March 16, 1965 A. J. GEORGE 3,173,169

DRAPERY HANGER

Filed Feb. 27, 1963

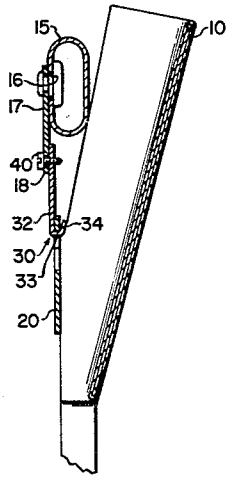


Fig. 2.

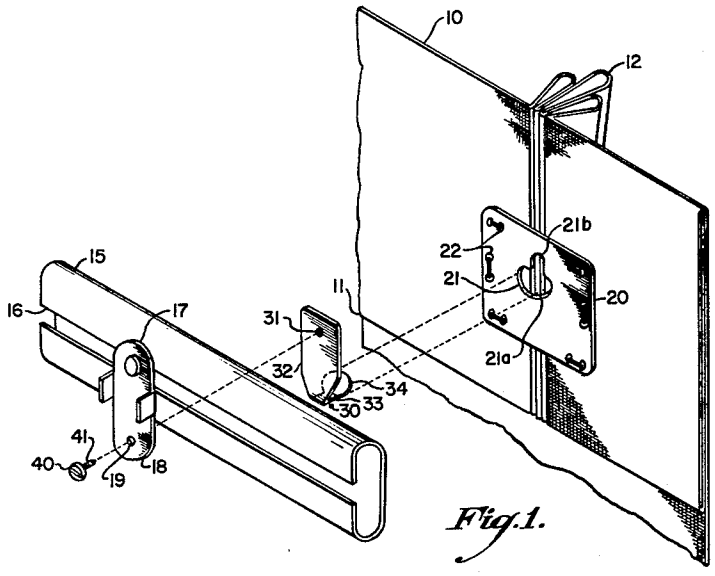


Fig. 1.

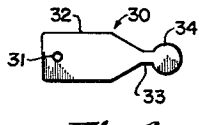


Fig. 3.

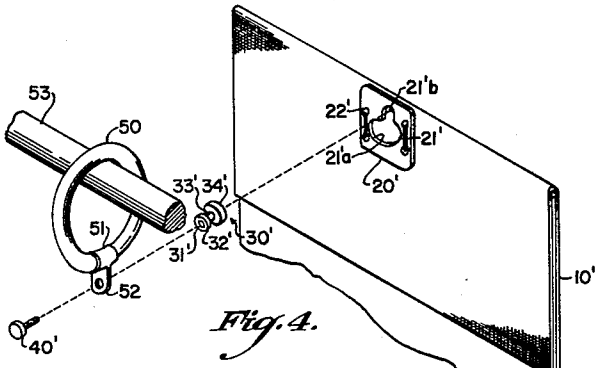


Fig. 4.

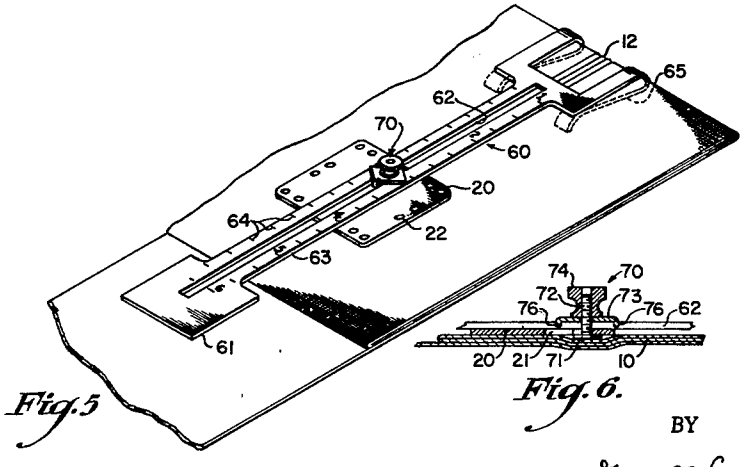


Fig. 5

Fig. 6.

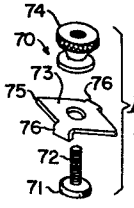


Fig. 7.

INVENTOR.
Ann J. George.

