DRAPE PLEATING DEVICE AND FASTENER

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DRAPE PLEATING DEVICE AND FASTENER
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This invention relates to the field of drapes and curtains, and has for its objective the creation of a pre-scored pleating device attachable to a drape or curtain in such a manner that professional-type permanent pleats can be formed therein without requiring the skill or services of a professional decorator. It has for its further objective the creation of a fastener adapted to secure the drape in the pleated arrangement and to support the drape in such form upon a drapery rod.

In the present state of the art various types of preformed pleating devices have been employed, but these have been found to be unsatisfactory for a number of reasons. One of these reasons is that such types of pleating devices do not hold the pleats with sufficient rigidity for the purposes required. Another is that some form of hook is required with these devices that penetrates the drape itself in order to hold the pleats in position, causing unsightly holes, and, frequently, tears in the material.

It is therefore the principal object of my invention to provide a pre-scored drape pleating device that is attachable to any drape to form and hold permanent, professional type pleats therein.

It is a further important object of my invention to create a drape pleating device that is inexpensive to manufacture and simple to install without the need of professional skill.

A third important object of my invention lies in the creation of a drape pleating device constructed in different forms, so that the user can selectively make any one of a variety of pleats.

A fourth important object of my invention is the creation of a drape fastener to be used in connection with the drape pleating device, adapted to hold the pleats in their pre-arranged form and to support the drape upon its hanging rod.

Other salient, objects, advantages and functional features will be more readily appreciated from an examination of the following specification, taken with the accompanying drawings, wherein:

FIG. 1 is a back view of a section of a preferred form of my pleating device, used in the creation of pinch pleats;
FIG. 2 is a cross-sectional view, taken on lines 2—2 of FIG. 1;
FIG. 3 is a perspective view of the embodiment shown in FIG. 1, showing the pleating device folded along prearranged lines;
FIG. 4 is a rear perspective view of a preferred form of fastener;
FIG. 5 is a front perspective view of the device shown in FIG. 4;
FIG. 6 is an enlarged top view, partly broken, of the pleat forming device secured to a drape and supported by the fastener shown in FIG. 4;
FIG. 7 is an enlarged top view of a modified embodiment of the drape pleating device and of a modified embodiment of the fastener, secured to a drape;
FIG. 8 is an enlarged top view of another modification of both the pleating device and the fastener, shown secured to a drape;
FIG. 9 is a front perspective view of the modified form of fastener shown in FIG. 8; and
FIG. 10 is a perspective view of a modified embodiment of the drape pleater shown in FIG. 1.

Similar reference characters designate similar parts throughout the different views.

Illustrative of the embodiment shown by FIGS. 1, 2, 3, the drape pleating device 10 comprises a strip of plastic material having a body section 11 and marginal sections 12 and 13 integral therewith, the device 10 being manufactured preferably as a continuous roll of plastic material, from which suitable lengths necessary for each particular drape can be cut without waste of material.

The body section 11 is provided of a thickness of plastic that is sufficient to maintain proper rigidity for the drape material to which the device is to be attached, yet permit creasing thereof along pre-scored transverse lines, while the marginal sections 12 and 13 are substantially thinner than the body section 11, as shown in FIG. 2, so that the device 10 can be secured to a drape by the attachment of these marginal sections 12 and 13 to the drape material. Such an attachment may be made by numerous methods presently possible, such as by sewing the marginal sections 12 and 13 to the drape material, providing an adequate adhesive material to the surface of the sections 12 and 13, and the like.

In the construction of the drape pleating device 10 the plastic body section 11 is scored transversely in a particular pattern to form the desired pleats, the scoring of each pleat-forming portion being spaced from the next portion so as to form a particular pleat pattern, and in the intermediate areas the device 10 is likewise scored, as shown. In the process of scoring the pleat-forming sections the plastic body 11 is also extruded at the alternate score points to form ridges 15 and 16 of a particular shape, so as to provide securing means to hold the pleats together, as will hereinafter be shown.

In the embodiment shown by FIGS. 1 and 3, the drape pleating device 10 is constructed to provide a series of equally spaced pinch pleats 17. In this embodiment I prefer the body section 11 to be 3 inches wide, with the margin sections 12 and 13 ½ inch wide each. Seven scores 14, ¾ of an inch apart from each other, are made to provide three pinch pleats 17, the outer score 14 being separated from the next series of seven scores 14 a distance of 4 inches, a score 18 being provided intermediate this distance, as shown. Obviously, drapes of different sizes and widths may require different arrangements and pleat distances, for which appropriate pleating devices 10 can be made.

The ridges 15 and 16 are of triangular cross-section, their apices forming the point of juncture with the body section 11, with the ridges 16 substantially shorter than the ridges 15. In FIG. 3 the pleating device 10 is shown creased along the scores 14 to form the pinch pleats 17.

To secure the pleats 17 together I have provided a pleat fastener 19, preferably made of plastic and with a tapered shape. The fastener 19 is provided with a hook 20 on the back thereof, adapted to be secured upon the rail of a drape rod, and a series of converging channels 21 on the front thereof, the channels 21 being of substantially the same length and cross-section as the respective ridges 15 and 16, adapted to receive and hold the respective ridges 15 and 16 securely therein, the channels 21 being closed at their bases as a support for the ridges 15 and 16.

