inner periphery of the dispensing end of said cas-

ing, said bag being substantially longer than said casing and folded back upon itself at its free end forming a number of empty convolutions terminating in a loop, a freely rotatable bottom affixed to said casing, and means connecting said loop with said bottom whereby on rotation of the latter the bag will be subjected to torsion whereby its cubic capacity will be diminished.

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