July 12, 1960 H. STUMPF, JR 2,944,677

SHELF EXTENDER DISPLAY OR STORAGE DEVICE

Filed June 3, 1959 6 Sheets-Sheet 1

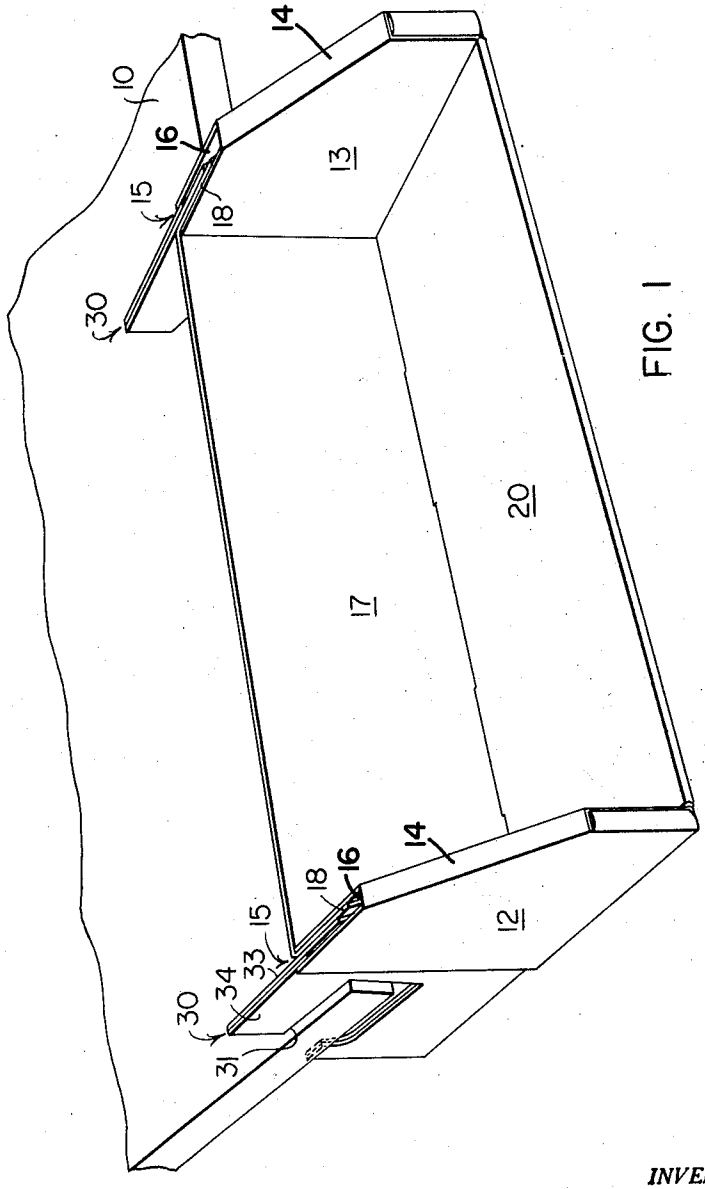


FIG. 1

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SHELF EXTENDER DISPLAY OR STORAGE DEVICE

