Nov. 6, 1928. 1,690,850

M. B. BEHRMAN

PACKAGE CLOSURE

Filed Dec. 1, 1924 2 Sheets-Sheet 1

Fig. 1.

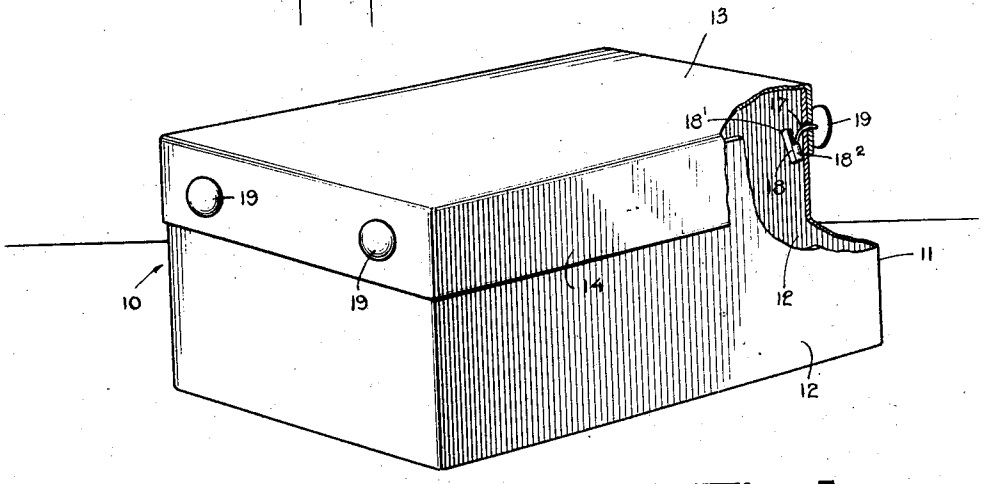


Fig. 2.

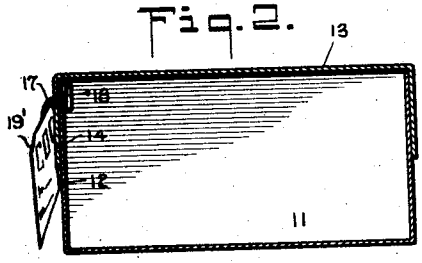


Fig. 3.

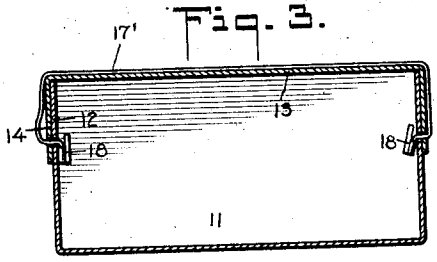


Fig. 4.

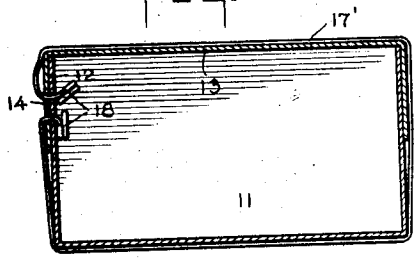
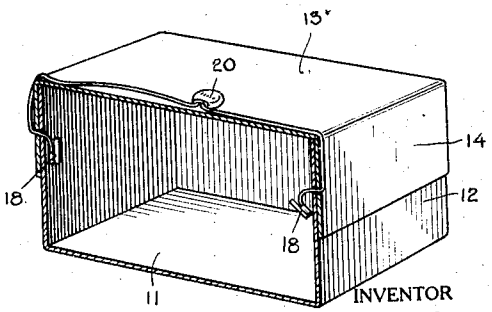


Fig. 5.



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Fig. 6.

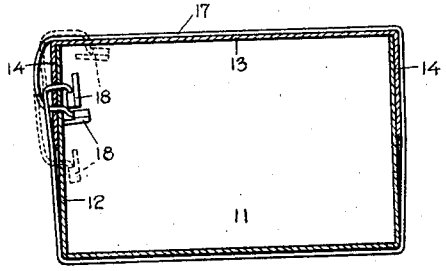


Fig. 7.

