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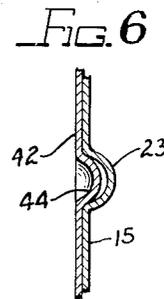
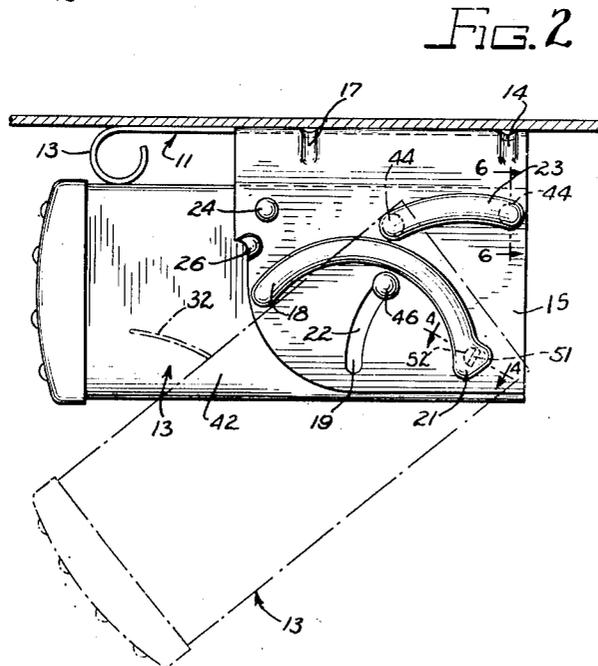
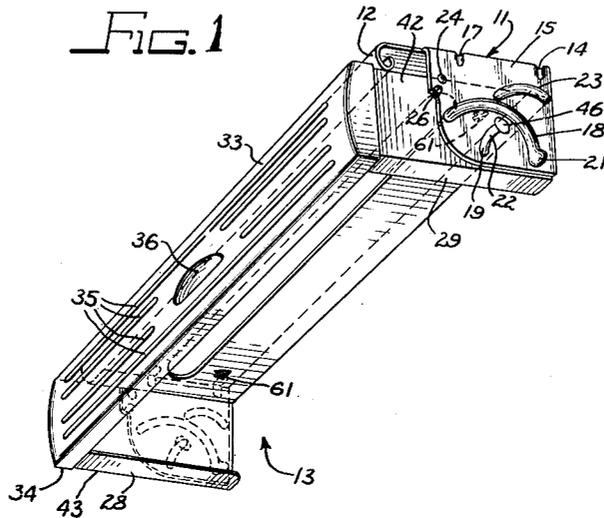
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DISPENSER BRACKET

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2 Sheets-Sheet 1



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DISPENSER BRACKET

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The present invention relates to dispensing devices, and particularly to dispensing devices adapted to support a package of disposable tissues.

Certain packaged products are produced and assembled so that the contents thereof may be withdrawn successively through a wall aperture which may be made by puncturing a prepared area thereof. One example which illustrates this practice concerns packaged disposable cellulose tissues which are used for personal needs, household utility, and in various other general service respects. Manufacturers of these tissues, recognizing that facile availability of these tissues in respect to their container package to a large extent enhances their utility, have designed the packaging containers so that the tissues may be removed successively from a stacked condition therein. Towards this end the tissues are packaged with inter-engaging flaps and stacked in containers which outline their assembled stack dimensions.

It is desirable to be able to support packages containing such disposable tissues on wall mounted fixtures so that they can be placed in various locations on the wall or other support in a room or an automobile. Such mounting and availability are especially important in connection with their use in automobiles where storage space is scarce.

A principal object of the present invention, therefore, is to provide a mounting and dispensing fixture that is suitable for use with commercially packaged articles, such as cleansing tissues, which can be applied upon vertical or horizontal wall surfaces, which will support such packaged goods in utility and concealment positions selectively, and is so constructed as to permit the housing to be rotated into such position that a box of tissues may be easily inserted therein or removed therefrom from the front side of the fixture.

