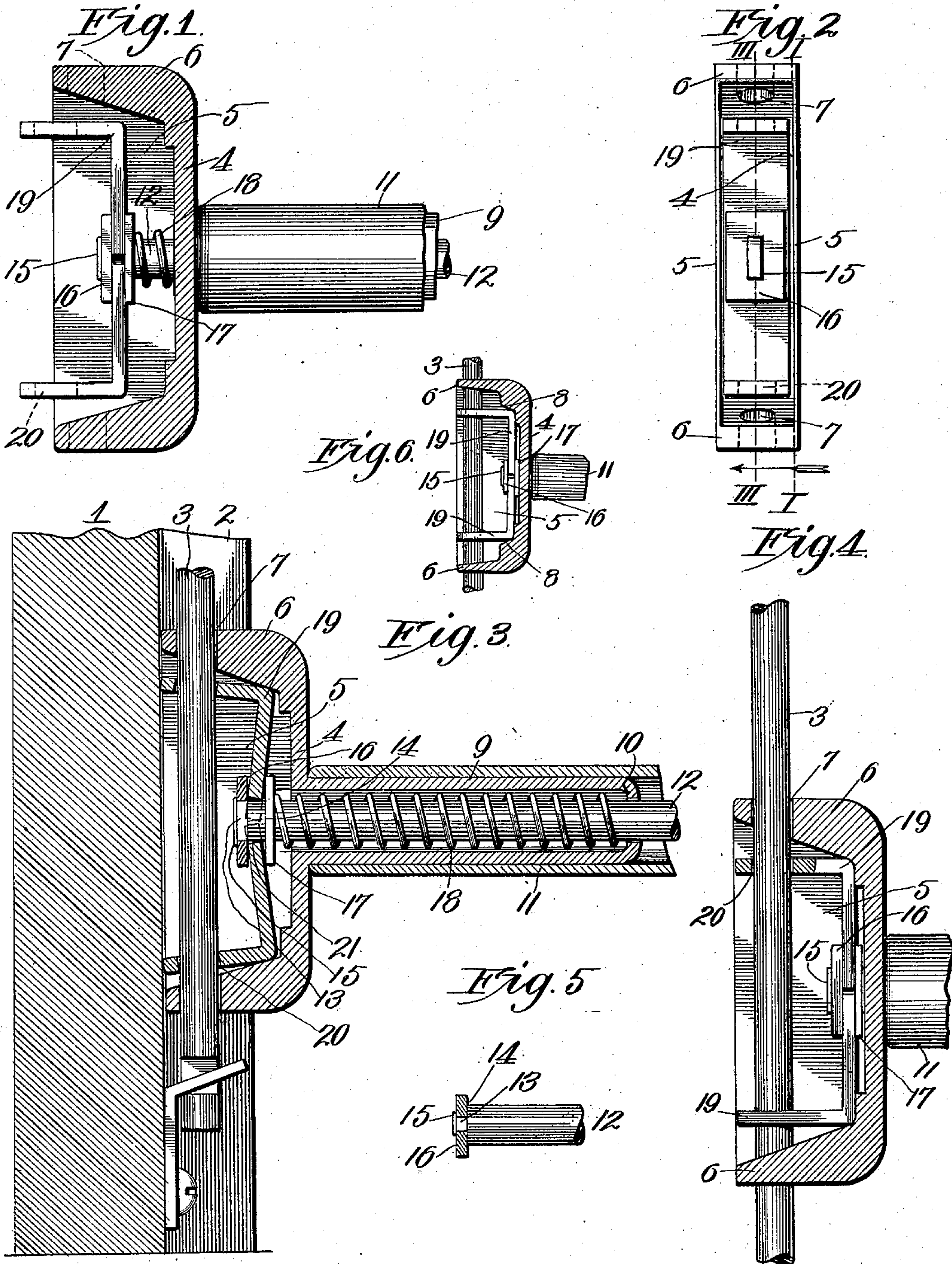


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PATENTED OCT. 8, 1907.

H. M. STURGIS.
CURTAIN FIXTURE.

APPLICATION FILED SEPT. 22, 1906.



