Sept. 24, 1935. L. S. HARRISON 2,015,625

CONTAINER CLOSURE

Original Filed Feb. 20, 1933

Fig. 1

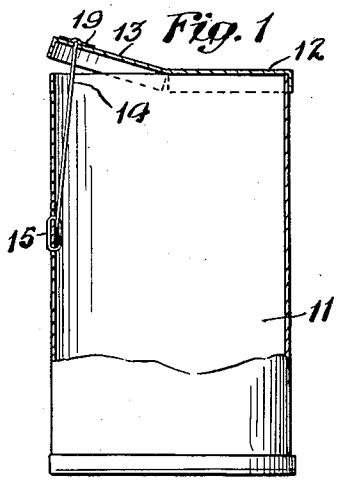


Fig. 2

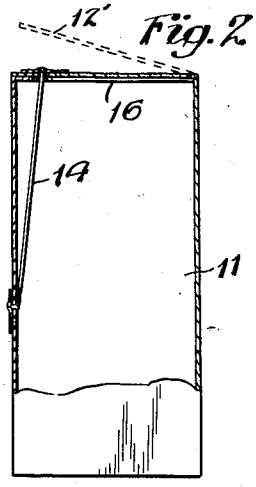


Fig. 3

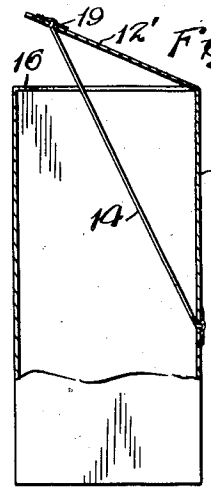


Fig. 6

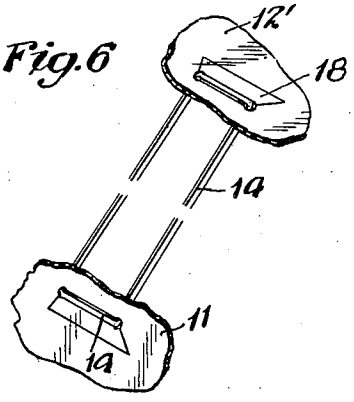


Fig. 4

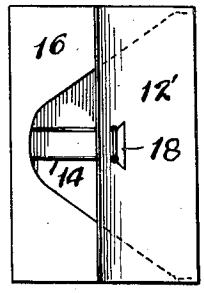


Fig. 5

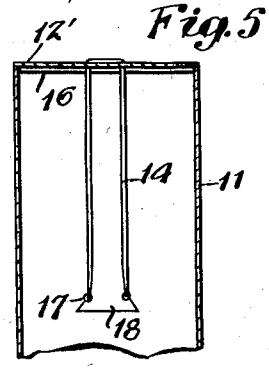
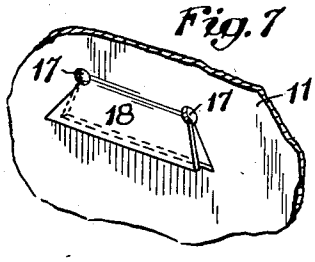


Fig. 7



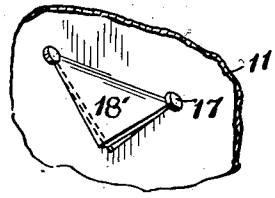


Fig. 10

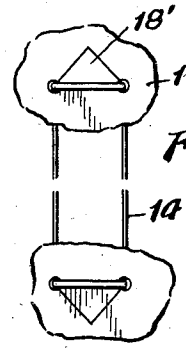


Fig. 9

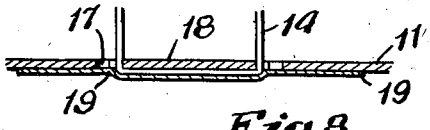


Fig. 8

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Patented Sept. 24, 1935 2,015,625

UNITED STATES PATENT OFFICE

2,015,625

CONTAINER CLOSURE

Lee S. Harrison, New Orleans, La.

Application February 20, 1933, Serial No. 657,696
Renewed April 8, 1935

6 Claims. (Cl. 229—44)

My invention relates to containers and more particularly to improvements in closures therefor.

It is customary to enclose various foods such as cereals and the like in paper cartons which are torn open by the consumer but which are still used as containers until their contents have been consumed. During the period between the opening of the cartons and the total consumption of their contents, the food is exposed to the ravages of insects and rodents which is highly undesirable.

An important object of my invention, therefore, is to provide a container which obviates these disadvantages.

A further object of my invention is the provision of a container having a closure which is automatic in operation except when manually held in open position.

Another object of my invention is to provide a device of this character which is simple in construction, inexpensive to manufacture and efficient in operation.

Other objects and advantages of my invention will be apparent during the course of the following description.

In the accompanying drawing which forms a part of this specification, and wherein like characters of reference denote like parts throughout the same,

Figure 1 is vertical sectional view through a carton embodying my invention,

Figure 2 is a similar view of a modified form of my invention,

Figure 3 is a similar view of a still further modification of my invention,

Figure 4 is a plan view of the container of Figure 2 showing the closure in its partially raised position,

Figure 5 is a fragmentary vertical sectional view thereof taken at a right angle to Figure 2,

Figure 6 is a detail perspective view of the closure operating means,

Figure 7 is an enlarged detail perspective view of one of the flaps for engaging the resilient operating member,

Figure 8 is a sectional view through the flap and showing the resilient member in position with a protecting covering thereover,

Figure 9 is a detail view showing the use of a modified form of flap, and,

Figure 10 is an enlarged perspective view of said modified form of flap.