Filed June 3, 1959 6 Sheets-Sheet 2

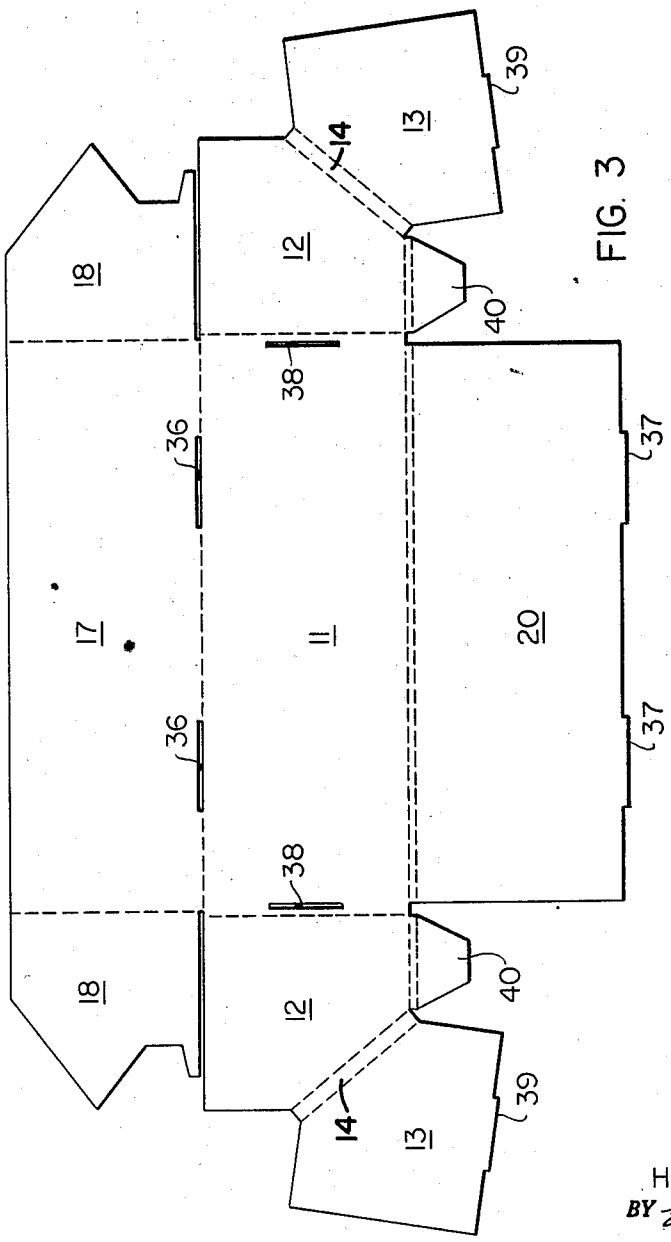


FIG. 3

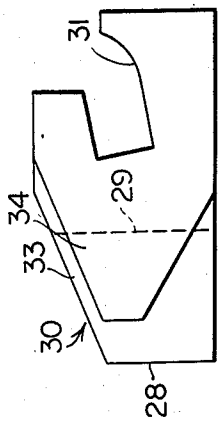


FIG. 4

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SHELF EXTENDER DISPLAY OR STORAGE DEVICE