Witnesses:

Frank R. Gore

Fred V. Griffith

Inventor:

Herbert M. Sturgis

By

George S. Thorpe

Atty.

UNITED STATES PATENT OFFICE.

HERBERT M. STURGIS, OF KANSAS CITY, MISSOURI.

CURTAIN-FIXTURE.

No. 867,850.

Specification of Letters Patent.

Patented Oct. 8, 1907.

Application filed September 22, 1906. Serial No. 335,813.

To all whom it may concern:

Be it known that I, HERBERT M. STURGIS, a citizen of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented certain new and useful Improvements in Curtain-Fixtures, of which the following is a specification.

This invention relates to curtain fixtures and more particularly to that class for use on car curtains and has for its object to produce means whereby curtains will be secured reliably at any desired point of adjustment.

To this end the invention consists in certain novel and peculiar features of construction and organization as hereinafter described and claimed; and in order that it may be fully understood reference is to be had to the accompanying drawing, in which:—

Figure 1, is a vertical section taken on the line I—I of Fig. 2, of curtain-securing devices embodying my invention. Fig. 2, is an end view of said devices. Fig. 3, is a central vertical section of the devices and of one side of the window frame, on the line III—III of Fig. 2. Fig. 4, is a view substantially similar to Fig. 1 but with the outer portion of the upper dog in central section and the curtain guide-rod extending through said shoe and dogs and the latter in a different position from that shown in Fig. 3. Fig. 5, is a view similar to Fig. 4 but with the shoe provided with internal shoulders.

In the said drawing 1 indicates one side of the window frame, 2 the usual vertical groove therein and 3 a stiff guide-rod supported within said groove in any suitable or preferred manner.

A shoe for engagement with each rod 3, is constructed as follows: 4 indicates the body portion arranged vertically and provided with vertical side walls 5 projecting outwardly and into the groove 2 and with upper and lower end walls 6 which connect the upper ends of walls 5 and are provided with vertically alined holes 7 through which rod 3 extends. The inner sides of said end walls converge inwardly as in Figs. 1 to 4 inclusive, or they may be provided with shoulders 8 at their junction with the body portion.

9 indicates a cylindrical tubular stem projecting horizontally inward from and centrally of the body portion and has its inner end flanged inward as at 10.

11 indicates a horizontal tubular rod to receive the lower end of the curtain (not shown), and 12 a rod extending through rod 11 and stem 9 and into the shoe, and terminating at its outer end in a reduced portion 13, to provide a shoulder 14, the outer end of portion 13 being up-set or riveted as at 15 to secure rigidly against shoulder 14, a head or enlargement 16 for rod 12.

17 indicates a collar fitting slidingly on rod 12 between head 16 and the body portion of the shoe and holding said collar pressed yieldingly outward is a helical spring 18, the same encircling rod 12 within

stem 9 and bearing at its inner end against the inwardly projecting flange or flanged end 10 of said stem.

19 indicates a pair of angle plates or dogs within the shoe; the substantially horizontal arms of said dogs being provided with apertures 20 for engagement with rod 3. The substantially vertical arms of the dogs fit between head 16 and collar 17 and are bifurcated or notched at 21 to engage rod 12 between said head and collar, it being noticed in this connection that the inner ends of the sloping or converging surfaces of the end walls 6 or the shoulders 8, are so disposed that the dogs fit snugly between them.

By reference to Fig. 1 it will be seen that the tendency of spring 18 is to project the dogs outward so that their apertures 20 shall be out of alinement with holes 7 of the shoe, and while in this position the dogs are held reliably in place by pressure of the spring, but can be easily removed from position and replaced in such position.

