

May 26, 1942.

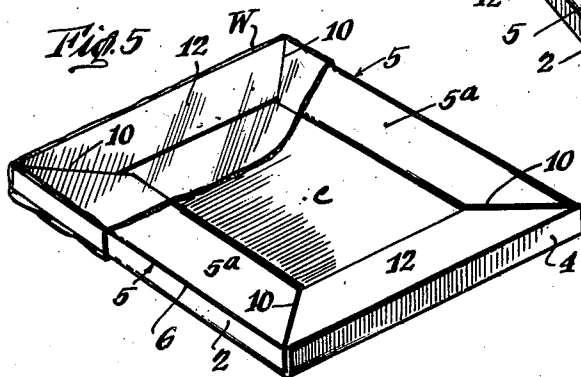
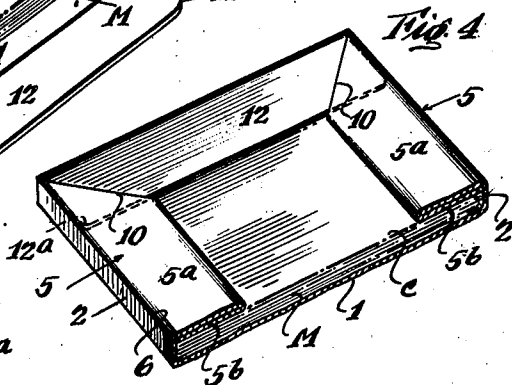
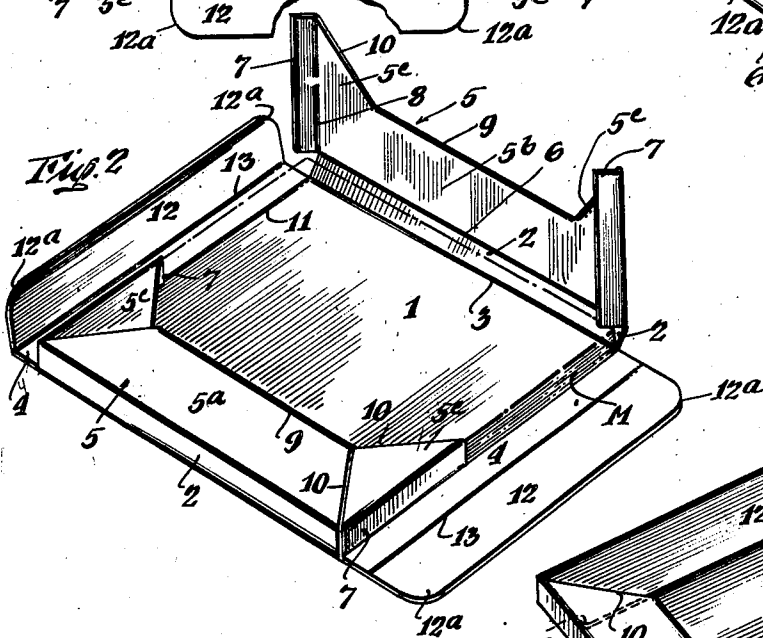
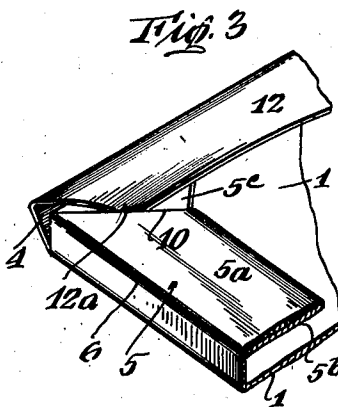
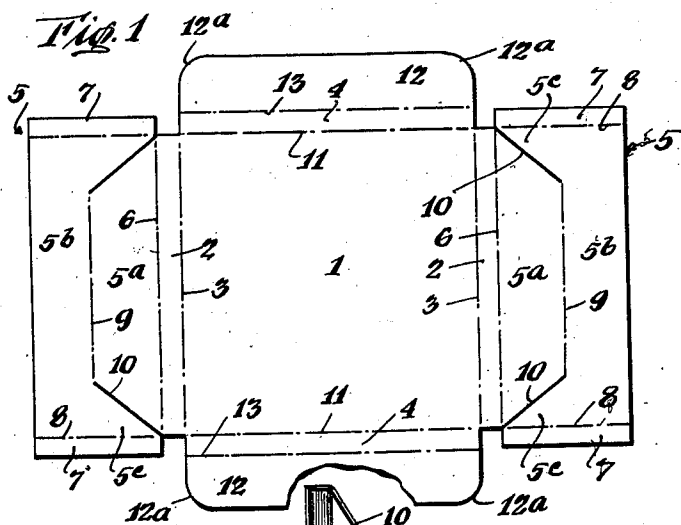
W. A. RINGLER