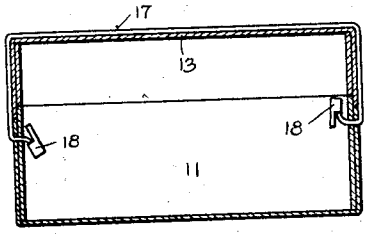


Fig. 8.

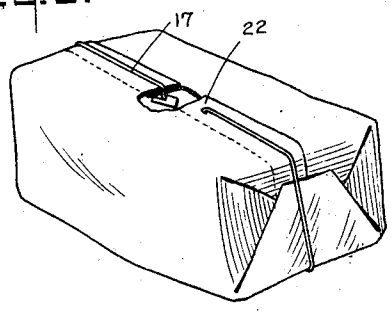
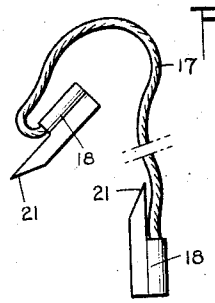


Fig. 9.



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UNITED STATES PATENT OFFICE.

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PACKAGE CLOSURE.

Application filed December 1, 1924. Serial No 753,358.

My present invention relates generally to improvements in packaging and involves the methods and means for securing the package in closed condition and coordinately involves the method and means for securing coacting sections of a package closure against separation.

Merchants who do a credit or exchange business find that it is a common practice for a prospective customer to order up merchandise and after making use of the contents to then return the merchandise for credit or exchange, and my invention has particular utility to prevent such practice occurring without detection. Its utility, however, extends generally to the field of maintaining package closures in predetermined position, and certain phases of my invention may serve even a broader field of utility.

The more important objects of my invention are: the provision of a simple, inexpensive and readily operable means for fastening receptacles and more particularly for fastening receptacles in sealed condition and of a receptacle so fastened and sealed; and the provision of a package, receptacle or container and the fastening means therefor of such a character that the receptacle or package cannot be opened or undone for the removal of the contents thereof without rupturing the package, receptacle or container or the fastening means therefor.

A still further object of my invention is the provision of a simple and inexpensive means which on the one hand permits of rapidly fastening receptacles, containers or the like and on the other hand insures against opening of the receptacle or tampering with the contents thereof and which therefor provides a means for detecting the breach of a specific provision against such acts imposed by the merchant upon the prospective customer and which where agreed upon permits the mutilation of either the receptacle or the fastening means being construed as an act of purchase by the one against whom such act can be charged.

The term receptacle or package, unless otherwise specifically described, is to be construed in its most generic sense as referring to any type of enclosure for merchandise, whether preformed as in a box or container, or whether formed about the merchandise as in a wrapper.

For the attainment of these objects and such further objects as may hereinafter appear or be pointed out, I have illustrated embodiments of my invention in the accompanying drawings wherein—

Fig. 1 is a perspective view of one embodiment of my invention partly broken away to show one method of fastening a preformed container in accordance with my invention;

Fig. 2 is a longitudinal section through another embodiment;

Figs. 3 and 4 are views similar to that of Fig. 2 illustrating other embodiments;

Fig. 5 is a perspective view of a still further embodiment;

Figs. 6 and 7 illustrates in cross section, two other embodiments of my invention;

Fig. 8 illustrates method of securing a package which is formed or wrapped about merchandise; and

Fig. 9 illustrates an enlargement of a modified form of fastening element.

Referring particularly to the illustration, it will be observed that 10 is a package which by way of example may be a paper box in which 11 is the container portion having side walls 12 and a cover or closure element 13, illustrated as, but not necessarily, separate from the box and having a depending portion 14, arranged to be positioned adjacent to and overlap the side walls 12.

To fasten and seal the cover 13 upon the container 11 in the embodiment of Fig. 1, I provide a locking shackle or tie having at one end thereof an anchoring tip 18 and at the other end thereof an abutment member 19 connected in any preferred or desired manner, as by a short string 17. The anchoring tip 18 is formed so that the diameter or thickness thereof is disproportionately less than the length, the flexible tie or shackle 17 being attached to the tip so that the effective fastening point is intermediate the ends of the tip, one end 18′ of the tip being preferably formed so as to serve as a guiding or piercing portion, and the other end 18^2 forming a handle or manipulating portion.

