

Aug. 3, 1965

I. W. MAIRSON

3,198,244

PLEATED DRAPERIES

Filed Aug. 26, 1963

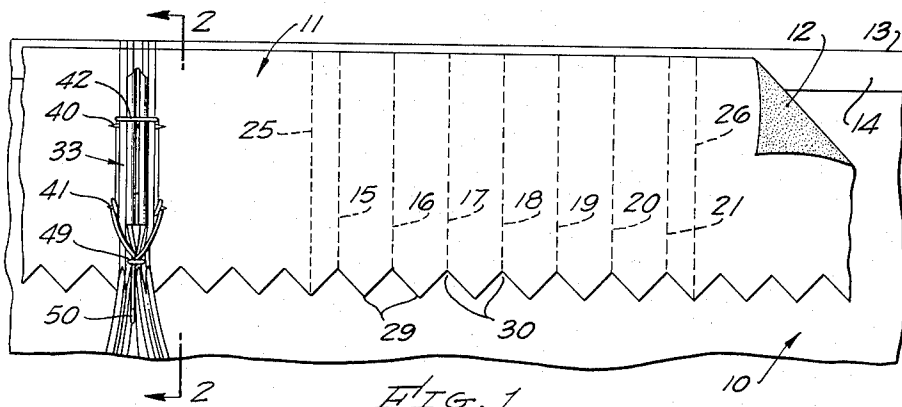


FIG. 1.

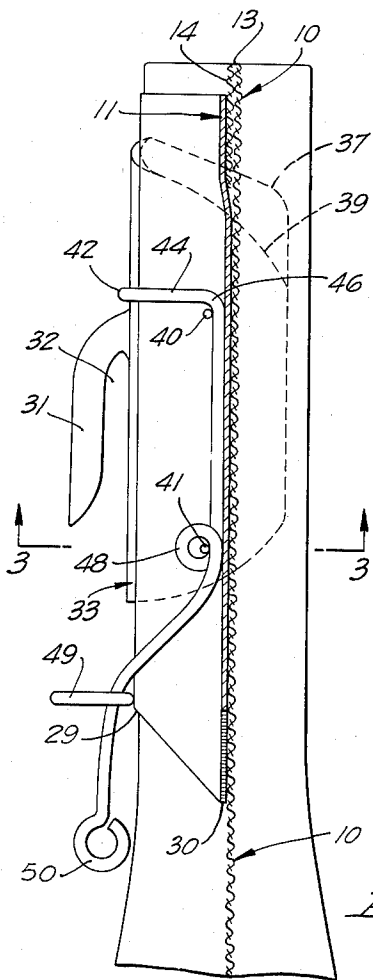


FIG. 2.

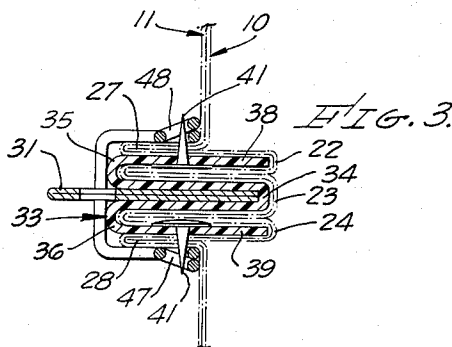


FIG. 3.

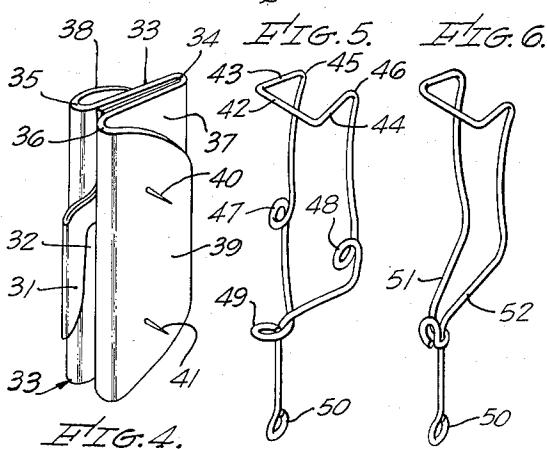


FIG. 4.

INVENTOR.  
IRVING W. MAIRSON

BY

*Hazard & Miller*

ATTORNEYS.

1

2

3,198,244

## PLEATED DRAPERIES

Irving W. Mairson, 204 Tulane Place, Costa Mesa, Calif.

