April 27, 1965 S. PERLMUTTER 3,179,993

DRAPERY HOOK

Original Filed June 4, 1959 2 Sheets-Sheet 1

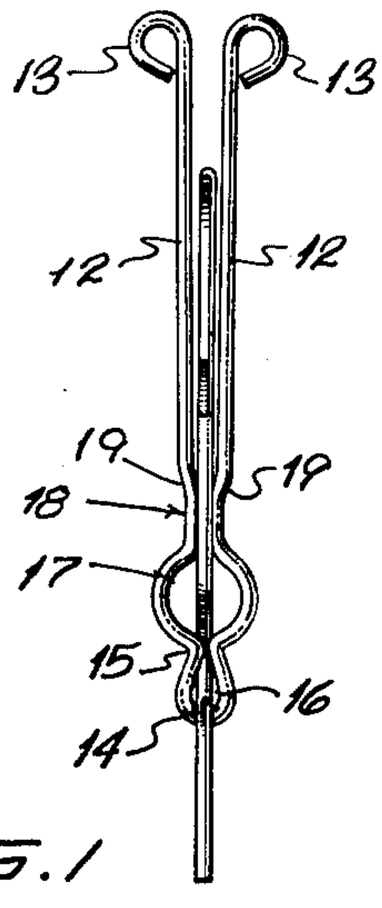


FIG. 1

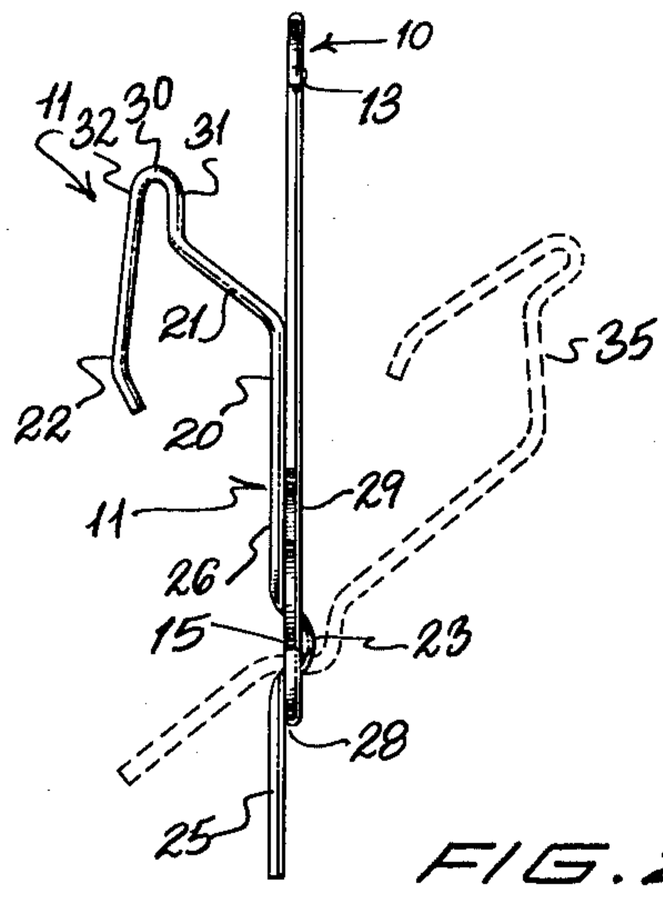


FIG. 2