Filed June 3, 1959 6 Sheets-Sheet 3

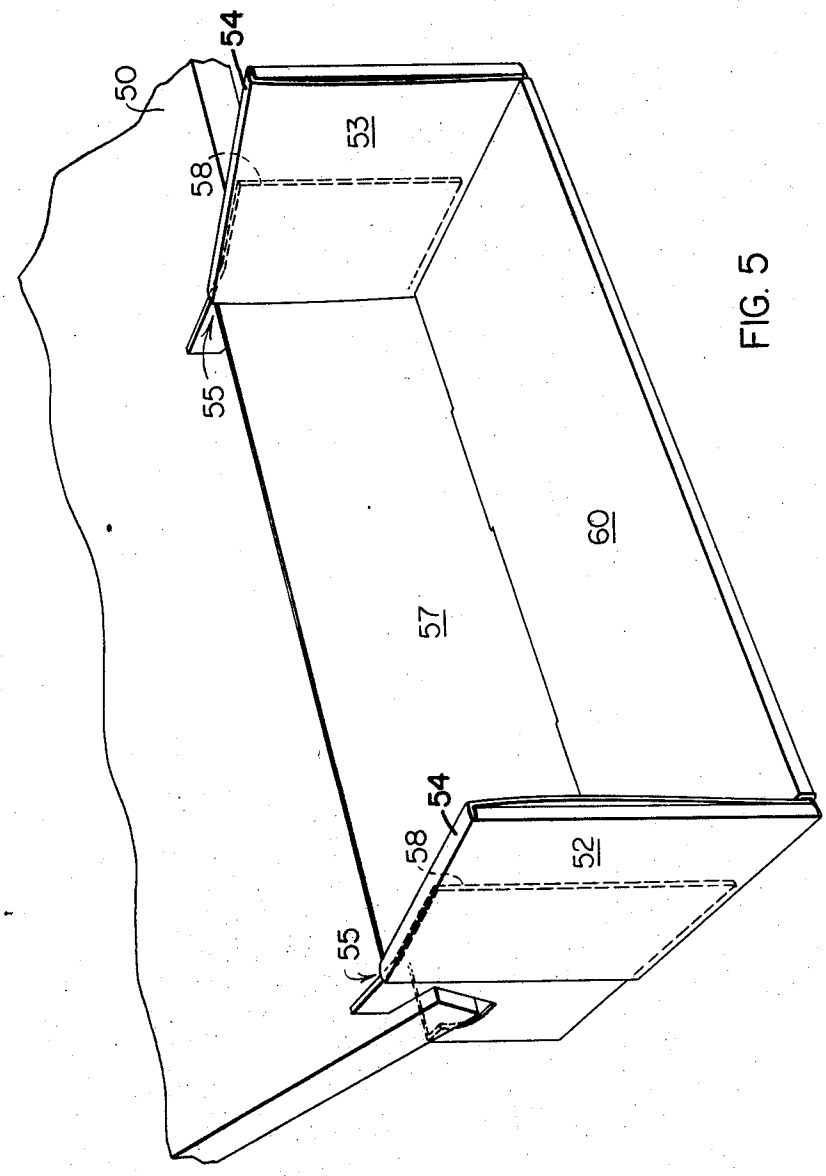


FIG. 5

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SHELF EXTENDER DISPLAY OR STORAGE DEVICE