2,283,949

FOLDER

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2 Sheets-Sheet 1



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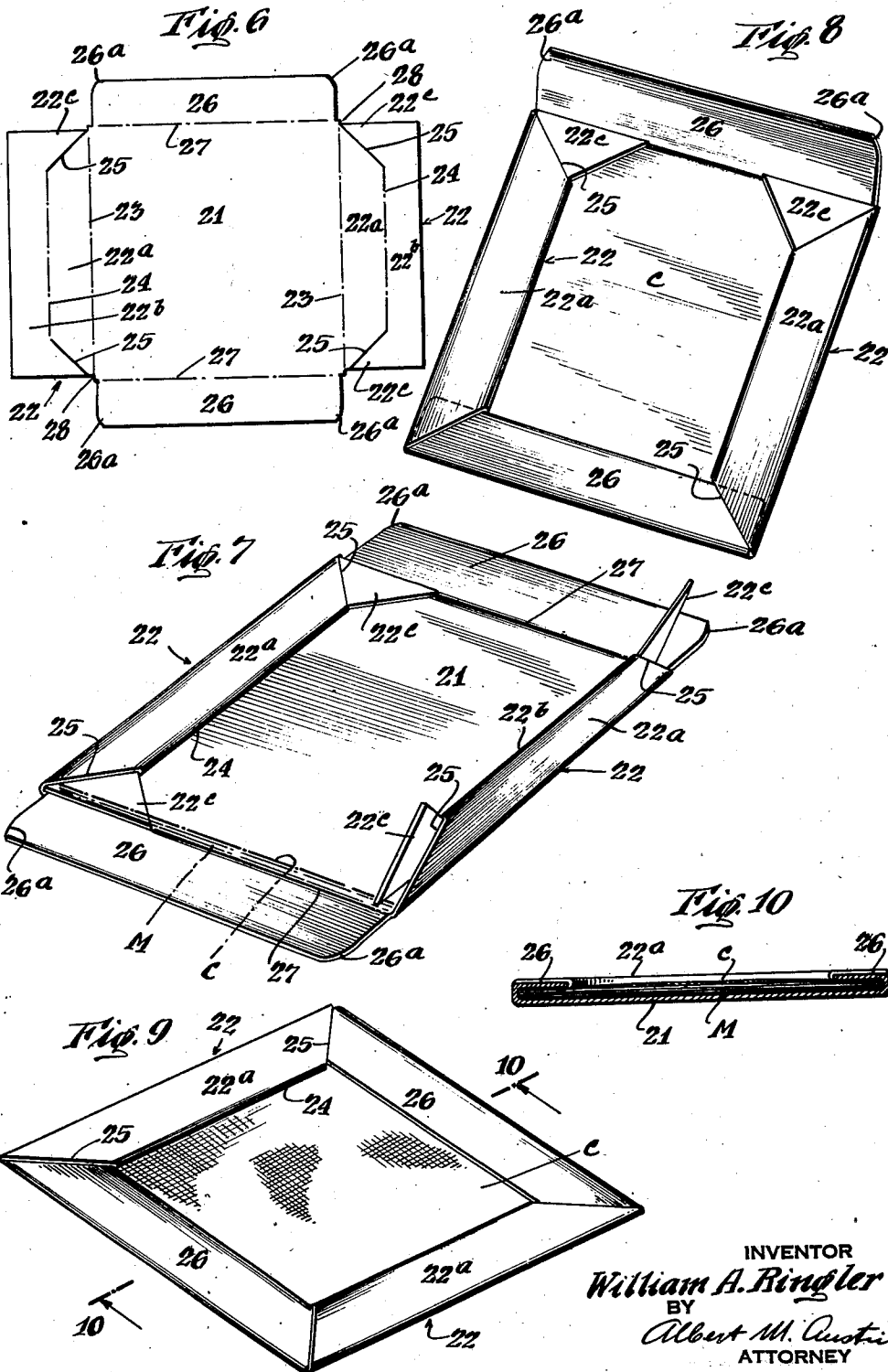
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UNITED STATES PATENT OFFICE

2,283,949

FOLDER

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7 Claims. (Cl. 229—34)

This invention relates to folders, and more particularly to a folder made from paperboard material which can be inexpensively manufactured and assembled, shipped to the user in flat condition, and when assembled provides a convenient and attractive package for relatively flat articles of merchandise.

