

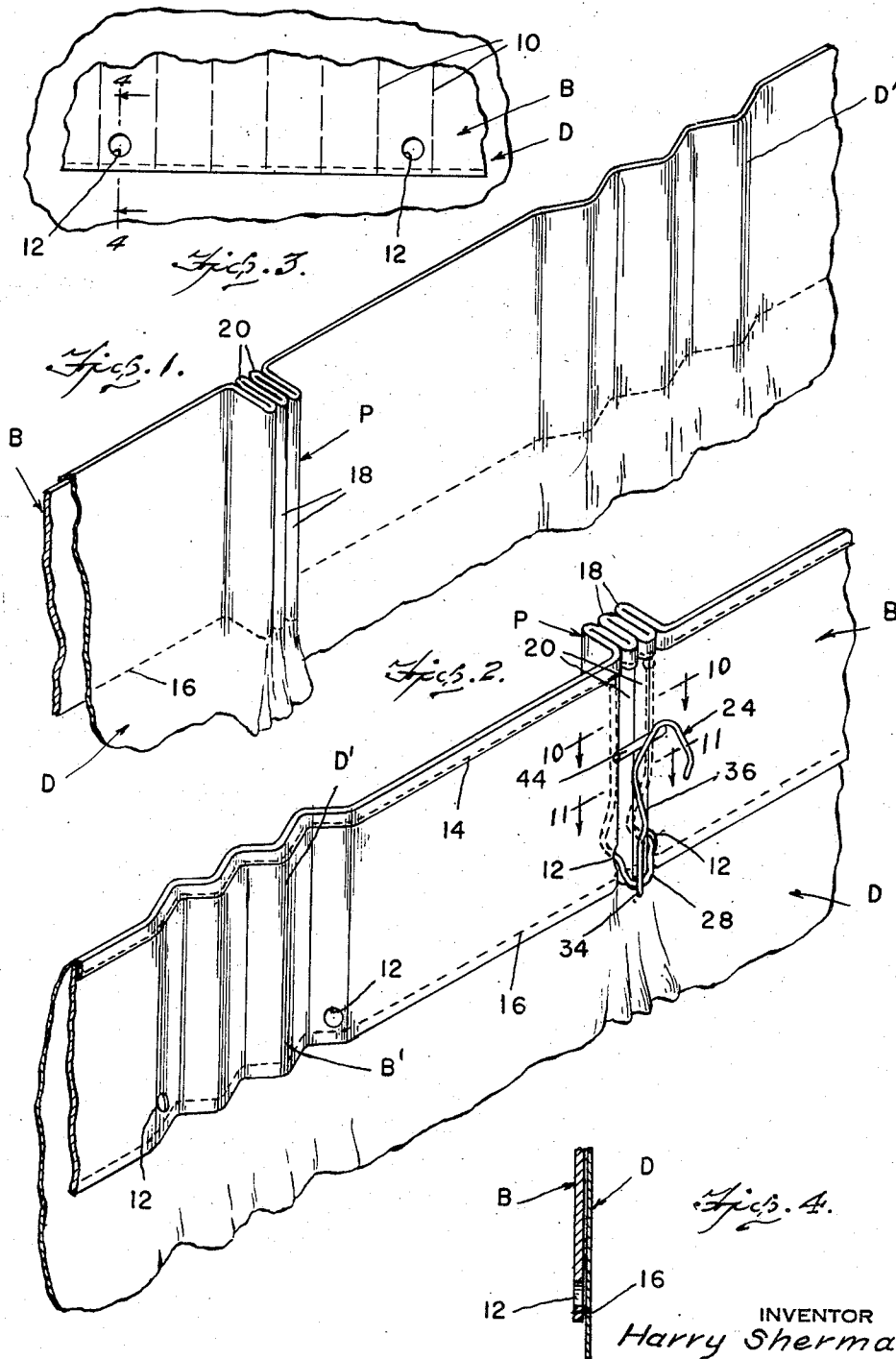
Aug. 14, 1956

H. SHERMAN
HOOKS FOR DRAPES

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3 Sheets-Sheet 1



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Fig. 5.