Filed June 3, 1959 6 Sheets-Sheet 4

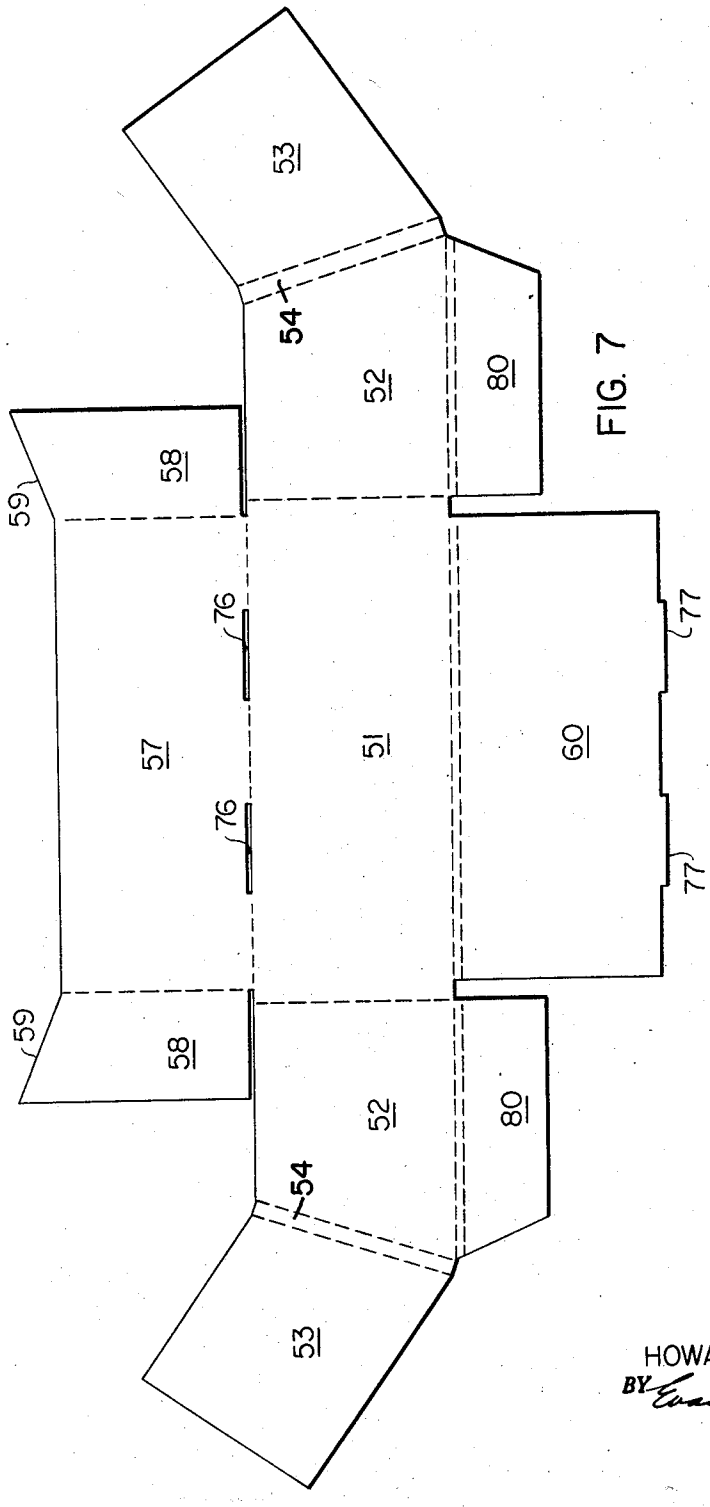


FIG. 7

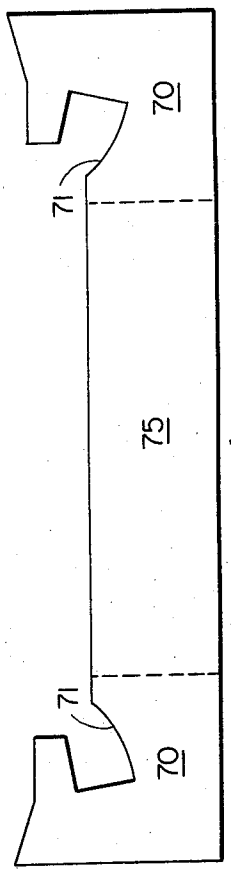


FIG. 8

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SHELF EXTENDER DISPLAY OR STORAGE DEVICE

