A supporting structure resiliently pressed against the ceiling of a vehicle to hold a disposable tissue dispensing box in the frame and pressed against said vehicle ceiling, wherein said supporting structure comprises a substantially rectangular frame having side and end walls with a perpendicular projection at the lower edge of said side and end walls towards the interior of said frame forming a supporting flange to support a disposable tissue box having its outlet turned downward; said frame being attached by an integral flexible hinge means to a fastening channel member having an inner projection which is fixed the end of a spring means having its other end fastened to the upper edge of one of said frame and walls; wherein said frame end wall to which said spring means is coupled and said channel member includes reinforcing sheetmetal caps and wherein said channel member includes holes through which screw means are passed to clamp said channel member to the bosses or projections of an adapter, which adapter comprises a semi-rigid cover with side, bottom and an end walls, said end wall including a perpendicularly inwardly projecting flange which engages a base of a rear-view mirror, and said adapter having two projecting tabs located at the ends of said sidewalls opposite the end wall with flange, said tabs having each a hole through which a bolt is passed to clamp said adapter onto the upper portion of the rod of said rear-view mirror.

1 Claim, 5 Drawing Figures
SUPPORTING STRUCTURE FOR DISPOSABLE TISSUE DISPENSER

BACKGROUND OF THE INVENTION

This invention relates to supporting structures for dispenser boxes and particularly refers to improvements in a supporting frame for disposable handkerchief containers and the like.

At the present time, disposable items have achieved notable industrial development, and disposable items such as handkerchief tissues and napkins are considered indispensable for everyday use.

With increasing use of these articles, dispenser devices and holders for such items have been produced. Usually disposable napkins and tissues are supplied in packs or boxes which function as dispensers, for convenient use by the consumer. However, under some circumstances handling or storing such containers is difficult and leads to wasting or losing them before their contents have been used up. This is frequently the case when using such boxes in automobiles, in which these boxes have not found an adequate mounting position to date.

With a view to solving the problem of carrying these dispenser boxes in vehicles, rigid supports have been developed which are secured to the lower portion of the instrument panel; but this position has proved inconvenient for passengers.

SUMMARY OF THE INVENTION

To solve the foregoing problem a frame or support structure to hold the dispenser has been devised which is easily installed and is mounted in engagement with a portion of the roof of the vehicle.

The supporting structure for dispenser boxes of disposable items in this invention comprises a semi-rigid frame preferably of plastic material, optimally rectangular and of dimensions appropriate to hold most standard dispensers of disposable tissues and the like, the frame consisting of vertical walls with integral flange at the lower edge pointing perpendicularly inward as a shelf to hold the dispenser, the frame with flange being spring-loaded and mounted as to secure and hold the dispenser against the ceiling or upper surface of the vehicle, said frame being resiliently engaged at one end by a hinge mechanism to a member which is mounted on the vehicle structure, optionally the base of the rearview mirror.

With the tongue member or channel fixed to the vehicle, the flexible and spring-loaded connection with the frame permits placing the disposable-tissue dispenser in the frame, which then by its flange holds the dispenser against the ceiling of the vehicle, with the dispenser slot or opening turned downward, facilitating the withdrawal of the disposable tissues by the user.

In spite of the foregoing, said frame support coupling has lacked a device which would allow of securing the frame structure to the base of the rearview mirror without the need for making holes in said base, considering that users are not always disposed to drill such holes which permanently deface the interior finish of their vehicles.

Consequently, it is another object of this invention to provide a covering adapter of plastic material which will go over the rearview mirror base as a shield. Said adapter is provided with two parallel projections or tabs which straddle the mirror support rod and which may be fastened together by fastening means such as a bolt or the like, to cause the tabs to clamp onto the mirror support rod, thus firmly attaching the adapter to said rearview mirror base. Said adapter bears a plurality of hollow and threaded bosses extending outward from its face, which permit fastening thereto the spring-loaded frame structure for supporting disposable tissue containers; by this means these structures can be mounted in the vehicle without affecting or marring the interior finish of the vehicle. Said adapter comprises also, at the end opposite to the tabs which clamp it to the mirror rod, an integral flange which goes under and engages the corresponding end portion of the rearview mirror base, thus securing said adapter to said base.

The invention further includes reinforcing metallic plates which strengthen the wall of the frame support and the channel which provides the resilient and spring-loaded linkage between frame and adapter, to prevent deformation of same.

