

(No Model.)

2 Sheets—Sheet 1.

P. GOLDSMITH.
CURTAIN HANGING APPARATUS.

No. 575,423.

Patented Jan. 19, 1897.

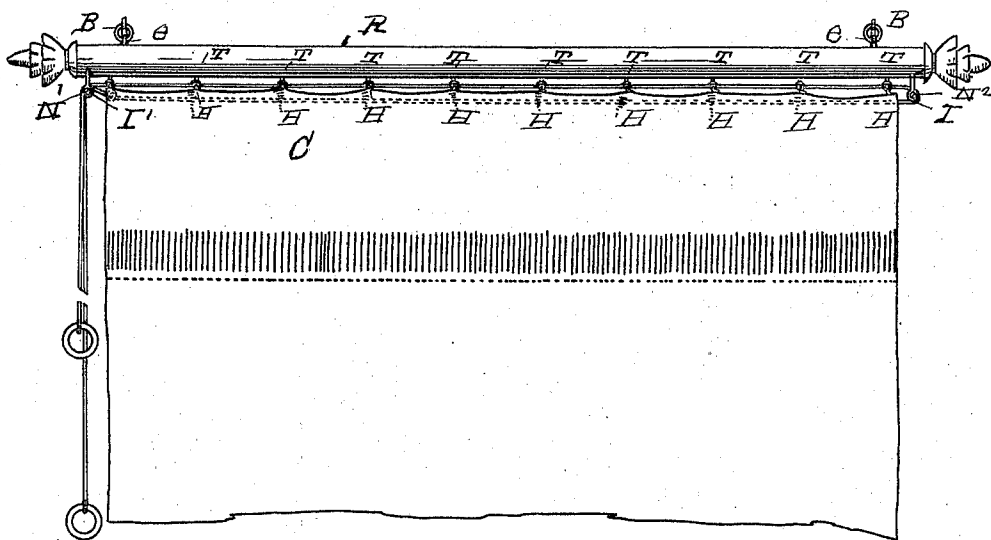


FIG 1

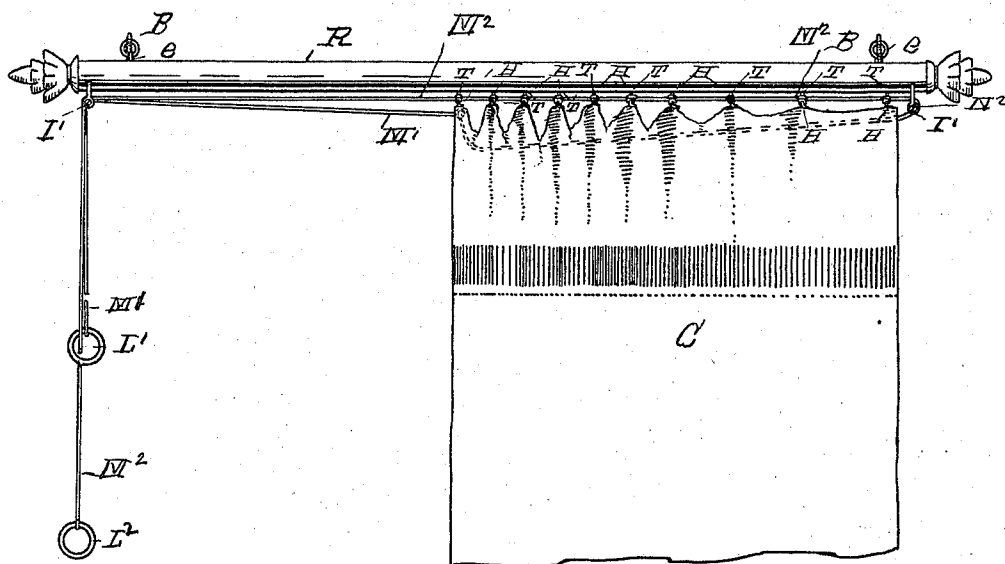


FIG 2

WITNESSES

William A. Sweet

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by W. H. Hagen
att'y

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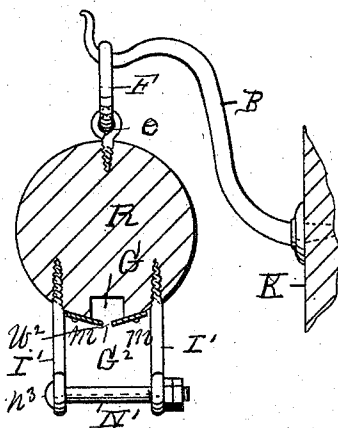
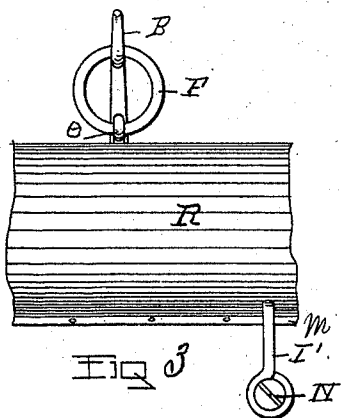
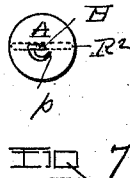
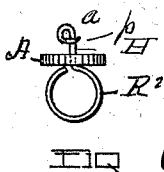
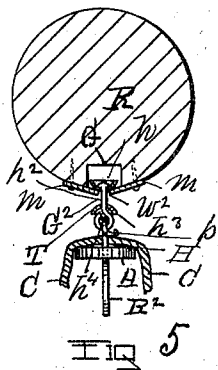
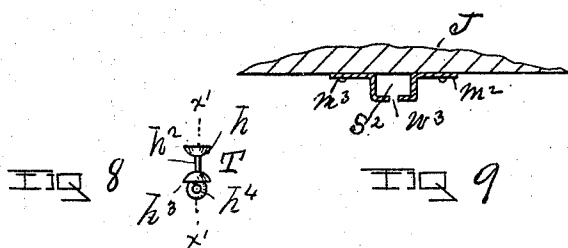


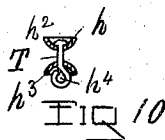
Fig 4



WITNESSES

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UNITED STATES PATENT OFFICE.

PAUL GOLDSMITH, OF TROY, NEW YORK.

CURTAIN-HANGING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 575,423, dated January 19, 1897.

Application filed August 10, 1896. Serial No. 602,214. (No model.)

To all whom it may concern:

Be it known that I, PAUL GOLDSMITH, of the city of Troy, county of Rensselaer, and State of New York, have invented a new and useful Improvement in Curtain-Hanging Apparatus, of which the following is a specification.

My invention relates to an apparatus for hanging curtains, and more particularly to that class of curtains which are pendent from a rod and are drawn sidewise to open and close.

The objects sought to be accomplished by my invention are attained by forming a slot in the under surface of the curtain rod or bar, suspended by means of eyes on its upper face hung upon bracket-hooks connected to the lintel or wall above the opening which the curtain is to close, with a series of riders or travelers each having a swivel-head which is rounded on its under surface and makes a swivel connection with its shank, with a washer that is upwardly concave loosely threaded on the shank below its head, and a depending ring on the shank below the washer. These riders or travelers thus constructed are each entered within the open end of the slideway-groove formed in the rod or bar with the swivel-heads of the travelers or riders thus entered straddling the sides of the slot interiorly with their shanks within and depending from the slot, and having the washer loosely threaded thereon below the slot and a ring depending from the shank where below the washer. To connect these riders or travelers with the curtain, hooks of a peculiar construction are used, each of which has a hook proper upon its upper end with its prong extended laterally after having been bent downwardly to form an offset. Each of these hooks is passed through the curtain material and a rubber disk arranged beneath the curtain, with each of the hooks proper hooked into one of the rings of each of the riders or travelers, in which position a series of these hooks and travelers or riders are thus used, and by which, as thus arranged, the curtain can be moved back and forth, with the riders or travelers sliding easily in the slideway thus formed.

My invention also relates to a construction of a cord-roller to take the place of a pulley

in such a manner that the cord cannot fail to pass freely over the same.

Accompanying this specification to form a part of it there are two plates of drawings 55 containing ten figures illustrating my invention, with the same designation of parts by letter reference used in all of them.