To secure the cover 13 to the container 11 of the embodiment of Fig. 1, against accidental opening, I provide the tip 18 with the piercing end 21 against the side wall 14, and force said tip through the overlapping layers 12 and 14, to the inside of the container, upon which the tip 18 will automatically position itself parallel to said inside

wall and as shown in the broken away portion of said figure, thus preventing the withdrawal of said tip. The length of the connecting member 17 is preferably just sufficient to permit of this operation so as to bring the button 19 as close to the outside surface of the wall 14 of the cover 13 as possible. As many of such toggle fasteners can be employed as may be found necessary or advisable, two on each end being illustrated in Fig. 1. It will be understod of course that the container and cover may be provided in advance with registering preformed orifices through which the tip 18 may be passed, and such arrangement may be found preferable where the container is made of material difficult to pierce. Such apertures will preferably be of a size to admit the tip 18 only when lengthwise.

In the insertion of the tip 18 through the cover 13 and container 11, either by piercing or otherwise, the abutment member 19 may serve to apply the necesary pressure when it is found that due either to the size of the tip or to its dimensions, that pressure cannot conveniently be applied directly to the tip by the fingers.

Once in this position, the fastening element is irremovable without rupture of the package or the flexible tie or elements of the button.

It will be observed that from outer appearances in a device of this kind nothing but the button 19 will show and this device can be made in a manner pleasing to the eye, or supplied with printed or advertising matter as desired.

In Fig. 2 corresponding parts have been given corresponding numerals and serve the same function, but there has been substituted in the sealing element a part 19′ for the button 19, as illustrated in the modification previously described. This form of locking element may be in the nature of a tag upon which may appear any desired data.

In Fig. 3 I have illustrated a modification in which the flexible tie 17 is provided both of its ends with tips 18 and in this form the connecting element 17′ is made of a length sufficient to envelop a substantial part of the container and in this embodiment the length is such as to permit of the insertion of anchoring tips of the nature above described at points on opposite sides of the container. Preferably only enough slack is allowed to permit of the manipulation of the tips for insertion, the flexible portion 17′ otherwise lying taut to retain the cover or closure element in position. It will thus be observed that the cover 13 cannot be removed from the container without rupture of the container or the flexible tie. In addition, where desired the flexible tie 17 may serve to permit of carrying the container thereby.

In Fig. 4 I have illustrated a further modification in which the flexible tie is made to substantially completely envelop the package, or container, the free ends of such tie having anchoring tips as described in connection with the modifications above described. These tips are inserted either by piercing or inserted through pre-formed apertures at points in the box adjacent each other.

In Fig. 5 I have illustrated a modification somewhat similar to that illustrated in Fig. 3, but in which the sealing means comprises two toggles such as described in connection with the embodiment of Fig. 3, one tip of each toggle being received in a seal 20, against removal.

Though it may be desirable to form the lengths of my tie members of lengths to correspond to standard size of receptacles, I contemplate using my locking element in conjunction with packages in any suitable size and to illustrate this point, it will be observed that in Fig. 6 a flexible tie member may be enveloped around containers of different sizes, or toggles having different lengths may be employed with the same size receptacle.

In full lines in this figure I show the length of the shackle and the distance around the container to be such relatively that the shackle can be passed completely around the container with the ends passing each other and secured adjacent each other by passing both tips through both the cover and the box, and in dotted lines I show the relative dimensions as such as to permit these ends not only to pass each other, but to be secured at points removed from each other, one end being passed only through the body of the container and the other end only through the cover.

In Fig. 7 of the drawings, I show a still further embodiment in which the cover of the receptacle does not overlap the body of the container, and in which the tip member of the shackle is secured at one end through the container and below the cover and the connecting member is then passed over the cover, and the tip member at the other end then secured through the body of the container and also below the cover.

It will thus be observed that in each illustration or each modification, that I have provided an effective manner of fastening a package, container or receptacle, and at the same time provide a seal therefor, so that unfastening or removal of the contents of the package, container or receptacle cannot be made without rupturing the container or the fastening element.