In accordance with this invention, an improved folder for a single folded article or a plurality of stacked or folded articles, is provided which may be inexpensively formed from a single blank of paperboard material. The blank is suitably cut and scored to provide a bottom merchandise supporting panel with inturned side flaps hingedly connected thereto on opposite sides thereof, each side flap having a fold-under flap hinged thereto. Each fold-under flap is provided with a pair of inwardly projecting ears which are severed from the side flap, the ears being so arranged as to support inwardly extending end flaps. Each corner portion of each end flap is tucked between the adjacent inturned side flap and the turn-under flap. The inturned side and end flaps together form a substantially continuous rim extending inwardly around the bottom panel and in spaced relation thereto. The rim portion of the folder may be spaced any desired distance from the bottom wall panel by providing side and end wall panels to which the side and end flaps are hingedly connected. The prepared blanks may be shipped to the user in flat extended condition so as to occupy a very minimum of space during shipment and storage.

In packaging, the user places a single or a plurality of relatively flat articles of merchandise, which may be folded, if desired, upon the bottom wall panel. The folder is closed by folding each turn-under flap over its associated side flap and then swinging each side flap inwardly so as to overlie the merchandise. Each end flap is then folded inwardly and each corner portion thereof is tucked between the adjacent end of the turn-under flap and the overlying side flap so as to provide a substantially continuous rigid rim overlying the merchandise and preventing withdrawal thereof. A cover, which may comprise a sheet of paperboard positioned to underlie the rim portion, may be provided to protect the merchandise in the folder from contamination or injury. If more complete protection to the merchandise within the folder is desired, the assembled folder with the merchandise packed therein may be wrapped or covered by suitable sheet material, such as paper or Cellophane. No glue, staples, stitches or other securing means are

needed to hold the folder in fixed, assembled position and yet the folder is sufficiently strong and rigid so as to fully contain, enclose and protect the merchandise packed therein.

The consumer may conveniently obtain access to the merchandise in the folder by removing the covering wrapper, withdrawing the corner portions of the end flaps from their housed position between the side flaps and associated turn-under flaps, and then swinging the end flaps and the side flaps outwardly. After the consumer has removed the desired number of articles of merchandise from the folder, the folder may be easily and quickly closed as above indicated.

My improved folder is particularly adapted for the convenient and economical packaging of numerous, relatively flat articles of merchandise, such as textile or paper handkerchiefs and napkins, facial tissue, carbon papers, stencil sheets, writing paper, bed sheets, pillow cases and numerous other articles which may be either folded or extended when packaged. Thus, either a single article or a plurality of articles may be conveniently packaged in the folder as desired.

An object of this invention is to provide an improved folder formed from a single blank of paperboard material which can be economically manufactured, assembled and packaged.

Another object of this invention is to provide improved folders for the packaging of relatively flat articles of merchandise, which folders can be formed complete at high production speed and in one operation by means of an automatic cutting and scoring machine, and which may be shipped to the user in flat extended condition occupying a minimum of space during shipment and storage.

Another object of this invention is to provide an improved folder which can be conveniently packaged and closed by the user to fully protect and enclose the contents, which can be conveniently opened and reclosed by the consumer, and which can be made in numerous different shapes, sizes and forms to provide a highly serviceable and attractive package.

Other objects and advantages of this invention will become apparent as the disclosure proceeds.

The invention also consists in certain new and original features of construction and combination of parts hereinafter set forth and claimed.

