Aug. 22, 1967 J. W. HARRISON 3,337,113

INDIVIDUAL REFRIGERATOR DOOR GASKET DIE CUT FOLDER

Filed Oct. 18, 1963 5 Sheets-Sheet 1

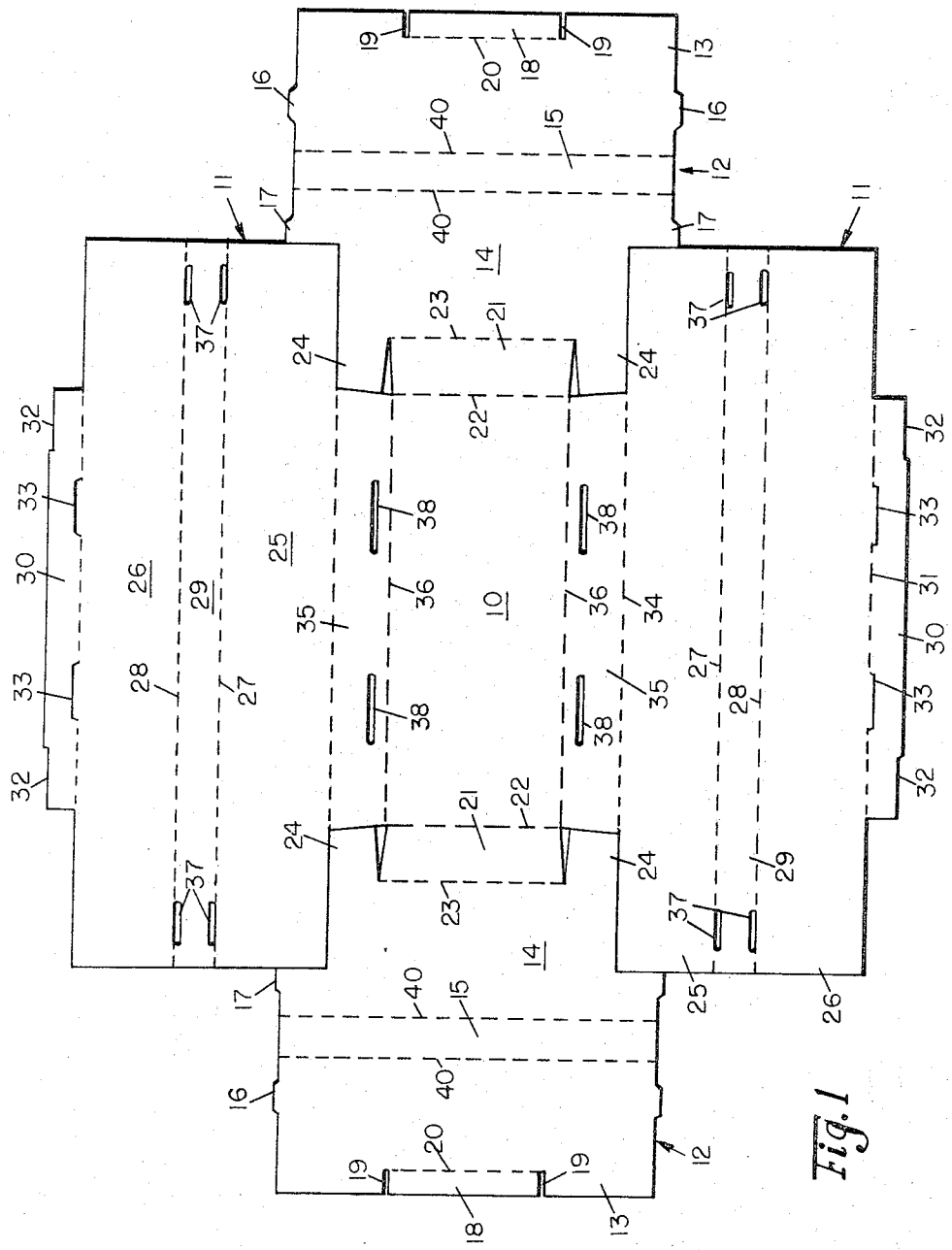


Fig. 1

INVENTOR
JERRY W. HARRISON

BY

ATTORNEY

INDIVIDUAL REFRIGERATOR DOOR GASKET DIE CUT FOLDER

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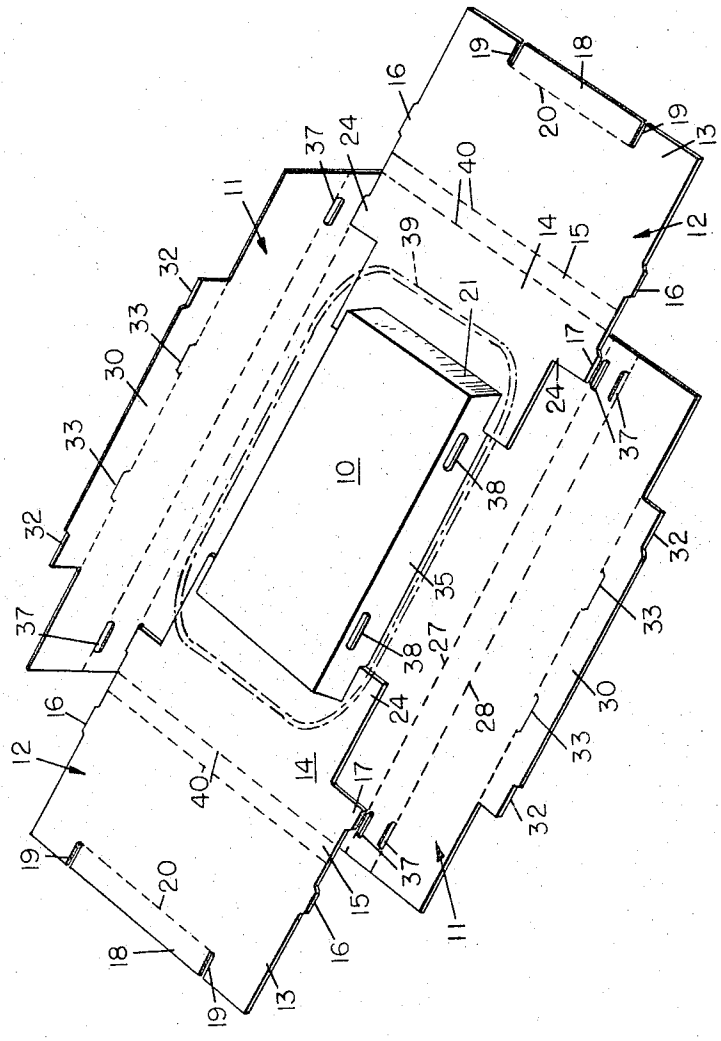


