

May 25, 1965

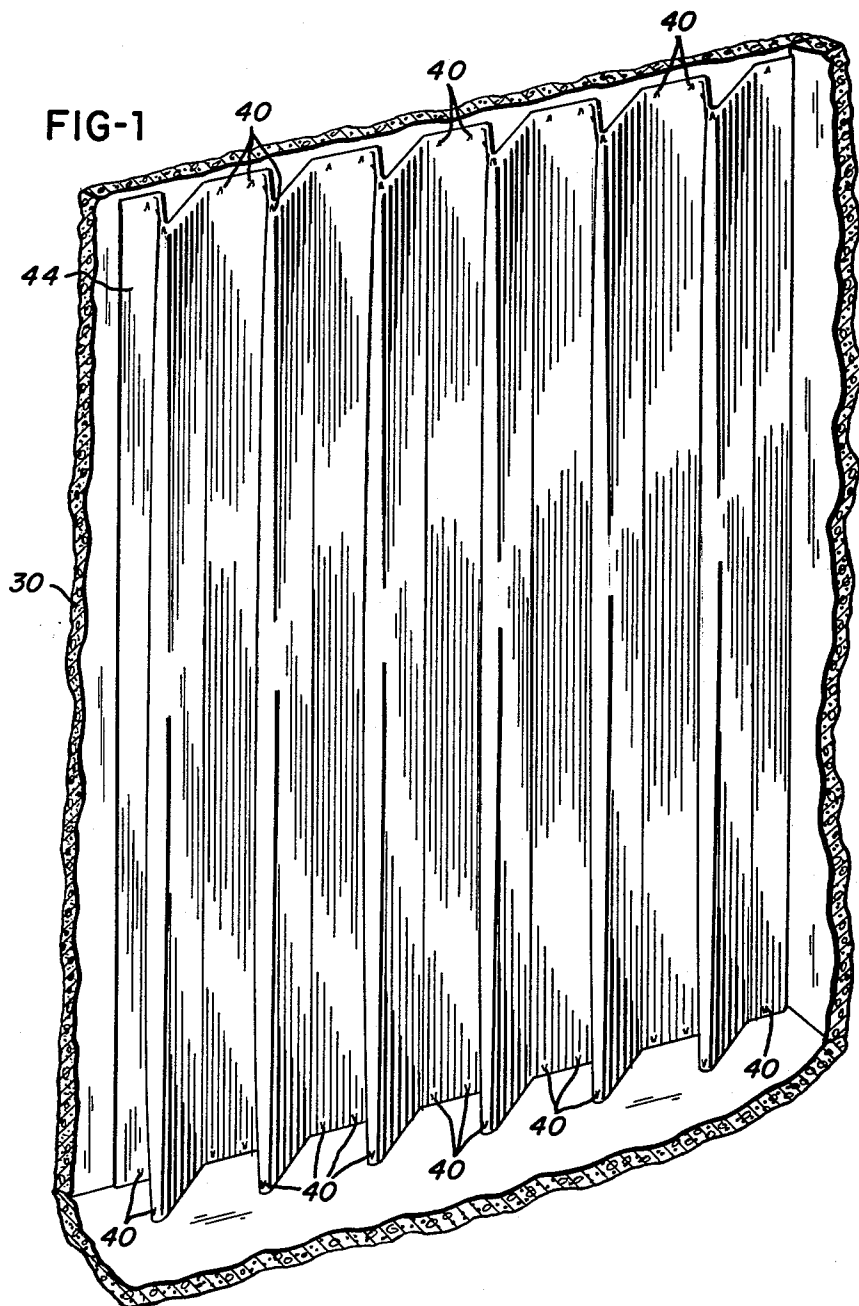
D. R. HUMBLE

3,185,207

DECORATION STRUCTURE

Filed July 2, 1962

4 Sheets-Sheet 1



