

[54] CARPET SAVER

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297/188, 463, 423; 160/127; 248/345.1, 350,
287; 16/1

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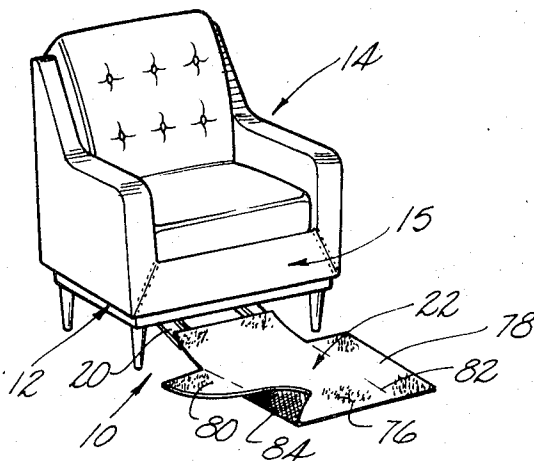
Primary Examiner—James T. McCall

[57]

ABSTRACT

A carpet saver adjustably mounted to the underneath portion of the frame of a chair and the like which includes a tray and a rug slidably mounted to the tray for movement from a stored position beneath the chair to an in-use position beyond the front edge of the chair so that the feet of a person sitting in the chair rest upon the rug of the carpet saver instead of on the carpet upon which the chair rests to save the carpet from excessive wear. When the carpet saver is not in use, the rug is slid into a stored position on the tray beneath the chair, thus, concealing it from sight.