Filed Aug. 26, 1963, Ser. No. 304,309

2 Claims. (Cl. 160—348)

This invention relates to improvements in the construction of pleated draperies.

One object of the invention is to provide a novel method for attaching backing material to the top portion of the drapery material which method is not only simple but highly economical and facilitates the formation of a backed drape having a smooth top edge and which does not have objectionable breaks at the bottom of the backing material.

Another object of the invention is to provide a novel backing strip as a new article of manufacture which is coated on one side with an adhesive by which it may be attached to the drapery material. This strip which is formed of relatively stiff material such as buckram, is transversely perforated, scored or otherwise weakened on groups of fold lines which facilitate folding the backing material and the drapery material in the formation of pleats. Preferably these fold lines are arranged in groups of nine parallel fold lines, the inner seven of which are equally spaced from each other and which, when folded, form three closely adjacent pleats. The outer two fold lines are spaced from the inner seven a distance approximately equal to one-half of the spacing between the inner fold lines and, when folded, form in effect half pleats which causes the plane of the drapery material between adjacent groups of pleats to be positioned at approximately the centers of the pleats. In this manner the pleats may be regarded as projecting forwardly from the plane of the drapery material approximately one half of their widths and also projecting rearwardly from the plane of the drapery material approximately one half of their widths. Also the bottom edge of the backing strip is serrated or formed with downwardly projecting points or crests and upwardly directed indentations or valleys. The downwardly projecting points or crests are preferably located centrally between adjacent fold lines and the upwardly directed indentations or valleys are preferably located at the fold lines employed to form complete pleats. In this manner the downwardly projecting points or crests tend to avoid the formation of an objectionable break in the drapery material which occurs if the bottom edge of the backing strip is not serrated and is merely a horizontal edge.

Another object of the invention is to provide a drapery hook-providing member which is applicable to the rear sides of the pleats of the drapery and which is so designed that it can be locked against displacement relative to the drape by the application of a simply designed and easily constructed fastener.

With the foregoing and other objects in view, which will be made manifest in the following detailed description and specifically pointed out in the appended claims, reference is had to the accompanying drawings for an illustrative embodiment of the invention, wherein:

FIGURE 1 is a partial view in elevation of a portion of a drape that is in the process of being constructed in accordance with the present invention.

FIG. 2 is a view in vertical section taken substantially upon the line 2—2 upon FIG. 1 in the direction indicated, this view being shown on an enlarged scale.

FIG. 3 is a horizontal section taken substantially upon the line 3—3 upon FIG. 2 in the direction indicated.

FIG. 4 is a perspective view of the combined pleat-holder and drapery hook-providing member that may be employed.

FIG. 5 is a perspective view of one form of clamping device that may be used to clamp the pleats in position on the construction shown in FIG. 4 and lock it against displacement relative to the drape.

FIG. 6 is a perspective view of an alternative form of clamping device that may be employed.

Referring to the accompanying drawings wherein similar reference characters designate similar parts throughout, 10 indicates the body of the drapery material from which the drape is to be formed. 11 indicates the backing material that is of the type conventionally employed to back a pleated drape near its top edge. In accordance with the present invention the backing material 11 is formed of buckram or equivalent relatively stiff material and has an adhesive 12 applied to one face thereof. This adhesive may be either of a type that will permanently set on drying or upon being heated, or it may be of the pressure-sensitive type which remains tacky for an indefinite period of time. If a pressure-sensitive adhesive is employed it is applied to the backing material merely by pressure and can be stripped off of the drapery material whenever occasion arises such as when it is desired to dry clean or wash the drape 10. If an adhesive is employed that permanently sets on drying or which is applied and caused to set by the application of heat the backing material will then be permanently attached to the drapery material 10.