Fig. 2

INVENTOR
JERRY W. HARRISON

BY

ATTORNEY

INDIVIDUAL REFRIGERATOR DOOR GASKET DIE CUT FOLDER

Filed Oct. 18, 1963 5 Sheets-Sheet 3

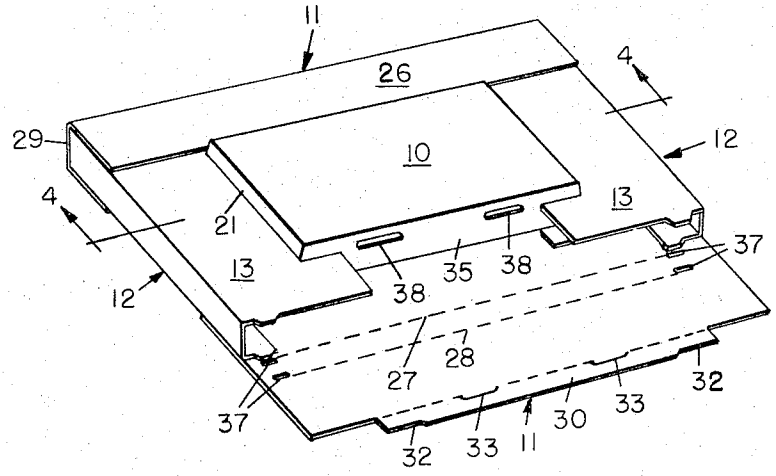


Fig. 3

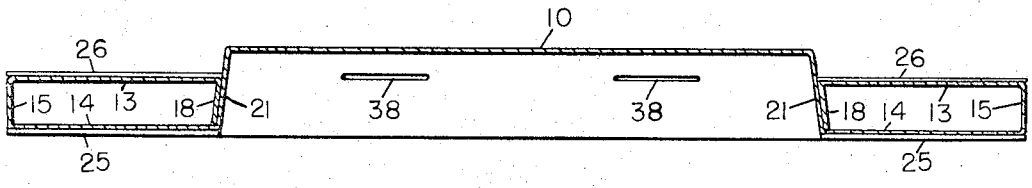


Fig. 4

INVENTOR
JERRY W. HARRISON

BY

ATTORNEY

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INDIVIDUAL REFRIGERATOR DOOR GASKET DIE CUT FOLDER

Filed Oct. 18, 1963 5 Sheets-Sheet 4

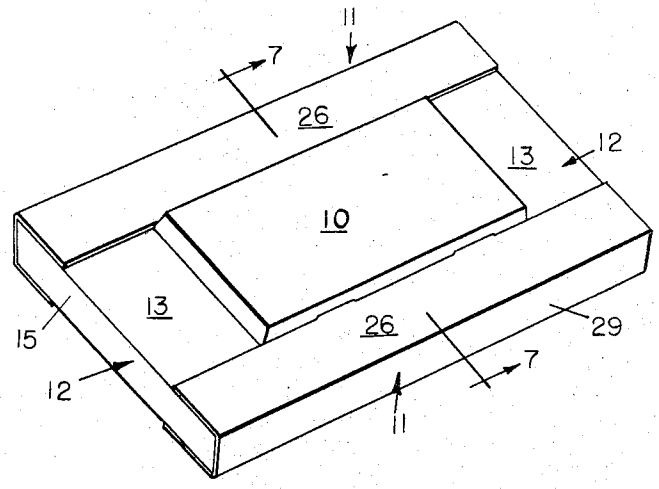


Fig 5

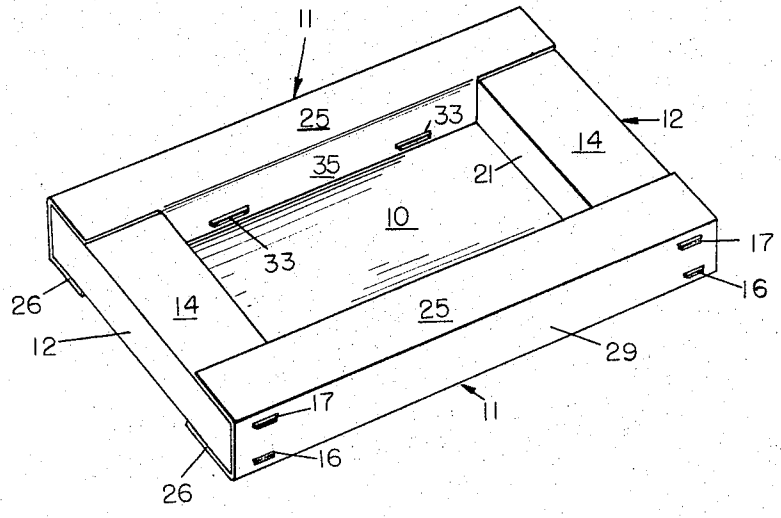


Fig. 6

INVENTOR
JERRY W. HARRISON

BY

ATTORNEY

Aug. 22, 1967 J. W. HARRISON 3,337,113

INDIVIDUAL REFRIGERATOR DOOR GASKET DIE CUT FOLDER

Filed Oct. 18, 1963 5 Sheets-Sheet 5

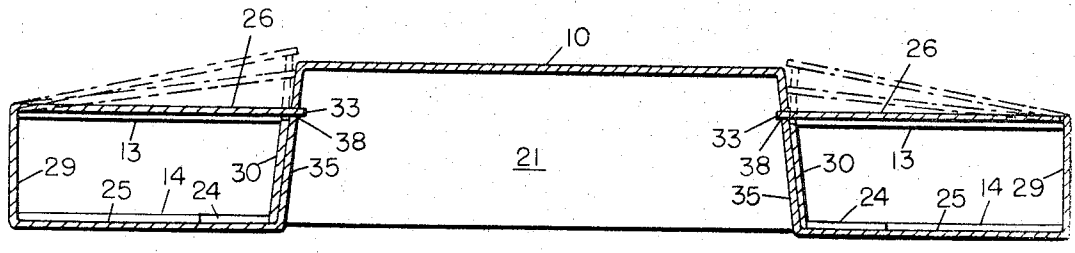


Fig. 7

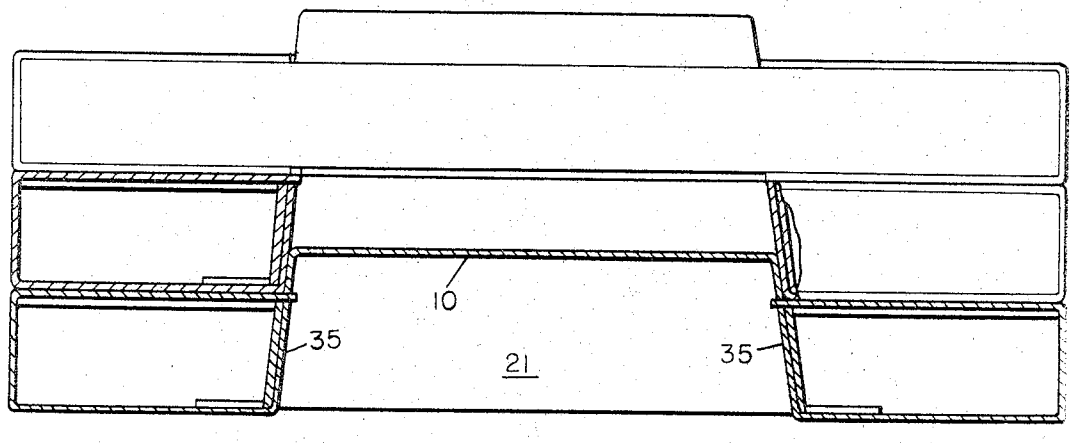


Fig. 8

INVENTOR
JERRY W. HARRISON

BY

ATTORNEY

United States Patent Office

3,337,113

Patented Aug. 22, 1967

3,337,113

INDIVIDUAL REFRIGERATOR DOOR GASKET DIE CUT FOLDER

Jerry W. Harrison, New Albany, Ind., assignor to The Mead Corporation, Dayton, Ohio, a corporation of Ohio

Filed Oct. 18, 1963, Ser. No. 317,283
5 Claims. (Cl. 229—34)

The present invention relates to an individual refrigerator door gasket die cut folder.

In accord with this invention, there is provided a one piece folder of fibre board for the packaging of individual refrigerator door gaskets made from either extruded rubber, vinyl plastic material or the like. When the folder is fully assembled or folded from its original blank, there is provided a frame-like fully enclosed rectangularly extending continuous space wherein the gasket may be stored for shipping and there is likewise provided