

Dec. 19, 1961

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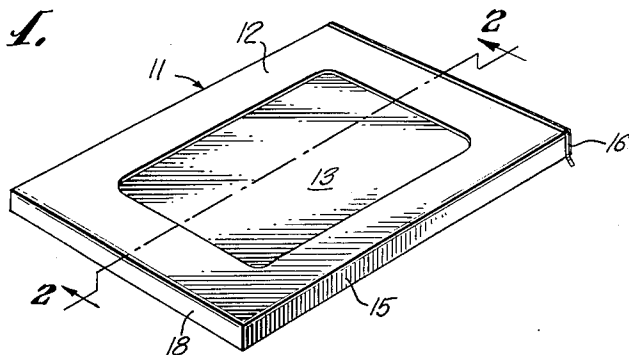
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PAPERBOARD LOADING DEVICE FOR BACON CONTAINERS

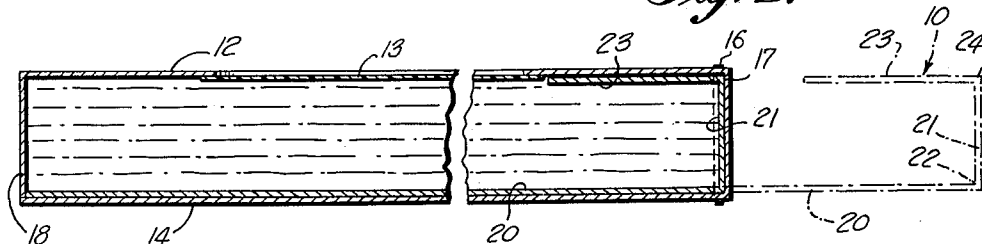
Filed Oct. 8, 1959

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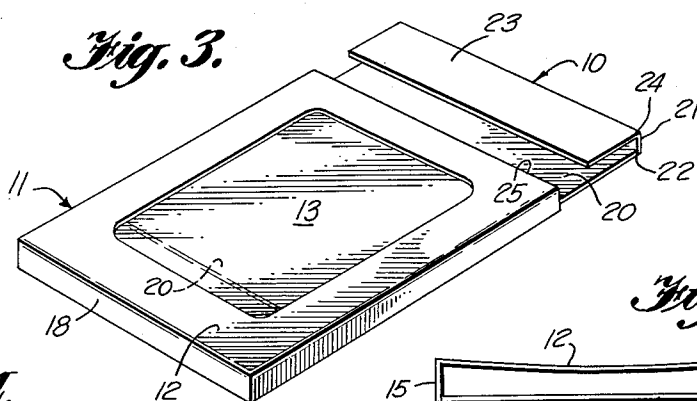
*Fig. 1.*



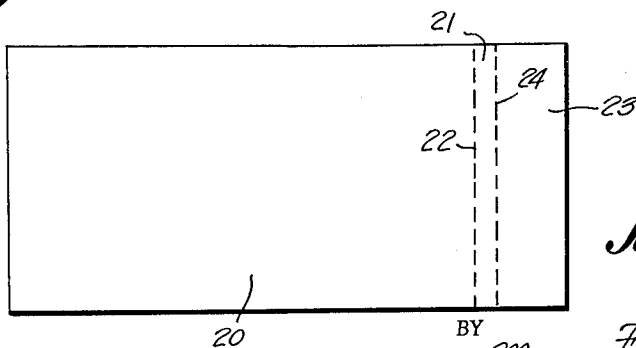
*Fig. 2.*



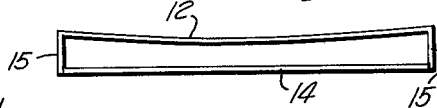
*Fig. 3.*



*Fig. 4.*



*Fig. 5.*



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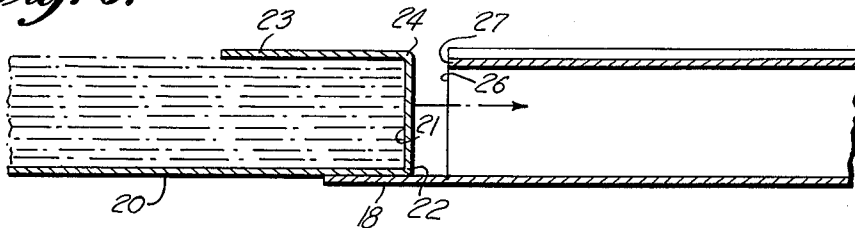
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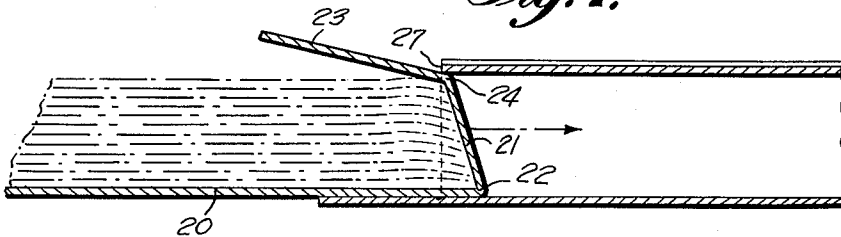
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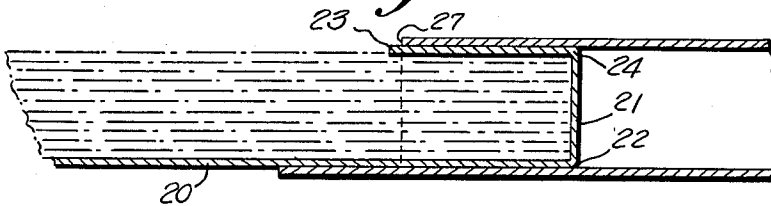
*Fig. 6.*