BY

Green, McAllister & Miller
HER ATTORNEYS.

United States Patent Office 3,173,169
Patented Mar. 16, 1965

3,173,169

DRAPERY HANGER

Ann J. George, 105 N. Pennsylvania Ave., Apollo, Pa.

Filed Feb. 27, 1963, Ser. No. 261,459
5 Claims. (Cl. 16—87.2)

This invention relates to drapery connectors or the like for hanging window covers, including draperies, curtains, etc., on support members such as traverse rods, swinging cranes, poles and rings or curtain rods and rings. More particularly this invention relates to a two-part drapery connector that permits the draperies to be taken down for laundering or cleaning, and rehung without upsetting the accurate location of the drapery hanging connection.

Modern trends of interior decoration have brought about a wholesale changeover from sheer, fixed-in place curtains, to heavy, movable draperies, and particularly to draperies that cover very large areas; sometimes even larger than the windows with which they are associated. While a great many different types of drapery hanging devices have been proposed from time to time, no drapery connector has ever been constructed that can satisfactorily be left in place during laundering or cleaning, and pressing of the draperies, without the possibility of damage to the draperies or to the hanger.

One of the most common forms of drapery connectors is a simple wire hook device that has a pin or loop at one end for affixing the hook to the drapery by pinning or sewing. Such a hook must be removed from the drapery before it is washed or otherwise cleaned, since the exposed hook will injure the draperies or the cleaning machinery. When the draperies are to be rehung, the hooks must be again connected, by pinning or sewing, to the draperies. Of course, if one or more hooks is not replaced in exactly the right position, the draperies will not hang straight and even. This last mentioned problem is of particular concern to those interior decorators who make custom draperies for their clients. Reports from dissatisfied clients are often traced back to an improper reinstallation of the drapery connectors, which has caused once perfectly hung draperies to look sloppy and poorly made.

Another difficulty encountered with existing forms of draper connectors is the high degree of tilt or flop-over permitted inherently by any form of hook. Where the hook is supported within an eye of a traverse rod carrier, it must rotate or tilt to bring the weight of the drapery into static balance. The top or heading of the draperies, being securely connected to the hook, will tilt and be unsightly; furthermore, the tilted hook is in a position where it can easily work its way loose from the carrier.

In hanging cafe curtains or any drapery where the hanger is visible from outside the window, wire hangers such as those available currently on the market, are unsightly and hence unsatisfactory. Many housewives will avoid such curtains altogether or will go to the additional trouble of sewing the curtains to the support rings. Upon observing the foregoing state of the art, I have determined that housewives are doing a great deal of unnecessary work and achieving unnecessarily dissatisfactory results.

Accordingly, an object of my invention has been to fully investigate the aesthetic and physical problems encountered in the art of drapery and curtain connectors;

Another object of my invention has been to provide a drapery connector that is permanently installed on the drapery and will not impede or in any way be detrimental to the draperies during washing, cleaning or pressing thereof;

Another important object of my invention has been to provide an improved drapery connector that can be easily and inexpensively manufactured, and can therefore be priced competitively with the drapery hangers that are currently available;

A further object of my invention has been to provide drapery connectors that are aesthetically acceptable for use wherever the hangers would be exposed to view, either from inside or outside the window;

A further important object of my invention has been to provide a simple gaging apparatus for aid in installing my drapery connectors and to thereby make their accurate installation substantially foolproof.

These and other important objects of my invention will appear to those skilled in the art upon reading and understanding the following description of my inventive concepts and some specific embodiments thereof.

One phase of my invention involves a drapery connector employing a completely-flat substantially-rigid hanger plate that is permanently affixed to the drapery or curtain which is to be hung. The hanger plate is substantially rigid to the extent that no degree of flexure is required for its proper operation. A degree of incidental flexibility, however, will not be harmful. Such a rigid flat plate can be readily passed through any washing, cleaning or pressing machine without fear of harm to itself, the draperies, or the machinery. Furthermore, the use of a flat plate permits the connecting force between the plate and the draperies to be spread over a large area whereby the potential drapery-tearing force is reduced by distribution. Yet this plate will not interfere with the opening of the drapery as it occupies no more space on the back of the drapery than a "pinch pleat" occupies on the front of the drapery. It ocupies less space than does a box pleat.