Although the novel features which are believed to be characteristic of this invention will be particularly pointed out in the claims appended hereto, the invention itself, as to its objects and

advantages, and the manner in which it may be carried out, may be better understood by referring to the following description taken in connection with the accompanying drawings forming a part thereof, in which

Fig. 1 is a plan view of a prepared blank from which my improved folder is assembled;

Fig. 2 is a perspective view of the prepared blanks with the rim-forming flaps thereof in the process of being folded over the contained merchandise;

Fig. 3 is a fragmentary perspective view of the folder showing one corner of an end flap in the process of being inserted between the adjacent overlying intumed side flap and the underlying outturned turn-under flap;

Fig. 4 is a fragmentary perspective view of the folder as it appears when fully assembled to enclose the contained merchandise;

Fig. 5 is a perspective view of the folder fully assembled to enclose the merchandise all wrapped within a transparent covering wrapper, the covering wrapper being partially broken away to more clearly illustrate the construction;

Fig. 6 is a plan view of a prepared blank from which a folder of somewhat modified form may be assembled;

Fig. 7 is a perspective view of the blank shown in Fig. 6 in the process of being assembled into a merchandise containing folder;

Fig. 8 is another perspective view of the folder as it appears at a further advanced stage in the packaging operation;

Fig. 9 is a perspective view of the fully assembled folder as it appears when merchandise is contained therein; and

Fig. 10 is a cross-sectional view through the assembled package, this view being taken along lines 10-10 of Fig. 9.

Similar reference characters refer to similar parts throughout the several views of the drawings and the specification.

Referring more particularly to Figs. 1 to 5, inclusive, my improved folder may be made from a single blank of paperboard material which is cut and scored by means of an automatic cutting and scoring machine from large sheets or rolls of paperboard material. Paperboard material of the requisite weight, thickness, stiffness and toughness is selected to support and contain the desired weight, size and quantity of merchandise in accordance with shipping and merchandising requirements. If the contents are of great weight, the folder may be made of several plies of tough paperboard material.

Referring to the folder-forming blank shown in Fig. 1, the blank comprises a bottom-forming panel 1 having diametrically opposed side wall panels 2 hinged to the bottom panel 1 along suitable hinge or fold lines 3. Diametrically opposed end wall panels 4 are suitably hingedly connected to the bottom wall panel 1, as by score lines 11.

A flap section 5 is hingedly connected to each of the side wall panels 2 as by score line 6. Each flap section 5 is divided into two portions comprising an intumed side flap 5a and a turn-under flap 5b which are hingedly connected along the hinge line 9. A diagonally extending cut 10 extends from each end of the hinge line 9 to the adjacent end of the hinge line 6, defining a generally triangular shaped platform portion 5c formed as a part of the turn-under flap portion 5b. A supporting leg 7, which may be approximately the width of the flap section 5 and having a depth approximately equal to the depth

of the adjacent end wall panel 4, is hingedly connected to each end of flap portion 5b along a hinge line 8.

An end flap 12 is hingedly connected to each of the end wall panels 4 along the hinge line 13, each end flap 12 having a rounded corner portion 12a for a purpose which will presently appear.

The blank as shown in Fig. 1 may be produced at a very high production rate upon an automatic cutting and scoring machine which cuts each blank in the proper shape and scores each blank in rapid succession as the paperboard in the form of large sheets or rolls is fed through the machine. The blanks formed as shown in Fig. 1 can be stacked in superimposed relationship in suitable packing cases, thus occupying a minimum of space during shipment and storage. The user removes the blanks from the packing case and assembles them as needed.

The bottom wall panel defines the containing area of the folder and it will be obvious that the size and shape of the bottom wall panel 1 may be made to any dimension required to properly contain the merchandise therein.

The folder is particularly adapted for the packaging of merchandise which is relatively flat. The folder may be used to contain a single article only such as a handkerchief, napkin, bed sheet, towel, pillow case, blanket and other textile materials and garments, a single extended or folded article or plurality of such articles being stacked in the folder as desired. The folder is also highly adapted for the packaging of numerous other materials which are stacked therein, either in folded or unfolded condition, such as facial tissues, paper napkins, carbon paper, stencil sheets, writing papers, envelopes, and numerous other articles of merchandise as will be apparent to those skilled in the art. To facilitate description, the article or articles packed in the folder will be generally referred to as merchandise M, which designation is intended to include all of the various articles, including those above enumerated, which can be satisfactorily packed and merchandised in such folders.