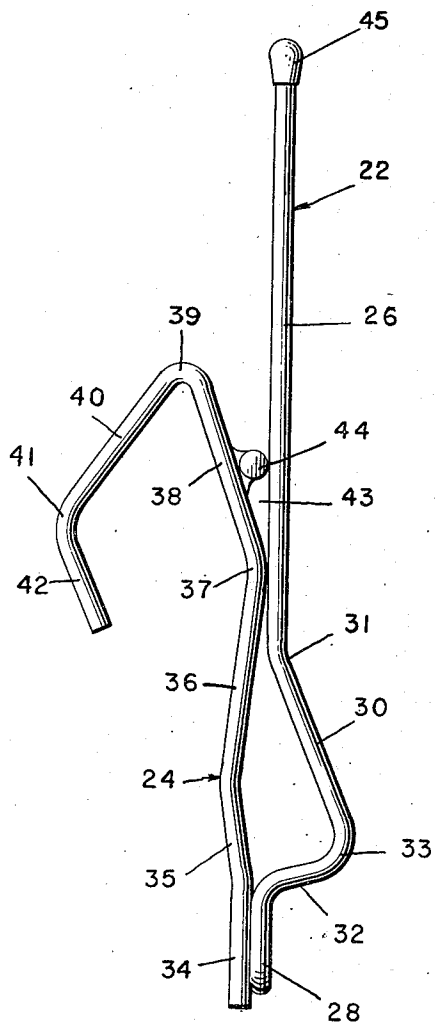
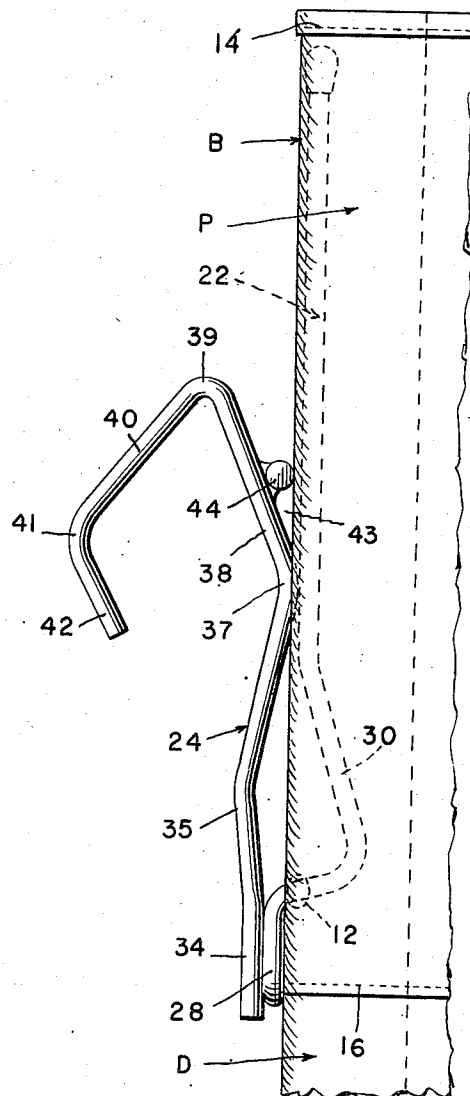


Fig. 6.