10 Claims, 6 Drawing Figures



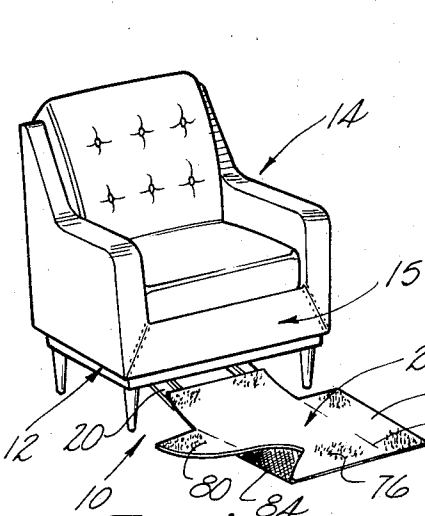


Fig-1

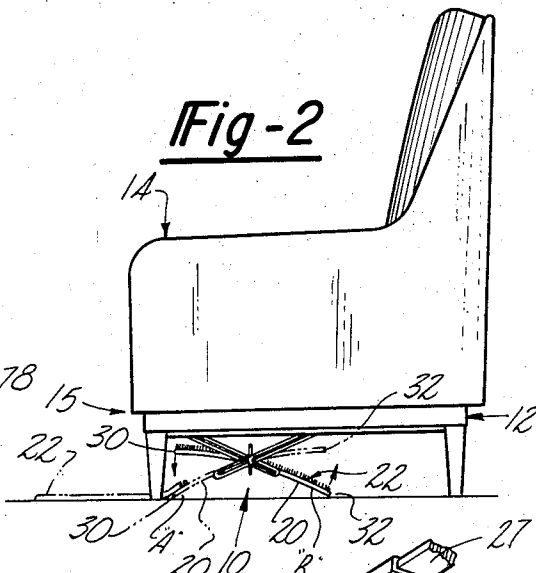


Fig-2

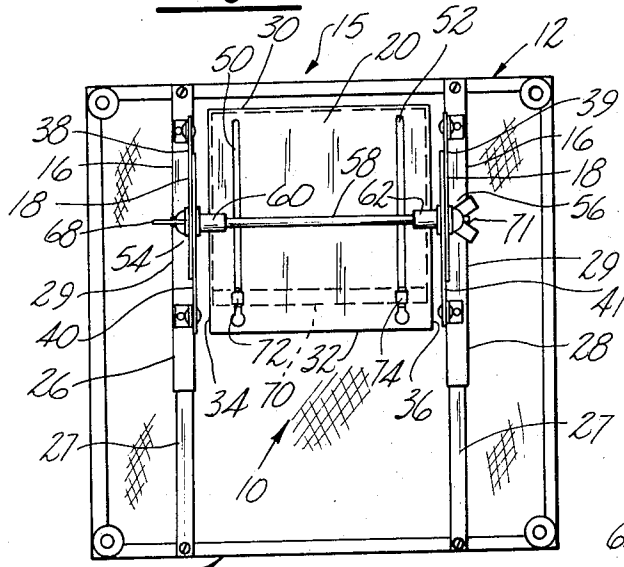


Fig-3

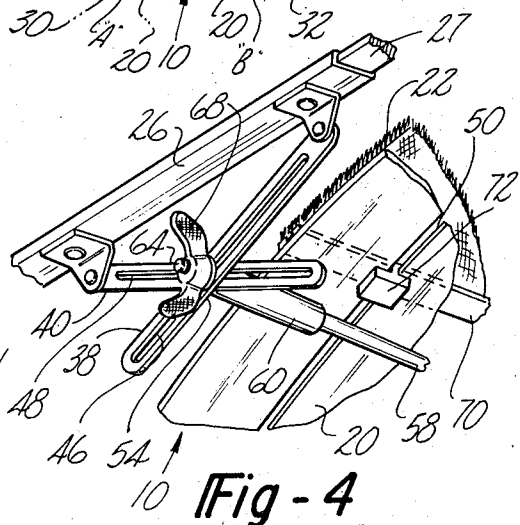


Fig-4

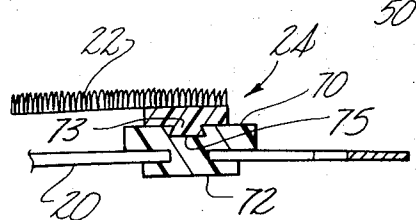


Fig-6

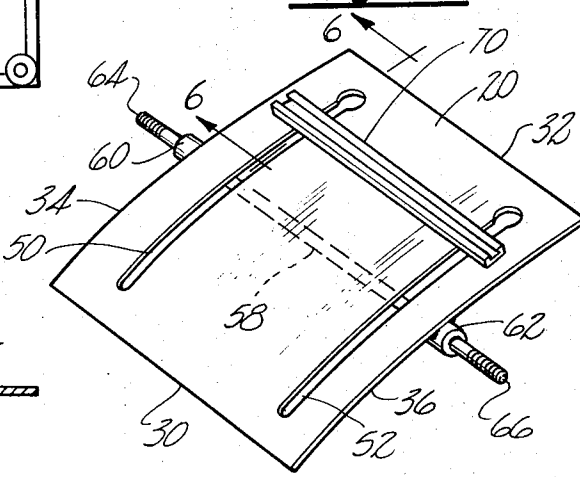


Fig-5

CARPET SAVER

BACKGROUND OF THE INVENTION

1. Field of the Invention

My invention relates to the field of art encompassing devices which are designed to be attached to a chair and the like having a trackway or guide upon which a flexible sheet is mounted for movement. In particular, the invention pertains to a novel carpet saver apparatus attached to the underneath portion of a chair frame having a rug attached to a bracket of the apparatus which bracket is mounted for movement in a guide of the apparatus so that the rug is movable from a stored position to an in-use position.

2. Description of the Prior Art

The conventional practice to prevent undue wear to a carpet is to use small rugs commonly called "throw rugs" to cover an area of the carpet to be protected. The major disadvantage in the use of a "throw rug" is that it is difficult and inconvenient to store when it is not in use.

The present invention is simple in construction, easy to use and provides a storage space for a rug when it is not in use protecting the carpet in front of a chair or couch.

SUMMARY OF THE INVENTION

The invention provides a carpet saver apparatus to be attached to the underneath portion of a chair or couch frame. The apparatus includes a rug attached to a receptacle for slidable movement from a stored position beneath the chair to an in use position in front of the chair so that the feet of a person sitting in the chair rest on the rug of the carpet saver. The receptacle is adjustably attached to an adjustable mounting means which is in turn mounted to the frame of the chair so that the carpet saver apparatus can be mounted to chairs and the like of various sizes and shapes.

BRIEF DESCRIPTION OF THE DRAWINGS

One embodiment of the present invention is illustrated in the accompanying drawings, where like numerals refer to like parts throughout the several views and in which:

FIG. 1 is a perspective view of a chair having a carpet saver apparatus installed, the carpet saver being in the in-use position;

FIG. 2 is a side view of the chair of FIG. 1;

FIG. 3 is a bottom view of the chair of FIG. 1;

FIG. 4 is a fragmentary perspective view of the carpet saver apparatus and adjustable attachment means;

FIG. 5 is a perspective view of the tray of the carpet saver;

FIG. 6 is an enlarged cross-sectional view of the slidable attachment means taken along line 6—6 of FIG. 5.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring to the drawings, a preferred carpet saver apparatus, generally denoted as 10, is illustrated in FIG. 1 installed to a chair frame 12 beneath a chair 14.