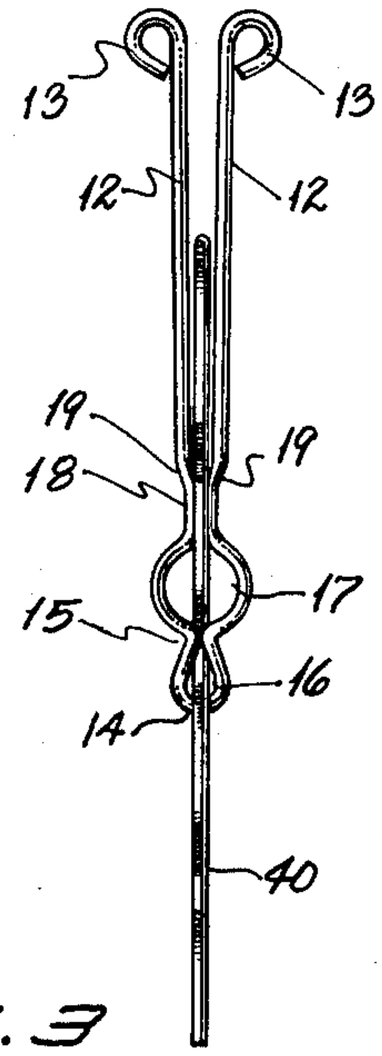


FIG. 3

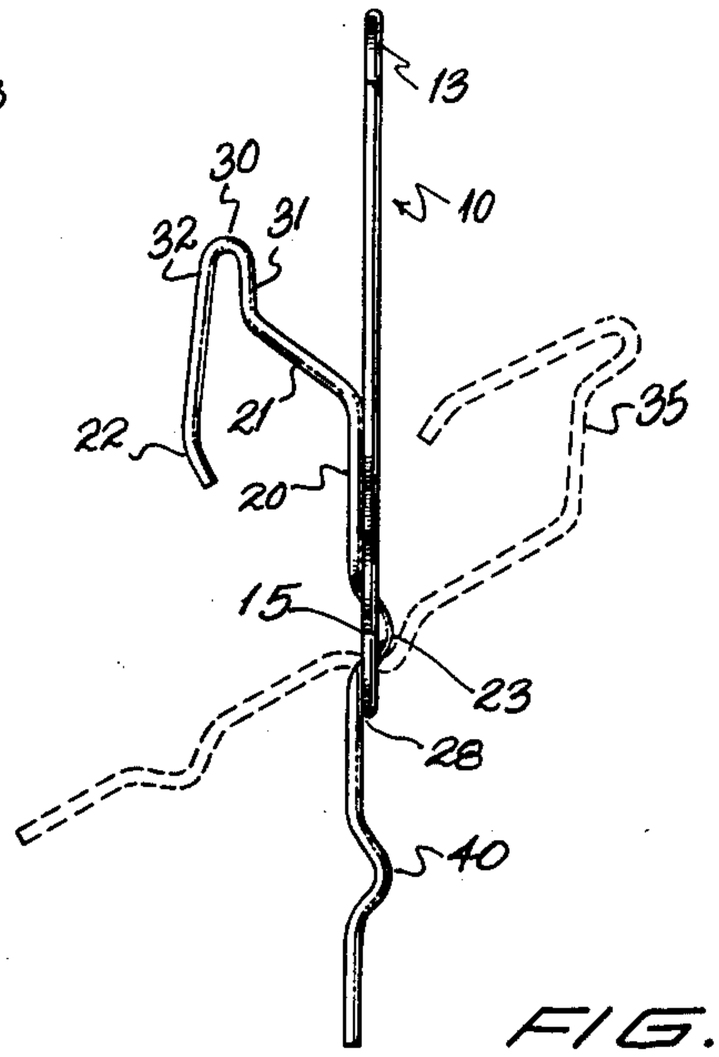


FIG. 4

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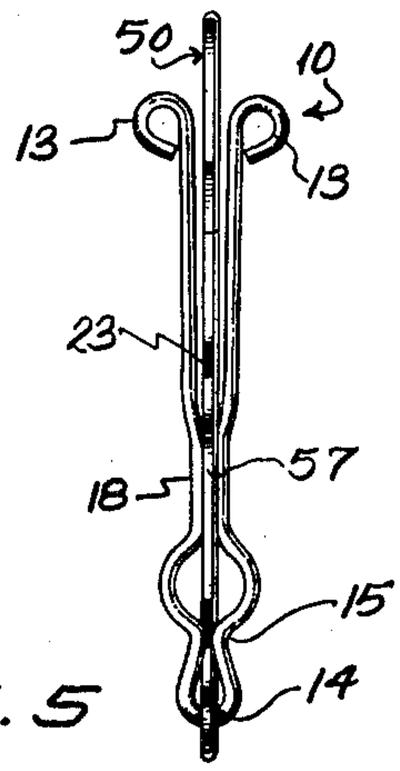