In applying the backing material 11 to the drapery material 10 the top edge of the backing material 11 can be positioned so that it is partially disposed underneath the top edge of the drapery material 10 and after having been adhesively fastened thereto the top margin of the drapery material 10 and its attached backing 11 can be together reversely folded as at 13, thus forming a rounded top marginal edge for the drape 10. After having been reversely folded the body of the backing material 10 that is not adhesively fastened to the reversely bent portion 14 is adhesively fastened to the back of the drape 10, thus holding the marginal portion 14 in place. In the alternative, the marginal portion 14 can be reversely folded as at 13 as in forming a hem and the backing material 11 may be adhesively fastened to both the marginal portion 14 and the body of the drape. The spacing of the top edge of the backing material 11 from the reverse fold 13 to some extent governs the roundness of the top edge of the drape. Thus if the top edge of the backing material 11 is very close to the reverse fold 13 the reverse fold at 13 may be somewhat sharp. On the other hand, if it is spaced downwardly from the reverse fold 13 a considerable distance the top edge at the reverse fold 13 will be somewhat rounder. The formation of what may be regarded as the equivalent of a top hem on the drape by merely adhesively fastening the backing material 11 to the reversely folded margin 14 and to the body of the drape is materially simpler and more economical than if the hem is formed or the backing material is attached by sewing.

The backing material 11 is transversely perforated, scored or weakened for folding purposes on spaced groups of parallel fold lines. One group of lines is illustrated on FIG. 1 consisting of seven fold lines 15, 16, 17, 18, 19, 20 and 21 which are equally spaced from each other. These lines are employed in folding to form three closely adjacent full pleats indicated at 22, 23 and 24 on FIG. 3. At the outer sides of the central group of equally spaced seven fold lines there are additional parallel fold lines 25 and 26. Fold line 25 is spaced from fold line 15 a distance equal to approximately one-half of the spacing between fold lines 15 and 16. Similarly, fold line 26 is spaced from fold line 21 a distance

approximately equal to one-half of the spacing between fold lines 20 and 21. These fold lines 25 and 26, when employed and folded, cause what in effect are half pleats 27 and 28 to be formed so that the plane of the drapery material 10 between adjacent groups of pleats will be disposed approximately opposite the centers of the complete or full pleats 22, 23 and 24. Thus the full pleats 22, 23 and 24 may be regarded as projecting forwardly from the plane of the drapery material 10 approximately one half of their complete widths and likewise the pleats may be regarded as projecting rearwardly from the plane of the drapery material 10 approximately one half of their complete widths.

The bottom edge of the backing material 10 is preferably serrated or notched having downwardly projecting points or crests 29 between which there are upwardly directed indentations or valleys 30. The downwardly directed points or crests 29 are preferably arranged centrally between adjacent fold lines 15 and 16, 16 and 17, 17 and 18, etc., and are arranged at the bottoms of the fold lines 25 and 26. The upwardly directed indentations or valleys 30 are arranged at the bottoms of the fold lines 15, 16, 17, etc. The points or crests 29 and the indentations or valleys 30 are continued along the bottom edge of the backing material 11 between adjacent groups of fold lines and the purpose of these downwardly directed points or crests 29 is to avoid the formation of a sharp break on the obverse side of the drapery material 10 which is apt to occur if the bottom edge of the backing 11 is straight and horizontal.

In constructing the backing material 11 with this configuration of having a serrated bottom edge it is desirable to employ a strip of buckram of double the width of the backing material 11 shown and to die out the serrated edge thus, in effect, splitting the double width of backing material into two strips each having a serrated edge at its bottom and a straight edge at its top and avoiding wastage of material.

After the backing material has been adhesively fastened to the reversely folded margin 14 below the reverse bend 13 and is also adhesively fastened to the back of the drapery material 10, the drapery material and the backing is folded on the fold lines 15 to 21, inclusive, 25 and 26, in the manner illustrated in FIG. 3, thus forming the three full pleats 22, 23 and 24 and two half pleats 27 and 28. A drapery hook-providing member is provided that may be constructed of sheet material and which provides a downwardly directed hook 31 having an upwardly open crotch 32. This hook may be formed of a section of sheet metal or other sheet material reversely folded upon itself and inserted centrally in the body 33 of a pleat holder. This pleat holder may be formed of sheet metal or other sheet material which, when folded or bent, will retain its shape and it is reversely folded centrally at 34. It is again reversely folded at 35 and 36. The spacing between the reverse folds 34 and either 35 or 36 is approximately equal to the width of the pleats 22, 23 and 24. In effect the pleat holder thus provides a central web 37 that can be inserted in the back of the central pleat 23. It also provides two side webs 38 and 39 that can be inserted in the backs of the two side pleats 22 and 24.