The merchandise M either folded, stacked or of single-ply thickness should be so arranged when prepared for packaging as to substantially occupy the entire area of the bottom wall panel 1. The side wall panels 2 and the end wall panels 4 should correspond in height to the height of the merchandise to be packed therein. Each flap portion 5b is swung over the inside face of the side flap portion 5a to which it is hingedly connected. The side panels 2 are then raised and each of the side flap portions 5a are swung inwardly as shown in Fig. 2. The leg supports 7 hingedly connected to the side flap portions 5b are then swung downwardly so that the free edge thereof will rest upon the bottom wall panel 1 with the outturned turn-under flap portions 5b and the triangular shaped platform portions 5c overlying or resting upon the top surface of the merchandise M. When thus assembled, it will be appreciated that the outturned side flap portions 5b, except for the triangular shaped platform portions 5c, are concealed between the merchandise and the overlying intumed side flap portion 5a. The legs 7 support the triangular shaped platform portions 5c, the outturned flap portions 5b, and the intumed side flap portions 5a in a plane substantially parallel to, but spaced from, the bottom wall panel 1.

When the flap sections 5 have been thus as-

sembled, the end wall panels 4 are raised so as to overlie the legs 7. End flaps 12 are then turned inwardly so as to rest upon the platform portions 5c. To maintain the folder in merchandise containing position, each corner portion 12a of the inturned end flaps 12 is inserted under the adjacent cut edge 10 so as to be frictionally gripped between the turned under flap portion 5b and the overlying side flap portion 5a. The corner portions 12a of the end flaps are thus held pinched between adjacent flap portions 5a and 5b, the friction between the parts being such as to require considerable force to withdraw the end flaps 12 from their gripped position.

No adhesive, staples, stitches, or other securing means are required to hold the folder fully assembled in package form enclosing the merchandise M. As thus assembled, the folder will withstand the rough treatment encountered in shipping and handling without loosening. The inturned side wall flaps 5 and the inturned end wall flaps 12 provide a retaining rim extending continuously around the folder, which is inturned to a substantial distance so as to fully protect and retain the merchandise therein. The continuous rim thus formed is rigidly supported by the platform portions 5c and the legs 7 so that numerous packages may be stacked one upon the other without danger of collapse or damage to the contents.

If desired, an overlying cover C which may be made from a flat blank of paperboard material is placed upon the merchandise M, prior to folding the blank, as shown more particularly in Figs. 2, 4 and 5. The cover C is retained in fixed position by the overlying continuous rim of the folder. The cover member C fully protects the merchandise from dust and contamination. If desired, the packaged folder may be enclosed within a suitable wrapper W as shown in Fig. 5. The wrapper W may be made of some transparent material so that the merchandise contents are fully visible therethrough.

Where a single relatively thin article, or plurality of articles presenting a limited combined thickness, are to be packaged, the side wall panels 2 and the end wall panels 4 and the supporting leg 7, as shown in Figs. 1 to 5 inclusive, may be eliminated. There is shown for purposes of illustration in Figs. 6 to 10 inclusive, a folder highly adapted to the packaging of a relatively thin article or articles. This folder may be formed from a single blank of paperboard material, as shown in Fig. 6, comprising a bottom wall panel 21 of the required shape and dimensions to properly contain the merchandise.

A pair of diametrically opposed side flap sections 22 are each hingedly connected to the bottom wall panel 21 as by score line 23. Each side flap section 22 is divided into an inturned side flap portion 22a and an outturned side flap portion 22b, these portions being defined and connected by a hinge or fold line 24. A cut 25 extends diagonally from each end of score line 24 to the adjacent end of score line 23 defining a triangular shaped platform portion 22c. A pair of diametrically opposed end flaps 26 are each hinged to the bottom wall panel 21 along a hinged or fold line 27. The end flaps 26 and side flap sections 22 may terminate short of the extreme corner 28 of the bottom panel 21 to facilitate packaging.

In packaging, the merchandise is arranged, 75

folded or stacked so as to occupy substantially the entire area of the bottom wall panel 21, the edges of the merchandise extending substantially to the fold lines 23 and 27. To protect the merchandise and to completely enclose the same, a cover C may be positioned upon the top surface of the merchandise, cover C comprising a flat sheet of paperboard material cut to the desired size. The side flaps 22 and end flaps 26 are then assembled to overlie the merchandise and provide a substantially continuous merchandise-retaining rim or flange.

