Feb. 26, 1952 B. W. GAMMON 2,586,931

CLOSURE FOR PAPER RECEPTACLES

Filed Sept. 29, 1949

FIG. 1

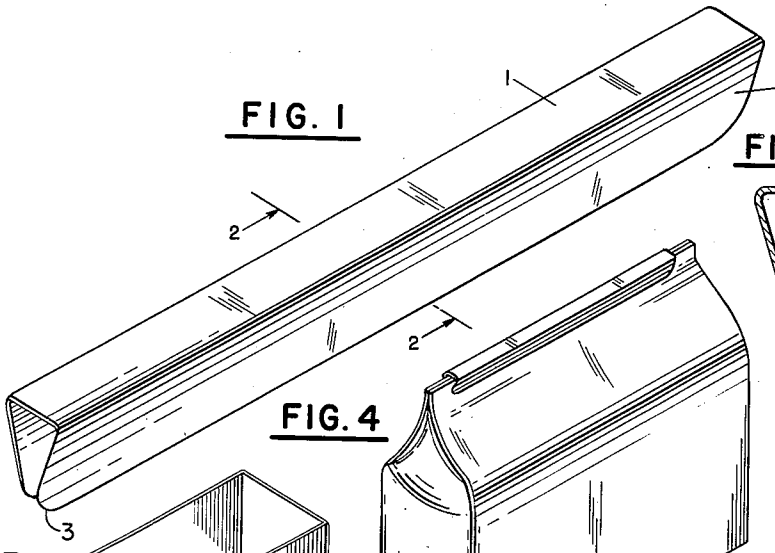


FIG 2

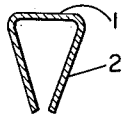


FIG. 4

FIG. 3

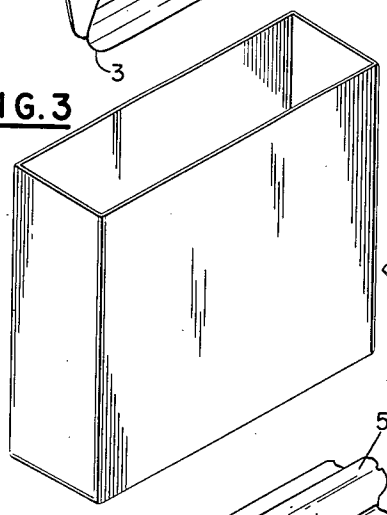


FIG. 5

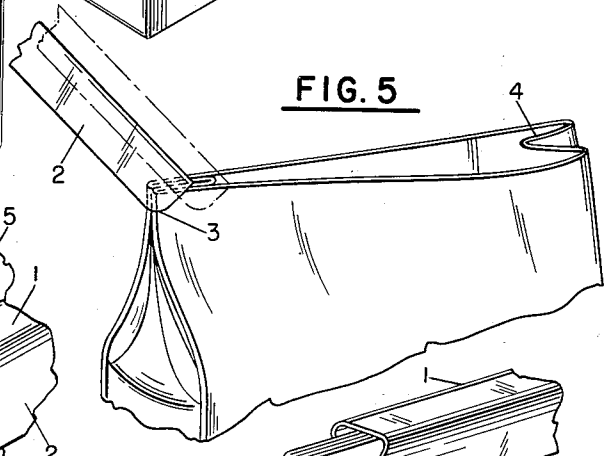


FIG. 7

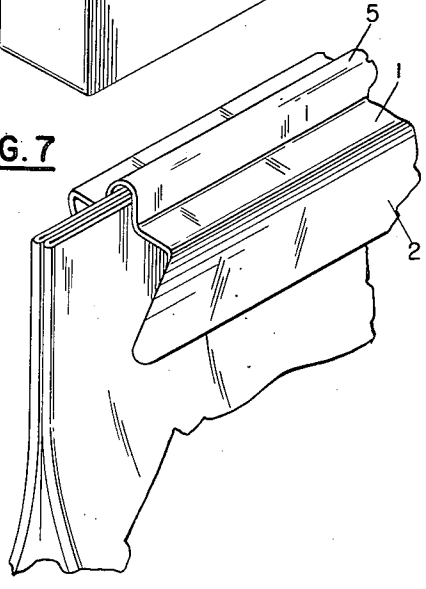
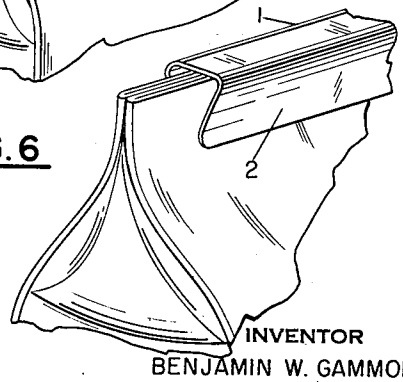


FIG. 6



INVENTOR
BENJAMIN W. GAMMON
BY
Pennie, Edmonds, Morton & Barrows
ATTORNEYS

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CLOSURE FOR PAPER RECEPTACLES

Benjamin W. Gammon, Hollis, N. Y.