Another phase of my invention involves the provision of a downwardly extending carrier extension that is constructed to minimize the tilt or flop-over of the drapery heading. Most traverse rods have a rearwardly located slot in which movable carriers are supported. Draperies supported by such rods are ostensibly hung in front of the rods, however, the weight of the drapery actually hangs in a vertical line with the rearwardly located carrier. Ordinary wire-hook-type drapery connectors hang at a considerable angle to the vertical; usually between 20° and 45°. I have determined that by positioning the drapery support connection point directly below the traverse rod slot, and extending the vertical length of the carrier, the drapery heading will flex outwardly only so far as is necessary to clear the front edge of the traverse rod; usually between 8° and 15°.

A further phase of my invention relates to the use of a key or button that is substantially rigidly connected to carrier members of the transverse rod for removably engaging the hanger plate. I have found that such a rigidly mounted key makes it substantially impossible for the connectors to "jump" or become accidently disengaged as is common in the case of ordinary wire-type hooks. Accidental disengagement is usually caused by a cumulative repeated outward and slightly upward motion of the hooks resulting from bunching of the draperies when they are opened. When a hook is disengaged, the draperies will hang unevenly and the top of the drapery will droop. A key connection as provided by my invention makes progressive steps toward disengagement impossible and thus the chance of accidental separation of the connector parts is virtually eliminated.

A further important phase of my invention relates to the use of a key and keyhole connector by which draperies can be easily attached or removed from the support rods. Decorators or housewives working around a problem, such as sloping or uneven floors, will find it is greatly to their convenience to be able to completely finish the top of the drapery, attach the hanger plates and hang the drapery to make the adjustments at the hemline of the drapery. With my invention, the drapery will not need further adjustment in its life time. Dressmakers and tailors always make their adjustments at

the hemline of a garment. They know that raising the top or waistline of a garment at one place and lowering it at another will ruin the hang of the garment. The same is true of draperies, yet all pin and hook types of drapery fasteners make adjustments by raising one place, lowering another.

A still further important phase of my invention involves the provision of a tool for assisting in the installation of my hanger plates onto the draperies. The tool comprises an adjustable scale which is provided with means for selectively gripping a hanger plate at its connection point and holding it in a predetermined position with respect to the scale. When the installation tool is in place, the hanger plate can be sewn either by hand or machine without further concern as to its location. More importantly, the hanger plates can be sewn in place without concern as to whether they are all exactly the same size. This latter factor will significantly reduce the production cost of the hanger plate since tolerance considerations in their manufacture will be effectively eliminated.

Besides sewing the hanger plate in position by hand or machine, many other methods of attaching it to the drapery may be used depending on the material of the drapery and the method of cleaning prescribed. The drapery hanger could be stapled to the drapery, or it could be bonded with any of the "press on" tapes. All the new two-sided tapes should be considered as well as bonding glues or cements.

Some specific embodiments of my invention are shown for purposes of illustration in the accompanying drawings, of which:

FIGURE 1 is an exploded perspective view of a conventional drapery and drapery rod together with the elements of a preferred embodiment of my drapery connector;

FIGURE 2 is an assembled side, cross-sectional view of the drapery hanger shown in FIGURE 1;

FIGURE 3 is a developed view of a carrier extension shown in FIGURES 1 and 2;

FIGURE 4 is an exploded perspective view of a second embodiment of my invention which is of particular use in hanging cafe curtains and the like;

FIGURE 5 is a perspective view of a hanger plate locating tool constructed in accordance with my invention;

FIGURE 6 is an enlarged cross-sectional view of an element of the hanger plate locating tool shown in FIGURE 5; and

FIGURE 7 is an exploded perspective view of the element shown in FIGURE 6.

Turning now more specifically to FIGURES 1 and 2, there is shown a conventional flexible cloth window cover or drapery **10** that has a heading portion **11** which is grouped into a pleated portion **12**. FIGURE 1 also shows a conventional window cover holding means or traverse rod **15** that has a rearwardly located slotted portion **16** in which slides a carriage member, truck, or carrier **17**. The carrier **17** includes a downwardly extending tongue or tab **18** that has an eye hole or open portion **19** therein and through which the ordinary wire drapery hangers currently in use are inserted.