The merchandise-retaining rim is formed by folding each of the outturned side flap portions 22b over the inside face of the corresponding inturned side flap portion 22a to which it is hingedly connected. Each of the side flap portions 22a is then folded inwardly to overlie the merchandise or merchandise-protecting cover C. When thus arranged, the triangular-shaped platform portion 22c will extend inwardly with the outer edge 28 thereof substantially in alignment to the adjacent hinge line 27.

The merchandise-retaining rim is completed by folding the end flaps 26 inwardly, the end flaps 26 and the side flaps 22 being retained in fixed position by inserting each corner 26a of the end flaps between the adjacent overlying side flap portion 22a and the underlying side flap portion 22b, insertion being effected at the cut line 25. The end flaps 26 are tenaciously held in inturned position by the pinching and frictional forces exerted on the corner portions 26a thereof by the underlying outturned side flap portions 22b and the overlying inturned side flap portions 22a. The package can only be opened by exerting considerable outward pulling force on the end flaps 26 so as to withdraw the corner portions 26a thereof from their housed position.

The package as thus assembled will retain its proper container form under substantially all conditions of use and abuse which merchandise containers receive in the channels of commerce. The triangular shaped platform portions 22c act to support the overlying end flaps 26 and further provide a tying gusset or strut whereby the end flaps 26 and the side flaps 22a are retained in spaced parallel relationship with respect to the bottom wall panel 21. The assembled merchandise-containing folder may be wrapped in a suitable wrapper to further protect the merchandise from contamination. The completed packages are highly adapted to vertical stacking, for display on the merchant's shelves, and retain the merchandise therein in fresh, unsoiled, unwrinkled condition until ultimately consumed.

Folders made in accordance with this invention are highly attractive and serviceable, and may be used for the packaging of numerous articles of merchandise, arranged in either folded or stacked flat condition. The folders are most economical to manufacture, and may be completely formed by running large sheets or rolls of the selected paperboard material through a cutting and scoring machine which prepares the complete blank without hand operation. No gluing, stitching or stapling operation is required to assemble the blank. The flat blanks are shipped to the user in flat expanded form substantially without lost dead air space and thus substantial economies can be effected in shipping and storage costs. When the merchandise is to be packaged, the merchandise is placed on the bottom wall panel thereof and the merchandise is quick-

ly and positively enclosed by a continuous overlying enclosing rim, which is quickly formed by a few simple, quickly performed flap-turning operations. A cover comprising a flat paperboard member may be provided which is to be positioned over the merchandise to lie directly beneath the retaining rim.

My improved folder is adapted to be formed in numerous attractive and convenient sizes, shapes and contours to contain and package numerous and various articles of merchandise. The proper paperboard material, either single or plural ply, of the requisite stiffness and strength to properly retain and support the merchandise to be packaged, is selected for the folder blank. The folder may be so made as to contain a stack of merchandise of almost any desired thickness by providing side and end wall panels of the proper height. The merchandise-retaining rim portion may be scalloped or otherwise cut into a decorative contour. The merchandise-containing folder is a strong and rigid to adequately protect the contents, and the packages are adapted to be stacked in high piles without crushing, wrinkling or damaging the merchandise packaged therein.

While certain novel features of the invention have been disclosed herein, and are pointed out in the annexed claims, it will be understood that various omissions, substitutions and changes may be made by those skilled in the art without departing from the spirit of the invention.

What is claimed is:

1. A merchandise package including, a folder formed from a single blank of paperboard material including a bottom wall panel upon which the merchandise is positioned, a substantially continuous inturned rim overlying the merchandise and retaining the merchandise within the folder, said rim including alternate flap sections each presenting before folding a generally rectangular-shaped section having an outer flap portion hinged to an inner flap portion, each of said outer flap portions being folded to underlie its associated inner flap portion, each of said underlying flap portions having end extensions projecting beyond the end edges of the associated overlying flap portion, and intermediate flap sections having the end portions thereof supported by the adjacent end extensions and inserted between the overlying and underlying flap portions of the adjacent alternate sections.