Filed June 3, 1959 6 Sheets-Sheet 5

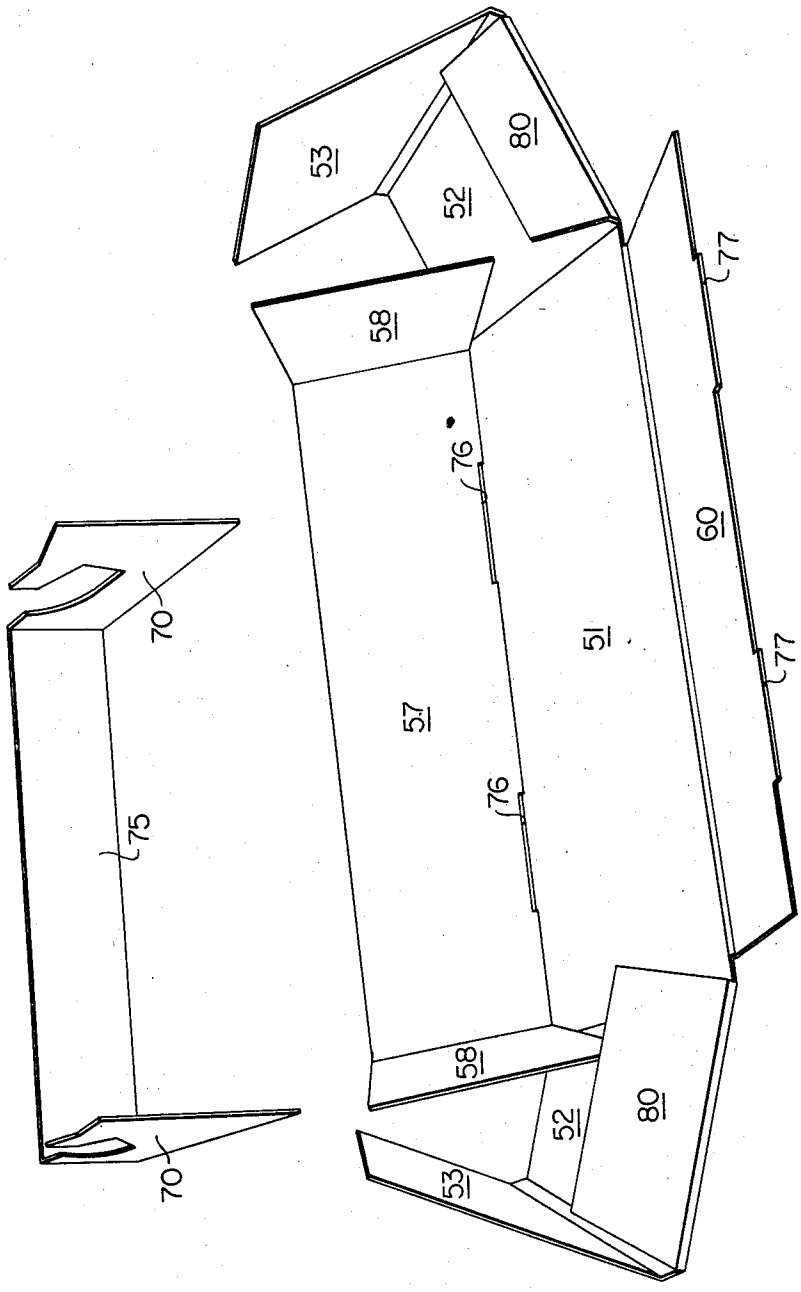


FIG. 6

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SHELF EXTENDER DISPLAY OR STORAGE DEVICE

Filed June 3, 1959 6 Sheets-Sheet 6

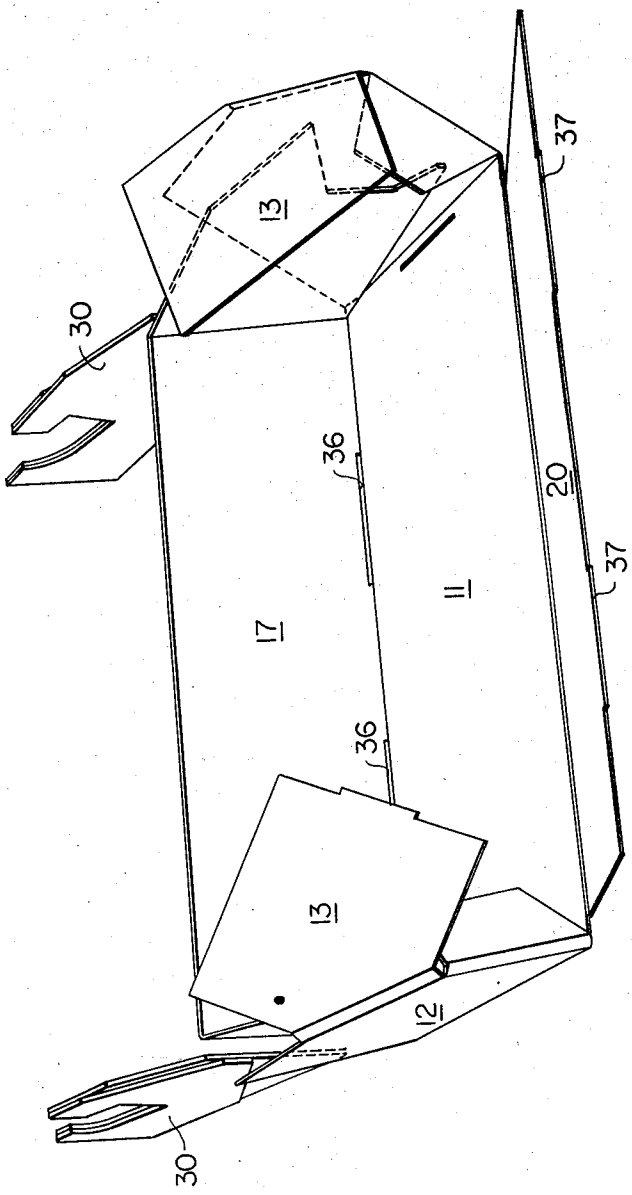


FIG. 2

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United States Patent Office 2,944,677 Patented July 12, 1960

2,944,677

SHELF EXTENDER DISPLAY OR STORAGE DEVICE

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Filed June 3, 1959, Ser. No. 817,818

4 Claims. (Cl. 211—153)

This invention relates to paperboard containers or display devices and more particularly to a point-of-sale display rack or device.

The type of device contemplated by the present invention may be termed a shelf extender and is particularly appropriate for use with cosmetics and proprietory drugs and like items where point-of-sale display is an important factor in successful merchandising of the product. The device of the present invention is advantageous from the product manufacturer's point of view since the retailer may be supplied with the device along with the cosmetic or drug or other similar product and may employ the present device to display the product without materially diminishing the amount of shelf space available for the display of other products.

Alternatively, the device of the present invention may be supplied to ultimate consumers along with items appropriate for storage therein at home on closet shelves or the like, for example, with shoe polish or similar items.

A feature of the invention is its adaptability to being shipped in the flat if desired and its ready assembly and erection by the user without glue or staples or other fastening means.

