Aug. 18, 1936. N. J. LEIGH 2,051,093

DISPLAY RACK

Filed March 26, 1936 2 Sheets-Sheet 1

Fig. 1

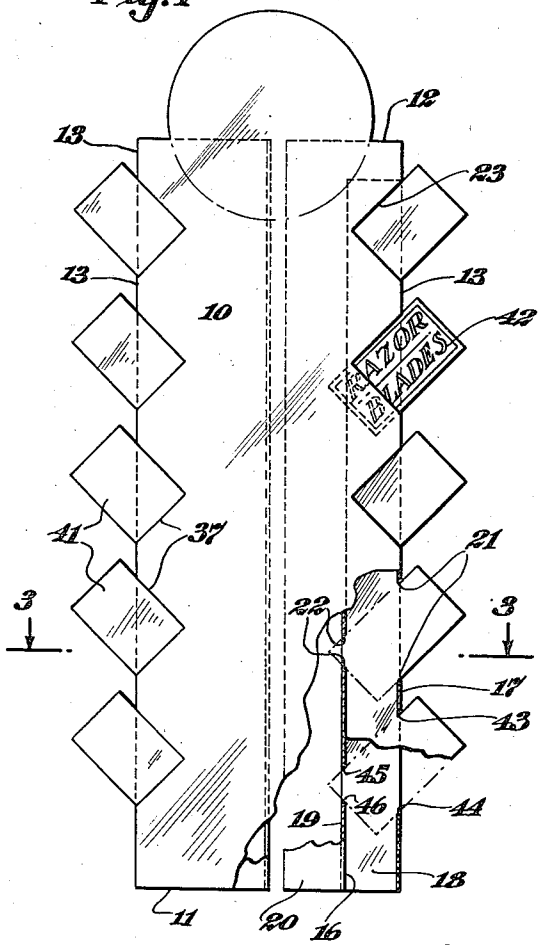


Fig. 2

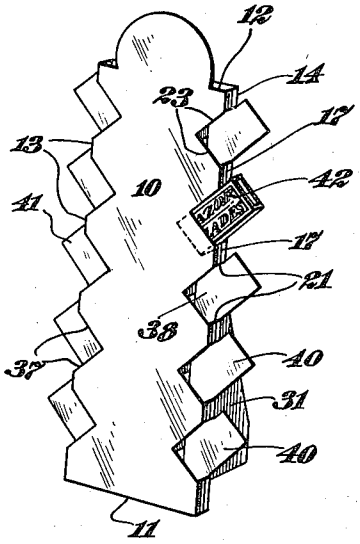


Fig. 4

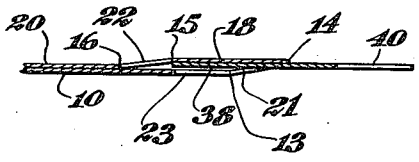


Fig. 3

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Fig. 5

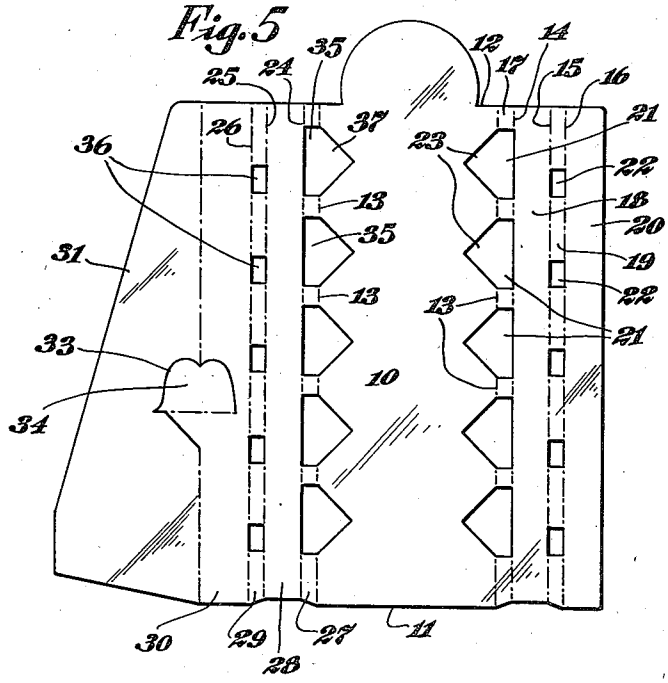


Fig. 6

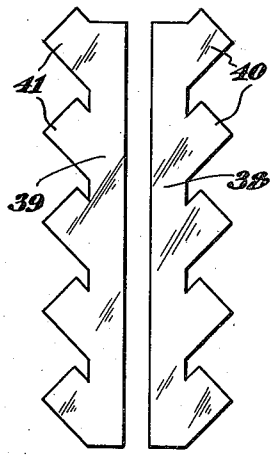


Fig. 7

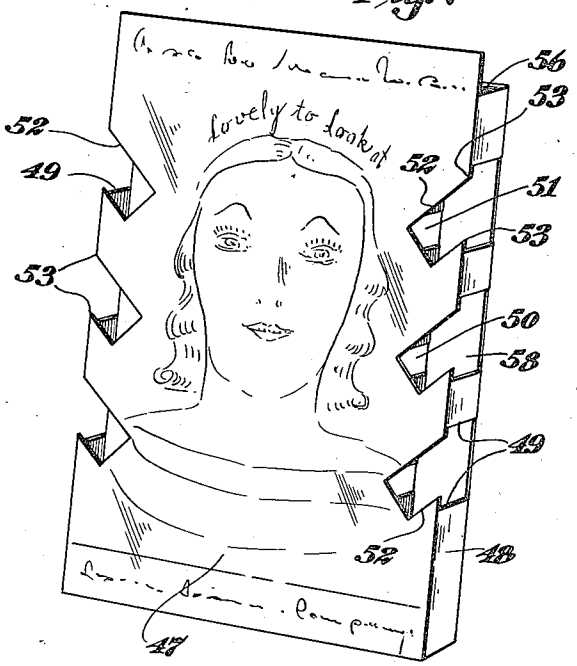
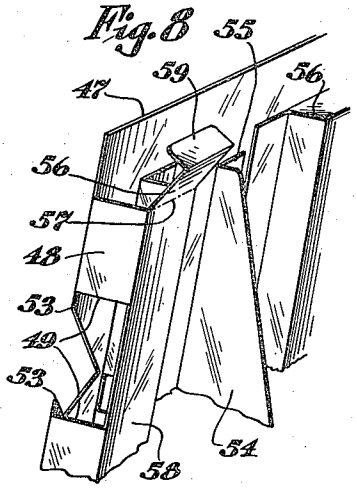


Fig. 8



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DISPLAY RACK

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Application March 26, 1936, Serial No. 70,966

12 Claims. (Cl. 211—72)

My present invention relates generally to display racks.

It is a general object of my invention to provide a supporting device for a plurality of packages that are offered for sale in a store. The invention is primarily applicable to a device of the character which may conveniently stand on a counter, displaying and offering for sale such packaged goods as razor blades, toothbrushes, and the like; but many phases of the invention are not restricted to any particular type or size of package nor to any particular size of rack.

Briefly, the invention provides a main display panel, upon which suitable advertising indicia may be depicted; a rear prop or support for the panel; and means for accommodating and supporting a series of packages or commodities in projecting relation to one or both lateral edges of the display panel.

One of the features of the invention lies in providing a series of openings in the panel adjacent to at least one lateral edge, and in the employment of means for supporting a series of packages behind this edge so that the inner portions of the packages are exposed through the openings, respectively, while the outer portions of the packages project laterally in side-by-side relation.