a centrally disposed rectangular recess in one side of the folder and a rectangular raised portion on the opposite side of the folder, the recess and raised portion being encompassed by the frame-like portion of the folder. The device is such that pluralities of the same may be conveniently stacked, the raised portions being snugly received in the recesses. The device is possessed of several novel features, one of which is a self-locking flap which will be more fully defined hereinbelow.

It is, accordingly, an object of the invention to provide a novel one piece folder for packaging of individual refrigerator door gaskets.

Another object of the invention is to provide, in a device of the character set forth, novel means for stacking pluralities of the same.

Still another object of the invention is to provide, in a device of the character set forth, a novel self-locking panel.

A still further object of the invention is to provide, in a device of the character set forth, novel means for providing therein a continuous rectangularly extending fully enclosed passageway for storing an endless gasket.

Still another object of the invention is to provide a folder of the character set forth which is simple in construction, inexpensive to manufacture and yet effective and efficient in use.

Other and further objects of the invention will become apparent from a reading of the following specification taken in conjunction with the drawings, in which:

FIGURE 1 is a plan view of a blank of a folder embodying the present invention;

FIGURE 2 is a perspective view of the blank shown in FIGURE 1 but showing the same in partly folded condition;

FIGURE 3 is a perspective view illustrating the folder at a further state in its assembly;

FIGURE 4 is an enlarged sectional view taken along line 4—4 of FIGURE 3;

FIGURE 5 is a perspective view illustrating the completely assembled folder viewed from the upper side thereof;

FIGURE 6 is a view similar to FIGURE 5 but viewing the same from the lower side thereof;

FIGURE 7 is an enlarged sectional view taken on line 7—7 of FIGURE 5; and,

FIGURE 8 is an end elevational view, partly in section, showing the manner of stacking pluralities of the devices of the present invention.

Referring to the drawings, there is shown therein a central rectangular panel **10**, a pair of side sections generally indicated at **11** and a pair of end sections generally indicated at **12**.

End sections **12** each consist of an outer panel **13**, an inner panel **14** interconnected integrally with panel **13** by an outer end wall **15**. The outer panels **13** are each provided on each side thereof with an integrally formed ear **16** and the inner panels are each likewise provided on each side thereof with integrally formed ears **17**. In the outer edge portion of each of the panels **13** there is centrally provided a spacer flop **18** defined at either of its sides by slots **19** and at its inner edge by a fold line **20**.

An outwardly divergent inner end wall **21**, as shown in FIGURES 1 and 2, is integrally connected along a fold line **22** to each end of the central panel **10** and to the inner edge of the adjacent inner panel **14** along a fold line **23** and inner panels **14** each are provided with integrally formed inwardly extending flaps **24**.