Of the illustrations, Figure 1 is a front view of a curtain, showing the application of my improved apparatus for operating it, with the curtain shown as drawn out in full to close the area which it covers. Fig. 2 is a view of the same parts which are shown at Fig. 1, but with the curtain operated to partly open. 60 Fig. 3 shows in side elevation a part of the curtain rod or bar, one of the bracket-hooks by which it connects with the wall or lintel, and a side view of the cord slide-roller. Fig. 4 is a cross-section of the curtain bar or rod, with the bracket-hook on which it is pendent, the ring in the rod or bar, and one of the cord slide-rollers shown in side elevation. Fig. 5 is a cross-section taken through the rod or bar, the traveler or rider, the hook, part of the curtain, with the washer-disk and the bottom ring of the traveler shown in side elevation. Fig. 6 is a side elevation of the hook and disk, together with the ring on the hook beneath the disk. Fig. 7 is a top view of the hook and disk with the ring on the hook indicated by a dotted line. Fig. 8 is a side elevation of one of the travelers or riders. Fig. 9 shows a modification of the slideway or slot in which the travelers or riders move. Fig. 10 is a section taken on the line $x'x'$ of Fig. 8. 75

The several parts of the apparatus thus illustrated are designated by letter-reference, and the function of the parts is described as follows: 80

The letters R designate the curtain bar or rod, which on its upper face is provided with screw-eyes e , which are vertically screwed into the top of the rod or bar and provided with a ring F, and the letters B designate bracket-hooks, each of which is projected from the side wall or lintel K. 95

The letter G designates a groove or slot formed to project upwardly and inwardly into the under surface of the rod or bar R, 100 and the letters $m m$ designate strips of thin sheet metal which form the slot G^2 and are

attached to the bottom of the rod or bar R to extend inwardly over the groove at each side of the latter, so as to leave an intermediate slot or slideway w^2 .

5 The letters T designate one of the riders or travelers, each of which at its upper end is made with a swivel-head h , adapted to turn loosely on its shank h^2 , and the letter h^3 designates a washer having an upwardly-convex
10 face which is arranged to be passed on over the shank by means of a central passage in the washer, and on the shank h^2 , below the washer, there is placed the connected depending ring h^4 . With the riders or travelers thus
15 constructed a series of them are entered within the open end of the groove G, with the swivel-heads of the riders or travelers interiorly straddling the sides of the slideway and with their shanks within and depending there-
20 from, and in which position the travelers may slide back and forth.

The letters H designate the hooks, each of which at its upper end has the hook-bend a , with the prong end continued down to form
25 the hook and then extended laterally in off-set projection at p .

The letters R^2 designate a ring, of which there is one formed integrally with the hook, and the letter A designates a disk which is
30 arranged on the hook-shank by means of a central passage formed in the disk and the latter passed down over the hook. This disk is preferably made of rubber and is arranged on the hook-shank between its hook proper
35 and the ring R^2 .

To connect the travelers or riders with the hooks and the latter with the curtain C, the riders or travelers are all entered within the slot G, at the open end of the latter, with the
40 swivel-heads of the riders interiorly straddling the slotted slideway w^2 and their shanks within the latter, with the washers h^3 arranged on the shanks below the slideway and the rings h^4 depending from the lower end of the
45 shank below the washer h^3 . This having been done the hooks H at regular spacings are each hooked into the curtain and then turned therein as entered, so that the curtain will rest upon the disks which have been pre-
50 viously threaded onto the shanks of the hooks above their rings, and to complete the connection of the hooks proper each of the hooks H are then hooked into the ring of each one of the riders or travelers as depending there-
55 from. As thus connected the curtain may be drawn out, as shown at Fig. 1, or moved upon the bar or rod to appear as shown at Fig. 2.

To operate the curtain by means of cords to slide back and forth upon the rod R, the
60 following mechanism is used:

The letters I' I' designate screw-eyes which are used in pairs, with a pair at each end of the roller R, screwed therein crosswise of the rod, so as to be in line with each other.

65 The letter N' designates a slide-roller which is entered within the eyes of that pair of screw-eyes which are at the cord side of the

curtain, and the letter N^2 designates another slide-roller which is entered within the eyes of the other pair of screw-eyes at the oppo-
70 site end of the bar or rod R. Each of these slide-rollers is provided with a head n^3 , where at one of its ends it extends beyond the screw-eye, and at the other end, where passing
75 through the other screw-eye, it is provided with a nut, with both of these slide-rollers being adapted to journal loosely in the screw-eyes wherein placed.

The letter M' designates a cord which has its upper end passed over the slide-roller N' 80 to be carried laterally to connect with the side edge of the curtain near its top, and at its depending end this cord is provided with a grasping-ring L'. When this cord is pulled upon and the curtain is open, this movement 85 of the cord draws upon it to close.