Upper and lower piercing points 40 and 41 project laterally from the two side webs 38 and 39. These piercing points can be forced through the material of the drapery and of the backing material forming the outer sides of the side pleats 22 and 24. They are also extended through the material of the drape and of the backing forming the half pleats 27 and 28 and project therebeyond. A clamp is provided which may be of the form shown in FIG. 5 and which is formed of spring wire. This is shaped to provide a central portion 42 from which portions 43 and 44 extend forwardly and are bent downwardly to provide corners 45 and 46. The downwardly bent portions may also be curled to form loops 47 and

48. One portion may then terminate in a retainer 49 and the other portion may terminate in a handle 50. By flexing the wire the handle 50 can be caused to disengage the retainer 49 and the clamp opened. When the clamp is opened it is applied to the back of the pleat group and the corners 45 and 46 are caused to engage the upper prongs 40. The loops at 47 and 48 may be positioned so as to encircle the lower prongs 41 after which the clamp is closed by returning the handle 50 into locking engagement with the retainer 49. When the clamp is thus applied it not only causes the pleats to embrace the sides of the webs 37, 38 and 39 but by reason of the locking engagement between the clamp and the prongs 40 and 41 the pleat holder and the clamp are firmly held against displacement relative to the drape. Consequently, even though the drape material 10 may be very heavy, when it is suspended by its hooks 31 from a drapery support there is no opportunity for the pleat holder and hook-providing member becoming displaced.

The alternative form of clamp shown in FIG. 6 differs from that shown in FIG. 5 primarily by the fact that instead of having loops 47 and 48, lower corners 51 and 52 are employed which engage the lower prongs 41 that project through the half pleats.

From the above described construction it will be appreciated that a novel method of constructing drapes is provided which is highly economical as compared with hemming the top edge of the drape material or sewing the backing 11 to the drape material. Furthermore, if pressure-sensitive adhesives are employed the backing can be easily removed when it is desired to clean the drapes. This is accomplished by merely loosening the clamps shown in FIGS. 5 and 6 and removing them from the backs of the pleats, opening the pleats to disengage or release the pleat holder and hook-providing member, and stripping the backing 11 from the drape.

In the construction of the drape after the backing has been adhesively applied the backing and the drape material can be readily folded on the fold lines to form the pleats and the pleat holder and hook-providing member can be easily and quickly applied and locked in applied position by the clamps of the type shown in FIGS. 5 and 6. In lieu of these specific clamps other clamps may be employed, it being desirable, however, that they lockingly engage the projecting portions of the prongs 40 and 41 to lock the hook-providing member against displacement relative to the drape.

Various changes may be made in the details of construction without departing from the spirit and scope of the invention as defined by the appended claims.

I claim:

1. For use with pleats of pleated drapes, means providing two connected spaced side webs adapted to be positioned in the backs of two outermost pleats of a pleat group of a drape, means providing a downwardly open hook secured to said side webs and projecting rearwardly therefrom, each side web having upper and lower piercing points projecting laterally from the outer sides thereof adapted to be projected through the outer sides of said outermost pleats, and a clamping member having a central portion adapted to be positioned across the backs of the side webs, said clamping member having arms extending forwardly and downwardly from the central portion engageable over the tops and forward sides of the upper piercing points and with the bottoms and forward sides of the lower piercing points, said arms having means for detachably connecting them to each other across the rear edges of the side webs.

2. A device as defined in claim 1 wherein the clamping member is formed of spring wire capable of being flexed and the portions of the arms thereof which engage the lower piercing points are in the form of closed loops.

(References on following page)

5

References Cited by the Examiner

UNITED STATES PATENTS

|           |       |             |           |
|-----------|-------|-------------|-----------|
| 2,126,834 | 8/38  | Steinberger | 160—348   |
| 2,595,549 | 5/52  | Sherman     | 160—348 X |
| 2,656,886 | 10/53 | Hess        | 160—348   |
| 2,765,844 | 10/56 | Kuddes      | 160—348   |
| 2,779,404 | 1/57  | Hess        | 160—348   |

5

6

|           |      |              |         |
|-----------|------|--------------|---------|
| 2,779,405 | 1/57 | Hess         | 160—348 |
| 2,854,073 | 9/58 | Ramm         | 160—348 |
| 2,874,772 | 2/59 | Dwyer et al. | 160—348 |
| 2,884,053 | 4/59 | Truesdale    | 160—330 |
| 2,947,993 | 8/60 | Donath       | 112—427 |
| 2,985,235 | 5/61 | Landell      | 160—348 |

HARRISON R. MOSELEY, *Primary Examiner.*