Another object of the present invention is to provide a rugged surface mountable bracket for supporting dispensables in packaged form which can be produced in an economical and inexpensive manner from low cost materials.

Another object of this invention is to provide a novelly constructed hinge mechanism whereby the package containing housing having an opening may be rotated through an arc of 180° so that the opening is brought around to position of quickly and easily inserting or removing a box of tissues from the housing.

Still another object of this invention is to pro-

vide a dispensing device which may be installed in places where insufficient space is provided for the insertion or removal of a box of tissues through the open back of the dispenser.

Further objects are such as will become evident during the course of the following description and such as will appear from the disclosure and claims appended hereto.

For a better understanding reference will now be had more particularly to the illustrations in the accompanying drawings and to the detailed description of the construction and operation which will follow. In both the drawings and the following detailed description, like reference characters are employed to designate corresponding parts throughout.

Fig. 1 is a perspective view of a sheet metal formed container and wall-mountable supporting bracket particularly adapted to accommodate packaged cleansing tissues and in which there are embodied various features of the present invention;

Fig. 2 is a perspective view of the same type of apparatus illustrated in Fig. 1, showing in dotted and solid outline relative positions of the container during concealment and utility positions;

Fig. 3 is a view showing the structural features of the apparatus in package-receiving or withdrawal position;

Fig. 4 is a sectional detail view taken along lines 4—4 of Fig. 2;

Fig. 5 is a perspective view of a modified form of apparatus in which the container element is fabricated of plastic or other substance characterized by a more full enclosure of the commercial package thereby; and

Fig. 6 is a sectional detail view taken along lines 6—6 of Fig. 2.

The reference numeral 11 designates generally a sheet metal formed mounting bracket, the foremost edge of which is formed with an open bead 12 for the purpose of affording thereby a resilient bumper and spacer device to be encountered by a pivotal frame member 13 during its placement into the closed position as illustrated in Figs. 1 and 2. The panel of the mounting plate 11 is preferably perforated at various and appropriate locations so that screws, nails, or other anchoring devices, may be inserted therethrough for securing the bracket to a horizontal wall such as, for example, the glove compartment of an automobile.

The open bead 12 imparts a transverse rigidity near the upper end of the panel section 11 and near its rearmost edge this panel may be further

reinforced and stiffened by the provision of a rib, as at 14, which extends across the width of the panel and partially around the corner at each end, as is better portrayed in Figs. 1, 2 and 3.

At each of its opposite sides the back panel is bent at right angles to form a pair of side panels 15 and 16, and a small rib is provided, preferably as at 17, in respect to each of the end panels 15 and 16 to further increase the rigidity of the panel.

Referring to Figs. 1, 2 and 3, it will be noted that the foremost end panel 15 has arcuate channels on its inside face preferably formed by offsetting the material of the wall outwardly. The arcuate channel 18 has its axis on the center of a hole containing the guide rivet 19 in Fig. 2. The arcuate channel 18 is provided near its lower end with a significant flaring extremity 21, the purpose of which will be better explained at a later point in this description.

An arcuate cut-out is made in the panel 15, as at 22, such that its center of curvature is in the approximation of the toe extremity of the flared portion 21 just described. A rib formed by upsetting the material of the end wall designated generally at 23 is located to the rear and slightly above the arcuate channel 18, the curvature of which is concentric with that of the cut-out 22 and accordingly will be understood to have the same approximate point for its circle center. Directly forwardly, the rib 23 there is formed in the panel 15 a detent 24 and, to the left of the detent 24, along a circular line from the center discussed above formed in the toe formation 21, the panel 15 is flared into an edge fluting 26.

While not particularly illustrated in these drawings, as in the case of panel 15, the companion or hidden-from-view panel 16 is formed in precisely the same manner as panel 15, except that in relation thereto all of the channels, ribs and cut-outs of panel 16 are symmetrical and opposite.

