No. 863,395. PATENTED AUG. 13, 1907.

P. A. HOUGHTALING.

CURTAIN FIXTURE.

APPLICATION FILED JUNE 29, 1906.

Fig. 1.

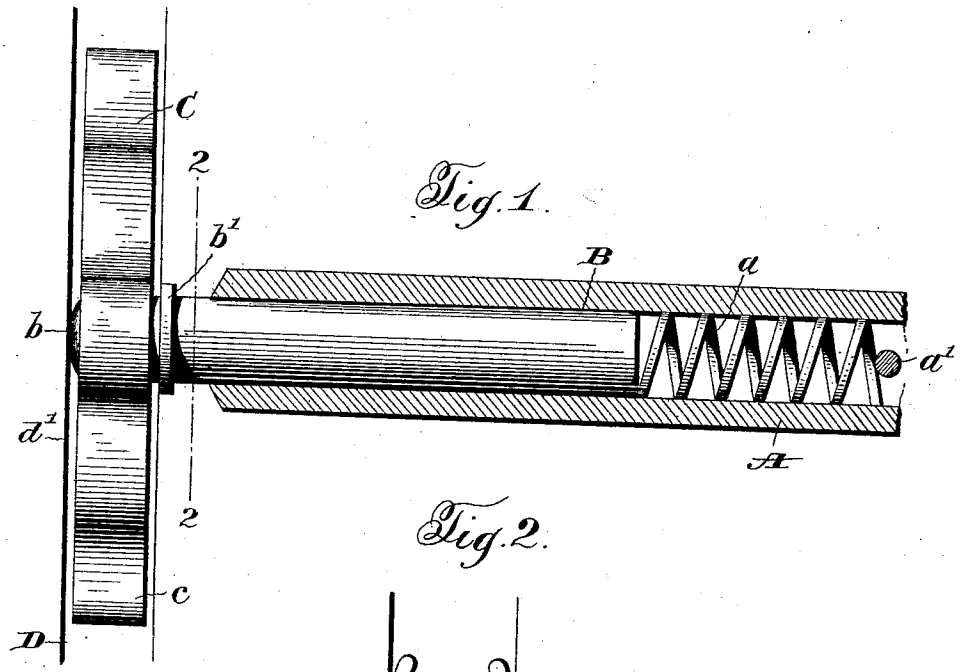
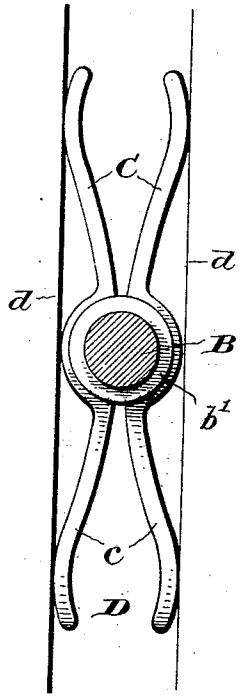


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

PAUL A. HOUGHTALING, OF RIVERTON, NEW JERSEY, ASSIGNOR TO THE CURTAIN SUPPLY COMPANY, OF NEWARK, NEW JERSEY, A CORPORATION OF NEW JERSEY.

CURTAIN-FIXTURE.

No. 863,395. Specification of Letters Patent. Patented Aug. 13, 1907.

Application filed June 29, 1905. Serial No. 267,479.

To all whom it may concern:

Be it known that I, PAUL A. HOUGHTALING, a citizen of the United States, residing in Riverton, New Jersey, have invented certain Improvements in Curtain-Fixtures, of which the following is a specification.

My invention relates to that class of devices designed to hold a shade or curtain in any given position against the tendency of its spring roller to roll it up or raise it, and more especially the invention is included in that particular type of curtain holding structures in which the lower portion of the curtain is provided with devices frictionally acting upon the sides or upon both sides and bottom, of the grooves of the window frame in which the curtain operates.

One object of the invention is to provide a relatively simple and inexpensive structure applicable to the lower portion of a curtain, which shall serve to automatically retain the same in any given position against the upwardly acting tendency of its spring curtain roller.

Another object of the invention is to provide a device of the character above noted, which shall be of such a nature as to permit of the curtain rod being attached to the extreme lower edge of a curtain, which edge shall extend in substantially the line connecting the lower ends of the heads or shoes carried by said curtain rod.