Side sections **11** each consist of an inner panel **25**, an outer panel **26** integrally interconnected with panel **25** along fold lines **27** and **28** by an outer side wall **29**. A spacer flap **30** is centrally and integrally connected to the outer edge of each of the outer panel **26** along fold lines **31** and each is provided with cut away outer corners **32**. A pair of locking tabs **33** is cut from each of spacer flaps **30** and each is integral at its base with its adjoining panel **26**.

Each of the inner panels **25** is integrally connected at its inner edge along a fold line **34** to an outwardly divergent inner side wall **35** which is in each case, in turn, connected along a fold line **36** to the adjacent side of central panel **10**.

Side sections **11** are each provided adjacent each side thereof with pairs of slots **37**, each slot in each case lying immediately inwardly of a fold line **27** and **28**.

The inner side walls **35** are each provided with a pair of slots **38**, the slots **38** being spaced a slight distance outwardly of the panel **10** in each case.

In assembling the folder to package, for example, an endless gasket indicated in dotted lines at **39**, the inner side walls are first folded downwardly with respect to panel **10** along fold lines **36** after which the inner end walls **21** are likewise folded downwardly with respect to panel **10** along fold lines **22** at the same time bending the remainder of the end sections **12** upwardly with respect to the panels **21** and guiding flaps **24** to positions over the side walls **35**. Gasket **39** is then positioned around the central panel and inner walls **21** and **35**.

Side sections **11** are then bent to vertical positions along fold lines **34** whereupon the outer end walls **15** are bent to vertical position and outer panels **13** bent inwardly of the device using the fold lines **40** defining the outer end walls **15** for such purpose. The ears **16** and **17** are thereupon inserted into the slots **37** while the spacer flaps **18** are bent downwardly in abutting relation to the inner end walls **21**, the bottom edges of such flaps **18** abutting the surfaces of their respective inner panels **14** to maintain the planes of panels **13** and **14** in a parallel relationship.

It will be seen that since walls **21** and **35** are outwardly divergent in their blank form that when bent as above described, they will extend somewhat angularly outwardly downwardly and not vertically.

Outer panels **26** are now extended inwardly, bending the side section **11** along fold lines **27** and **29** for such purpose and the spacer flaps **30** are then bent vertically downwardly in sliding contact with their adjacent inner side walls **35** whereupon the locking tabs **33** first contact the surfaces of walls **35** distorting the same outwardly until tabs **33** register with slots **38** with a snapping action due to the tension previously applied to walls **35** to thus securely lock the entire device in a unitary manner and with a minimum of effort.

It will be seen that the free edges of the main bodies of flaps **30** will rest upon the surfaces of panels **25** while

the edges of the cut away portions **32** will rest upon flaps **24**.

It will also be seen that a device such as the gasket **39** may be fully and quickly positioned and protectively concealed and completely enclosed within the folder of the present invention and that the packages thus formed may be stacked in the manner shown in FIGURE 8, the raised portion formed by panel **10** and inner walls **21** and **35** being receivable in the recess formed by the same elements in the package immediately overlying it.

While but one form of the invention has been shown and described herein, it is obvious that other modifications and/or equivalents may be employed without departing from the scope of the invention, which is defined in the appended claims.

What is claimed is:

1. A foldable package for receiving and enclosing a ring-like article comprising

a unitary blank defining a rectangular panel,

inner wall panels foldably joined with and angularly disposed relative to said rectangular panel,

side and end sections foldably joined to said inner wall panels and each of said sections including a plurality of foldably interconnected wall portions,

said sections cooperating with said inner wall panels and defining therewith,

a tubular structure having therein a spatially-continuous article-receiving cavity encompassing and extending outwardly from said inner wall panels for removably enclosing a ring-like article, and means

readily detachably securing the free ends of said portions of each of said side sections to oppositely disposed inner wall panels, with said free ends disposed adjacent the outer surface of said inner wall panels.

2. Structure according to claim **1** wherein said rectangular panel is spaced apart from said tubular structure.

3. Structure according to claim **1** wherein said end sections each include inwardly extending engageable portions engagingly received by portions of said inner walls and by other portions of each of said side sections.

4. Structure according to claim **1** wherein said securing means additionaly includes tab and slot means for readily detachably securing said end sections to said side sections.

5. Structure according to claim **2** wherein said inner wall panels diverge outwardly from said rectangular panel and define therewith a recess for nestably receiving therein portions of another like package structure.

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LOUIS G. MANCENE, *Primary Examiner.*