FIG. 5

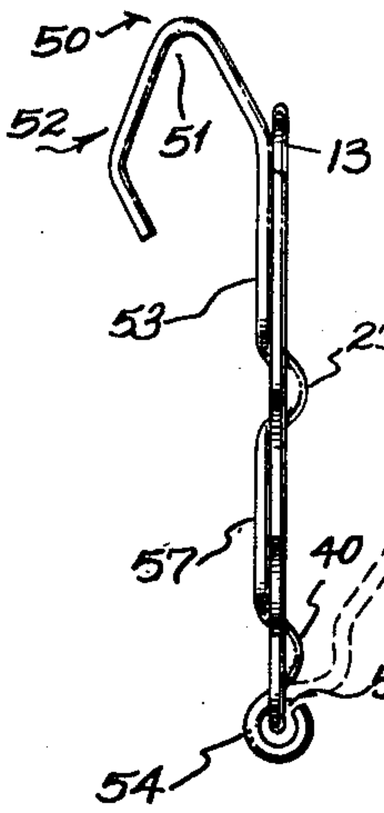


FIG. 6

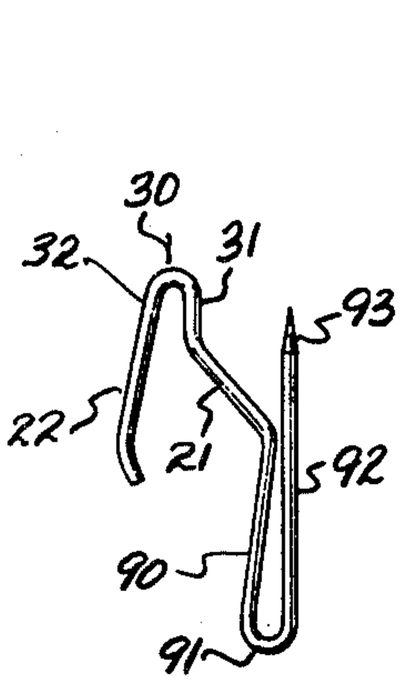


FIG. 9

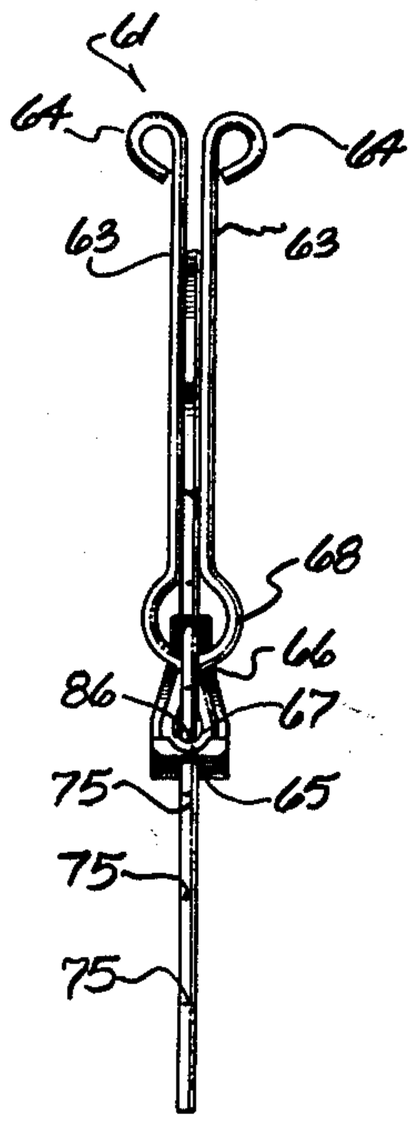


FIG. 7

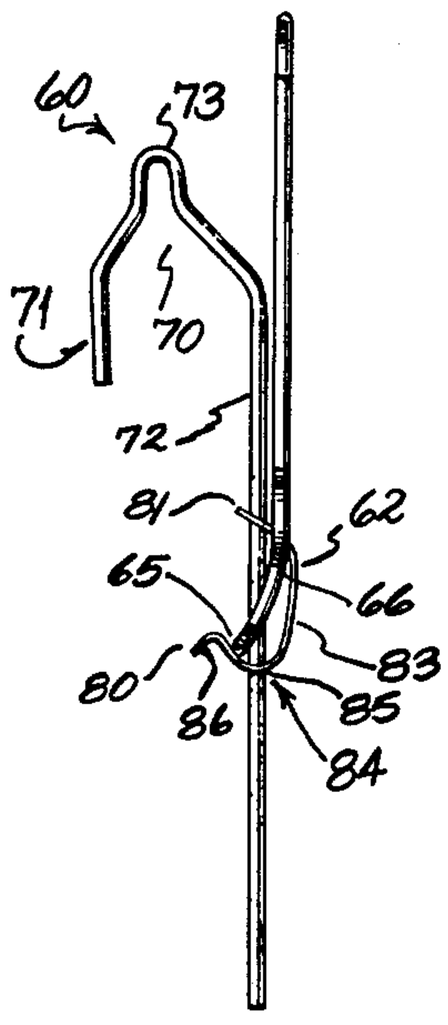


FIG. 8

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3,179,993
Patented Apr. 27, 1965



3,179,993

# DRAPERY HOOK

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Original application June 4, 1959, Ser. No. 818,178, now Patent No. 3,118,205, dated Jan. 21, 1964. Divided and this application Feb. 6, 1963, Ser. No. 266,120

6 Claims. (Cl. 24—84)

This application is a division of the prior copending application Serial Number 818,178 of Samuel Perlmutter, filed June 4, 1959, entitled "Drapery Hook," that matured into United States Patent Number 3,118,205.

The present invention relates in general to drapery hooks, and more particularly to a novel drapery hook adapted to be adjusted in size and/or remain when secured to a traverse rod slider in a substantially locked vertically oriented position. The invention herein disclosed is in part an improvement of the principles disclosed in my copending applications Serial No. 713,450 entitled Drapery Hook filed February 5, 1958, and now Patent No. 2,986,768 and Serial No. 788,669 entitled Drapery Hook filed January 23, 1959 and now Patent No. 3,021,552.

The present invention is adapted for use in connection with traverse rods having sliders formed with an opening to accommodate the drapery hook. The drapery hooks embodying the concepts of the present invention include those commonly termed sew-on hooks, non-sew hooks, pin-on hooks, slip-in hooks, and pleater hooks. In each of these hooks, a portion engages the fabric of the drapery. A second portion extends away from the first portion and forms the hook element which engages the slider. As indicated in my co-pending application Serial No. 788,669, the hook element passes through an opening in the slider so that the bight of the hook element rests on the lower surface of the opening in the slider. In such prior constructions a downward force exerted by the weight of the drapery on the first portion causes a torque about an axis passing through the slider opening and generally parallel to the traverse rod, so that the drapery supported on the first portion tips forwardly causing an undesirable and unsightly crease or fold in the upper portions of the drapes.

In my copending application, means were provided in the hook element to prevent the occurrence of such an undesirable crease or fold even when relatively heavy draperies were being supported. In the arrangement provided, a crimp is formed at the top of the bight of the hook element which is adapted to engage the side portions of the slider immediately below the opening. In the present invention, further improvement of this construction is provided by locating the crimp at the end of the bight section remote from the first portion of the hook which supports the drape. It has been found that this arrangement functions more effectively to prevent torque-caused folding of the drapes. In addition such an arrangement positions the first portion of the drapery hook forwardly of the traverse rod so that it does not bind against the traverse rod as the hook slides relative to the rod.