Between the two parallel panels 15 and 16 there is interposed a rectangularly conformed sheet metal housing member, designated 13, which, for the sake of economy of fabrication is, in the preferred disclosure, illustrated as being shaped of a principal enveloping section of sheet steel whose ends, designated 28 and 29, face each other on the small sides of the rectangular formation, as viewed in Fig. 1, but whose main and largest panel or intermediate section is provided with a longitudinal slot 31, whose location is placed in this position because it coincides with the location of a similar slot formed in the cardboard packaging containers of certain classes of cellulose fiber cleansing tissues, which are thus made and sold commercially for various personal, household and industrial uses. Through the aforementioned coincidence or registration of the opening 31 in the sheet metal housing 13 and the corresponding opening in the commercial package, there is obtained accessibility to the inter-folded sheets of cleansing tissues, one of which has been designated as at 32 (Fig. 2) having an end fold extended out so as to be grasped for removal.

One end of the principal sheet metal member 13 is preferably capped by an end piece 33 which consists of a formed unitary member of rectangular outline having curved or filleted corners 34 coinciding with the similar forming or shaping of the principal member 13 thereat. The other end of the sheet metal member 13 is left open for the insertion or removal of a package of tissues.

The cap or end member 33 is preferably ornamented with longitudinal flutes or ridges, as at

35, and at its center, as at 36, is provided with an inset embossment whereby one edge, as best seen in Fig. 1, is formed in straight line, sharp drop-off arrangement so as to be engageable manually for the purpose of rotating the container from the position shown in Fig. 1 to that shown in dotted outline in Fig. 2 for the removal of a tissue or to that shown in solid outline in Fig. 3 for insertion or removal of a package or box of tissues.

The cap 33 is integrated with the side member by riveting or spot welding at the peripheral juncture, Fig. 1, where the filleted straight side section encloses the rectilinear edging of the formed sheet 13. In this way the assembly is made generously stout and transversely rigid, maintaining its shape and physical dimensions in an enduring manner.

Calling attention now again to the sheet 13 which forms the principal encircling body for a package of tissues to be inserted therein (not shown), it will be observed to comprise opposite end panels 42 and 43 (see particularly Fig. 1) of rectangular outline, and of these panels, the foremost one 42 will be understood to resemble its counterpart 43 in all respects with identical but symmetrically opposite formation detail.

In the foremost panel 42 is formed a pair of detent projections 44 and 45 (Figs. 2 and 3) of slightly smaller diameter than the detent 24 in panel 15. At a significant point in each of the panels 42 and 43 there is provided a headed rivet 46 located in the position 19 in Figs. 2 and 3, but located in an opposite extremity of the curved slot 22 in Fig. 1. This rivet is applied during a final assembly operation since its head is extended through the curved slot 22 in panels 15 and 16 whereby the thickness of the metal which forms these panels comprises a spacing between the head 46 and its anchorage in the panels 42 and 43 so as to be slidable about the point 21 as a center along the path of slot 22.

In addition to the foregoing significances of the panels 42 and 43, each is provided with an upstanding lug 51, Fig. 3 (not visible in full lines in any of the other illustrations), which remains confined within the space accommodation within the arcuate channel 18 in its related panel 15 or 16. The out-struck projection 51 is perpendicular to the body of panel 42 and accordingly leaves an opening 52 in said body when it is removed. Unlike other of the protuberant parts of the panels 42 and 43, projections 51 are sharp confinable obstructions which, because of such reasons, remain within the confines of the hollow arcuate channels 18 as they travel from one end to the other during the course of the operations now to be explained. Detent projections 44 and 45 being shallow and filleted lend themselves more easily to ingress and egress through cammable or distortable clearances, as will now become apparent.