For a better understanding of the invention as well as of other objects and further features thereof, reference is had to the following description of the invention, to be read in connection with the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1, is a view in vertical elevation of the adapter of this invention, which provides for attaching the box-supporting structure or frame to the rearview mirror base in a vehicle.

FIG. 2 is a plan view from above of the adapter shown in FIG. 1.

FIG. 3, is a plan view of the same piece from below.

FIG. 4, is a view in longitudinal cross-section along the line 4—4 of FIG. 2.

FIG. 5, is a semi-schematic view illustrating the adapter position and the box supporting structure or frame to hold disposable tissue dispensers and the like against a vehicle ceiling, in relation to the rearview mirror of said vehicle.

DETAILED DESCRIPTION OF THE INVENTION

The improved structures of this invention for holding disposable tissue dispensers comprise a frame 11 with side and end walls 12 and a projection 13 extending from the lower edge of these walls 12 perpendicular thereto and inwardly of said walls 12 to form a supporting flange 13 on which is carried a box 14 or dispenser of disposable tissues, napkins or the like, the dispenser slot or opening in the container being turned downward, making it easy for the user to take out a tissue 15 from the dispenser. Said frame 11 is integrally joined by a flexible hinge element 16 to a channel or tongue 17 whose sidewalls surround and conceal a spring 19 which is hooked into an inner projection 18 within said channel and whose opposite end is hooked into the upper side of the end wall 12 of the frame 11. Since both frame 11 and channel 17 are made of plastic material, reinforcing strips 20 are included to prevent deformation both of the frame and of the channel.

Channel 17 ends in a flat portion or strap 21 containing holes through which pass screws 22 which also pass through and secure one of the reinforcing strips or caps 20 and which screw firmly into the threaded holes 23 in the bosses 24 which are integral with adapter 25.
which is composed of a semi-rigid plastic cover or shell; having sidewalls 26, a bottom wall 27 and an end wall 28, which is placed on top of the base 29 of a rear-view mirror 30, said base 29 being attached to the roof 31 of an automotive vehicle. Sidewalls 26 of adapter 25 carry at the end opposite to adapter's end wall 28 projections or tabs 32 with orifices 33 through which a bolt is passed, clamping the tabs against the rod 35 of the rear-view mirror. Said end wall 28 of the adapter includes a small upper flange 36 which passes beneath and thus engages said rear-view mirror base 29, whereby the adapter is firmly fixed and secured to said rear-view mirror base 29 and to the upper portion of the rear-view mirror rod 35 without any work of drilling any interior portion of said automotive vehicle. The foregoing allows a removable installation of the supporting structure for tissue dispensers and the like, the dispenser being held in place against the ceiling of the vehicle by the frame of the supporting structure.

To replace the tissue dispenser, the frame is pulled down, the old box removed and a new one inserted with the slot down, and the frame is released, which; is easily done thanks to the elastic and spring-loaded construction of the invention.

The present invention has been herein disclosed with reference to a specific embodiment; however, it should be clear that the invention is not necessarily confined to the particular details as set forth. It should also be clear that this application is intended to cover any other modifications or changes that may come within the scope of the following claims:

1. A supporting structure resiliently pressed against the ceiling of a vehicle to hold a disposable tissue dispensing box in the frame and pressed against said vehicle ceiling, wherein said supporting structure comprises a substantially rectangular frame having side and end walls with a perpendicular projection at the lower edge of said side and end walls towards the interior of said frame conforming a supporting flange to support a disposable tissue box having its outlet turned downward; said frame being attached by an integral flexible hinge means to a fastening channel member having an inner projection to which is fixed the end of a spring means having its other end fastened to the upper edge of one of said frame and walls; wherein said frame end wall to which said spring means is coupled and said channel member includes reinforcing sheetmetal caps and wherein said channel member includes holes through which screw means are passed to clamp said channel member to the bosses or projections of an adapter, which adapter comprises a semi-rigid cover with side, bottom and an end walls, said end wall including a perpendicularly inwardly projecting flange which engages a base of a rear-view mirror, and said adapter having two projecting tabs located at the ends of said sidewalls opposite the end wall with flange, said tabs having each a hole through which a bolt is passed to clamp said adapter onto the upper portion of the rod of said rear-view mirror.