The present invention is admirably adaptable to the relatively inexpensive knockdown type of display device which is composed solely of cardboard or its equivalents. In one embodiment of the invention, the entire structure may be composed of a single blank of cardboard, and the structure is of a kind which permits the cardboard to be printed or lithographed on only one surface. In a modified embodiment, the device is improved and rendered more advantageous by the supplemental use of an additional flat element or elements of cardboard serving as backgrounds for the packages or commodities.

A display rack of the present improved type is characterized by the association with a display panel of a tubular chamber behind one edge of the panel, the chamber having spaced walls which are substantially perpendicular to the display panel and which are provided with apertures which receive and support the packages, respectively, which are offered for sale. In accordance with the invention, the apertures in the outer wall are relatively large and are adapted snugly to accommodate therethrough the packages in question; while the apertures in the inner wall are relatively small and serve as abutment supports for only the inner portions of the packages.

Where the device is constructed from an integral blank of cardboard or the like, a unique arrangement of fold lines and cut-outs permits the tubular chamber to be made integral with the display panel. Preferably, a chamber of this character is provided at each lateral edge of the display panel.

I achieve the foregoing objects, and such other objects as may hereinafter appear or be pointed out, in the manner illustratively exemplified in the accompanying drawings, wherein—

Figure 1 is a front elevational view, with portions broken away, of a display rack of the present improved character;

Figure 2 is a perspective view of the rack with one package illustratively shown in position;

Figure 3 is an enlarged cross-sectional view taken substantially along the line 3—3 of Figure 1;

Figure 4 is a view similar to Figure 3, showing a portion of the device in knocked-down condition;

Figure 5 is a plan view of the integral blank of cardboard which enters into the construction of the device of Figures 1–3;

Figure 6 is a plan view of the two supplemental blanks of cardboard which are used in the device of Figures 1–3;

Figure 7 is a perspective view of a slightly modified construction; and

Figure 8 is a fragmentary, rear, perspective view of the device of Figure 7, showing one of the structural details.

In Figure 5, I have illustrated the blank of cardboard which enters into the construction of the device of Figures 1–4. The particular embodiment chosen for illustration provides, on the blank, a body section 10 which is substantially rectangular, being bounded by the end edges 11 and 12 and by the lateral score lines 13. To the right of the body section 10, as viewed in Figure 5, a marginal section is divided by score lines 14, 15, and 16 into substantially rectangular areas 17, 18, 19, and 20. This marginal section is rearwardly doubled back, as indicated most clearly in Figure 3, so that the areas 17, 18, and 19 define the side and rear walls of a chamber of substantially rectangular cross-section, this chamber being arranged immediately behind the right-hand edge of the panel 10. The area 20 is folded into parallel superposition with respect to the panel 10 and is adhesively secured to the rear of the panel 10, thus retaining the tubular chamber in position. This chamber is nevertheless collapsible into the substantially flattened relationship

shown in Figure 4, and it is this flattened relationship which exists when the device is stacked with others, shipped, or ultimately knocked down.

It will be observed that the areas 17 and 19 define the outer and inner side walls of the tubular chamber, respectively, while the area 18 defines the rear wall. The side walls 17 and 19 may be said to constitute two spaced walls which are substantially perpendicular to the plane of the panel 10.

In accordance with my invention, the outer side wall 17 is provided with a series of relatively large apertures 21, and the inner side wall 19 is provided with a corresponding series of smaller apertures 22. Furthermore, the lateral edge portion of the panel 10 is provided with openings 23 which register with the apertures 21. In the illustrated embodiment the cut-away portions 23 are substantially triangular.

To the left of the panel 10, as viewed in Figure 5, I prefer to provide a second marginal section which is similarly constructed, being divided by score lines 24, 25, and 26 into substantially rectangular areas 27, 28, 29, and 30. This marginal section is also rearwardly doubled back to define a second tubular chamber of substantially rectangular cross-section, as shown most clearly in Figure 3. Here, again, the areas 27 and 29 define the outer and inner side walls of this chamber, respectively, while the area 28 defines the rear wall. The area 30 is adhesively secured to the back of the panel 10, thus retaining the tubular chamber in position immediately behind the left-hand edge of the display panel 10.

