June 24, 1947. A. McD. HESS 2,422,963

MEANS FOR FORMING PLEATS

Original Filed July 26, 1939

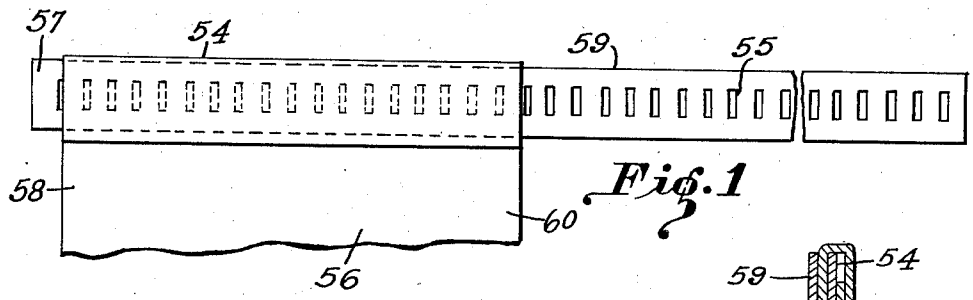


Fig. 1

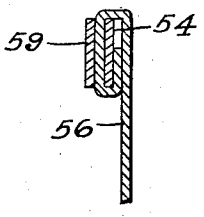


Fig. 2

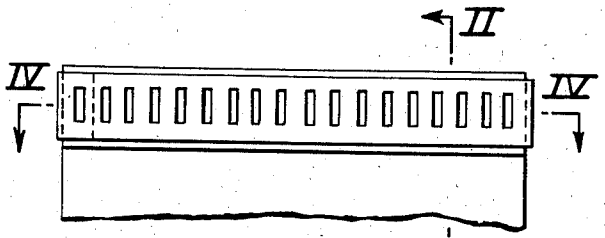


Fig. 3



Fig. 4

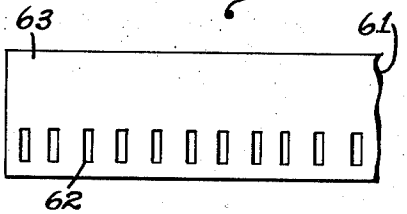


Fig. 5

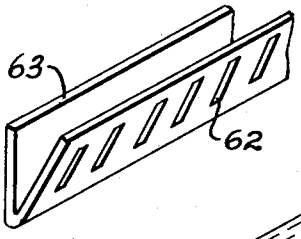


Fig. 6

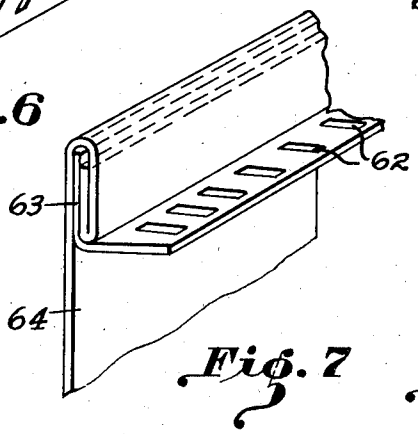


Fig. 7

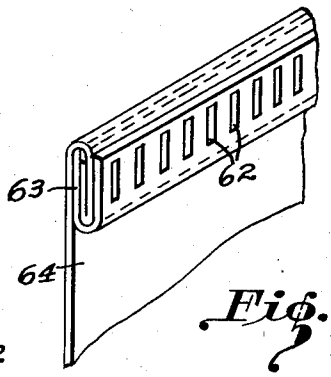


Fig. 8

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MEANS FOR FORMING PLEATS

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Original application July 26, 1939, Serial No. 286,573. Divided and this application July 21, 1943, Serial No. 495,581

7 Claims. (Cl. 160—348)

1

This invention relates to headings for curtains, drapes or other fabrics whereby pleats may be readily formed.

This is a division of my application Serial No. 286,573, filed July 26, 1939, patented July 27, 1943, No. 2,325,056.

The main object of the invention is to provide a structure whereby the pleating of a fabric is readily and simply accomplished.

A further object of the invention is to provide improved structures of pleated fabrics whereby the pleating may be readily accomplished by the housewife or others.

A further object of the invention is to provide an improved construction of strips whereby the curtain or drape may be suspended by a rod or pole.

Other and ancillary objects of the invention will appear hereinafter.

In the accompanying drawings which illustrate the invention—

Fig. 1 is a front plan view, of a form of pleating heading at an intermediate stage of its attachment to a drape;

Fig. 2 is a section on the line II—II of Fig. 3;

Fig. 3 is a rear elevational view of the apparatus as shown in Fig. 1, the tape being in completely assembled position with the drape;

Fig. 4 is a section on the line IV—IV of Fig. 3;

Fig. 5 is a view of a section, broken away, of a still further modified form of pleating tape;

Fig. 6 is a perspective view, broken away, of the tape as shown in Fig. 5 folded into position to be applied to the drape;

Fig. 7 is a perspective view, broken away, showing the manner of assembling the tape and the drape; and

Fig. 8 is a perspective view, partly broken away, showing the complete assembly of the parts as shown in Fig. 7.