With particular reference to FIGS. 3 and 4, the carpet saver apparatus 10 includes adjustable mounting means 16 mounted to the chair frame 12, adjustable attachment means 18 connected to the adjustable mount-

ing means 16, a receptacle 20 pivotally connected to the adjustable attachment means 18, and a flexible material 22, such as a rug, slidably attached to the receptacle 20 by slidable attachment means 24. The rug 22 is illustrated in FIG. 1 in an in-use position beyond the front 15 of the chair 14 so that the feet of a person seated in the chair 14 will rest upon the rug 22.

Now turning to FIG. 2, the broken lines show the position of the receptacle 20 when the rug 22 is in the in-use position, and the solid lines show the position of the receptacle 20 when the rug 22 is in the stored position. Further, the in-use position of the receptacle 20 is indicated at "A" and the stored position is indicated at "B."

As can be best seen in FIG. 3, the adjustable mounting means 16 is comprised of two spaced apart parallel rods 26, 28 each attached at one end to the frame 12 at the front of the chair 14 and at its opposite end to the frame 12 at the back of the chair 14.

Further, each of the rods 26, 28 are formed of a first rod segment 27 and a second rod segment 29. The first rod segment 27 is axially slidably received in the second rod segment 29 so that the length of each of the rods 26, 28 may be made shorter or longer by sliding the rod segments 27, 29 axially of each other to adjust the rods 26, 28 to fit chairs of various sizes and shapes.

Referring to FIGS. 2, 3 and 4, the adjustable attachment means 18 includes two sets of two arms 38, 40 and 39, 41. One set of arms 38, 40 are connected to rod 26 and the other set of arms 39, 41 are connected to the rod 28. The arms 38, 40 are each pivotally attached at one of their ends to rod 26 and the arms 39, 41 are each pivotally attached at one of their ends to rod 28. The pivotal attachment of one set of arms 38, 40 can be seen in FIG. 4 which illustrates the arms 38, 40 pivotally attached to the rod 26, the attachment of arms 39, 41 to the rod 28 being identical. Each of the arms 38, 40 and arms 39, 41 also have an elongated slot disposed generally along their longitudinal axis. FIG. 5 shows the slots 46, 48 in arms 38, 41, respectively, the slots in arms 39, 41 being identical.

Referring now to FIGS. 2, 3 and 5, the receptacle 20 is in essence a tray having a front edge 30, a back edge 32 and two side edges 34, 36. The front edge 30 is located generally adjacent and generally parallel to the front of the chair 14. The tray 20 also has two elongated spaced apart slots 50, 52 with their axes disposed generally perpendicular to the front edge 30 of the tray 20. The tray 20 is shown as arcuately shaped in longitudinal cross section as can be best seen in FIGS. 2 and 5. The arcuate shape concavely faces the carpet upon which the chair 14 rests. This arcuate shape is desirable in that it results in a clearance space between the front edge 30 of the tray 20 and the front end of the chair frame 12 (see FIG. 2) for the hand of a person when reaching beneath the chair 14 to pull the rug 22 from its stored position to its in-use position.

As can be best seen in FIGS. 3, 4 and 5, the tray 20 is connected to the set of arms 38, 40 near its side edge 34 and to the set of arms 39, 41 near its edge 36. The connection means is preferably a pivot mounting generally denoted as 54, 56 having a generally horizontal axis of rotation disposed generally perpendicular to the slots 50, 52 in the tray 20. In addition, the axis of rotation of the pivot mounting 54, 56 is disposed forward of the transverse centerline of the tray 20, i.e., toward

the front edge 30 of the tray 20 to produce an unbalance in the tray 20 which, in effect, biases the tray to pivot about the pivot mounting in a direction to elevate the front edge 30 and displace the back edge 32 downwardly when the flexible material 22 is in the stored position on the tray 20. The pivot mounting 54, 56 is illustrated as a shaft 58 and journals 60, 62 attached to the tray 20, the shaft being rotatably mounted in the journals 60, 62 so that the tray will pivot about the shaft. One end 64 of shaft 58 is slidably received in the elongated slots 46, 48 in arms 38, 40, respectively, and the other end 66 of shaft 58 is slidably received in the elongated slots 46, 48 in arms 39, 41, respectively. The shaft 58 is selectively positioned in the slots and secured in that position by fasteners, such as wing nuts 68 and 71 threadably engaging ends 64, 66 of shaft 58 and tightening against the arms 38, 40 and 39, 41, respectively.