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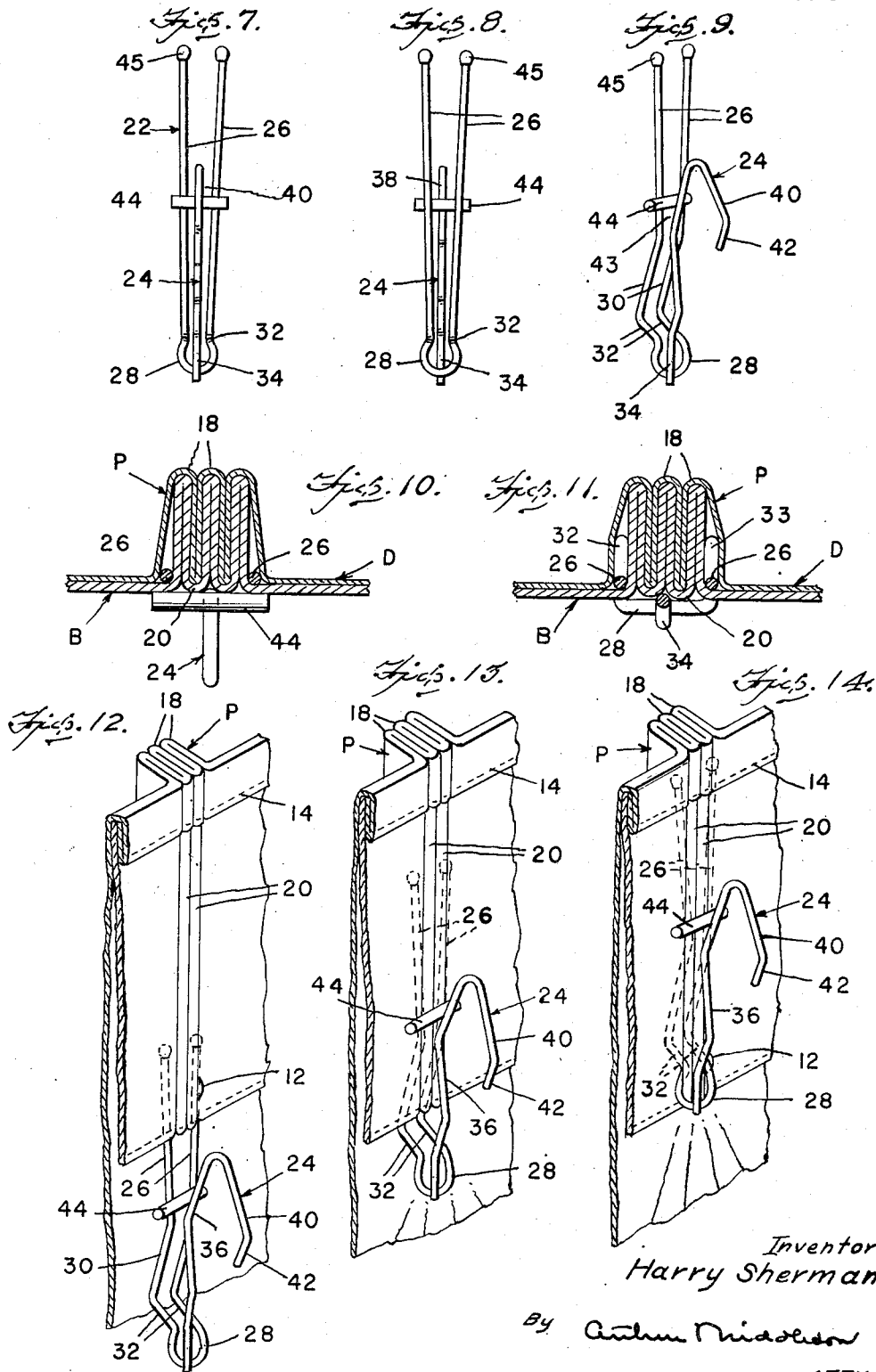
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2,758,645

HOOKS FOR DRAPES

Harry Sherman, Laurelton, N. Y.

Application December 21, 1953, Serial No. 399,340

4 Claims. (Cl. 160—348)

This invention relates generally to the class of draperies and means for suspending the same from a conventional horizontal bar and the invention is directed more particularly to pinch-pleat draperies, curtains and the like together with ways and means for forming and maintaining the pleats.

According to the present methods of making pinch-pleat type draperies, the groups of pinch-pleats formed at the top or head of the drapery had to be sewed together in order to maintain the form and position thereof, and various types of hooks have been devised to be secured to or in the drapery heading for suspending the drape. Such hooks have to be attached to the drape with care to see that the alignment of the hooks is proper to maintain the straight and even hanging of the drape. Furthermore, difficulty has been experienced in applying the suspension hooks in a manner to prevent the hooks from tearing the drape or backing strip which is customarily applied to the rear face of the drape at the top thereof.

The present invention has to do not only with the provision of an improved type of suspension hook but also with an improved method of making a pinch-pleat drape which results in the formation of pleats designed for cooperation in a novel manner with the improved hook.