The drapery connector of my invention essentially comprises three parts: a completely flat substantially rigid hanger part, button-receiving means or plate **20**; a hook member, carriage extension, or key member **30**; and a fastener or thumb screw **40**.

The hanger part **20** is made of thin sheet metal or stiff plastic and contains a keyhole shaped opening or slotted portion **21** that includes a large entrance or insertion portion **21***a* and a smaller downwardly open U-shaped retainer or supporting portion **21***b* that is located upwardly of the larger insertion portion **21***a*. The hanger part **20** also includes thread holes or other means **22** for securely connecting edge portions of the hanger part

20 flat against the drapery **10**. The hanger part **20** is made relatively wide so that the thread holes **22** are spaced far apart and the drapery-tearing force imposed by the sewn connections is thereby substantially reduced by distribution. Once the hanger plate **20** has been sewn, or otherwise fastened, in place, it will never have to be moved for washing, cleaning or pressing of the draperies.

The key member **30** shown in the embodiment of FIGURES 1 through 3, is pressed or stamped from sheet metal in the developed shape shown in FIGURE 3, and is bent to the final shape or profile shown in FIGURES 1 and 2. The key member **30** contains a threaded hole **31** for receiving the thumb screw **40** whereby the traverse rod carrier **17** is clamp-engaged by the key and thumb screw in a secure supporting relationship. As the carrier holes **19**, of available standard traverse rods, vary considerably in size, the thumb screw **40** has a threaded shaft **41** that is preferably of substantially the same diameter as the wire of which pin-type drapery hooks are made. It will thus be seen that between the flange-type clamping action of the key member **30** and the thumb screw **40**; and the small shaft **41**, the key member **30** of my invention can be used with any traverse rod that is available on the market. Furthermore, it is within the contemplation of my invention to form the key member **30** integrally with the carrier **17** if it is desired to provide carriers useful only with my invention.

The key member **30** shown in FIGURES 1 through 3 further includes a downwardly-extending tongue, tab or body part **32**, a thin, outwardly-extending neck portion **33** and an upwardly-turned, round-ended hook, keeper portion or button **34** at its lower end. In use, the upwardly turned button **34** of the key member **30** is inserted into the larger open portion **21***a* of the hanger **20** and the thin neck portion **33** of the key member extension **30** is slid into a retaining engagement with the retainer opening **21***b* of the hanger **20**.

From the assembled view of FIGURE 2, it will be seen that the weight of the drapery **10** is carried substantially in vertical line with the supporting connections between the traverse rod slot **16** and its carrier **17**. Thus the drapery **10** will not rotate or turn in order to reposition the weight of the drapery as is true in the case of conventional wire hooks. The result of this construction is that the upper portion of the drapery will tilt outwardly only so far as is necessary to clear the rod **17**, or at an angle of about 8–15°. Because the narrow neck portion **33** and the retainer slot portion **21***b* provide the only connection between the hanger **20** and the carrier extension **30**, it is impossible for the hangers **20** to work their way out of engagement over a period of time, as occurs in the case of conventional wire hangers.

Turning now to FIGURE 4, there is shown another embodiment of my invention which is of particular use where draperies or curtains are to be held or hung from their topmost edge and also where they are positioned such that the connector is visible from either inside or outside of the window. Cafe curtains are usually hung from large rings or attachment members **50** that each have a small flange **51** extending from the bottom thereof. The flange **51** has a hole **52** therethrough for attaching the curtains by pinning or sewing. The rings **50** slide freely on a support rod or bar **53**. The connector of FIGURE 4 comprises a completely flat substantially rigid hanger part or slotted plate member **20'** that is substantially like the hanger part **20** shown in FIGURES 1 and 2, though it may be somewhat smaller in size. The hanger part **20'** has a keyhole opening or slotted portion **21'** that includes a large entrance or insertion portion **21'***a* and a smaller downwardly-open U-shaped retainer portion **21'***b*. Thread holes or other means **22'** for attaching the hanger part **20'** to the curtain **10'** are also provided.