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1 Claim. (Cl. 24—30.5)

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This invention relates to a temporary closure for paper boxes, paper bags and like packages and to its method of use, and has for its object to provide a simple, cheap device which may be enclosed in a package of merchandise such, for example, as a box of breakfast food or a bag of coffee and used after the package is opened to provide a closure for the package until its contents are used up. Many household commodities in granular or flake form are dispensed in paper bags or paper board cartons which are either partially or fully opened to gain access to the contents and are continued in use as dispensing containers until the contents are exhausted. Unless such packages are after each use closed and tied with a string, or otherwise re-sealed, the contents are not protected against dirt, insects and the like, and if the packages are accidentally knocked over the contents will be spilled.

By the improvement forming the subject-matter of this invention I provide a simple, inexpensive device which may be enclosed in the package itself at an added cost of a small fraction of a cent and which at any time the package is opened may be readily applied as a closure to the package and repeatedly removed and replaced until the contents of the package are exhausted.

In the accompanying drawings,

Fig. 1 illustrates my improved package closure in perspective;

Fig. 2 is a cross-section on line 2—2 of Fig. 1;

Fig. 3 shows a pasteboard carton such as universally employed for breakfast cereals, crackers and the like with one end removed;

Fig. 4 is a similar view showing the end of the carton folded and closed with my improved package closure;

Fig. 5 is an enlarged detail in perspective showing the method of applying the closure to the carton illustrated in Fig. 3;

Fig. 6 is a similar view showing one end of the package with the closure applied; and

Fig. 7 is a cross-section of a closure of modified form.

Referring to the drawings, particularly to Fig. 1, my improved package closure consists of an integral piece of sheet metal, preferably tinned sheet iron about ten thousandths of an inch thick, similar to the metal used in the manufacture of tin boxes, tin cans and the like. Such metal is inherently stiff, and when bent or die-shaped will retain its shape, although somewhat resilient. The closure is roughly channel-shaped with the rectangular base 1 of the channel approximately three-eighths of an inch wide and with the sides

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of the trough flat and converging so that the edges are separated by approximately three-thirty-seconds of an inch. The sides 2 may be somewhat wider than the bottom. The corners 3 at the ends of the converging edges of the device are rounded as shown.

The length of the device depends upon the size of the package to which it is to be applied. It is not necessary, however, that the device be as long as the package, particularly when applied to pasteboard boxes where the inherent stiffness of the package is sufficient to maintain the ends closed.

In Fig. 4 I have shown the method of applying the closure to a pasteboard carton. The end of the carton is entirely removed and the narrow ends at the top of the carton are tucked in to form a so-called "bellows" fold 4, such as employed in the manufacture of paper packages. The side walls of the top are brought together, and the closure is applied by inserting the corner of the in-folded top of the package in the wide portion of the closure adjacent the base, while holding the closure in an upwardly inclined position as shown in Fig. 5. The closure is then pushed along the top of the carton while still held in inclined position, until the corners of the closure are advanced beyond the edges of the end of the carton. The closure is then turned to a position parallel with the top edges of the carton and slid along the top edges until the closure is in position to tightly close the top of the box, as illustrated in Fig. 4.

In Fig. 7 I have shown a modification of my improved closure. As here shown the base 1 of the closure is provided with a longitudinal rib 5 which provides on the inner face of the base, a groove extending the length of the base and of a width to fit over the meeting edges of the box to prevent any dust which might settle in the space between the box top and the sides of the closure from entering the package.

I am aware that closures for bags have been proposed wherein a split tube of metal is applied over the folded top edges of a paper bag and in some instances the metal at the edges of the split has been bent outwardly to facilitate the application of the closure to the bag. In my improved closure the side walls of the channel are flat so that in applying the closure to the box, as the closure is moved from the position shown in solid lines in Fig. 5 to the position shown in broken lines, the sides of the channel will be easily spread apart as the folded edges of the box gradually enter between the side walls of the

channel. The above mentioned prior closures, if tight enough to hold the passage closed, are difficult to apply.

My improved closure may be made by a simple stamping operation at a cost very little more than the metal itself, which, as stated above, is ordinary rolled sheet iron. After the bag or package is filled, the closure may be dropped in either by hand or by a simple addition to the machine by which the boxes or packages are filled. By its use the ordinary pasteboard box or paper bag may be used as a dispensing container with the contents fully protected against contamination or spillage.

I claim:

A substantially channel-shaped strip of substantially rigid but slightly resilient sheet material comprising a base and side walls, the side walls converging toward each other so that the width of the base is several times the width of the spacing between the parallel free-end portions of the side walls, the side walls being flat and of a width at least equal to the width of the base, and a base having substantially rectangular portions extending inwardly from each side and being in substantially the same plane, and a longitudinal groove connecting said base portions, said channel-shaped strip being adapted to fit over and receive the meeting edges of a package.

BENJ. W. GAMMON.

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