A further feature of the present invention provides a slip-in hook adapted to be adjusted to raise or lower the upper edge of draperies supported thereby. This adjustable hook is easy and certain of operation in use or installation.

In this arrangement two separable wire members interengage in several different positions whereby a drapery hook of selective adjustability is provided. This hook is simply formed, utilizing only two separable pieces of wire which are rigidly interengaged by a unique locking



arrangement. No soldering, welding or other securing means are necessary to rigidly interlock and secure the two pieces together. The hook formed by these two pieces will securely grasp and retain drapes in a vertical position without tearing, piercing, creasing or folding at the upper portions of the drapes. Moreover, the drapes are more securely retained by the engaging members of the hook than are drapes supported by conventional hooks of the prior art.

A still further modification of the present invention contemplates an interlocking assembly of a separable hook element and drape engaging portion, secured together by a third interlocking member, with each of these three members simply formed and adapted to be readily assembled, without the necessity of welding or soldering.

A still further object of the present invention is to provide an adjustable drapery hook constructed of simple construction adapted to be formed only of wire, and assembled rapidly and automatically with a minimum expense, labor skill and soldering or welding.

These and other objects and advantages of the present invention will be more clearly understood when considered in conjunction with the accompanying drawings in which the invention is illustrated in several embodiments wherein:

FIG. 1 is a front elevation of a drapery hook.

FIG. 2 is a side elevation of the drapery hook shown in FIG. 1.

FIG. 3 is a front elevation of a preferred form of the drapery hook.

FIG. 4 is a side elevation of the hook shown in FIG. 3.

FIG. 5 is a front elevation of another embodiment of my invention.

FIG. 6 is a side elevation of the drapery hook shown in FIG. 5.

FIG. 7 is a further modification of a three piece adjustable drapery hook.

FIG. 8 is a side elevation of the drapery hook shown in FIG. 7, and,

FIG. 9 is a side elevation of a pin-on drapery hook embodying features of the present invention.

Referring first to FIGS. 1 and 2 there is illustrated a drapery hook formed entirely of interlocking lengths of wire.

This wire should have some resilience and may be formed of chrome plated steel. The hook is formed of two separable parts including a drapery supporting member 10 and a hook element 11. The drapery supporting member 10 has arms 12 extending generally parallel to one another, but if desired with a slightly diverging angle from the lower portion to the upper portion. The upper ends of the arms 12 each terminate in a loop 13 adapted to facilitate the insertion of these arms into adjacent pockets of a pleated drapery. The lower ends of the arms 12 are continuous with one another in a bight section 14. The arms are pinched together at 15 at the lower ends of the arm closely adjacent to the bight section 14. The distance between the pinch 15 and the lowermost portion of the bight section 14 should be small. The opening 16 should be of sufficient size to permit slideably positioning of a portion of the hook element 11 therein. Immediately above the pinch 15 is a loop 17 formed between the pinch 15 and a contiguous section 18.

The contiguous section 18 comprises a section of arms 12 in substantially touching relationship and is formed by pinching the arms 12 together for a short distance. The exact length of the section 18 is not critical. However, the arms 12 and 13 should be in adjacency over a length sufficient to act as a retaining means for the hook element more fully described hereafter. The arms sharply diverge slightly from one another immediately above the contiguous section 18 in sections indicated at 19.

The arms **12** are substantially parallel from the sections **19** to the loops **13**.

The drapery supporting member **10** should be formed in such a manner that the arms **12** at the contiguous section **18** are tensioned toward one another to reduce the space between the two arms **12** in this contiguous section to a distance apart less than the diameter of the wire forming the hook element **11**, and preferably into touching relationship. The hook element **11** is formed with a leg **20**, bight **21** and leg **22** continuous with one another. The leg **20**, which may also be termed a shank, is formed with a crimp **23** at its lower portion with the crimp **23** preferably in the same plane as legs **20**, **22** and bight **21**.