Preferably, the marginal section of the blank, referred to in the preceding paragraph, is provided with an extension 31 bounded by the score line or hinge line 32, the extension 31 serving as a collapsible prop for the entire device, as shown most clearly in Figure 3. It is also desirable to provide the cut 33 so that a hinged brace 34 may cooperate with the prop 31 when the device is set up. The prop 31 and the hinged brace 34 are, per se, known in the art and form no part of the present invention, except in so far as they are formed as integral portions of a single blank, the only required pasting operations being the two which secure the areas 20 and 30 to the rear of the panel 10, as shown in Figure 3.

The outer side wall of the left-hand tubular chamber is, like the other, provided with relatively large apertures 35; the inner side wall 29 is provided with a corresponding series of smaller apertures 36; and the left-hand edge portion of the panel 10 is provided with openings or cut-outs 37 which register with the apertures 35.

Before describing how the display rack is adapted to support packages or the like, it is necessary to point out that, in the preferred construction, separate and supplemental cardboard blanks 38 and 39 are inserted into the two tubular chambers, respectively, during the course of manufacture. These blanks assume the positions shown in Figure 3 when the device is manufactured, and it will be observed that the blank 38 has laterally projecting portions 40 which extend out of the chamber through the apertures 21; while the blank 39 has similar projecting portions 41 which project laterally out of the other chamber through the apertures 35.

When the device is set up it assumes the position shown most clearly in Figure 2. In this figure, and also in Figure 1, I have illustratively shown a package 42 of substantially rectangular configuration, in display position. The package is inserted into the tubular chamber behind the right-hand edge of the panel 10 by passing it through one of the apertures 21. This disposes the package within the tubular chamber in a substantially cross-wise relation. The inner end portion of the package passes into the corresponding smaller aperture 22, this aperture thus serving as an abutment support. Preferably, each aperture 21 is so positioned with respect to the corresponding aperture 22 that the package will assume the oblique disposition shown in Figures 1 and 2.

It will be understood that the apertures 21 and 22 are made of a predetermined size to accommodate a predetermined package, and the uniquely advantageous character of the present construction lies in the fact that the package is firmly and securely held in position. Not only is the package snugly held between the panel 10, at the front, and the rear wall 18, at the back, but it has in addition four points of support which are illustratively shown in Figure 1 at the points 43, 44, 45, and 46. The points of support 43 and 44 are afforded by the upper and lower edges of one of the apertures 21, and the points of support 45 and 46 are afforded by the upper and lower edges of the corresponding aperture 22.

It is also to be observed that each projecting portion 40 of the supplemental background element 38 is given a predetermined configuration so that it will substantially underlie the laterally projecting portion of the package 42. Not only does the element 38 produce a snugger fit of the package within the present device, but it serves also as an attractive background for vacant spaces, i. e., for those spaces from which packages 42 have been removed as they are sold. It is usually preferable to print or lithograph the exposed surfaces of the projecting background portions 40, either with advertising indicia, or with a simulation of the front face of a package 42.

The function of the openings 23 in the front panel are to expose to view at least a part of the front face of the package portion which is disposed within the chamber. Depending upon the type of package which is displayed, the openings 23 will assume either a triangular configuration, as shown, or some other suitable shape.

In essence, the invention may be said to consist of a front panel, in association with a tubular chamber behind one edge, the side walls of the chamber having apertures adapted to support a package in the manner hereinbefore described. In practice, however, it is preferable to provide not only one tubular chamber, but two, as shown in the drawings; and it is also preferable to provide for the support and display of more than one package in each tubular chamber. Thus, in the device of Figures 1 and 2, means are provided for accommodating and displaying a total of ten packages, five in each chamber.