In the light of the foregoing, it is an object of the present invention to provide an improved pinch-pleat drape construction and cooperating suspension hook wherein, by reason of the novel pleat construction or arrangement and the novel hook form for coaction therewith, desirable improvements in the art are attained.

It is a further object of the present invention to devise changes in the formation of the pleats and in hook carrying appliances for association therewith, that are readily applied to the pleats and function to simultaneously stabilize and clamp the pleats together whereby it is unnecessary to sew the pleats as is now customary.

Pinch-pleat drapes usually have applied thereto across the top portion of the rear side thereof, a strip of buckram or other shape-retaining, drape-stiffening material and it is therefore another object of the invention to devise an improved form of reinforcing strip and of the hook carrying appliance to make them conjointly cooperative to give new and better effects.

The hook carrying appliance of the present invention includes spaced prong members for connection with the reinforcing backing strip carried by the drape and a further object of the invention, therefore, is to devise such an appliance that when said prong portions are in applied engagement with the pleats, adjacent to the folds of the outer pleats of each group, the group of pleats will be clamped together and will be stabilized in a longitudinal direction when the appliance is mounted on a supporting rod.

A still further object of the invention is to provide a hook carrying appliance which can be easily and quickly joined to the top or head portion of the drape having a pre-pleated stiffening or backing and adjusted longitudi-

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nally of the pleats to facilitate the even hanging of the drape.

A still further object of the invention is to provide a pre-pleated stiffening or backing strip for a drape wherein means is provided to facilitate the connection of the prongs of the carrying appliance with the pleats in such a manner as to avoid the tearing of the backing material.

Still another object of the invention is to provide a hook carrying appliance for suspending pinch-pleat drapes wherein pleat engaging and clamping prongs are designed in a novel manner to facilitate the insertion of the prongs into receiving openings in the reinforcing backing or stiffening material.

Still another object of the invention is to provide a hook carrying suspension device wherein the hook portion is disposed rearwardly of pleat engaging and grasping portions, with a means disposed transversely of the hook to lie across or transversely of such portions and of the back edges of the pleats to maintain the latter in a properly stabilized position.

Still another object of the invention is to provide, as a new combination, a drape having a pre-pleated reinforcing or stiffening band of material secured across the rear face thereof at the top, such as buckram or the like, which material is provided with horizontally spaced apertures lying above the lower edge thereof and at opposite sides of each group of pleats, and a hook carrying appliance for supporting the drape, which has spaced prong members adapted to enter such apertures to lie between the stiffening material and the body of the drape with the pleated portions of the drape and stiffening material therebetween, with elements forming a part of such prong members for grasping and frictionally holding the pleats whereby to maintain the appliance and the drape in a desired adjusted relationship.

The foregoing and other objects are attained by providing an elongate unitary device which comprises a part, which may be defined as the front part, of elongated substantially U-shaped outline, and a rear part in the form of a hook by which the device may be suspended from a supporting rod. The device as a whole may be formed of any suitable material but is preferably fashioned from wire stock of suitable weight and resiliency.

The front part of the device is of substantial length, preferably conforming approximately to the height of the pleats of the drape, and consists of two long prongs which are joined together at their lower ends. Adjacent to its lower end, each prong is shaped to provide a forwardly projecting or offset portion which curves back at the bottom of the prong, forming a stop shoulder.

Disposed rearwardly of the U-shaped front part of the device is a suspension hook which has a long forward side and a short rearward side which forms the hook bill. This hook is disposed in a plane passing midway between the prongs of the forward part and is secured to the lower end or bottom of such forward part below the said shoulders.

The invention also contemplates the provision, in addition to the novel hook suspension appliance, of a strip of reinforcing material such as buckram or the like which is sewed along its longitudinal edges to the top portion of the drape and which has first been pre-pleated to provide spaced apart groups of pinch-pleats. Each group of pleats in the strip, after the latter has been secured to the drape as stated, and its facing drape, are then gathered together and clamped in this position by the said grasping elements of the hook carrying appliance which has the two prong portions thereof extended through apertures formed in the buckram stiffening above the lower secured edge of the latter. These apertures through which the prongs of the appliance are extended,

are horizontally aligned to receive the prongs and as the prongs are inserted to extend along opposite sides of the group of pleats between the stiffening and the drape material, the said clamping elements which constitute forwardly offset portions of the prongs, slide through the openings and, in effect, grasp the group of pleats between them.