The plane of the arms **12** in the drapery supporting member **10** and the plane of the hook element **11** are normal to one another. The hook element **11** and drapery supporting member **10** are interengaged by the interlock of the crimp **23** with the pinch **15**. The crimp **23** is positioned on one side of the pinch **15** with the lower portion **25** of the leg **20** projecting through the opening **16** and extending downwardly of the supporting member **10** on the other side of the bight section **14** as indicated at **28**, FIG. 2. The upper portion **26** of the leg **20** projects through the loop **17** and bears against the contiguous section **18** as indicated at **29**. The upper portion **26** of the leg **20** may, if desired, be slightly inclined towards the drapery supporting member **10** and between the arms **12** above the contiguous section **18** to effect a more positive engagement between the upper portion **26** and the contiguous section **18**. Preferably, the upper portion **26** bears directly against both legs **12** at the contiguous section **18**.

The bight **21** is inclined upwardly from the leg **20**. A crimp **30** is formed at the upper end of the bight **21** with this crimp **30** having sides **31** and **32**. The rear side **32** extends downwardly and is contiguous with the leg **22**. Crimp **30** is adapted to engage a slider of conventional shape and size. These sliders are supported on traverse rods and are adapted to be moved longitudinally of the rod for the purpose of carrying the drapes and drapery hooks.

The sides **31** and **32** engage the forward and rear portion of the slider respectively as indicated in my copending application Serial No. 788,699. It has been found that locating the crimp **30** at the rear end of the bight **21** and inclining the bight is substantially advantageous over the construction shown in my copending application. Such an arrangement causes the drapes to hang straighter and permits shading of the sliders without binding of the hooks against the traverse rod.

This embodiment may be assembled by first inserting the lower portion **25** of the leg **20** through the loop **16** so that hook element **11** assumes the position illustrated at **35** in dotted outline. The hook element **11** is then rotated counterclockwise relative to the drapery supporting member **10** to the position of final assembly. Hook element **11** is maintained in locked position to the relative drapery supporting member **10** when the upper portion **26** of the shank or leg **20** is passed between the contiguous sections **18**. As the hook element **11** is moved between the legs **12** it forces contiguous sections **18** apart. Once the hook element **11** is in the position indicated in solid line in FIG. 2 the contiguous sections **18** spring together again thereby locking the hook element **11** in place.

The simplicity of this assembly eliminates the necessity of welding and expensive machinery and equipment for assembling the hook element and drapery supporting member, as is necessary with other types of constructions. Moreover, it permits assembly by the ultimate consumer, and thereby eliminates expensive manufacturing costs. When a drape is inserted on the arms **12**, the drapery pocket is forced between the contiguous section **18** and the upper portion **26** of the leg **20**, which further assures a rigid interlocking arrangement between the member **10** and element **11**. Since the leverage distance between the bight **14** and the pinch **15** is short, a substantial torque on the hook element **11** relative to the drapery supporting member **10** is possible without the crimp passing between the arms at the pinch **15**. It has been found that the wire of the hook element **11** will bend before the wire at the pinch **15** of the drapery supporting member **10** will spread.



In the embodiments illustrated in FIGS. 3 and 4, like numerals refer to the corresponding elements illustrated in the embodiment shown in FIGS. 1 and 2. The shank or leg **20** is longer and is provided with a pair of crimps **23** and **40**. The crimp **40** may engage pinch **15** in a manner similar to the interengagement of the crimp **23** and pinch **15**. When the crimp **40** is interengaged with the pinch **15**, the crimp **23** is positioned between the arms **12** close to their upper end. In this position drapery material supported on the arms **12** will be reversely folded about crimp **23** and will thereby be more rigidly clamped.

When the crimp **23** is interengaged with the pinch **15**, drapes will be supported higher than when crimp **40** is interengaged with the pinch **15**. If desired, more than two crimps may be incorporated into the leg **20** so that more than two positions of adjustment are possible. The crimps should be spaced apart a distance greater than the distance between the pinch **15** and upper end of the contiguous section **18** so as not to interfere with the interlock of the two members.