To illustrate what is meant, attention is now again directed to Figs. 1, 2 and 3. With the housing member in its tissue and package concealing position, the tissue and the contained package are hidden from view and the dispensing opening 31 is concealed from access and exposure by being presented in the confining space which faces the outer surface of panel 11. To obtain access to the tissue, the operator engages the depression 36 and exerts a torque against the housing by pulling downward or towards the operator. This movement is marginally resisted because at this starting point the detent projection 45 is resting within the hollow of the nodule 24 in panel 15 and the detent projection 44 is at the rear of rib 23. Since the panels are close-

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spaced to a significant degree, the force which an operator thus exerts is intended to be of a positive degree. Eventually because of the shallow filleted curvature formation of the opposite detent projections 45 this resistance to movement is overcome by effecting a gentle springing away of the sides 15 and 16, which is induced by the camming action of this detent projection which moves from the rear of rib 23 until it reaches the forward end of rib 23. Thereupon the housing 13 moves from the solid line position shown in Fig. 2 throughout an arc which corresponds with the subtended angle represented by the cut-out 22, coming to rest in the dotted outline position shown in Fig. 2 whereat the rivet 46 is obstructed by encountering the end of slot 22. At this stage the housing 13 is in utility position and tissues may be easily withdrawn through the dispensing opening 31.

It is important to observe that because the rivet 46 is limited by the length of the slot 22, further exertion of force causes the housing 13 to be rotated about point 19 as a center, and with the rivets 46 as fulcrums. During the aforementioned arcuate sliding movement of the rivets 46 in their slots 22, the detent projections 44 which are shown in dotted outline in Fig. 2 move from the lowermost end to the uppermost end of the space provided by the embossments 23. Continued further exertion of force causes said detent projections 44 to cam out of the curved internal ridges within the embossments 23, traveling through an arcuate path thereafter on the smooth non-embossed internal surface of panels 15 and 16 from the points at which they leave the embossments 23, exiting at the flared formations 26 on each of the panels 15 and 16. This renders the container 13 to be rotated freely about the pivots 46 until the open back is brought around to the front without encountering at this point even that degree of resistance which was produced by the detent projections 44 scraping the inner surface of panels 15 and 16 until container 13 is brought into container filling or removal position shown in solid lines in Fig. 3.

It is especially to be noted that by means of the just described compounding of two pivotal actions, during which the package housing 13 is moved from its protecting and concealment position toward and into the exposure for content dispensing position, there has been achieved a close placement condition of the fixture assembly when not needed and an extending laterally thereof from such close placement to a more projected position when the dispensables are made accessible. Moreover, this lateral displacement of the unit which houses the dispensing package is made incident to its revolvment and without requiring conscious effort on the part of the operator.

When ultimately the container 13 reaches the position shown in solid lines in Fig. 3 it is more positively obstructed against further progress by reason of the fact that the out-struck lugs 51 reach the ends of the internal space afforded by the long arcuate channels 18 and, since, as already has been explained, the projections 51 are sharp and more squarely encountering because of their formation or shape than are the detent projections 44 and 45, the position featured in Fig. 3 becomes the practical limit of movement.

It is to be noted that by the action just described the open back of the package housing 13 is ultimately brought around to the front and is thus placed in position whereby the operator

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may easily and conveniently insert a box of disposable tissues or remove an empty box. By reason of the structure and mode of operation described, the dispensing device may be installed in places where insufficient space is provided to enable the user to insert or remove a box of disposable tissues through the open back of the housing 13 when the dispenser is in the position shown in Fig. 2.

The return operation constitutes simply a reversal of the succession of steps just described, it being of significance to observe that the detent projections 44, by reason of the flared sections 26, pass through the position shown in Fig. 2, traveling towards the receded designation without any appreciable impediment at which time the embossments again disappear behind the sides of the panels 15 and 16.

It has been stated that for the purpose of embracing, enclosing and protecting the commercial packages of cleansing tissues, the rotatable members may be constructed in various manners within the general contemplation of the foregoing utilities. In Fig. 5 an illustration of the diversification to which this application lends itself is aptly illustrated. Here it will be observed that a plastic rectangular housing having an opening at one of its narrow side walls has been provided with superimposed panels which are formed and constitute the counterparts of the end panels 42 and 43. Since these counterparts as metallic elements are less susceptible to wear and deterioration, they are preferably formed of sheet metal and superimposed by riveting or other techniques of securement.