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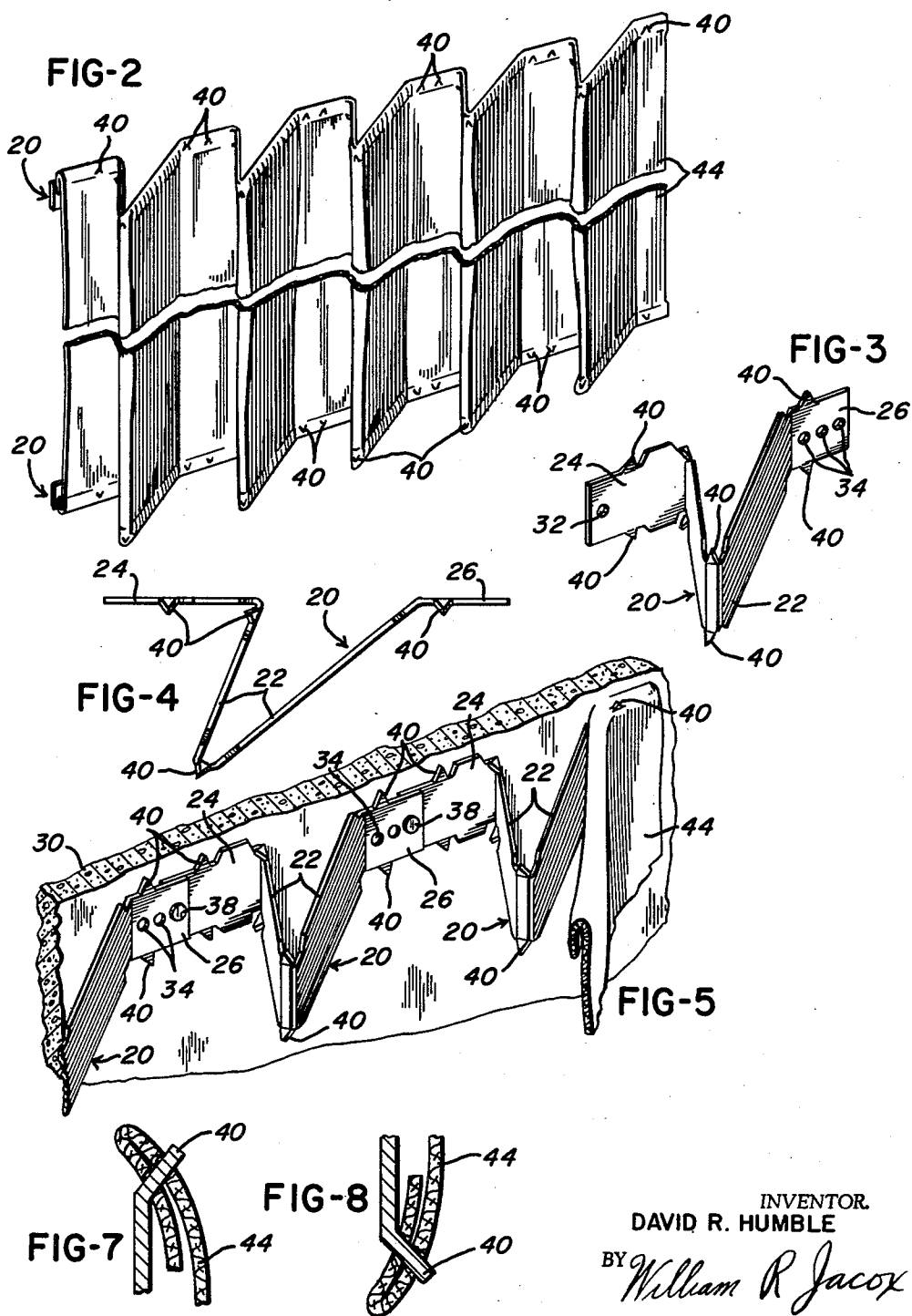
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DECORATION STRUCTURE