A carriage extension or key member 30' is employed that differs somewhat from the key member 30 of the embodiment shown in FIGURES 1 through 3. The key member 30' comprises a body or flange portion 32', a thin neck portion 33', and a button, head, or keeper portion 34' that is insertable into the larger open portion of the hanger part 20'. A threaded fastener-receiving hole 31' is formed in the flange and neck portions 32' and 33'. A thumb screw or headed fastener 40' cooperatively engages the hole 31', and together with the flange portion 32', provides a clamping juncture that securely connects the key member 30' to attachment member 50. The button 34' and neck portion 33' cooperate with the retainer portion 21'b of the hanger part to securely hold the curtains in place. As the hanger part 20' is flat, the curtain can be removed from the button 34', laundered, pressed, and reinstalled on the rings 50 without relocating or sewing any part of the connector device.

FIGURES 5–7 show a sewing instrument, window cover holding means, or locating tool 60 for assisting in the attachment of the hangers 20 and 20' to the draperies and curtains. Many users will desire to take extra care that the hangers 20 and 20' are accurately located since the hangers are attached only once during the life of the draperies. Furthermore, the cost of producing the hangers can be significantly reduced if accurate dimensional relationships are not required as between the location of the keyhole portion 21 and the hanger periphery. The tool 60 will make the accurate location and attachment of my hangers 20 practically foolproof and thus it will enhance the overall utility of my novel drapery connectors.

My locating tool 60 comprises a thin metal strip or elongated body 61 that is about six inches long, or long enough to cover the entire depth of most drapery headings. The body 61 has a slotted central portion or track 62 and narrow side portions 63 which are marked with a scale 64 of convenient intervals, such as quarter inches. The body 61 is also provided at one end with integrally formed or riveted drapery-gripping means such as a pair of spring clips 65 for holdingly engaging a top edge of the window cover 10. In use, the spring clips 65 are slipped over the top edge of the drapery so as to hold the body 61 in position along the drapery pleat.

A hanger-locating part or rider 70 is movably supported within the slotted portion 62 for selective positioning along the scale 64. The details of the locating part are more clearly shown in FIGURES 6 and 7. The locating part 70 is essentially a key member that comprises a button or keeper portion 71 which has an outside diameter that is similar to the effective diameter of the button 34 of carriage extension 30, or the button 34' of the extension 30', whereby the button 71 can be freely inserted through the larger portion 21a of the hanger keyhole portion 21. A threaded shaft or neck portion 72 is securely connected to the button 71 and extends upwardly through the slotted portion 62 of the tool body 61 where it passes through a track-following indicating plate or washer 73 and is threadably engaged by a tightening member or thumb nut 74.

The indicating washer 73 has an indexing portion or pointer 75 that cooperates with the scale 64 to accurately show the location of the hanger 20 with respect to the drapery heading 11. The indicating washer 73 also has at least one, and preferably two, guide portions or followers 76 that guidingly slide within the slotted portion 62 to maintain a 90° relationship between the pointer 75 and the scale 64.

The operation of my tool 60 is as follows: The location of the hanger parts 20 with respect to the drapery heading 11 is determined and the pointer 75 of the indicator washer 73 is moved along the scale 64 to its desired position. A hanger 20 is then fitted onto the button 71 such that the retainer portion 21b of the hanger keyhole 21 fits snugly on the neck portion 72. The thumb nut 74 is then tightened to retain the rider 70 and hanger part 20 in their proper position. The tool 60 is next clipped onto the back of the drapery at a pleat or other desired hanging location, and the button 71 is brought into contact with the drapery material. The hanger part 20, while so held, can easily be sewn in place or attached by staples through holes 22, to the drapery 10 with confidence that it will be accurately located.

When the hanger part 20 has been attached, the thumb nut 74 is loosened, and the button 71 is moved out of engagement with the hanger part through the enlarged portion 21a of the hanger keyhole 21. Each of the hanger parts 20 can thus be installed in the same foolproof manner with the assurance that the draperies will hang evenly and smoothly.

It will thus be appreciated by housewives, interior decorators, and others skilled in the art, that I have provided a drapery connector that will greatly simplify the maintenance of high quality draperies by making it possible to completely launder, clean, and press draperies with either private or commercial equipment without disturbing the accurately pre-located drapery connectors. It will further be appreciated that the drapery connectors of my invention will virtually eliminate unsightly draperies caused by accidental disengagement of a portion of the drapery from the traverse rods. Also, it will be apparent that I have provided a tool which can be rapidly and efficiently used to accurately install the hanger parts of my invention and hence assure that the draperies will hang properly throughout their life.