The invention contemplates the provision of paperboard shelves having a bottom panel with upright primary and secondary end panels at the ends of the bottom panel, each pair of the end panels defining pockets which receive shelf-engaging paperboard panel means which are slidable at least partially into and out of the pockets. Means are also provided extending between the pairs of end panels to restrain or to contribute to the restraint of the folding of the pairs with respect to the bottom panel, and means are also provided to retain the pairs of end panels in pocket-defining configuration or attitude with respect to each other.

Examples of the invention are illustrated in the accompanying drawings in which:

Figure 1 illustrates an example of the invention in association with a permanent shelf.

Figure 2 illustrates the device of Figure 1 in the process of being disassembled and unfolded into flattened condition.

Figure 3 illustrates the flat blank from which the device may be formed.

Figure 4 illustrates one of the shelf-engaging panels forming part of the device as illustrated in Figures 1 and 2.

Figure 5 illustrates another example of the invention in association with a permanent shelf.

Figure 6 illustrates the device of Figure 5 in the process of being disassembled and unfolded into flattened condition.

Figure 7 illustrates the flat blank from which the device may be formed.

Figure 8 illustrates the shelf-engaging panel means forming part of the device as illustrated in Figures 5 and 6.

The blanks illustrated in Figures 3 and 7 are viewed from the side which is to become the inner side of the device.

Illustrated in Figures 1–4 is a shelf extender device in engagement with a wooden shelf or other permanent shelf of similar structure indicated by the reference numeral 10 (Figure 1). The device itself includes a paperboard shelf comprising a bottom panel 11 and also comprising upright primary end panels 12 which are hinged to the bottom panel or shelf panel 11. Secondary upright end panels 13 are hinged to the primary end panels 12 through intervening portions 14. Each pair of primary and secondary end panels 12 and 13 together define pockets 16 having mouth portions 15 facing to the side of the device corresponding to the rear side of the shelf panel 11 and generally indicated by the reference numeral 15.

Means other than the shelf which comprises the shelf panel 11 extends along such shelf and from one to the other of the pairs of primary and secondary end panels 12 and 13. This means engages the primary and secondary end panels 12 and 13 and contributes to restraint of the panels against folding with respect to the shelf panel 11. This means in Figures 1–3 comprises a side panel 17 hinged to the rear side of the bottom panel 11 and extending along the length thereof and also end flaps 18 hinged at each end of the panel 17 and engaged in the pockets defined between the pairs of panels 12 and 13.

Means are also provided to lock the associated pairs of primary and secondary end panels 12 and 13 against movement away from each other at points remote from the sides or edges at which they are hinged to each other. This means may comprise an additional shelf panel 20 hinged to the front side of the bottom panel 11 and folded inwardly to overlie the bottom panel 11. The end edges of such additional shelf panel 20 will be seen to engage the lower portions of the secondary end panels 13 to hold such lower portions away from their associated primary end panels 12. It will be seen that at least part of this engagement is at points remote from the sides or edges at which the pairs of primary and secondary end panels 12 and 13 are hinged to each other.

The shelf-engaging means of the device of Figures 1–4 include a pair of shelf-engaging paperboard panels generally indicated by the reference numeral 30 and comprising vertical panels slidable at least partially into and partially out of the pockets defined between the associated pairs of primary and secondary end panels 12 and 13 through the mouths 15. It will be seen that the members 30 project from the mouths 15 in a rearward direction and are formed with shelf-engaging notches 31 adapted to receive the edge of the shelf 10 in the illustrated manner. In the particular embodiment, the members 30 comprise two-ply structure including the plies 33 and 34.

Suitable notches or other retaining means may be provided to aid in assembling or retaining the assembled and erected device in its erected condition. For example, slots 36 may be provided in the panel 17 designed to receive tongues 37 formed in a side of the panel 20. Also slots 38 may be formed in the panel 11 designed to receive tongues 39 on an edge of the panel 13.

Additional flaps such as the flaps 40 may be provided to fill in the front edges of the pockets defined between the pairs of panels 12 and 13 to provide a finished appearance in the erected article.