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4 Sheets-Sheet 2



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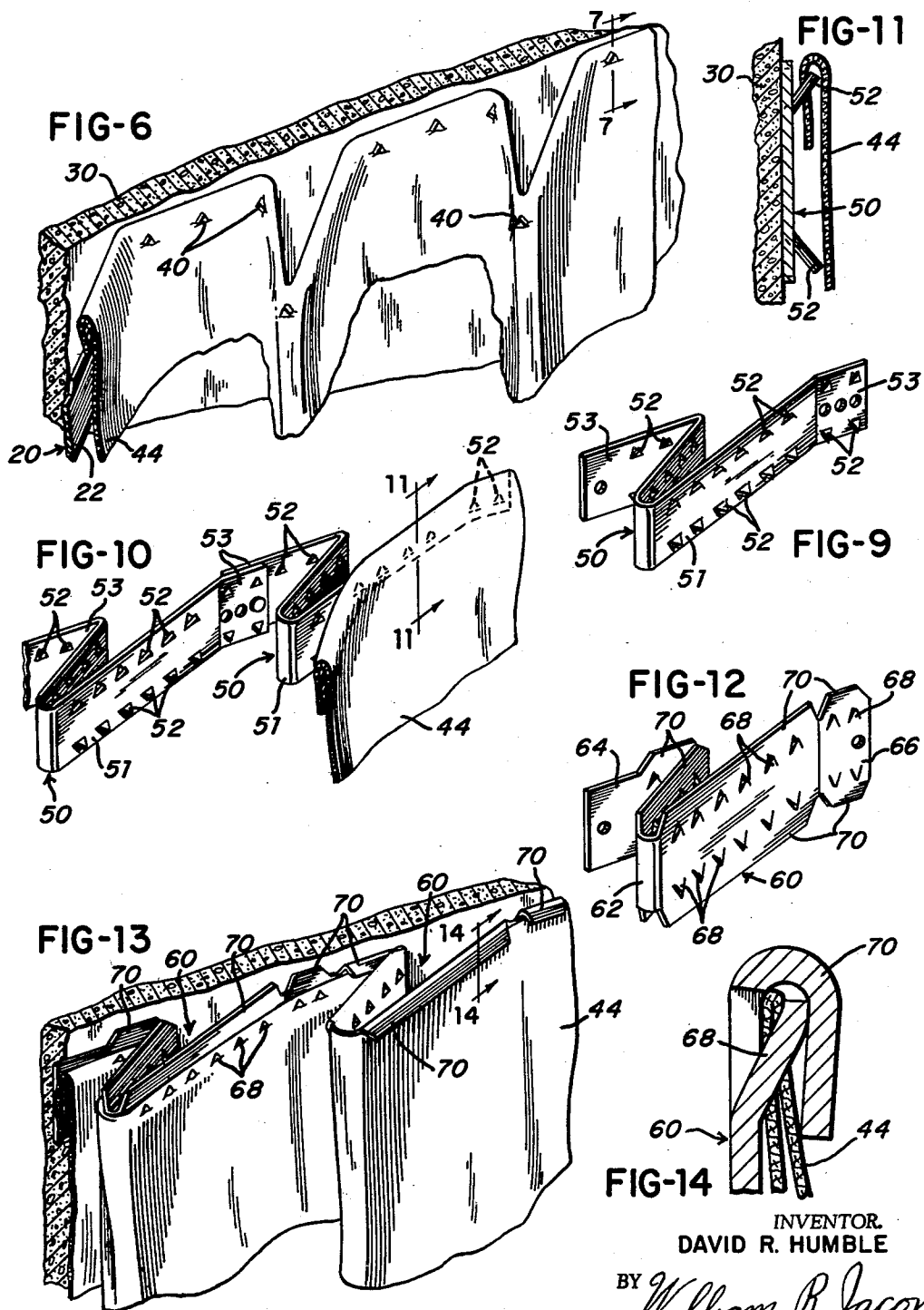
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4 Sheets-Sheet 3