Other objects include the formation of the hook carrying appliance at the lower ends of the pleat engaging prongs in such a manner as to keep the lower end of the device where the prongs are joined together from deforming the pleats, and also to so arrange the device that it will hold itself in place but, at the same time, is readily removable when it becomes necessary to take down the drapes for cleaning or other purposes.

The invention will be best understood from a consideration of the following detailed description taken in connection with the accompanying drawings with the understanding, however, that the invention is not confined to a structure conformity with the showing of the drawings but may be modified within the scope of the appended claims.

In the drawings:

Fig. 1 is a view in top perspective of a portion of the top of a drape provided with a stiffening or reinforcing backing in accordance with the present invention and showing one group of pleats completely formed and a second and adjacent group partially formed.

Fig. 2 is a view in perspective of the reverse side of the top portion of the drape shown in Fig. 1 and illustrating the application thereto of the enclosed hook carrying appliance of the present invention and also illustrating the relation of the openings in the stiffening material in which the prongs of the appliance are received when the pleats are fully or completely formed.

Fig. 3 is a view in elevation of a portion of the reinforcing strip or backing strip applied to the rear face of the drape.

Fig. 4 is a detailed section taken substantially on the line 4—4 of Fig. 3.

Fig. 5 is a view in side elevation and on an enlarged scale, of the hook carrying appliance per se.

Fig. 6 is a similar side elevational view of the hook carrying appliance, showing the backing strip engaging prongs in dotted outline and in position beneath the backing strip, the portion of the backing strip as shown constituting one side of a pleat.

Figs. 7, 8 and 9 show on a smaller scale than Figs. 5 and 6 the appearance of the hook carrying appliance from different positions; Fig. 7 showing a rear elevational view; Fig. 8 showing a front elevational view and Fig. 9 showing the appliance in perspective.

Fig. 10 is a sectional view, on an enlarged scale, taken substantially on line 10—10 of Fig. 2, the plane of section being perpendicular to the length of the pleats.

Fig. 11 is a sectional view, on an enlarged scale taken substantially on the line 11—11 of Fig. 2, in a plane parallel to the plane of section line 11—11.

Fig. 12 is a perspective view illustrating the first stage in the application of the appliance to a group of pleats, with the ends of the appliance prongs entered in the openings in the stiffener or backing strip.

Fig. 13 is a perspective view similar to Fig. 12 showing the stage at which the obliquely and forwardly extending portions of the prongs are entering the backing strip openings.

Fig. 14 is a view in perspective corresponding to the preceding two views showing the final position of the hook carrying appliance wherein the forwardly extending portions of the prongs have a group of pleats engaged or gripped therebetween and the prongs are maintained in a proper stabilizing position with respect to the pleats by a transverse member carried by the hooks.

Referring now more particularly to the drawings the reference character D generally designates a drape, the

top portion only of which is illustrated, while the reference character B generally designates a backing strip or band which is customarily applied to the rear face of the drape along the top, as shown, and which preferably consists of the material buckram.

In a pinch pleat drape, it is customary practice to apply a stiffening strip or backing to the rear face of the drape and then form the desired pleats, in groups, at spaced intervals along the top thereof. The backing strip is sewed along its top and bottom edges and after the pleats have been formed by folding the backing strip and the drape material together they are secured by stitching or by conventional pins or hanger hooks having pins for engagement through the backing material.

In accordance with the present invention, the backing strip B is prepleated by the formation at spaced intervals of spaced groups of folds extending transversely of the backing strip along spaced parallel lines indicated at 10 in Fig. 3.

In addition to the preforming of the pleats in the backing strip, such strip is provided above the bottom edge thereof with the longitudinally spaced pairs of apertures or openings 12 which are located at opposite sides of the group of pleats which result from the transverse folding of the backing strip along the transverse lines 10. In Fig. 3 the openings 12 are shown as each located at the inner side of the bordering pleat fold line 10. While it is important that these openings be placed so as not to cut through the edge of the backing strip, it is not necessary that they be located in the exact positions shown with respect to the adjacent outside or bordering fold lines 10 since they may be moved apart slightly to extend over or have the fold line pass therethrough.