The function of the slots 49, 50 in the pivotally mounted arms 39, 41 and in the pivotally mounted arms 38, 40 is to allow the tray 20 to be selectively positioned at various vertical distances relative to the chair frame 12. To adjust this vertical distance, the wing nuts 68, 71 are loosened and the shaft 58 is moved vertically, the ends 64, 68 sliding in the slots in the arms. As the shaft 58 is moved upwardly toward the chair frame 12, the arms of each set of arms pivot toward each other about their pivotally mounted ends 42, 44 and 43, 45 decreasing the angle included between each of the arms 42, 44 and rod 26 and between each of the arms 43, 45 and rod 28. When the desired distance is reached, the wing nuts 68 and 70 are tightened to secure the rod 28 in place. As the shaft 58 is moved downwardly away from the chair frame 12, the arms of each set pivot away from each other about their pivotally mounted ends 42, 44, and 43, 45 increasing the angle included between each of the arms 42, 44 and the rod 26, and between each of the arms 43, 45 and the rod 28.

The rug 22 is slidably attached to the tray 20 by slidable attachment means 24 so that it can be slid from a stored position on the tray 20 to an in-use position in front of the chair and visa versa. This slidable attachment means 24 is best illustrated in FIGS. 4, 5 and 6 and includes an elongated bracket 70 disposed with its longitudinal axis generally perpendicular to the longitudinal axes of the slots 50, 52 in the tray 20. The elongated bracket 70 includes downwardly extending projections 72, 74 which are slidably received in the slots 50, 52 of tray 20, thus, the bracket 70 is movably secured to the tray 20 for movement in the longitudinal direction of the tray 20 toward and away from the front edge 30 thereof. Further, the attachment means 24 includes means to removably connect the rug 22 to the bracket 70. This removable connection is illustrated in FIG. 6 as a groove 75 defined in the elongated bracket 70 which clampingly engages a tongue 73 attached to the rug 22.

The rug 22 is illustrated in FIG. 1 as being generally "T-shaped." The means defining the tongue 73 being attached to the rug near the base of the stem 76 of the T-shape. In addition, the arms 78, 80 of the T-shape are attached to the stem 76 by hinges 82, 84, respectively. The hinges 82, 84 may be formed by a serration at the juncture of the arms 78, 80 and the stem 76, or the arms 78, 80 may be separate components from the stem 76 being affixed thereto by strips of fabric. The

purpose for the T-shaped rug 20 is to provide protection to the carpet upon which the chair 14 rests substantially across the entire width of the chair, but allowing the rug 22 to fit on the tray beneath the chair 14 by folding the arms 78, 80 of the rug over the stem 76 of the rug. A rectangular rug would not provide the same area of protection as the T-shaped rug 20.

The adjustable mounting means 16 allows the carpet saver apparatus to be mounted to frames of chairs and the like of various front to back dimensions, while the adjustable attachment means 18 allows the carpet saver apparatus to be adjusted for various chairs and the like having different heights or vertical dimensions from the floor to the chair frame. These features provide for universal use of the carpet saver device.

When the rug 22 is in the stored position, as shown at "B" in FIG. 2, the rug 22 lays completely on the tray 20. In this position the tray 20 is pivoted about the pivot mounting 54, 56 due to the unbalanced condition resulting from the position of the pivot mounting, so that the front end 30 of the tray is elevated toward the chair frame. The carpet saver apparatus is therefore not readily visible from the front of the chair.

To move the rug 22 from its stored position to its in-use position, the user of the apparatus reaches beneath the chair and grasps the rug 22 pulling it forward. As the rug is pulled from its stored position on the tray to its in-use position in front of the chair, the tray 20 pivots about the pivot mounting 54, 56 in a direction indicated by the arrows in FIG. 2. When the rug has been slid from the tray to its position in front of the chair, the arms 78, 80 of the rug are unfolded from their folded position over the stem 76 of the rug so that the rug now covers the carpet for essentially the entire width of the chair. The position "A" in FIG. 2 shows the orientation of the tray when the rug is in the in-use position, and FIG. 1 clearly shows the relationship of the arms 78 and 80 of the rug, arm 78 being illustrated in its unfolded position and arm 80 being illustrated in the process of being unfolded from its stored position over the stem 76 of the rug.

The foregoing detailed description is given primarily for clarity of understanding and no unnecessary limitations should be understood therefrom, for modifications will be obvious to those skilled in the art upon reading this disclosure and may be made without departing from the spirit of the invention or the scope of the appended claims.