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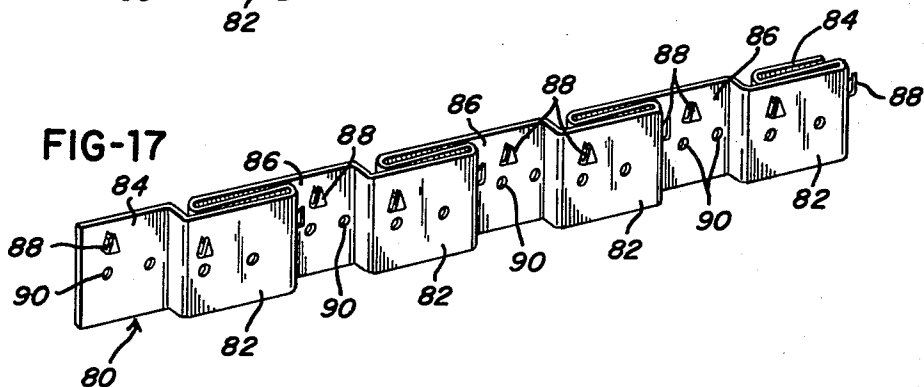
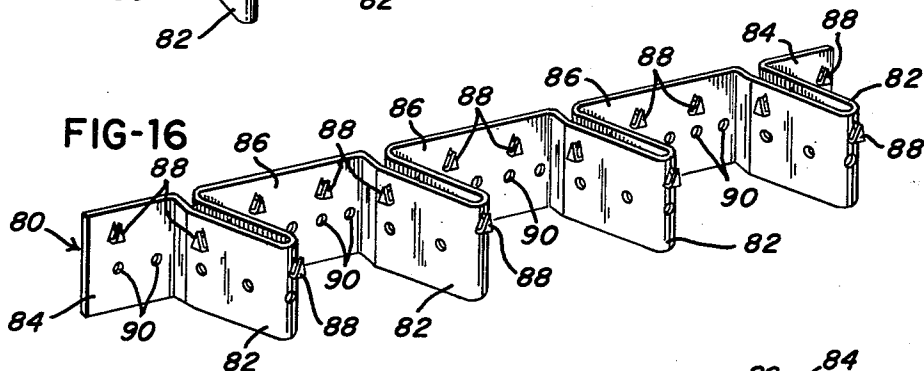
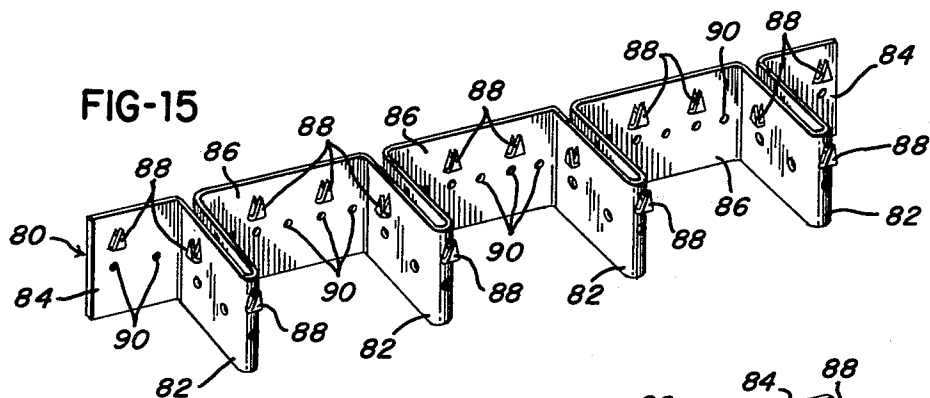
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DECORATION STRUCTURE

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4 Sheets-Sheet 4



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DECORATION STRUCTURE

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3 Claims. (Cl. 160—382)

This invention relates to decoration structure. The invention relates more particularly to wall covering structure or structure for decoration of walls. However, the invention is not so limited in that it may serve numerous other purposes.

It is an object of this invention to provide attractive low cost decoration structure.

It is another object of this invention to provide wall cover structure which may include comparatively low cost materials.

It is another object of this invention to provide support structure which is capable of retaining low cost cloth-like sheet material in a manner so that folds or pleats are formed therein.

Other objects and advantages reside in the construction of parts, the combination thereof, the method of manufacture, and the mode of operation, as will become more apparent from the following description.