In the construction of the pleated drape, a length of the pleat draping device 10 corresponding to the width of the drape is sewn or otherwise permanently attached to the top seam or fold forming part of the back surface of the drape material 22. The body section 11 is creased along the scores 14, bringing the drape material within the creases to form the pinch pleats 17. The body section 11 is also creased along the scores 18 to provide folds in the drape 22. The fastener 19 is then hooked onto each set of ridges 15 and 16, so that the ridges 15 and 16 are firmly encased within the respective channels 21 as shown in FIG. 6, a fastener 19 being provided for each set of pleats 17 along the drape 22. The fasteners 19 are then secured to the rail of the drape rod (not shown) and the pleats 17 are manually creased the
length of the drape to form the full pleats, preferably thereafter "pinned" in place until they become "set." The drape 22 is now provided with a series of uniform, professional-type pleats throughout.

In FIG. 7 there is shown a modified embodiment of the drape pleating device 10 of FIG. 1, wherein the drape pleating device 10 is scored to provide a box pleat 23. This embodiment requires a series of 5 scores 14' to form each box pleat 23, with the extruded ridges 15' on the alternate scores 14' being circular in cross-section. With this embodiment a modified fastener 19' is provided with only 3 channels 21', likewise of circular cross-section, to receive the ridges 15'.

FIG. 8 discloses another modification of my invention, wherein the pleating device 10a is scored to create cartridge pleats 24. In this embodiment the scores 14a are spaced in series of two scores 14a, to form the cartridge pleat 24 shown, the extruded ridges 15a being of circular cross-section as shown in FIG. 10. With this embodiment a modified form of fastener 19a, as shown in FIG. 9, is provided having 2 channels 21a to receive the ridges 15a.

The embodiments above shown and described are by way of illustration only, and various changes may be made in the construction, composition and arrangement of parts without limitation upon or departure from the spirit and scope of the invention, or sacrificing any of the advantages thereof inherent therein. For example, the marginal sections 12 and 13 may have fabric or other material secured thereto which shall be secured to the drape itself to hold the drape pleater device 10, 10' or 10a in place. Other variations are possible within the spirit and scope of the invention, all of which are herein claimed.

Having described my invention, I claim:

1. In a combination drape pleating device and fastener, a drape pleating device comprising a strip of substantially rigid but creasable plastic provided with margin means adapted to secure the pleating device to the upper back margin of a drape by engagement of the margin means to the drape, the plastic strip provided pre-scored to define a predetermined pleat pattern and extruded along predetermined scores to define enlarged, extended plastic ridges transverse the plastic strip, the fastener comprising a substantially flat body member provided with a hanging hook on one face thereof and a plurality of channels in its opposite face, the channels being of substantially the same length and cross-section as the corresponding ridges and adapted to receive the converged ridges to secure and support the pleating device and attached drape in the predetermined pleat arrangement.

2. In a combination drape pleating device and fastener, a drape pleating device comprising a strip of plastic having a substantially rigid but creasable body section and substantially thinner margin sections and adapted to be secured along the upper back margin of a drape by engagement of the margin sections to the drape, the body section being provided pre-scored to define a predetermined pleat pattern and extruded along predetermined scores to define enlarged, extended plastic ridges transverse the body section, the fastener comprising a substantially flat body member provided with a hanging hook on one face thereof and a plurality of channels in its opposite face, the channels being of substantially the same length and cross-section as the corresponding ridges and adapted to receive the converged ridges to secure and support the pleating device and attached drape in a predetermined pleat arrangement.

3. A combination drape pleating device and fastener in accordance with claim 2, the ridges in the device being triangular in cross section and integral with the body section at their splices.

4. A combination drape pleating device and fastener according to claim 2, the ridges in the device being circular in cross-section.

5. A combination drape pleating device and fastener according to claim 2, the body section being scored in series comprising two scores each and extruded along the scores to define two enlarged, extended plastic ridges for the formation of a cartridge pleat, the fastener being provided with a corresponding number of channels.

6. In a combination drape pleating device and fastener, a drape pleating device comprising a strip of plastic having a substantially rigid but creasable body section and substantially thinner margin sections and adapted to be secured along the upper back margin of a drape by engagement of the margin sections to the drape, the body section being provided pre-scored to define a predetermined pleat pattern and extruded along alternate scores to define enlarged, extended plastic ridges transverse the body section, the fastener comprising a substantially flat body member provided with a hanging hook on one face thereof and a plurality of channels in its opposite face, the channels being of substantially the same length and cross-section as the corresponding ridges and adapted to receive the converged ridges to secure and support the pleating device and attached drape in the predetermined pleat pattern.

7. A combination drape pleating device and fastener according to claim 6, the body section being scored in series comprising seven scores each and extruded along the alternate scores to define four enlarged, extended plastic ridges for the formation of a pinch pleat, the fastener being provided with a corresponding number of channels.

8. A combination drape pleating device and fastener according to claim 6, the body section being scored in series comprising five scores each and extruded along the alternate scores to define three enlarged, extended plastic ridges for the formation of a box pleat, the fastener being provided with a corresponding number of channels.

References Cited in the file of this patent

UNITED STATES PATENTS

2,623,582 Handley December 30, 1952
2,779,404 Hess January 29, 1957
2,854,073 Rammi September 30, 1958