As previously stated the backing strip, being formed of a relatively stiff material which will hold the crease or fold when bent, is prepleated or folded along the indicated groups of fold lines 10 to provide longitudinally spaced groups of pleats therein.

In the preparation of the drape for hanging the prepleated backing strip is applied along the back face of the drape at the top thereof in the conventional manner and is stitched longitudinally at its top and bottom edges to the drape as indicated at 14 and 16 respectively. For this application, of course, the backing strip is stretched out or laid flat against the back face of the drape and after being secured in the manner stated the tendency of the backing strip to return to its folded or pleated condition where the pleats were previously formed, will indicate the areas of the drape to be folded as illustrated in Figs. 1 and 2 where the pleats are shown in partially formed condition in one part of each view and in fully formed condition in another part of the view.

The partly formed pleats in the drape material are designated D' and the partially closed preformed pleats of the stiffening buckram material are designated B'.

The completed or fully formed pleats ready to be secured together by the hereinafter described hook carrying appliance, are designated P. In the several views the pleats are shown as comprising three folds and are of the same width with the front edges 18 of the folds lying in a common plane spaced forwardly from and parallel with the front face of the drape while the back edges 20 of the folds lie in a common plane with the back face of the backing strip B, as illustrated in Figs. 10 and 11.

As will be readily seen upon reference to Fig. 2, when the pleats are formed in the drape and backing material the openings 12 will be located at the opposite sides of each group of pleats in the last fold near or at the back edge 20.

As previously stated, the openings 12 are also above the bottom edge of the backing strip and, as shown, they lie above the bottom row or line of stitching 16. The disposition of these openings above the bottom edge of the backing strip is important for the reason that if such openings should cut through the bottom edge of the strip the

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possibility of the backing strip being torn in the application and removal of the hook carrying appliance is present.

The novel hook carrying appliance forming part of the present invention is generally designated by the reference character A. This appliance comprises two main parts which are here identified as the front part or member, generally designated 22, and the rear part or member which is generally designated 24.

The front part or member 22 of the appliance is, as shown most clearly in Figs. 7 and 8, of elongate, substantially U-shaped outline form. This form provides the two long prongs 26 which are joined together at their bottom ends by the rounded or looped connecting portion 28.

The lower ends of the two prongs are bent or formed to provide the relatively long, straight, forwardly and downwardly extending portions 30 which form an obtuse angle with the straight upper part of the prong through the slow bend or curve 31.

At their bottom ends, the long angle portions 30 of the prongs join a short downwardly and reversely directed angular portion 32 through the sharp curve or bend 33, these last short angled portions 33 merging with the sides of the looped bottom portion 28 as shown, and as is also shown in Figs. 7 and 8, the portions 30 converge slightly toward the bends 33 and the shorter portions 32 diverge slightly toward the rear of the appliance.

The looped bottom or connecting portion 28 is positioned to set back slightly from the plane of the prong portions above the angle 31 as is clearly shown in Figs. 5 and 6, for the purpose hereinafter set forth.

The rear hook-bearing member or part 24 of the appliance comprises a length of suitable wire material which, as shown, is vertically disposed in a plane passing substantially midway between the prongs 26. This rear part comprises a short straight bottom portion 34 which is secured by welding or in any other suitable manner to the center of the looped connecting portion 28 of the front part.

At approximately the elevation of the connection between the portions 32 of the front part and the loop 28, the rear part 24 has a short portion 35 which angles or inclines slightly rearwardly from the front part for a distance lengthwise of the appliance substantially equaling half of the length of the distance between the bend 31 and the lower ends of the portions 32, whereupon the part 24 angles slightly forwardly in the longer straight portion 36. The upper end of this straight portion 36 terminates in the bend 37, the front side of which lies approximately in the plane of the rear sides of the prongs 26 as shown in Fig. 5. The part 24 then angles upwardly and rearwardly in the relatively long straight part 38 which joins at the reverse bend 39 with the downwardly and rearwardly inclining hook portion 40 which, in turn, joins, through the bend 41, with the short downwardly and forwardly directed terminus or bill portion 42.