The decoration structure of this invention includes attachment means which firmly retain sheet material, such as cloth or the like so that there are a plurality of spaced-apart pleats or folds in the material. Thus, drapes or the like are formed. The attachment means of the invention are disposed at opposite edges of the sheet material and cause the sheet material to be taut. Therefore, low cost cloth-like sheet material may be used to form drapes or the like. The sheet material may consist of relatively inexpensive material which does not naturally "hang" as a drape or the like in the conventional manner. Thus, material which is not ordinarily considered as drapery material may be used.

In the drawings:

FIGURE 1 is a perspective view of decoration structure of this invention.

FIGURE 2 is a perspective view, drawn on a larger scale than FIGURE 1 and with parts broken away, of decoration structure of this invention.

FIGURE 3 is a perspective view, drawn on a larger scale, of an attachment member of the decoration structure of this invention.

FIGURE 4 is a top view of the attachment member of FIGURE 3.

FIGURE 5 is a fragmentary perspective view, with parts broken away, showing attachment means of this invention secured to a wall and illustrating the manner in which covering material is attached to the attachment means.

FIGURE 6 is a fragmentary perspective view, similar to FIGURE 5, but showing additional covering material attached to the attachment means.

FIGURE 7 is a sectional view, greatly enlarged, taken substantially on line 7—7 of FIGURE 6. FIGURE 7 shows the manner in which covering material is attached to an upper attachment member.

FIGURE 8 is a sectional view, similar to FIGURE 7, but showing the manner in which covering material is attached to a lower attachment member.

FIGURE 9 is a perspective view of a modification of the attachment means of this invention.

FIGURE 10 is a perspective view illustrating the manner in which covering material is attached to the attachment means of FIGURE 9.

FIGURE 11 is a sectional view, greatly enlarged, taken substantially on line 11—11 of FIGURE 10.

FIGURE 12 is a perspective view of another modification in the attachment means of this invention.

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FIGURE 13 is a fragmentary perspective view illustrating the manner in which covering material is attached to the attachment means of FIGURE 12.

FIGURE 14 is a sectional view, greatly enlarged, taken substantially on line 14—14 of FIGURE 13.

FIGURE 15 is a perspective view showing another modification in attachment means of this invention.

FIGURE 16 is a perspective view showing a modification of the attachment means of FIGURE 15.

FIGURE 17 is a perspective view showing another modification of the attachment means of FIGURES 15 and 16.

Referring to the drawings in detail, FIGURES 3 and 4 show an attachment member 20, which, preferably, consists of a strip of rigid metallic material or the like which is bent to form a protuberance 22 with lugs 24 and 26. The lugs 24 and 26 are adapted to be attached to a wall 30 or the like or other structure, as shown in FIGURE 5. The protuberance 22 may extend at an angle from the wall 30, such as shown in FIGURES 4 and 5, or the protuberance 22 may be substantially normal to the wall 30.

A plurality of attachment members 20 are adapted to be secured in end to end relationship, as shown in FIGURE 5. An aperture 32 in the lug 24, as shown in FIGURE 3, may be used for securing the lug 24 to the wall 30. A plurality of apertures 34 are shown in the lug 26, any one of which may be used for securing the lug 26 to the wall 30. Preferably, a lug 26 of one attachment member 20 overlaps a lug 24 of an adjacent attachment member 20, as shown in FIGURE 5. A suitable aperture 34 of the lug 26 is selected for alignment with the aperture 32 of the lug 24 to obtain desired relative positioning of adjacent attachment members in consideration of the contour, height, etc. of the wall 30 and with respect to other attachment members. Suitable pins or screws 38, or the like extend through the apertures 32 and 34 and secure the attachment members 20 to the wall 30.

As stated above and as shown in FIGURE 5, a series of attachment members 20 are secured in end to end relationship along the upper portion of the wall 30. A series of attachment members 20 is also secured in end to end relationship along the bottom portion of the wall 30. Usually, the attachment members 20 are positioned so that a protuberance 22 at the bottom portion of the wall 30 is positioned directly below a protuberance 22 which is at the upper portion of the wall 30.