When the parts are to be assembled in operative relation, as shown in Figs. 3 and 4, the usual or any preferred means (not shown), may be manipulated to move rod 12 inward until the dogs assume the position shown in Fig. 4 with their apertures 20 in vertical alinement with holes 7 and ready to receive the rod 3. The latter is then slipped through the shoe and the dogs and secured in the groove 2 of the window casing, and as the pull on rod 12 is removed, the spring 18 moves the latter outward and thereby causes the dogs to assume the positions shown in Fig. 3, assuming such positions because the inner edges of the holes 20 find a resistance in and slide apart on the stiff rod and pivotally turn to said positions under the outward pressure of the spring 18, against their inner or contiguous ends. It will thus be seen that the dogs are in effect floating dogs because, when the rod 12 is moved inward the fulcrum points of the dogs are transferred to their outer angles and they rock or turn against the inner surfaces of walls 6 or the shoulders 8, as the case may be, it being apparent that this is so because the inward pull on their inner or contiguous ends tends to cause the dogs to move vertically apart and consequently press against said walls or shoulders. The said inner surfaces of said walls or shoulders therefore perform the dual functions of a fulcrum for the dogs to cause them to release the rod 3 when rod 12 is moved inward and of preventing the dogs from moving apart bodily when locked or unlocked on rod 3, as shown respectively in Figs. 3 and 4. The upper wall or shoulder also causes the upper dog to bite more heavily upon the rod 3 under an attempt to lower the curtain without unlocking the dogs and the same result is accomplished by the lower wall or shoulder and the lower dog under a similar attempt to raise the curtain. To adjust the curtain up or down the operator must move rod 12 inward, which action causes the dogs to rock to substantially the position shown in Fig. 4 when the

curtain may be pulled downward or the spring-roller (not shown) permitted to raise it, the dogs instantly re-clamping upon the rods when the power is removed which overcomes the pressure of spring 18, which in view of its tendency to press the dogs outward, as shown in Fig. 1, tends to impart to them a slight movement bodily as well as a pivotal movement and thus cause them to bite or impinge with greater force upon the rod than could be produced by a purely pivotal movement only.

From the above description it will be apparent that I have produced a curtain fixture embodying the features of advantage enumerated as desirable and which is susceptible of modification structurally without departing from the spirit and scope of the appended claims.

Having thus described the invention what I claim as new and desire to secure by Letters Patent, is:—

1. In a curtain fixture, a hollow shoe open at its outer side and provided with a tubular stem, a rod extending longitudinally through said stem and projecting into the shoe and provided within the latter with a head, a pair of angular dogs within and fulcrumed in said shoe above and below said rod respectively and having their contiguous ends disposed inwardly of said head, and an expansive spring mounted on said rod within said stem and bearing at its inner end against the latter and exerting a yielding pressure at its outer end whereby the said contiguous ends of the dogs are held against said head.

2. In a curtain fixture, a hollow shoe open at its outer side and provided with a tubular stem, a rod extending slidably through said stem and projecting into the shoe and provided with a head within the latter, a sliding collar mounted on said rod, and a pair of angular dogs having

their contiguous ends held between said head and collar with a yielding pressure.

3. In a curtain fixture, a hollow shoe open at its outer side and provided with a tubular stem, a rod extending slidably through said stem and projecting into the shoe and provided with a head within the latter, a sliding collar mounted on said rod, a pair of angular dogs having their contiguous ends interposed between the head and collar of said rod, and a spring mounted on the rod and bearing at its inner end against the stem of the shoe and at its outer end against said collar to clamp the latter yieldingly against the dogs.

4. The combination with a window casing having a groove in its inner side, a vertical rod in said groove and a tubular rod for attachment to a curtain, of a hollow shoe fitting in said groove and having its outer side open and provided with vertically aligned holes in its upper and lower ends, internal shoulders and a tubular stem projecting into the rod movable with the curtain and having its inner end flanged inwardly, a rod extending through the tubular curtain-rod and the stem and projecting into the shoe and provided within the latter with a stationary head and a sliding collar, a pair of angular dogs fulcrumed on said internal shoulders and having their contiguous ends engaging the rod between its head and collar and provided with apertures near their opposite ends engaging the vertical rod, and a spring surrounding the rod and bearing at its inner end against the flanged end of the stem and at its outer end against the said collar to cause the same to clamp said contiguous ends of the dogs against said head.

In testimony whereof I affix my signature, in the presence of two witnesses.

HERBERT M. STURGIS.

Witnesses:

FRANK R. GLORE,
G. Y. THORPE.