In the drawing wherein for the purpose of illustration is shown a preferred embodiment of my invention, the numeral 11 designates a cylindrical carton or container of paper, cardboard or other suitable material. The cover 12 is secured in place thereon by glue or other suitable means and is provided with a hinged portion 13 which is capable of being raised and lowered to uncover and cover a large portion of the top of the carton, as seen in Figure 1.

In order to normally maintain the hinged portion of the cover in its closed position I provide a resilient member 14 which connects the hinged cover with the side walls of the carton interiorly of the carton. The resilient member may be of any suitable character, such as a spring, but I prefer to use a loop or band of rubber as shown in the drawing. The band 14 may be secured to the carton and cover in any suitable manner, as for example by means of a wire clip 15 such as shown in Figure 1. It is preferred however to pass the band through spaced openings in the walls of the carton and cover.

In the modification illustrated in Figure 2 my invention is applied to a generally rectangular carton. The cover 12' is hinged at the rear edge of the carton and the entire cover pivots as a whole about this hinge. The resilient band 14 is secured adjacent the front of the cover and to the front wall of the carton intermediate the top and bottom thereof.

In the form of my invention shown in Figure 3 the parts are the same as in Figure 2 except that the lower end of the band 14 is secured to the rear wall of the carton instead of to the front wall thereof. The top of the carton is preferably provided with a generally U-shaped shelf 16, the open end of the U facing the rear wall of the carton. The shelf 16 provides a surface on which the cover 12' may rest under the pressure of the resilient member 14, and the shape of the shelf provides a trough-like outlet for discharging the contents of the carton while permitting free movement of the resilient member. The shelf 16 is best seen in Figure 4, in which the cover 12' is shown partially raised to expose the shelf and interior of the carton.

In order to accommodate the resilient member 14 the walls of the cartons and the covers thereof are preferably provided with spaced openings 17 connected by cut-out flaps 18. The flaps 18 have a quadrilateral shape, the side spaced from the openings 17 being the largest side and the short sides consequently converging towards openings 17. The portion of the carton or cover connecting openings 17 serves as a hinge about which the flap 18 may be pivoted as seen in Fig-

ure 7. When the flap has been moved to the position seen in Figure 7, the looped end of the band 14 may be passed through the space formed by the flap, thence around the flap and into openings 17. Flap 18 may then be moved back into place and a protecting strip 19 of suitable material such as gummed paper secured over the flap and band and adjacent portions of the carton walls to seal the openings, as seen in Figure 8.

In place of the flap shown in Figures 4, 5, 6 and 7 a generally triangular flap such as seen at 18' in Figures 9 and 10 may be used in the same manner.

When the flaps have been covered by protecting strip 19 the carton will be sealed at these points, and may be covered with waxed paper or the like in the usual manner, and sold. The buyer may then remove the wrapping and raise the cover by means of a blade, or a fingernail, and pour the desired quantity of material from the carton. When the cover is released, resilient members 14 automatically close it and hold it pressed firmly in closed position, thereby preventing the entrance of the usual household pests. The carton will consequently maintain its contents in their original sanitary state until they have been consumed. The bands and flaps may be easily and cheaply provided during the manufacture of the carton, and the cartons may be discarded after use, or retained for further use.

While I have shown and described the preferred embodiment of my invention it is to be understood that various changes in the size, shape and arrangement of parts may be resorted to without departing from the spirit of my invention or the scope of the subjoined claims.

Having thus described my invention, what I claim and desire to protect by Letters Patent is:

1. The combination with a carton having a hinged cover, of a flap cut out of said cover, a second flap cut out of the walls of the carton intermediate the top and bottom thereof, there being openings located at the ends of each flap, and a resilient band arranged interiorly of the carton and extending through said openings.

2. The combination with a carton having a hinged cover, of a flap cut out of said cover, a second flap cut out of the walls of the carton intermediate the top and bottom thereof, there being openings located at the ends of each flap, a resilient band arranged interiorly of the carton and extending through said openings, and means to seal the flaps in the cover and carton.

3. The combination with a container having a hinged cover, of a flap cut out of the forward portion of the cover, a second flap cut out of the forward wall of the container intermediate the top and bottom thereof, there being openings at the ends of each flap, a resilient band arranged interiorly of the container and extending through said openings, and means to seal the flaps in the cover and container.

4. The combination with a container having a hinged cover, of a flap cut out of the forward portion of the cover, a flap cut out of the rear wall of the container intermediate the top and bottom thereof, there being openings at the ends of each flap, an endless resilient band arranged interiorly of the container and extending through said openings in the cover and container, said band normally holding the cover in its closed position, and means to seal the flaps in the cover and container.

5. The combination with a paper food carton, of a hinged cover therefor, a resilient member connecting the walls of the carton with the hinged cover interiorly of the carton to normally maintain the cover in closed position, and a substantially U-shaped shelf secured to the top of the carton immediately adjacent the hinged cover, the open end of the shelf facing the hinged portion of the cover.

6. The combination with a food carton having a pair of spaced openings in its walls intermediate the top and bottom thereof, of a hinged cover for said carton having a pair of spaced openings in its forward portion, a resilient band extending through the openings in the carton and cover to normally hold the cover in its closed position, and a substantially U-shaped shelf secured to the top of the carton below the hinged cover, the open end of the shelf facing the hinged portion of the cover.

LEE S. HARRISON.