Each of the attachment members 20 is provided with a plurality of hooks, points, or projections 40 which extend from the protuberance 22 and from the lugs 24 and 26, as shown in FIGURES 3 and 4. In order that each attachment member 20 may be used at either the upper or the lower portion of the wall 30, the hooks or points or projections 40 extend from both the upper and lower edges of the attachment member 20. However, only the points 40 at the upper edge of the attachment members 20 are used on the attachment members 20 disposed at the upper portion of the wall 30 and only the points 40 at the lower edge of the attachment members 20 are used on the attachment members 20 disposed at the lower portion of the wall 30.

Any suitable sheet material 44 is attached to the attachment members 20 in the manner illustrated in FIGURES 5, 6, 7, and 8. A rather inexpensive material such as burlap has been found very satisfactory. However, other suitable materials may also be used. The upper edge of the sheet metal material 44 is lapped along the length thereof, as shown in FIGURE 5. The sheet material 44 is hung upon the points 40 as the points 40 are forced through both thicknesses of the lapped upper edge of the material 44 at spaced longitud-

inal positions along the upper edge of the material 44, as illustrated in FIGURES 5 and 6. The material 44 is attached to each of the points or projections 40 which extend from the upper edge of the protuberance 22 and which extend from the upper edge of the lugs 24 and 26. The material 44 is thus attached along the length thereof at the upper edge thereof to a plurality of positions on each of the attachment members 20 at the upper portion of the wall 30.

Then the material 44 is attached in a similar manner to the attachment members 20 which are disposed at the lower portion of the wall 30. The material 44 is provided with a short lap along the bottom edge thereof and the lapped portion is forced upon the points or projections 40 at the lower edge of attachment members 20 to secure the lower edge of the material 44 to the attachment members 20, as shown in FIGURES 1 and 2. The lower edge portion of the sheet material 44 is pulled downwardly as the lower edge portion is attached to the attachment members 20 at the lower portion of the wall 30. Thus, the sheet material 44 is taut between the upper and lower attachment members 20, as shown in FIGURES 1 and 2. The points or hooks 40 of the protuberances 22 and the points 40 of the lugs 24 and 26 are so positioned that the edge of the sheet of material 44 firmly engages the upper and lower attachment members 20 along the length thereof, as shown in FIGURES 1, 2, and 6. The upper and lower edges of the sheet material 44 are thus forced to conform to the shape of the attachment members 20. Thus, each opposed pair of upper and lower protuberances 22 of opposed attachment members 20 causes a well defined fold or simulated pleat to be formed in the sheet material 44 as the sheet material 44 is in slight tension between each opposed pair of protuberances 22. There is equal spacing between the well defined folds. Thus, the sheet material 44 serves to attractively cover the wall 30.

It is to be understood, however, that if the attachment members 20 are secured to structure other than a wall, the decoration structure of this invention may serve as a room divider, or as wall or window decoration or the like.

As shown in FIGURES 1, 2, 5, and 6, the points, hooks, or projections 40 extend through both portions of the lap at the upper and lower edges of the sheet material 44 and the points 40 are outwardly visible as they extend from the upper and lower edges of the sheet material 44, as best shown in FIGURES 1, 2, 5, and 6.

FIGURES 9, 10, and 11 show attachment members 50 which are adapted to be positioned in opposed upper and lower positions in a manner similar to that discussed with regard to attachment members 20. The attachment members 50 are disposed in a series and support and secure the sheet material 44 without the necessity of outwardly visible points or projections. Each of the attachment members 50 as a protuberance 51 disposed at any suitable angle with respect to attachment lugs 53. Each of the attachment members 50 is provided with points, hooks, or projections 52 which are pierced out from the body between the upper and lower edges of the attachment member 50. The points or projections 52 are shown as being in two rows along the length of each attachment member 50.

The attachment members 50 are secured in end to end relationship, as shown in FIGURE 10. Then the sheet material 44 is provided at the upper edge thereof with a short lap along the length thereof. The lapped portion of the sheet material 44 is hung upon the upper row of points 52 as the lapped portion is pierced by the points 52. Thus, the sheet material 44 is supported at closely spaced positions along the upper edge thereof. The points 52 extend only through the lapped portion of the sheet material 44 and the points are not outwardly visible, as illustrated in FIGURE 10.