Illustrated in Figures 5–8 is a shelf extender device in engagement with a wooden shelf or other permanent shelf of similar structure indicated by the reference numeral 50 (Figure 5). The device itself includes a paperboard shelf comprising a bottom panel 51 and also com-

prising upright primary end panels 52 which are hinged to the bottom panel 51. Secondary upright end panels 53 are hinged to the primary end panels 52 through intervening portions 54. Each pair of primary and secondary end panels 52 and 53 together define pockets having mouth portions 55 facing to the side of the device corresponding to the rear side of the shelf panel 51 and generally indicated by the reference numeral 55.

Means other than the shelf which comprises the shelf panel 51 extends along such shelf and from one to the other of the pairs of primary and secondary end panels 52 and 53. This means engages the primary and secondary end panels 52 and 53 and contributes to restraint of the panels against folding with respect to the shelf panel 51. This means in Figures 5–7 comprises a side panel 57 hinged to the rear side of the bottom panel 51 and extending along the length thereof and also end flaps 58 hinged at each end of the panel 57 and engaged in the pockets defined between the pairs of panels 52 and 53.

Means are also provided to lock the associated pairs of primary and secondary end panels 52 and 53 against movement away from each other at points remote from the sides or edges at which they are hinged to each other. This means may comprise an additional shelf panel 60 hinged to the front side of the bottom panel 51 and folded inwardly to overlie the bottom panel 51. The end edges of such additional shelf panel 60 will be seen to engage the lower portions of the secondary end panels 53 to hold such lower portions away from their associated primary end panels 52. It will be seen that at least part of this engagement is at points remote from the sides or edges at which the pairs of primary and secondary end panels 52 and 53 are hinged to each other.

The shelf-engaging means of the device of Figures 5–8 includes the shelf-engaging paperboard panels 70 which are vertically disposed and which are slidable at least partially into and partially out of the pockets defined between the associated pairs of primary and secondary end panels 52 and 53 through the mouths 55. It will be seen that the panels 70 project from the mouths 55 in a rearward direction and are formed with shelf-engaging notches 71 adapted to receive the edge of the shelf 50 in the illustrated manner. In the particular embodiment, the members 70 comprise single ply panels each hinged to a connecting long panel 75.

Suitable notches or other retaining means may be provided to aid in assembling or retaining the assembled and erected device in its erected condition. For example, slots 76 may be provided in the panel 57 designed to receive tongues 77 formed in a side of the panel 60. Also the pairs of panels 52 and 53 may be hinged together along hinge lines which slope downwardly toward the rear side of the device, as illustrated, the pocket sides thus defined being engageable by the flared portions or edges 59 of the panels 58.

Additional flaps such as the flaps 80 may be provided to fill in the front edges of the pockets defined between the pairs of panels 52 and 53 to provide a finished appearance in the erected article.

The devices described above may form a liner for the shipping containers for the goods which are to be displayed on such devices. In this and in other respects, it may be advantageous to enable the shelf-engaging panels to be stored wholly or partially within the pockets defined between the associated pairs of panels 12 and 13 or 52 and 53 and to provide a generally rectangular aspect for the device as a whole including normally protruding members such as the shelf-engaging members. To these ends the members 30 may be provided with vertical fold lines 29 (Figure 4) which are a smaller distance from the front end 28 of each member 30 than the front-to-back extent of the pockets, i.e., than approximately the width of the panels 11 or 20. The device may be shipped with the members 30 pulled out of their pockets just sufficiently to expose the fold lines 29

whereby the rear portion of the members 30 may be folded flat against the back side of the panel 17. When the device is to be mounted on a shelf, the members 30 are unfolded around the fold lines 29 to a flat aspect and are pushed more deeply into their associated pockets whereby the fold lines 29 are moved to the interior of the pockets and folding therearound is prevented.

To the same ends, the panels 70 may be pushed deeply within their pockets for shipment, the panel 75 being then positioned against the panel 57. When the device is to be used, the panel 75 is drawn away from the panel 57 and the panels 70 are drawn out of their pockets until stopped by the engagement of the edges or flared portions 59 with the hinge connections between the pairs of panels 52 and 53.

The invention is not restricted to the slavish imitation of each and every one of the details described above which have been set forth merely by way of example with the intent of most clearly setting forth the teaching of the invention. Obviously devices may be provided which change, eliminate or add certain specific structural details without departing from the invention.