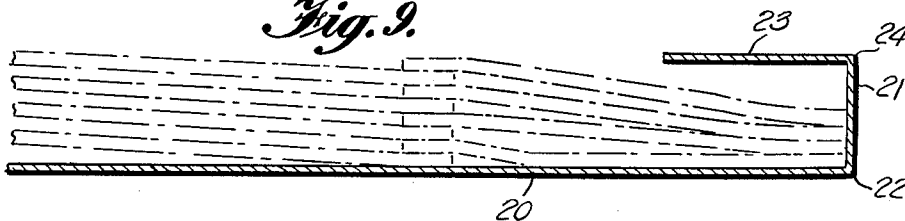
*Fig. 7.*



*Fig. 8.*



*Fig. 9.*



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**PAPERBOARD LOADING DEVICE FOR  
BACON CONTAINERS**

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1 Claim. (Cl. 99—174)

This invention relates to reclosable sleeve-type food packages, and more particularly to devices for supporting the food in such packages.

Foods such as bacon, sliced meats and the like are packaged in a sleeve-type container having a transparent window in one face of the package, so that the contents may be readily viewed. These containers are supplied with tamper-proof ends, and some of them are supplied with tear strips or perforated end or side opening means. The opening, whether the side or the end of the container, has one dimension which is relatively greater than the other so that the opening is merely a slot.

Containers furnished to the packing houses are provided with one end (consumer opening end) closed and sealed, and if the container has a tear strip it is provided on this end. The other end of the package (the loading end) is open, and it is closed and sealed after the food has been inserted in the container.

The present invention will be described with respect to loading a container for bacon, though it can be readily seen that it may be equally well used for loading containers for various kinds of sliced meats or other foods. When the container is loaded with sliced bacon, the bacon should snugly fit the container between its bottom and the display window top, so that the bacon will not become disarranged. It is not necessary or desirable to have a snug fit between the contents and the sides of the package, because the snugness between the top and bottom of the package will maintain the arrangement of the bacon.

The present invention is directed to a device for loading food into known sleeve-type window containers by automatic machinery, semi-automatic machinery, or by hand.

If the food were loaded directly into the container it would become disarranged, whether this is done by hand or by an automatic loading machine, since the interior of the box can be reached through the narrow slot-like loading end, only.

Where the bacon is arranged on paper or flat paper board pallets and slidably inserted in the box, it is a time-consuming manual operation because the bacon catches on the upper rim of the opening. When the opening is expanded, the ends of the bacon will pass the opening but they curl back at a point where the ends of the bacon strips come in contact with the top.

Where the bacon is placed in trays, difficulty is encountered in loading, particularly in automatic loading machines, since the upper edge of the container opening is not always entirely horizontal but often is dished in enough for the upper edge of the front wall of the tray to catch on it and crush the container or the tray. Also, the ends of the bacon catch on the edge of the container opening or curl back after they have passed the opening. From the consumer's standpoint, it is highly desirable to be able to tightly reclose the box after it has been opened, since only a few strips of bacon are generally used at a time. Sleeve-type containers having tamper-proof opening ends or sides are not adapted to substantially effective reclosure.

Consequently, it is an object of the present invention to provide a paperboard loading device which insures the quick, easy insertion of food in a snug fitting sleeve-type container, without disarrangement of the food.

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Another object of the present invention is to provide a reclosure which satisfactorily replaces the opened or disposed end of the container.

Other objects and advantages of the present invention will become apparent to those skilled in the art, from the following description when read in conjunction with the accompanying drawing, wherein:

FIGURE 1 is a perspective view of a sleeve-type window container having the food contents inserted in a paperboard loading device of the present invention;

FIGURE 2 is a vertical longitudinal sectional view of the container and loading tray, taken on the line 2—2 of FIGURE 1;

FIGURE 3 is a perspective view of the container shown in FIGURE 1, after it has been opened by the consumer, and showing the use of the leading end of the loading device as a reclosure for the container;

FIGURE 4 shows a paperboard blank from which the loading device of the present invention is made;

FIGURE 5 is an end view of the loading end of a sleeve-type container ready for loading;

FIGURE 6 is a fragmentary vertical sectional view of the loading device about to be inserted in the sleeve-type container;

FIGURE 7 is a view similar to FIGURE 6, but showing the yielding of the leading wall and end protector flap upon contact with the edges of the container opening;

FIGURE 8 is a view similar to FIGURES 6 and 7, showing the tendency of the leading wall of the loading device to erect itself after it has passed the opening of the container; and

FIGURE 9 is a vertical sectional view of a loading device containing a food of less length than the container, such as Canadian bacon.