I claim:

1. An apparatus to be attached to a chair and the like for protecting a carpeted floor upon which said chair rests, comprising:

a receptacle;

a flexible material;

means to slidably attach said flexible material to said receptacle so that said flexible material can be moved from a stored position on said receptacle to an in-use position in front of said chair;

an adjustable attachment means;

means to connect said receptacle to said adjustable attachment means; and

an adjustable mounting means connected to said adjustable attachment means to adjustably mount said apparatus to the underneath portion of the frame of said chair and the like;

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said adjustable attachment means and said adjustable mounting means allow said apparatus to be installed on chairs and the like of various sizes, the flexible material being slidably pulled from said stored position on said receptacle to said in use position outside the peripheral confines of said chair and the like so that the feet of a person sitting in said chair rest upon said flexible material.

2. An apparatus as defined in claim 1, wherein: said receptacle comprises:

a tray having a front edge and a back edge, said front edge being disposed near the front of said chair; at least one elongated slot positioned so that the longitudinal axis of said slot is oriented generally perpendicular to the front of said chair;

said means to slidably attach said flexible material to said receptacle comprises:

an elongated bracket, said elongated bracket being disposed generally perpendicular to the longitudinal axis of said slot;

a projection extending from said elongated bracket and being slidably received in said slot;

said elongated bracket including means to removably attach said flexible material thereto; and

said means to connect said receptacle to said adjustable attachment means is a pivot mounting having its axis disposed in a generally horizontal plane perpendicular to said slot.

3. An apparatus as defined in claim 1 wherein:

said adjustable mounting means comprises two spaced apart generally parallel rods attached to the frame of said chair and being disposed generally perpendicular to the front of said chair, said rods being spaced apart a distance at least equal to the width of said tray.

4. An apparatus as defined in claim 3, wherein said adjustable attachment means comprising:

two sets of two arms each, one set of two arms being attached to one of said spaced apart generally parallel rods and the other set being attached to the other of said spaced apart generally parallel rods;

each of said arms being pivotally attached at one end to one of said rods;

each of said arms having an elongated slot extending along the longitudinal axis, and

said pivot mounting of said tray to said adjustable attachment means being slidably received in said elongated slot in each of said arms, so that the distance between said rods and said tray can be adjusted to suit a particular chair to which said apparatus is mounted.

5. An apparatus as defined in claim 4, wherein:

an end of each of said rods being attached to the frame of said chair at the back of said chair and the

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opposite end of each of said rods being attached to the frame of said chair at the front of said chair; and

each of said two spaced apart rods comprise at least a first and a second rod segment, said first rod segment being axially slidably in said second rod segment so that the length of each of said rods can be adjusted to fit a chair of various sizes.

6. An apparatus as defined in claim 2, wherein the axis of said pivot mounting is disposed forward of the transverse centerline of said tray to produce an unbalance of said tray which biases said tray to pivot in a direction about said axis of said first pivot mounting in a direction which elevates said front edge of said tray when said flexible material is in said stored position on said tray.

7. An apparatus as defined in claim 6, wherein said tray is arcuately shaped in longitudinal cross-section; said arcuate shape is concavely facing downwardly away from said chair,

said arcuate shape provides a clearance between said front edge of said tray and the front end of said chair frame for the hand of a person pulling said flexible material from said stored to said in-use position.

8. An apparatus as defined in claim 5 wherein said means to slidably attach said flexible material to said receptacle includes:

means defining said elongated bracket having a groove disposed longitudinally therealong; and a tongue attached to said flexible material adjacent one of its edges, said tongue being clampingly receivable in said groove to retain said flexible material on said elongated bracket.

9. An apparatus as defined in claim 5, wherein said means to slidably attach said flexible material to said receptacle includes an adhesive material affixed to said elongated bracket to removably retain said flexible material on said elongated bracket.

10. An apparatus as defined in claim 8, wherein said flexible material comprises:

a generally T-shaped rug, the two arms of said T-shape being hinged to the stem of the T-shape, the axis of said hinges being generally parallel to each other and generally parallel to the longitudinal axis of the stem of the T-shape so that each of said arms are foldable over the stem of the T-shape; and the bottom edge of said stem of said T-shaped carpet being removably attached to said elongated bracket,

when said carpet is in said in-use position said arms of said T-shape are unfolded, and when said carpet is in said stored position said arms of said T-shape are folded over said stem.

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