These objects I attain as hereinafter set forth, reference being had to the accompanying drawings, in which:—

Figure 1, is an elevation, partly in section, illustrating a portion of a curtain rod equipped with a curtain holding device constructed according to my invention. Fig. 2, is a vertical section on the line 2—2, Fig. 1.

According to this invention I provide the ends of a curtain rod, or of the spring actuated bars carried thereby, with springs so disposed as to engage the sides of the guiding grooves of a window frame in which the curtain operates, and in one form of the invention so construct it that a portion of the head also engages the bottom of the window frame.

Referring to the drawings, A represents a tubular curtain rod having within it springs of which one is shown at *a*, the same being held in place by a pin *a'* and bearing upon a bar B upon which is carried the head or shoe C. In the present instance, each head consists of two bow-shaped springs C, curved so that at their ends they each engage a side surface *d* of the window frame groove D. The said springs are also bent to form a substantially semi-circular bearing which extends around or partially embraces the end of the spring actuated bar B. In order to retain these springs in position, this bar is preferably provided with a collar *b*, as shown, and, if desired, its extreme end may be extended so as to normally engage the bottom surface *d'* of the window frame groove.

Under operating conditions, it will be understood that the springs *c* forming the head or shoe engage the side surfaces *d* of the window frame groove D with sufficient force to retain the curtain in any given position against its tendency to move upward under the action of its spring roller, this holding action being still further increased, if desired, by the pressure of the end *b'* of the bar B against the bottom *d'* of the window frame groove, under the action of a spring *a*.

I claim as my invention:—

1. A curtain holding device consisting of a curtain rod, spring actuated bars carried thereby constructed to frictionally engage the bottoms of window frame grooves, with holding means, also carried by each of said bars, normally engaging the sides of said grooves, substantially as described.

2. A curtain holding device consisting of a curtain rod, spring actuated bars carried thereby constructed to contact with the bottoms of window frame grooves, and holding springs, carried by each of said bars normally engaging the sides of said window frame grooves, substantially as described.

3. A curtain holding device consisting of a curtain rod, spring actuated bars carried thereby constructed to engage the bottoms of window frame grooves, and frictional holding means, comprising two springs, carried by each of said bars and formed to engage said window frame grooves both above and below the points of engagement of the said bars with the bottoms of the grooves, substantially as described.

4. A curtain holding device consisting of a curtain rod, two substantially bow-shaped springs carried by each end thereof, each of said springs having portions loosely embracing a portion of the end of said rod, substantially as described.

5. The combination with a guiding window frame having grooves, of a curtain holding device consisting of a curtain rod, a spring actuated bar in each end thereof, two bow-shaped springs partially embracing and bearing upon each bar and engaging the sides of the window frame grooves, the ends of the spring actuated bars being extended to engage the bottoms of said grooves, substantially as described.

6. A curtain holding device consisting of a curtain rod, spring actuated bars carried thereby constructed to frictionally engage the bottoms of window frame grooves, and yieldable friction members carried by each of said bars arranged to frictionally engage said window frame grooves both above and below the points of engagement of the said bars with the bottoms of the grooves.

7. A curtain holding device consisting of a curtain rod, means at the end of the rod constructed to frictionally engage the bottoms of window frame grooves, spring means carried by the first mentioned means, the same being transversely arranged relative to said first mentioned means and normally frictionally engaging the sides of the window frame grooves both above and below the points of engagement of the said first mentioned means with the bottoms of the grooves.

8. A curtain holding device consisting of a curtain rod,

spring actuated bars carried thereby the outer ends of which are arranged to frictionally engage the bottoms of window frame grooves with frictional holding means also carried by each of said bars for normally engaging the sides of said grooves.

9. A curtain holding device consisting of a curtain rod, spring actuated bars carried thereby constructed to engage the bottoms of window-frame grooves, and auxiliary frictional holding means comprising two oppositely disposed springs carried by each of said bars and formed to engage both side walls of the window-frame groove above and below the points of engagement of the said bars with the bottoms of the grooves.

10. A curtain holding device consisting of a curtain rod, means at the end of the rod constructed to frictionally engage the window frame, spring means carried by the first mentioned means, the same being transversely arranged relative to said first mentioned means and normally frictionally engaging a part of the window frame at substantially right angles to the part engaged by the means at the end of the rod and both above and below the points of engagement of the said first mentioned means.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

PAUL A. HOUGHTALING.

Witnesses:

WM. E. SHUPE,

JOS. H. KLEIN.