In Figures 7 and 8, I have illustrated a slightly modified construction in which means are provided for accommodating and supporting a total of only six packages or the like, three in each tubular chamber. In this embodiment, an integral cardboard blank is shaped to define a front panel 47 and two tubular chambers behind the lateral edges of the panel. The chambers are identical, and reference will, therefore, be had to only the one at the right of Figure 7. The outer side wall 48 is provided with relatively large apertures 49, and the inner side wall 50 is provided with relatively small apertures 51. The edge portion of

the panel 47 is provided with openings 52 which register with the apertures 49. In this case, the openings 52 are trapezoidal in shape, and they are somewhat narrower than the apertures 49, thereby leaving slight overhanging portions 53 which assist in holding the packages in position.

Also, in Figures 7 and 8, the supplemental background elements are omitted; and the rear prop 54 is a separate element adhesively secured by the portion 55 to the back of the display panel 47.

One of the advantageous features of the embodiment of Figures 7 and 8 lies in the provision of a closure flap 56 at the top of each tubular chamber. This flap is hinged, as at 57, to the rear wall 58 of the chamber, and has an extension 59 which may be tucked into the top of the chamber when the closure flap 56 is moved from the open position at the left of Figure 8 to the closed position shown at the right of this figure. This closure flap 56 enhances the overall appearance of the device and serves the important additional function of rigidifying the chamber. Obviously, the flap 56 must be opened up before the device is collapsed into flattened relation for purposes of shipment or stacking.

One of the outstanding characteristics of the entire present structure, contributing toward its efficient and highly practical nature, lies in the fact that it is composed essentially of a single integral blank of cardboard, and that printing or lithographing need take place with respect to only one surface of the blank. Because of the desirability of printing on only one surface, the use of the supplemental elements 38 and 39 in the preferred embodiment is advantageous, because in the embodiment of Figures 7 and 8 the withdrawal of a package leaves an empty space which is not as attractive as it might be.

In general, it will be understood that changes in the details, herein described and illustrated for the purpose of explaining the nature of my invention, may be made by those skilled in the art without departing from the spirit and scope of the invention as expressed in the appended claims. It is, therefore, intended that these details be interpreted as illustrative, and not in a limiting sense.

Having thus described my invention, and illustrated its use, what I claim as new and desire to secure by Letters Patent is—

1. In a display rack of the character described, an integral cardboard blank having a body section defining a display panel, and a marginal section rearwardly doubled back to define the rear and side walls of a tubular chamber of substantially rectangular cross-section disposed behind one edge of said panel, a portion of said marginal section being adhesively secured to the back of said panel, another portion being shaped to define a rear prop for the panel, and the side walls of said chamber having apertures adapted to receive and support a package extending crosswise through said chamber.

2. In a display rack of the character described, an integral cardboard blank having a body section defining a display panel, and a marginal section rearwardly doubled back to define the rear and side walls of a tubular chamber of substantially rectangular cross-section disposed behind one edge of said panel, the side walls of said chamber having apertures adapted to receive and support a package extending crosswise through said chamber, the aperture in the outer wall being relatively large to permit insertion and removal of the package through it, the aperture in the inner wall being relatively small to accommodate and act as an abutment support for only the inner end portion of the package.

3. In a display rack of the character described, an integral cardboard blank having a body section defining a display panel, and a marginal section rearwardly doubled back to define the rear and side walls of a tubular chamber of substantially rectangular cross-section disposed behind one edge of said panel, the side walls of said chamber having apertures adapted to receive and support a package extending crosswise through said chamber, and the display panel having an edge portion cut away to expose at least part of the front face of the package portion within said chamber.

4. In a display rack of the character described, an integral cardboard blank having a body section defining a display panel, and a marginal section rearwardly doubled back to define the rear and side walls of a tubular chamber of substantially rectangular cross-section disposed behind one edge of said panel, the side walls of said chamber having apertures adapted to receive and support a package extending crosswise through said chamber, and a separate background element disposed within said chamber and provided with a portion projecting laterally out of said chamber through the aperture in the outer wall.