As illustrated, the reverse bend 39 connecting the hook portion 40 with the upwardly and rearwardly angled portion 38 is located at a distance approximately midway between the free ends of the prongs 26 and the bends 31 and, as shown most clearly in Fig. 5, the upwardly and rearwardly angled portion 38 of the rear part 24 forms with the adjacent straight prongs 26, a substantially V recess designated 43.

The numeral 44 designates a transverse element here shown as a short bar or horizontal portion which is mounted on the forward side of the inclined portion 38 of the rear part, and as shown in Figs. 7 and 8, has a length to extend across the prongs or completely bridge the space between them. This stop element 44 facilitates the stabilizing of the device when it is applied to the pleats in the manner about to be described, and it will be seen upon reference to Figs. 5 and 6 that the forwardly directed part of the element 44 lies approximately in the plane of the rear faces of the prongs 26 and the forward side or face of the bend 37.

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While the element 44 has been illustrated as a bar it is to be understood that such transverse element may be provided in other ways, as, for example, the wire material of which the part 24 is formed may be flattened to form laterally projecting side portions or it may be bent or folded in a suitable manner to provide the same.

The bends or angles 33 between the portions 30 and 32 of the prongs provide knees between which a group of pleats is clamped or gripped and this clamping or gripping action is made more effective by the slight convergence of the lower ends of the portions 30 and of the outer ends of the short portions 32.

To facilitate the insertion of the free ends of the prongs 26 into the space between the backing and the drape, through the openings 12, the free ends of the prongs may be capped as indicated at 45, with a suitable material such as plastic or the like to present a smooth, rounded surface.

Figs. 12, 13 and 14 illustrate different stages in the application of the hook carrying appliance to the pleats of the drape after the pleats have been formed in the manner previously stated.

As hereinbefore set forth, when a group of pleats has been formed, the openings 12 will lie at opposite sides of the group and adjacent to the back face of the backing strip. While the pleats are held together, the headed or free ends of the prongs 26 are inserted in the openings 12 as shown in Fig. 14, so that the ends of the prongs will then be interposed between the backing strip and the drape material. The prongs are then moved forwardly or upwardly toward the top edge of the drape so that the transverse element 44 will slide onto the rear face of the backing across the rear folds 20 as shown in Fig. 13.

Fig. 10 also illustrates the position assumed by the prongs between the drape and the backing and the position assumed by the element 44 across the rear face of the backing whereby the desired stabilizing action is obtained. In other words, the prongs are maintained closely against the front side of the backing strip adjacent to the rear or back edges of the folds therein.

Continued movement of the prongs along the pleats will cause the upper ends of the forwardly and downwardly angled portions 30 of the prongs to enter the openings 12 and because of the slow bend 31 between the portions 30 and the portions 26 of the prongs forming the wide angle between these parts, the portions 30 will slide smoothly through the openings so as to position the forwardly extending gripping knees formed by the angles 33 between the portions 30 and 32, toward the front edges of the folds to thereby grip and hold the folds firmly together while the overlying prongs 26 are maintained in the angles between the bordering folds of the backing strip and the adjacent flat portions of such strip.

In the final disposition of the hook carrying appliance in the pleats, the parts of the appliance will assume the approximate positions in which they are illustrated in Fig. 6 where it will be seen that because of the rearward offsetting of the looped lower portion 28 of the front part, the lower portion will be disposed across the back edges 20 of the pleat folds and thereby assisting the transverse element 44 in and maintaining the stable position of the appliance with respect to the pleats.

From the foregoing it will be seen that the present invention provides a novel method of forming groups of pinch pleats in a drape and also provides a hook carrying appliance designed to be attached to the stiffening strip without the use of pins and also designed to grip and hold a number of pleats together in properly formed relation.

The appliance may also be adjusted lengthwise of the pleats without changing the holding action thereon and without disturbing the stability thereof.