Having thus described my inventive concepts and some illustrative embodiments thereof, I claim:

1. A window cover connector comprising: a completely flat substantially rigid hanger part that has a downwardly-open U-shaped retainer portion and means for securely connecting and holding said hanger part flat against a window cover; and a key member for supportedly receiving window cover holding means, said key member having a neck portion that has a transverse dimension less than said retainer portion, extending outwardly thereof for cooperative vertical and lateral engagement with said retainer portion of said hanger part, said key member further having an enlarged keeper portion mounted on the outwardmost end of said neck portion.

2. A window cover connector comprising: a completely flat substantially rigid hanger part that has a downwardly-open U-shaped retainer portion and means located adjacent side edges of said hanger part for connecting and holding said hanger part flat against a window cover; and a key member for supportedly receiving window cover holding means, said key member having a neck portion that has a transverse dimension less than said retainer portion extending outwardly thereof for cooperative vertical and lateral engagement with said retainer portion of said hanger part, said key member further having an enlarged keeper portion mounted on the outwardmost end of said neck portion.

3. A window cover connector comprising: a completely flat substantially rigid hanger part that has a keyhole shaped opening formed therein, said key-hole shaped opening including a downwardly-open U-shaped retainer portion and an enlarged entrance portion positioned immediately therebelow, and means for connecting and holding said hanger part flat against a window cover; and a key member for supportedly receiving window cover holding means, said key member having a neck portion extending outwardly thereof, said neck portion being of a size for cooperative engagement with said U-shaped retainer portion, said key member further having an enlarged keeper portion mounted on the outwardmost end of said neck portion, said enlarged keeper

portion being of a size and shape that permits its insertion through said entrance portion of said hanger part.

4. In apparatus for hanging draperies that includes a traverse rod having a plurality of carriage members each having an open portion therein for receiving a drapery connector; a plurality of drapery connectors for attachment to said carriage members, each of said drapery connectors comprising a downwardly extending carriage extension that has at its lower end, an outwardly-extending neck portion and an enlarged, rounded, outwardly-extending button connected thereto; and a completely flat substantially rigid hanger part that has means associated therewith for effecting its flat attachment to a drapery, said flat hanger part also having a key-hole shaped opening formed therein, said key-hole shaped opening including an upwardly-located downwardly-open U-shaped, retainer portion for cooperatively receiving said neck portion of said carriage extension and engaging vertically and laterally therewith, and an enlarged entrance portion of sufficient size for freely receiving said button of said carriage extension.

5. In apparatus for hanging curtains and the like that includes a support rod and a plurality of attachment members that are each provided with an opening for receiving a curtain connector; a plurality of curtain connectors for connecting the curtain to the attachment members, each of said curtain connectors comprising a key member that has a fastener-receiving hole therein, a headed fastener for extending through the opening in the attachment members and cooperatively engaging the fastener receiving hole of the key member, said key member further having a thin neck portion securely connected thereto and extending outwardly thereof and an enlarged button mounted on the outermost end of said neck portion and extending transversely thereto; and a completely flat, substantially rigid hanger part that includes means for effecting its flat attachment to the curtain, said hanger part further including a key-hole shaped opening, said key-hole shaped opening having an upwardly-located downwardly-open U-shaped retainer portion for cooperatively receiving said neck portion of said key member for vertical and lateral engagement therewith, and an enlarged entrance portion of sufficient size for freely receiving and permitting through-passage of said enlarged button of said key member.

References Cited by the Examiner

UNITED STATES PATENTS

661,608	11/00	Holtzclaw	160—84
2,237,925	4/41	Chaikin	223—1.1
2,276,209	3/42	Kruse	16—87.4
2,320,308	5/43	Silverman	16—87.2
2,528,848	11/50	Weinzimmer	16—87.6
2,698,455	1/55	McMurray	16—87.4
2,952,315	9/60	Brontman	160—330
2,971,213	2/61	Johnson	16—87.2
3,018,932	1/62	Davis	223—1.1

FOREIGN PATENTS

1,073,174	1/60	Germany.

DONLEY J. STOCKING, *Primary Examiner.*