5. A display rack comprising a display panel, and a tubular chamber behind one edge of the panel, said chamber having two spaced walls substantially perpendicular to the panel, the outer wall being integral and flush with the edge of the panel and having an aperture adapted to snugly accommodate the midportion of a rectangular package therein, the inner wall having a smaller aperture adapted to receive and afford support for the inner corner of the package, whereby the free end portion of the package projects laterally from said panel.

6. A display rack comprising a display panel, and a tubular chamber behind one edge of the panel, said chamber having two spaced walls substantially perpendicular to the panel, the outer wall having an aperture adapted to snugly accommodate the midportion of a package therein, the inner wall having a smaller aperture adapted to receive and afford support for the inner end portion of the package, and the display panel having an edge portion cut away to expose at least part of the front face of the package portion within said chamber.

7. A display rack comprising a display panel, and a tubular chamber behind one edge of the panel, said chamber having two spaced walls substantially perpendicular to the panel, the outer wall having an aperture adapted to snugly accommodate the midportion of a package therein, the inner wall having a smaller aperture adapted to receive and afford support for the inner end portion of the package, whereby the free end portion of the package projects laterally from said panel, and a background element disposed within said chamber and provided with a portion projecting laterally out of said chamber to underlie said projecting package portion.

8. A cardboard display rack comprising a display panel, and a tubular cardboard chamber behind one edge of the panel, said chamber having two spaced walls substantially perpendicular to the panel, the outer wall being integral and flush with the edge of the panel and having a series of apertures adapted snugly to accommodate rectangular packages therethrough, the inner wall having a corresponding series of smaller aper-

tures adapted to receive and afford support for only the inner corners of said packages, respectively, whereby the free end portions of the packages project laterally, in side-by-side relation, from said panel.

9. A cardboard display rack comprising a display panel, and a tubular cardboard chamber behind one edge of the panel, said chamber having two spaced walls substantially perpendicular to the panel, the outer wall having a series of apertures adapted snugly to accommodate packages therethrough, the inner wall having a corresponding series of smaller apertures adapted to receive and afford support for the inner end portions of said packages, respectively, whereby the free end portions of the packages project laterally, in side-by-side relation, from said panel, and a cardboard background element disposed within said chamber and provided with portions projecting laterally out of said chamber to underlie said projecting package portions, respectively.

10. A display rack comprising a display panel, and a tubular chamber behind one edge of the panel, said chamber having two spaced walls substantially perpendicular to the panel, the outer wall having an aperture adapted to snugly accommodate the midportion of a package therein, the inner wall having a smaller aperture adapted to receive and afford support for the inner end portion of the package, whereby the free end portion of the package projects laterally from said panel, the display panel having an edge portion cut away to expose at least part of the front face of the package portion within said chamber, and a background element disposed within said chamber and provided with a portion projecting laterally out of said chamber to underlie said projecting package portion.

11. A cardboard display rack comprising a display panel, and a tubular cardboard chamber behind one edge of the panel, said chamber having two spaced walls substantially perpendicular to the panel, the outer wall having a series of apertures adapted snugly to accommodate packages therethrough, the inner wall having a corresponding series of smaller apertures adapted to receive and afford support for the inner end portions of said packages, respectively, whereby the free end portions of the packages project laterally, in side-by-side relation, from said panel, the display panel having a series of openings in registry with the apertures of the outer wall so as to expose at least part of the front face of each package within said chamber.

12. A cardboard display rack comprising a display panel, and a tubular cardboard chamber behind one edge of the panel, said chamber having two spaced walls substantially perpendicular to the panel, the outer wall having a series of apertures adapted snugly to accommodate packages therethrough, the inner wall having a corresponding series of smaller apertures adapted to receive and afford support for the inner end portions of said packages, respectively, whereby the free end portions of the packages project laterally, in side-by-side relation, from said panel, the display panel having a series of openings in registry with the apertures of the outer wall so as to expose at least part of the front face of each package within said chamber, and a cardboard background element disposed within said chamber and provided with portions projecting laterally out of said chamber to underlie said projecting package portions, respectively.

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