Since the commercial package of cleansing tissues in its full condition is a comparatively firm and less compressible rectangular unit, its insertion into the container 13 as shown in the preferred embodiment, Fig. 3, is accordingly secured by the provision of inwardly extending bite prongs 61 formed by triangular in-flared projections situated as best seen in Fig. 1. In the case of the modified embodiment, Fig. 5, the same retentive properties may be obtained by the provision of extensions 63 having toothed extremities and flared inwardly so as to bite into and secure the edges of the cardboard packaging in its new or firm condition.

As the package becomes depleted in both instances, it is easily collapsed so as to be removable, notwithstanding any interference from the projections 61 or 63.

While the present invention has been explained and described with reference to specifically contemplated designs and adaptations, it will be understood, nevertheless, that it is susceptible to significant degrees of modification and variation without departure from its essential concept. Accordingly, it is not intended to be limited in understanding to the particular details shown in the accompanying drawings nor to the language chosen in the foregoing description except as indicated in the hereunto appended claims.

The invention claimed is:

1. A sheet metal formed dispensing device bracket comprised of a mounting component having a back panel and a pair of end panels of which said end panels are provided with opposed primary axes guide embossments, opposed secondary axes guide embossments, and curved primary axes guide slots, a secondary component carried by said mounting component having sheet metal end panels adapted to be confined between said primary component end panels and

having provided respectively therewith primary axes projections to be confined in said primary axes embossments, primary axes rivet elements to be confined for movement in said primary axes curved slots, and secondary axes projecting elements consisting of up-struck protrusions in said secondary component side panels confined for pivotal as well as curvilinear movement in said mounting component primary axes embossments.

2. A sheet metal bracket assembly for holding packaged dispensables comprising a securable member having a back panel and end panels, a series of divers guide embossments on said end panels including opposed primary axes curved embossments, opposed secondary axes curved embossments and curved primary axes guide slots, a movable member having sheet metal end panels adapted to be straddled by said securable member end panels and having provided respectively therewith primary axes projections to be confined in said securable member primary axes embossments, primary axes floating rivet elements confined for movement in said securable member, primary axes guide slots, and secondary axes elements consisting of up-struck protrusions in said movable member side panels confined for pivotal as well as curvilinear movement in said securable member primary axes embossments.

3. An apparatus for supporting dispenser packages alternatively in utility and reeded conditions comprising, a mounting bracket having a wall panel and in perpendicularity to said wall panel a pair of end panels, a package embracing housing having opposed end panels adapted to be nested between said wall bracket end panels, and means for rotatably supporting said housing in respect to said bracket end panels comprising primary axis pivot projections in said housing and panels confined in arcuate embossments of said bracket end panels, secondary axis pivot projections integral with said housing end panels confined in arcuate guide slots of said bracket

end panels, and cammable surface areas between said housing end panels and said bracket end panels whereby said housing may be rotated throughout at least 180 degrees in respect to said mounting bracket during which the initial portion of rotation is performed about said primary axis projections and during which the final portion of rotation is performed about said secondary axis projections.

4. An apparatus for supporting cleansing tissue packages in accessible and reeded conditions comprising a bracket for wall surface mounting having a back panel and in perpendicularity thereto a pair of end panels, a package housing member having opposed end panels adapted to be straddled by said wall bracket end panels, and means for rotatably supporting said housing member in respect to said bracket comprising primary pivot projections in said housing member end panels confined for movement in the recesses of arcuate embossments of said bracket end panels, secondary pivot projections integral with said housing member end panels confined for movement in arcuate guide slots of said bracket end panels, and flare surface areas between said housing end panels and said bracket end panels whereby said primary pivot projections may be permitted to override their confines within said arcuate embossment recesses.

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