Referring to Figs. 1 to 4, inclusive, there is therein shown, a curtain or drapery heading wherein thermoplastic coated or impregnated tapes are employed so as to eliminate the sewing in relation to the hems and heading of curtains and draperies and affording at the same time means for stiffening the heading and also a means of obtaining true and straight edged curtain outlines which are often difficult to realize especially with net fabrics.

The tape **54** of suitable textile fabric or other material adapted to be impregnated with a thermo-plastic composition, of the construction of Figs. 1 to 4, has the uniformly spaced series of perforations or openings **55**, in this case shown

2

as oblong, but which may be of any suitable shape to accommodate the curtain rod used. This tape is impregnated with a thermo-plastic material which enables it to be secured to the drape to dispense with the sewing as above referred to.

In the structure as shown in Figs. 1 to 4 the tape is placed upon the drape or curtain **56** along its top edge upon the reverse or back side of such curtain. A short tab-like end **57** of the tape **54** extends beyond one lateral edge **58** of the drape, while a length **59** of the tape extends beyond the other lateral edge **60** of the drape to a distance substantially equal to the width of the drape between the sides **58** and **60**. The upper edge of the drape is then rolled about the tape **54** until its length has been adjusted to that desired (see Fig. 2). A hot iron is then applied to the rolled-up portion of the drape when the drape and the portion of the strip **54**, which it overlies, become fused together. The short protruding tape **57** is then bent back about the edge of the drapery to the back thereof, preparatory to being fused thereto. The long loose end **59** of the tape is then bent back about the other edge of the drapery and against the rear of the drape so as to overlap the backward turned tab **57**. A hot iron is then applied to the upper and lower edges of this unsecured portion of the tape lying at the back of the drape, care being taken that the iron is only applied to the edges of the tape so that the intermediate portions or straps between the openings **55** will not be secured to the drape but will be loose so that a supporting pole may be threaded beneath these straps to support the drape. While any suitable thermo-plastic material may be employed, one composition which has been satisfactorily employed is as follows:

	Per cent
Vinyl resin	29.0
Butyl acetate	5.4
Toluene	7.1
Di-butylphthalate	4.5
Paraffin oil	3
Acetone	51.0

Figs. 5 to 8 inclusive show a modified construction of heading employing thermo-plastic material. In this construction the tape **61**, impregnated with the thermo-plastic material, has a series of uniformly-spaced openings **62**, but such openings are arranged at one side leaving a portion **63** upon the other side which is unperforated. This tape is then folded along substantially its longitudinal center line into the form as shown in Fig. 6. The drape or curtain **64** has its top

edge folded or rolled (see Fig. 7) until the desired length of curtain or drape is secured. The part 63 of the tape is then inserted within the folds of the drape as shown in Fig. 7 and the folds of the drape and the tape portion 63 are secured together by passing over the folds of the drape within which the tape is inserted, a hot iron whereby the folds of the drape and the edge of the tape are fused together. The perforated portion 62 of the tape is then bent into contact with the back of the folds of the drape (see Fig. 8) and the portion having the perforations 62 is then fused to the drape by passing a hot iron along the edges of the part 62, care being taken that the iron shall not pass over those portions of the tape lying between the openings 62 in the tape so that such portions between the openings are not secured to the drape but are free therefrom so that a curtain rod or pole may be passed beneath them to support the drape.

While the invention has been illustrated in what are considered its best applications, it may have other embodiments without departing from its spirit and is not, therefore, limited to the structures shown in the drawings.

What I claim is:

1. The combination with a drape, of a pleating tape having openings, said pleating tape being secured to said drape by a thermo-plastic compound at its marginal edges whereby unsecured straps beneath which a rod may be inserted, are formed between the said openings, the said tape having said openings at one side of its longitudinal center line and the tape upon the opposite side of said center line being inserted between folds of said drape.

2. A relatively stiff textile fabric tape formed with a plurality of openings adapted to receive a rod and impregnated with a thermo-plastic substance and a drape rolled about the fabric and attached thereto by the application of heat along the long edges only whereby the intermediate portion is free for the insertion of a supporting rod.

3. A drape pleating tape formed of relatively stiff material and formed as two separable layers lying face to face and joined along one long edge, one layer being plain and the other layer being formed with a plurality of openings adapted to receive a rod and both layers impregnated with a thermo-plastic substance.

4. A drape pleating tape formed of relatively stiff material and formed as two separable layers lying face to face and joined along one long edge, one layer being formed with a plurality of openings adapted to receive a rod and impregnated with a thermo-plastic substance.

5. A drape pleating tape formed of relatively stiff material and formed with a plurality of openings adapted to receive a rod adjacent one longitudinal edge whereby the tape may be folded along a longitudinal medium line and receive a drape between its folds, said material being impregnated with a thermo-plastic substance.

6. A drape pleating tape formed of a relatively stiff textile fabric formed with a plurality of openings adapted to receive a rod and impregnated with a thermo-plastic substance whereby the tape may be attached to and removed from a drape by the application of heat along the long edges only whereby the intermediate portion is free for the insertion of a supporting rod.

7. A drape pleating tape formed of relatively stiff material having a surface layer of a thermo-plastic substance, and formed with a plurality of openings adapted to receive a rod whereby the tape may be attached to and removed from a drape by the application of heat along the long edges only whereby the intermediate portion is free for the insertion of a supporting rod.

ALEXANDER McDONALD HESS.

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