Adverting now to the drawing, and particularly to FIGURES 1, 2, 3 and 4, the paperboard loading device 10 of the present invention is for use in loading and reclosing a sleeve-type container 11, such as that shown in FIGURE 1. The container 11 has a top 12 having a window 13 of transparent plastic and a bottom 14. The sides 15 of the container 11 have a relatively minor height dimension with respect to the length and breadth of the container, to provide a substantially flat package for a pound of bacon, for instance. The container 11 is illustrative of known types of sleeve-type containers having substantially tamper-proof ends and sides (tamper-proofing not shown) and a means of readily opening an end or side, such as the tear strip 16 to open the consumer opening end 17, or by perforations, not shown, around one of the said ends or sides. These containers are provided at the loading station of a packing house with the consumer opening end 17 closed and sealed, and the bacon is inserted through the loading end 18. As seen in FIGURE 5, the top 12 due to the relatively large span, tends to sag intermediate the supporting sides 15, presenting an open loading end which is less than rectilinear. After the bacon is inserted in the container 11, the loading end 18 is closed and sealed in the well-known manner.

The paperboard loading device 10 of the present invention comprises a pallet portion 20 which is substantially the same length and width as the bottom 14 and top 12 of the container 11, the width of the pallet portion 20 being such that it has a free sliding fit within the container 11 and will not bind. A leading end wall 21 is hingedly joined to one end of the pallet portion 20 by means of the score line 22. A food-ends protector flap 23 is hingedly joined to the outer end of the end wall 21 by means of a score line 24.

The length of the leading end wall 21 is substantially equal to the inside height of the container 11, and it is of course as wide as the pallet portion 20, as may

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be seen in FIGURE 4. When the end 17 of the container 11 is removed by the consumer, the leading end wall 21 of the loading device 10 forms a closure for the container 11 which serves to reclose the container after it has been opened. After the end 17 of the container is torn off leaving an end opening 25, the loading device 10 is slid partially out of the container 11 and the desired amount of bacon is removed. The loading device 10 is then returned to its former position in the container 11 and the food ends protector flap 23 serves as a guide during reclosing and a frictional latch to hold the leading end wall 21 in a position normal to the pallet portion 20.

Adverting now to FIGURES 6, 7 and 8, there is illustrated a paperboard loading device 10 of the present invention being inserted in a sleeve or tube type container 11. The end 18 of the container 11 is folded back to expose an opening 26 in the end of the container. The upper edge 27 of the opening sags in the middle, and when the pusher (not shown) of an automatic loading machine advances the loading device 10 into the container, the leading end wall 21 adjacent the hinge line 22 contacts the edge 27, as seen in FIGURE 7, and swings it at the hinge line 24 rearward against the resiliency of the ends of the bacon, causing them to buckle at a point behind the opening, and raise the flap 23. This results in the leading end wall 21 providing an incline which cams the sagging edge 27 upward. As seen in FIGURE 8, when the flap 23 has entered the container 11, the pressure on the flap 23 reduces the buckled bacon ends and swings the leading end wall 21 back substantially to its normal position. When the pusher has fully inserted the loading device 10 in the container 11, the container is moved to a station where the end 18 is closed and sealed.

In FIGURE 9 there is shown an illustration of the use of the present invention for loading a sliced product in which the slices are of less length than the loading device 10, as in the case of Canadian bacon, for example. The ends of the bacon adjacent the leading end wall 21 are

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protected by the flap 23. The forward end of each subsequent slice is protected by the trailing end of the preceding slice.

While there has been disclosed in the foregoing description a practical embodiment of the paperboard loading device in accordance with the present invention, it will be understood by those skilled in the art that variations in the implementation of the concept of the invention are within the purview and scope of the invention.

What is claimed is:

A package of sliced foods comprising: a paperboard container enclosing said foods, said paperboard container including a cover having a top, bottom and vertical side walls forming a sleeve, said top and bottom being of substantially greater width than the height of said side walls, said cover also having a consumer end wall and a loading end wall, tear means for opening said consumer end wall, a sliding pallet within said cover receiving the sliced foods thereon, said pallet consisting of a flat supporting sheet slidably contacting the bottom of said cover, an integral end wall contacting the consumer end wall, said end wall of the pallet also having an integral protection flap overlying said food, the connection between the said end wall of the pallet and the flat supporting sheet of the pallet being a hinge connection, thereby permitting the end wall to pivot inwardly against the food during loading of said pallet through the loading end of said cover.

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