The embodiment of the invention illustrated in FIGS. 5 and 6 is similar to the embodiment illustrated in FIGS. 3 and 4 where like numerals refer to similar parts. In this arrangement the hook element **50** is formed with a bight **51**, rear leg portion **52** and shank **53**. This hook element **50** is not provided with a crimp arrangement illustrated at **30** in FIGS. 1–4 although if desired, it could be. The shank **53** is formed with a pair of crimps **23** and **40** similar to those previously described in connection with the embodiment of FIGS. 3 and 4. The lower end of shank **53** is bent into a loop **54** having an opening **55** through which the bight portion **14** of the drapery supporting member **10** may be inserted. This loop **54** acts as a pivot in assembling the hook element **50** and drapery supporting member **10**. The loop **54** permits the hook element **50** to be pivoted from a position illustrated in dotted outline at **56** to the position indicated in solid outline (FIG. 6). In the assembled arrangement the crimp **40** interengages the pinch **15** while an intermediate portion of the leg **20** indicated at **57** engages the contiguous section **18**. The crimp **23** projects between the legs **12** just above the contiguous section **18** thereby forming a positive clamping arrangement for securing drapes therebetween. If desired, the crimp **23** may be interengaged with the pinch **15** in a manner as indicated previously so that the drapes may be supported in a relatively higher position. The rounded loop **54** prevents the lower end of the shank **53** from catching or tearing the drapery material.

In the arrangement illustrated in FIGS. 7 and 8 there is provided an adjustable hook utilizing three interengaging members. These include hook element **60**, drapery supporting member **61** and an interlocking member **62**. The drapery supporting member **61** is formed with parallel arms **63** terminating at their upper end at loops **64** similar to loop **13** in FIG. 1. The arms **63** are interconnected at their lower end in a bight section **65**. The lower ends of the arms **63** immediately adjacent to the bight **65** are inclined toward one another into touching relation forming a pinch **66**. An opening **67** is formed between the pinch **66** and bight **65**. Immediately above the pinch **66** is a loop **68** formed by an enlargement of the arms **63**. The arms **63** between the upper end of the loops **68** and the loops **64** are parallel to one another and are either closely spaced, or in touching relation along their length. As best illustrated in FIG. 8, the drapery supporting member **61** is slightly curved at its lower end from the pinch **66** to the bight **65**. This curve angularly displaces

the opening 67 from the plane of the major portion of the drapery supporting member 61.

The hook element 60 is formed with a bight section 70, rear leg 71 and elongated shank 72. The hook element may be formed with a crimp 73 such as is illustrated at 30 in FIG. 2 or may be formed as the bight section 50 as is illustrated in FIG. 6. In the drawing, the crimp 73 is intermediate the ends of the bight section 70, similar to the arrangement shown in my copending application Serial No. 788,669. The shank 72 is provided with a series of notches 75 spaced at selected distances apart from the lower end of the shank upwardly. The shank 72 projects through opening 67, with the plane of the hook element 60 normal to the plane of the arms 63.

The hook element 60 is rigidly interlocked with the drapery supporting member 61 by the interlocking member 62. This interlocking member 62 is formed of a resilient flat piece of spring steel formed into the configuration illustrated. The interlocking member is elongated in form having a wider lower end 80 and narrower upper end 81. The upper end 81 is formed with a closely fitting hole through which the shank 72 slideably projects. This upper end 81 projects through the loop 68 and tensions the shank 72 towards the arms 63. An intermediate portion 83 of the member 62 continuous with the upper end 81 extends downwardly on the forward side of the loop 67 and is arcuately formed at 84 adjacent the lower end 80. The arcuate portion 84 is formed with an elongated slot extending longitudinally and between substantially the points 85 and 86. The shank 72 projects through this slot. The lower end 80 of the interlocking member 62 is interengaged with the bight section 65. The shank 72 bears against the forward edge of the slot as indicated at 85. Thus the shank 72 is rigidly secured by the interlocking member 62, with the upper end of the interlocking member 62 tensioning the shank in a forward direction against the restraining action of the interengagement of the shank 72 at the pinch 66, and the interengagement of the shank 72 with the inner surface of the bight 65. This hook is adjustable by raising and lowering the hook element 60 relative to the supporting member 61. The grooves 75 are interengaged with the hole in the upper end 81 of the member 62.