A lower series of attachment members 50 is also pro-

vided and attached to any suitable structure. The lower edge of the sheet material 44 is attached to the lower attachment members 50 in a similar manner to that of the upper edge thereof by securing the material 44 to the lower row of points 52. A small lap is made along the lower edge of the sheet material 44. The points or projections 52 are forced through only the lapped portion of the sheet material 44 so that the points 52 are not outwardly visible. Thus, the lower edge portion of the sheet material 44 is engaged by the points 52 at closely spaced positions along the length of the sheet material 44. The sheet material 44 is thus drawn and made taut between the upper and lower attachment members 50. The upper and lower edges of the sheet material 44 are thus forced to conform to the shape of the attachment members 50. Thus, the sheet material 44 is formed into folds which extend from the upper edge portion of the sheet material 44 to the lower edge portion thereof.

FIGURES 12, 13, and 14 show another modification of the attachment members of this invention. Each attachment member 60 has a protuberance 62 formed at any desired angle intermediate connector lugs 64 and 66. Each attachment member 60 has at least one row of pierced out points or projections or hooks 68 along the length thereof. Each attachment member 60 has flange portions 70 at the upper and lower edges thereof adjacent the points or projections 68.

A series or plurality of attachment members 60 are secured in end to end relationship to suitable support structure at an upper position and a series of attachment members 60 are secured in end to end relationship to suitable support structure at a lower position. The sheet material 44 is attached to the upper series of attachment members 60 as the sheet material 44 is hung upon the upper points or projections 68. In attaching the sheet material 44 to the points 68 a lap may not be necessary along the length of the sheet material 44. The points or projections 68 thus are visible as shown on the left part of FIGURE 13. However, after the material 44 is attached to the upper points 68, the upper flange portions 70 are bent downwardly, as shown at the right part of FIGURE 13, and as shown in FIGURE 14. The bent over flange portions 70 thus cover the projections or points 68 which extend through the material 44. Thus, none of the points or projections 68 are outwardly visible.

In a like manner the material 44 is secured to a lower positioned series of attachment members 60 as the material 44 is pierced by a lower row of projections or points 68. The lower flange portions 70 may thus be bent over in a similar manner to cover the projections 68.

FIGURE 15 shows an attachment member 80 of this invention which consists of a strip of rigid support material formed into a plurality of protuberances 82 which extend substantially at right angles from lug portions 84 and from intermediate portions 86. The attachment member 80 is provided with a row of pierced out points or projections 88 for securing sheet material 44, not shown, thereto. The attachment member 80 also has a plurality of apertures 90 for insertion of pins or screws (not shown) for connection of the attachment member 80 to suitable support structure. Attachment members 80 are positioned in opposed relationship, as described above with respect to the other attachment members, so that the sheet material 44 is attached along the length thereof to opposed attachment members 80 and is taut therebetween. Thus, a plurality of folds are formed in the sheet material 44 from one attachment member 80 to the opposed attachment member 80.

Due to the fact that the protuberances 82 extend substantially at right angles from the lug portions 84 and from the intermediate portions 86, the folds formed between opposed attachment members 80 are substantially normal thereto.

If desired, the protuberances 82 may be bent angularly

as shown in FIGURE 16, to form angularly extending folds between opposed pairs of the attachment members 80. Such bending of the protuberances 82 may be performed before or after the sheet material 44 is attached thereto.

As shown in FIGURE 17, the protuberances 82 may be bent over a considerable amount so that the protuberances 82 are substantially parallel with the lugs 84 and the intermediate portions 86. Thus, pleats or folds are formed in sheet material 44 (not shown) which is attached to the attachment members 80 of FIGURE 17. Such pleats or folds are less salient than those formed by other attachment members of this invention.

Thus, it is understood that the decoration structure of this invention provides means by which a wall may be attractively covered at comparative low cost or by which an attractive wall or decoration or the like may be formed at comparatively low costs.