2. A merchandise package comprising, a folder formed from a single blank of paperboard material including a bottom wall panel upon which the merchandise is positioned; and a substantially continuous inturned rim overlying the merchandise and retaining the merchandise within the folder, said rim comprising opposite side flap sections and opposite end flap sections; each of said side flap sections presenting before folding an outer side flap portion hinged to an inner side flap portion, each of said outer side flap portions being folded to underlie its associated inner side flap portion and having end extensions projecting beyond the end edges of the associated overlying side flap portion, said end flap sections having corner portions thereof supported by said end extensions and inserted between said overlying and underlying side flap portions.

3. A merchandise package including, a folder formed from a single blank of paperboard material including a bottom wall panel upon which the merchandise is positioned, and a substantially continuous inturned rim overlying the mer-

chandise and retaining the merchandise within the folder, said rim including alternate side flap sections and intermediate end flap sections, each of said side flap sections presenting before folding an outer side flap portion hinged to an inner side flap portion, each of said outer side flap portions being folded to underlie its associated inner side flap portion, each of said underlying side flap portions having ear extensions coplanar therewith projecting beyond the adjacent end edges of the associated overlying side flap portion, said ear extensions providing means upon which said end flap sections are supported, said end flap sections having the corner portions thereof inserted between said overlying and underlying side flap portions.

4. A merchandise package comprising, a folder formed from a single blank of paperboard material having a bottom wall panel upon which the merchandise is supported, side and end wall panels hingedly connected to said bottom wall panel, and a substantially continuous inturned rim overlying the merchandise and retaining the merchandise within the folder, said rim comprising side flap sections hingedly connected to said side wall panels, each of said side flap sections presenting before folding a generally rectangular-shaped section having an outer side flap portion hinged to an inner side flap portion, each of said outer side flap portions being folded to underlie its associated inner side flap portion and having ear extensions projecting beyond the end edges of the associated overlying side flap portion; and end flap sections connected to said end wall panels having corner portions thereof inserted between said overlying and underlying side flap portions.

5. A merchandise package comprising, a folder formed from a single blank of paperboard material having a bottom wall panel upon which the merchandise is supported, side and end wall panels hingedly connected to said bottom wall panel, and a substantially continuous inturned rim overlying the merchandise and retaining the merchandise within the folder, said rim comprising side flap sections hingedly connected to said side wall panels, each of said side flap sections presenting before folding an outer side flap portion hinged to an inner side flap portion, each of said outer side flap portions being folded to underlie its associated inner side flap portion and having ear extensions projecting beyond the end edges of the associated overlying side flap portion, a leg portion hinged to each end of each underlying side flap portion having the lower edge thereof resting upon said bottom wall panel, and end flaps hingedly connected to said end wall panels having the corner portions thereof inserted between said overlying and underlying side flap portions.

6. A merchandise package comprising, a folder formed from a single blank of paperboard material having a bottom wall panel upon which the merchandise is supported, side and end wall panels hingedly connected to said bottom wall panel, and a substantially continuous inturned rim overlying the merchandise and retaining the merchandise within the folder, said rim comprising side flap sections hingedly connected to said side wall panels, each of said side flap sections presenting before folding an outer side flap portion hinged to an inner side flap portion, each of said outer side flap portions being folded to underlie its associated inner side flap portion, supporting

ears extending inwardly from said underlying side flap portions and beyond the adjacent end edges of the associated overlying side flap portion, and end flaps hingedly connected to said end wall panels and supported by said ears, said end flaps having corner portions thereof inserted between said overlying and underlying side flap portions.

7. A merchandise package comprising, a folder formed from a single blank of paperboard material having a bottom wall panel upon which the merchandise is supported, side and end wall panels hingedly connected to said bottom wall panel, and a substantially continuous inturned rim overlying the merchandise and retaining the merchandise within the folder, said rim portion comprising a side flap section hingedly connected to

each of said side wall panels, each of said side flap sections presenting before folding an outer side flap portion hinged to an inner side flap portion, each of said outer side flap portions being folded to underlie its associated inner side flap portion, each of said underlying side flap portions having supporting ears coplanar therewith and projecting beyond the adjacent end edges of the associated overlying side flap portion, a leg portion hinged to each end of each of said supporting ears having the lower edge thereof resting upon said bottom wall panel, and end flaps hingedly connected to said end wall panels supported by said ears, said end flaps having the corner portions thereof inserted between the overlying and underlying side flap portions.

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