To adjust the hook, the interlocking member 62 is disengaged at its lower end 80 from the bight 65 by pushing forwardly on the lower end. This frees the shank 72 for vertical movement. The shank is then reengaged by returning the interlocking member to its engaging position.

This particular arrangement lends itself to automatic machines for assembly purposes. In this arrangement the hook may be assembled into a locking engagement by laying the section 83 of the interlocking member 62 on a flat surface with the upper and lower ends 81 and 80 projecting upwardly. The drapery supporting member 61 is then laid over this interlocking member with the upper end 81 projecting through the loop 68 and the lower end adjacent the bight 65. The shank 72 is then threaded through the opening in the upper end 81, the loop 67 and the slot in the lower end 80. The shank is then pressed towards the flat surface and the arms 63 causing the lower end 80 of the interlocking member 62 to snap into engagement with the bight 65, thereby locking the three elements together.

In FIG. 9 there is shown a further modification of the present invention adapted for use with a pin-on hook. In this arrangement, a crimp 30 is formed in a bight 21 in the same manner as that illustrated in the modifications of FIGS. 1 and 2. In this arrangement the forward leg 90, corresponding with leg 20 of the modification of FIG. 2, is continuous with the bight section 91 and drapery engaging prong 92, which terminates at its upper end in a piercing point 93. This embodiment may be used in a manner similar to conventional pin on hooks with the added advantage of the crimp arrangement illustrated at 30.



I claim:

1. An adjustable drapery hook formed of two members adapted to be releasably interlocked in selected positions comprising a wire hook element having an elongated shank, a drapery supporting member formed of a length of wire having two substantially parallel arms having portions thereof lying substantially in a plane and connected together at their lower ends at a bight section and with a pinched constriction at a point close to said bight section forming an opening through which said shank projects, and an interlocking member passing through said plane and engaging said shank above said constriction and interlocking it with said arms.

2. An adjustable drapery hook formed of two members adapted to be releasably interlocked in selected positions comprising a wire hook element having an elongated shank, a drapery supporting member formed of a length of wire having two substantially parallel arms connected together at their lower ends at a bight section and with a pinched constriction at a point close to said bight section forming an opening through which said shank projects, and an interlocking member comprising a flexible resilient member projecting between said arms above said constriction and engaging said shank and at its lower end engaging said bight.

3. An adjustable drapery hook in accordance with claim 2 wherein said interlocking member has an upper end having a narrower width than said lower end engaging said bight.

4. An adjustable drapery hook in accordance with claim 2 wherein said bight section of said drapery supporting member is curved with respect to said arms.

5. An adjustable drapery hook formed of two members adapted to be releasably interlocked in selected positions comprising a wire hook element having an elongated shank, a drapery supporting member formed of a length of wire having two substantially parallel arms connected together at their lower ends at a bight section and with a pinched constriction at a point close to said bight section forming an opening through which said shank projects, and an interlocking member comprising a flexible resilient flat member having holes at its upper and lower ends, said upper end projecting between said arms above said constriction and engaging said shank in said upper hole, and said lower end releasably engaging said bight section with said shank freely projecting through said lower hole below said constriction.

6. An adjustable drapery hook formed of two members adapted to be releasably interlocked in selected positions comprising a wire hook element having an elongated shank, a drapery supporting member formed of a length of wire having two substantially parallel arms connected together at their lower ends at a bight section and with a pinched constriction at a point close to said bight section forming an opening through which said shank projects, and an interlocking member projecting between said arms and engaging said shank above said constriction and interlocking it with said arms.


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