What is claimed is:

1. A paperboard shelf extender device for holding goods for display, dispensing or use, without taking up permanent shelf space, comprising a paperboard shelf having a front side and a rear side and comprising a bottom panel, upright primary end panels hinged to said bottom panel, secondary upright end panels hinged to said primary end panels, each pair of primary and secondary end panels together defining pockets having mouth portions facing to the side of said device corresponding to the rear side of said shelf, a side panel hinged to the rear side of said bottom panel and extending along the length thereof, end flaps hinged at each end of said side panel and engaged in said pockets, means to lock the associated pairs of primary and secondary end panels against movement away from each other at points remote from the sides at which they are hinged to each other, shelf-engaging paperboard panel means including vertical panels slidable at least partially into and partially out of said pockets through said pocket mouth portions and projectable therefrom in a rearward direction, said shelf-engaging paperboard panel means having shelf-engaging notches formed therein.

2. A paperboard shelf extender device for holding goods for display, dispensing or use, without taking up permanent shelf space, comprising a paperboard shelf having a front side and a rear side and comprising a bottom panel, upright primary end panels hinged to said bottom panel, secondary upright end panels hinged to said primary end panels, each pair of primary and secondary end panels together defining pockets having mouth portions facing to the side of said device corresponding to the rear side of said shelf, a side panel hinged to the rear side of said bottom panel and extending along the length thereof, end flaps hinged at each end of said side panel and engaged in said pockets, an additional shelf panel hinged to the front side of said bottom panel and folded inwardly to overlie said bottom panel, the end edges of said additional shelf panel engaging lower portions of said secondary end panels to hold them against movement away from their associated primary end panels, shelf-engaging paperboard panel means including vertical panels slidable at least partially into and partially out of said pockets through said pocket mouth portions and projectable therefrom in a rearward direction, said shelf-engaging paperboard panel means having shelf-engaging notches formed therein.

3. A paperboard shelf extender device for holding goods for display, dispensing or use, without taking up permanent shelf space, comprising a paperboard shelf having a front side and a rear side and comprising a bottom panel, upright primary end panels hinged to said

bottom panel, secondary upright end panels hinged to said primary end panels, each pair of primary and secondary end panels together defining pockets having mouth portions facing to the side of said device corresponding to the rear side of said shelf, means extending along said shelf and from one to the other of said pairs of primary and secondary end panels and engaging said pairs for contributing to restraint of said pairs against folding with respect to said shelf, means to lock the associated pairs of primary and secondary end panels against movement away from each other at points remote from the sides at which they are hinged to each other, shelf-engaging paperboard panel means including vertical panels slidable at least partially into and partially out of said pockets through said pocket mouth portions and projectable therefrom in a rearward direction, said shelf-engaging paperboard panel means having shelf-engaging notches formed therein.

4. A paperboard shelf extender device for holding goods for display, dispensing or use, without taking up permanent shelf space, comprising a paperboard shelf having a front side and a rear side and comprising a bottom panel, upright primary end panels hinged to said bottom panel, secondary upright end panels hinged to said primary end panels, each pair of primary and secondary end panels together defining pockets having

mouth portions facing to the side of said device corresponding to the rear side of said shelf, means extending along said shelf and from one to the other of said pairs of primary and secondary end panels and engaging said pairs for contributing to restraint of said pairs against folding with respect to said shelf, an additional shelf panel hinged to the front side of said bottom panel and folded inwardly to overlie said bottom panel, the end edges of said additional shelf panel engaging lower portions of said secondary end panels to hold them against movement away from their associated primary end panels, shelf-engaging paperboard panel means including vertical panels slidable at least partially into the partially out of said pockets through said pocket mouth portions and projectable therefrom in a rearward direction, said shelf-engaging paperboard panel means having shelf-engaging notches formed therein.

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UNITED STATES PATENT OFFICE

CERTIFICATE OF CORRECTION

Patent No. 2,944,677 July 12, 1960

Howard Stumpf, Jr.

It is hereby certified that error appears in the printed specification of the above numbered patent requiring correction and that the said Letters Patent should read as corrected below.

Column 6, line 13, for "the partially" read -- and partially --.

Signed and sealed this 20th day of December 1960.

(SEAL)
Attest:
KARL H. AXLINE
Attesting Officer

ROBERT C. WATSON
Commissioner of Patents