I claim:

1. In a drape of the type having pinch-pleats in the top portion, the combination of a stiffening strip pre-pleated in groups of pleats and secured along the rear face of the drape at the top thereof and provided with longitudinally spaced apertures above the lower edge

thereof and between which the pleats are formed, each aperture being adjacent to the outer pleat of a group, and a pleat-stabilizing and support device comprising a substantially U-shaped front member including pleat-stabilizing spaced elongate prongs having two ends united and the free ends inserted into said openings to lie between the body of the drape and the stiffening strip, each of said prongs having a portion thereof adjacent its inner end forwardly and downwardly offset from the main part thereof, said forwardly and downwardly offset portions being disposed opposite each other and providing extended longitudinally disposed gripping surfaces coacting to form a pleat-gripping clasp between which pleats are frictionally held, a hook member disposed rearwardly of the front member comprising a shank and a downwardly facing hook portion at the upper part of the shank extending rearwardly therefrom, the shank of the hook member at its lower end being secured to the lower inner connecting portion of the U-shaped front member from which portion the shank of the hook member rises first away from the front member thence toward it until its plane substantially intersects the plane of the front member and then away therefrom to leave a space therebetween, and stop means on the hook member extending transversely thereof and located in said space for stopping the hook member from tilting forwardly between the pleats.

2. In a drape of the type having pinch-pleats in the top portion, the combination of a stiffening strip pre-pleated in groups of pleats and secured along the rear face of the drape at the top thereof while provided with longitudinally spaced apertures above the lower edge thereof and between which the pleats are formed with each aperture adjacent the outer pleats of each group, and a pleat-stabilizing and support device comprising a substantially U-shaped front member including pleat-stabilizing spaced elongated prongs inserted into said openings to lie between the body of the drape and the stiffening strip, each of said prongs having a portion thereof adjacent its inner end forwardly offset from the main part thereof, said forwardly offset portions being disposed opposite each other and providing extended longitudinal gripping surfaces coacting to form a pleat-gripping clasp between which the pleats are frictionally held, a hook member disposed rearwardly of the U-shaped front member comprising a shank and a downwardly facing hook at the upper end thereof extending rearwardly therefrom, the shank of the hook member at its lower end being secured to the lower inner connecting end portion of the U-shaped front member below the forwardly offset portions of the prongs thereof and having an offset portion above the forwardly offset portions of the prongs of the front member forwardly directed to an extent approaching intersection with the plane of the front member, and means on the upper part of the hook member above the forwardly off-

set pleat gripping portions of the prongs of the front member for bridging two adjacent pleats to prevent the hook member from entering therebetween.

3. A pinch-pleat drapery stabilizing and support device comprising a generally U-shaped front member with a pair of elongate prongs having united bottom ends and adapted to receive between them portions of pre-pleated reinforced drapery material, each of said prongs having a portion thereof intermediate its ends forwardly offset from the main part thereof, said forwardly offset portions providing extended gripping surfaces that coact to form a material-gripping clasp, a hook member disposed rearwardly of the front member comprising a shank and a downwardly facing hook at the upper part of the shank extending rearwardly therefrom, the shank of the hook member being secured at its lower end to the lower inner connecting portion of the U-shaped front member, and a transverse bar member on the hook member extending across the front side thereof in closely spaced relation with the prongs of the front member above the forwardly offset portions thereof for preventing the hook member from tilting forwardly between the pleats.

4. A hook appliance including an elongate substantially U-shaped front member providing two long prongs joined together at one end, and a rear continuous elongate member attached at one end to the lower inner connecting portion of the U-shaped front member and extending longitudinally of the same in a plane passing between the prongs thereof, each of said prongs having a relatively long portion thereof above its inner end offset to extend obliquely forwardly and downwardly away from the main part of the prong, and a relatively short forwardly offset portion joining said forwardly and downwardly inclined portion at the lower end thereof, said relatively long and short inwardly offset portions of the prongs being disposed opposite each other and providing extended gripping surfaces to form a pleat-gripping clasp, said rear member having a portion thereof bowed first toward but above said oblique offset portions of the prongs of the front member until it approaches the plane of the front member and then rearwardly away from said oblique portions and terminating at its top in a rearwardly projecting downwardly opening hook, and means on said rear member above said forwardly offset portions of the prongs of said front member extending transversely of the rear member for preventing forward tilting of said rear member.

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