In Fig. 9 I have illustrated a modified form of fastening element wherein 17 is the flexible tie preferably made of cord, thread or highly flexible wire, having fastened on

at least one of the free ends an anchoring element 18. In my preferred form, the anchoring element is sheet metal which may be crimped or otherwise fastened on to the flexible tie, cord, thread, wire, etc. This anchoring element is preferably formed with a piercing point 21 at one end thereof. This piercing point may be formed at either end or at both ends of the anchoring tip 18. The anchoring tip is connected in relation to the flexible cord, tie, wire, etc., by a connection intermediate the ends thereof so that tension on the cord member when the shackle or anchoring tip is introduced through any aperture will arrange the anchoring tip transversely to the cord and across the aperture to prevent its withdrawal through said aperture.

In this way I have provided a fastening means which is not only capable of use, as above described, in receptacles which have already formed therein apertures to receive the anchoring tip, but for packaging or fastening with paper receptacles the anchoring tip may be used for piercing the body of the receptacle, container or the like, to form a self-made aperture.

Having thus described my invention and illustrated its use, what I claim as new and desire to secure by Letters Patent is—

1. The combination with a closed container, of a fastening device for retaining it closed and unopenable except by mutilation of the container or the device, said device comprising a tie member encircling the container and unseverable except by mutilation thereof, the opposite ends of said member extending into the interior of the container and provided with enlarged locking elements permanently preventing withdrawal of said ends.

2. The combination with a closed container, of a fastening device for retaining it closed and unopenable except by mutilation of the container or the device, said device comprising a tie member encircling the container and unseverable except by mutilation thereof, the opposite ends of said member extending into the interior of the container and provided with enlarged locking elements permanently preventing withdrawal of said ends, at least one of said elements being adjustably carried and being so constructed and arranged as to be irremovably insertable, when adjusted, from the exterior to the interior of the container even after the latter is closed and encircled by said tie member.

3. The combination with a closed container, of a fastening device for retaining it closed and unopenable except by mutilation of the container or the device, said device comprising a tie member encircling the container and unseverable except by mutilation thereof, the opposite ends of said member extending into the interior of the container and provided with enlarged locking elements permanently preventing withdrawal of said ends, at least one of said elements being elongated and adjustably carried, and being so constructed and arranged as to be irremovably insertable, when adjusted into substantial alignment with the tie member end, from the exterior to the interior of the container even after the latter is closed and encircled by said tie member.

4. The combination with a closed container, of a fastening device for retaining it closed and unopenable except by mutilation of the container or the device, said device comprising a tie member encircling the container and unseverable except by mutilation thereof, the opposite ends of said member extending into the interior of the container and provided with enlarged locking elements permanently preventing withdrawal of said ends, at least one of said elements being elongated and normally transverse to said tie member end, and being momentarily adjustable with respect to said end, whereby said element and end are irremovably insertable, upon momentary adjustment thereof into mutual alignment, from the exterior to the interior of the closed and encircled container.

5. The combination with a closed container comprising telescoped portions and therefore including superposed layers whose sustained superposition retains the container closed, of a fastening device for retaining said container closed and unopenable except by mutilation of the container or device, said device comprising a tie member encircling the container and unseverable except by mutilation thereof, the opposite ends of said member extending into the interior of the container and provided with enlarged locking elements permanently preventing withdrawal of said ends, at least one of said ends extending through said superposed layers.

6. The combination with a closed container comprising telescoped portions and therefore including superposed layers whose sustained superposition retains the container closed, of a fastening device for retaining said container closed and unopenable except by mutilation of the container or device, said device comprising a tie member encircling the container and unseverable except by mutilation thereof, the opposite ends of said member extending through said superposed layers into the interior of the container and being provided with enlarged locking elements permanently preventing withdrawal of said ends.

7. The combination with a closed container, of a fastening device for retaining it closed and unopenable except by muti-

lation of the container or the device, said device comprising a tie member extending at least partially around the container and unseverable except by mutilation thereof, the opposite ends of said member extending into the interior of the container at spaced points on the container and provided with enlarged locking elements permanently preventing withdrawal of said ends.

In witness whereof, I have signed this specification, this 20th day of November 1924.

MARCUS B. BEHRMAN.