The letter M^2 designates another cord which at its depending end is provided with a grasping-ring L^2 , from where it is carried upwardly to pass over the slide-roller N', and from
90 thence carried horizontally to pass around the slide-roller N^2 to return frontwardly to the cord side of the curtain, to there attach to the latter at the same point as the cord M'. By pulling upon the cord M^2 as thus con-
95 nected the curtain is moved to slide sideways on its connection with the bar, so as to open the area which it covers.

The curtain-hook herein shown and described may be used for hanging other cur-
100 tains than that shown.

In the modification shown at Fig. 9 a slide-way S^2 is formed for the travelers or riders by means of two strips of thin sheet metal m^2
105 m^3 , each of which is offset centrally throughout its length to extend downwardly where offset and thus produce between its edges the inter-
110 mediate slot or slideway w^3 with the upper edges of the plates attached to ceiling or lintel J. When this modification is used to pro-
115 duce a slideway for the travelers or riders, the rings on the top of the rod or bar and the latter are dispensed with. When using my apparatus to hang heavy curtains, the rubber disk may be omitted, although its use is ad-
120 vantageous when the curtain is made of light material, as it prevents the hooks from tearing. By having the rider or traveler hook-shank make a swivel connection with the heads they move freely and easily, and by
125 means of the washer on the rider-shanks the hooks are prevented from turning to disconnect.

Having thus described my invention, what I claim, and desire to secure by Letters Pat-
125 ent, is—

1. In an apparatus for hanging curtains, the combination with a slideway having a slot in its under side; of riders or travelers entered within said slideway; a shank making a swiveled connection with each of said
130 riders or travelers and arranged to depend therefrom within said slot; a depending ring formed integrally with the lower end of each

of said shanks; a washer on the latter between the ring and the slot; hooks each having a downwardly and laterally projected prong, and a depending ring with each of said hook-prongs, adapted to be passed through a curtain at intervals with the latter resting on the hook-rings, and with each of the hooks hooked into the depending ring of one of the travelers or riders, substantially in the manner as and for the purposes set forth.

2. The combination with a bar provided with a groove having a slot in its under side, of travelers or riders, each provided with a head arranged within said groove to straddle said slot, and each having a shank making a swiveled connection with the head, and depending therefrom within said slot, and at its lower end below the slot, each provided with a depending ring; a washer arranged on the travelers or riders between the shank and the sides of the slot; curtain-hooks each provided with a hook having a downwardly and laterally projected prong, and at the lower end of the shank provided with a ring; a disk-form washer threaded onto each of the hook-shanks above the ring thereon, with each of said hooks adapted to have a curtain passed on over it to the rest on the disk-form washer, with the hooks each hooked into one of the traveler or rider rings, substantially in the manner as and for the purposes set forth.

3. The combination with the groove G , made with the slot G^2 , forming the slideway w^2 ; of the riders or travelers T , each made with a swivel-head h , shank h^2 , swivel-washer h^3 , and ring h^4 , entered within said slideway with their heads interiorly straddling the same and their shanks and rings depending therefrom; the hooks H , each having a hook proper at its upper end made with an offset prong p , and at its lower end provided with the ring R^2 , with the hooks proper each adapted to be passed through the curtain C , with the latter

resting upon the ring R^2 , and the hooks proper each hooked into one of the rings upon each of the riders or travelers, substantially in the manner as and for the purposes set forth.

4. The combination with the rod or bar R , having the slideway w^2 , formed therein, and provided with the slide-rollers N' and N^2 , each downwardly projected from one of its opposite ends of the travelers or riders T , each provided with a head having a swiveled head adapted to interiorly straddle said slideway when inserted therein with the shank of the rider or traveler within the slot G^2 , and depending therefrom and having a ring on its lower end; the hooks H , each provided with a hook proper at its upper end having an offset point on its prong p , and at its shank end with the ring R^2 ; the curtain C , at its upper end depending from said hooks; the cord M' , passed over the roller N' , to connect with the adjacent front edge of the curtain, and the cord M^2 , passed over the roller N^2 , and the roller N^2 , and carried horizontally to connect with the curtain at its front edge near its top, substantially as and for the purposes set forth.

5. In a curtain-hook, the combination with the hook proper of a downwardly and laterally extended prong; a ring formed integrally with the hook-shank at the lower end of the latter, and a disk-form washer on the hook-shank, between the ring and the hook-prong, substantially as and for the purposes set forth.

Signed at Troy, New York, this 8th day of August, 1896, in the presence of the two witnesses whose names are hereto written.

PAUL GOLDSMITH.

Witnesses:

GEO. M. PAYFER,
W. E. HAGAN.