Although the preferred embodiment of the device has been described, it will be understood that within the purview of this invention various changes may be made in the form, details, proportion and arrangement of parts, the combination thereof and mode of operation, which generally stated consist in a device capable of carrying out the objects set forth, as disclosed and defined in the appended claims.

Having thus described my invention, I claim:

1. Support structure for cloth-like sheet material, said structure comprising,

a generally flat strip of rigid material having at least two protuberances extending angularly outwardly from its surface between the ends thereof, there being flat attachment portions of said strip between said protuberances and adjacent the ends of said strip outwardly of said protuberances,

said flat portions being substantially co-planar with one another and each being provided with apertures for attaching said strip to a support surface,

the strip being provided with a plurality of pointed, outward extending projections at spaced positions along the length thereof, there being projections on each said flat portion, on the outermost end of each protuberance, and adjacent the angles formed between at least one side of the protuberances and the adjacent flat portion,

the projections being adapted to support the sheet material along the length of the strip as the protuberances cause a plurality of spaced folds to be formed in the sheet material.

2. Support structure for cloth-like sheet material, said structure comprising,

a generally flat strip of rigid material having at least two protuberances extending angularly outwardly from its surface between the ends thereof, there being flat attachment portions of said strip between said protuberances and adjacent the ends of said strip outwardly of said protuberances,

said flat portions being substantially co-planar with one another and each being provided with apertures for attaching said strip to a support surface,

the strip being provided with a plurality of projections

at spaced positions along the length thereof, there being projections on each said flat portion, on the outermost end of each protuberance, and adjacent the angles formed between at least one side of the protuberances and the adjacent flat portion,

the flat portions of said strip at the ends thereof being shorter in length than the intermediate flat portions and being adapted to lie in overlapping facial engagement with the corresponding portion of a second such support structure,

the projections being adapted to support the sheet material along the length of the strip as the protuberances cause a plurality of folds to be formed in the sheet material and the flat portions of the strip cause spacing in the sheet material between adjacent folds.

3. Support structure for cloth-like sheet material, said structure comprising,

a generally flat strip of rigid material having at least two protuberances extending angularly outwardly from its surface between the ends thereof, there being flat attachment portions of said strip between said protuberances and adjacent the ends of said strip outwardly of said protuberances,

said flat portions being substantially co-planar with one another and each being provided with apertures for attaching said strip to a support surface,

the strip being provided with a plurality of projections at spaced positions along the length thereof, there being projections on each said flat portion, on the outermost end of each protuberance, and adjacent the angles formed between at least one side of the protuberances and the adjacent flat portion,

the flat portions of said strip at the ends thereof being shorter in length than the intermediate flat portions, the apertures in the flat portions at the ends of said strip being located to coincide with the apertures in a second such strip when the two strips are positioned to maintain uniform spacing of the protuberances,

the projections being adapted to support the sheet material along the length of the strip as the protuberances cause a plurality of folds to be formed in the sheet material and the flat portions of the strip cause spacing in the sheet material between adjacent folds.

References Cited by the Examiner

UNITED STATES PATENTS

631,401	8/99	Kuhnel et al.	160—348
1,324,950	12/19	Zrebiec	160—404 X
1,447,126	2/23	Dwyer	160—348 X
1,852,729	4/32	White	160—348 X
2,238,891	4/41	Cohen et al.	160—348
2,242,355	5/41	Harris	160—348
2,318,955	5/43	Milnor	160—328 X
2,524,326	10/50	Comerford et al.	160—348
2,524,958	10/50	Calvani	160—348
2,557,578	6/51	Stallone	160—348

60 HARRISON R. MOSELEY, *Primary Examiner.*

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UNITED STATES PATENT OFFICE
CERTIFICATE OF CORRECTION

Patent No. 3,185,207

May 25, 196

David R. Humble

It is hereby certified that error appears in the above numbered patent requiring correction and that the said Letters Patent should read as corrected below.

Column 6, line 7, for "that" read -- than --.

Signed and sealed this 26th day of October 1965.

(SEAL)

Attest:

ERNEST W. SWIDER
Attesting Officer

EDWARD J. BRENNER
Commissioner of Patents
