Feb. 21, 1928. 1,659,898

R. A. SIMPSON

WINDOW ADJUSTER

Filed Nov. 3, 1925

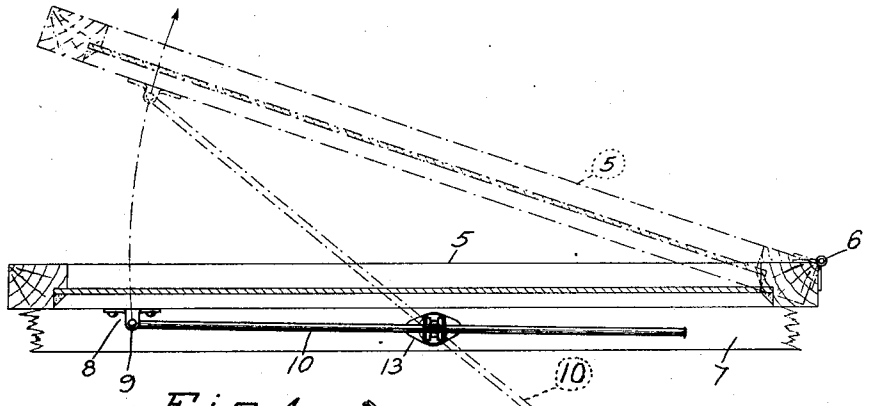


Fig. 1

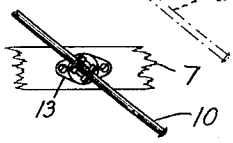


Fig. 1a

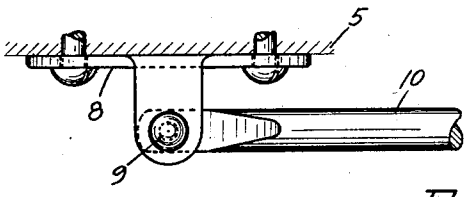
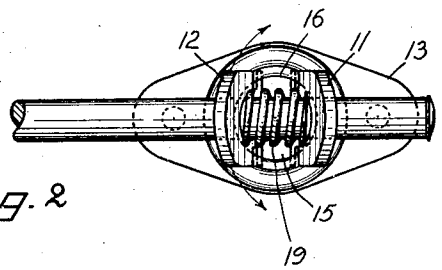


Fig. 2



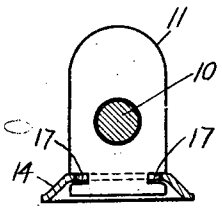


Fig. 5

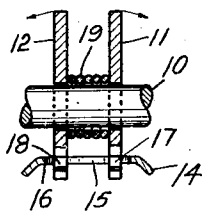


Fig. 4

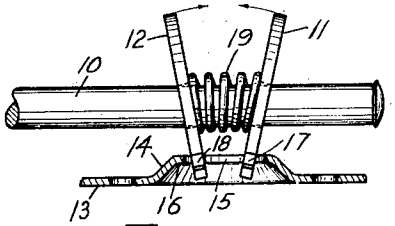


Fig. 3

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UNITED STATES PATENT OFFICE.

RUFUS A. SIMPSON, OF OAKLAND, CALIFORNIA, ASSIGNOR TO R. A. SIMPSON MANUFACTURING COMPANY, OF OAKLAND, CALIFORNIA, A CORPORATION OF CALIFORNIA.

WINDOW ADJUSTER.

Application filed November 3, 1925. Serial No. 66,487.

My invention relates in general to window catches, holders, adjusters and the like, and has particular reference to an adjustable holder for windows of the so called casement type.

The principal feature of the invention resides in the construction and assembly of the adjustable parts of the holder, whereby a most effective, simple and cheap device is produced that can be relied upon to accomplish the desired results in a very positive manner.

The detail construction shown in the accompanying drawing has been selected for the purpose of illustrating the salient features of the invention, but it must be recognized that the same is not limited to these details, as certain changes may be made within the scope of the subjoined claims without departing from the spirit of the invention.

In said drawing: Figure 1 is a sectional plan of a casement window showing the application of the invention. The dot-and-dash lines represent the window open a little.

Figure 1ª is a plan of the adjustable clamp which embodies the important features of the invention, and shows the angular position that the clamping jaws assumed for the open position of the window.

Figure 2 is an enlarged detail view in plan of the holder assembly of Figure 1.

Figure 3 is a detail side view, partly in section, of the adjustable clamp of Figure 2 and with but a portion of the holding rod.

Figure 4 is a view in section of the clamp with the binding jaws thereof in unactive binding relation with the rod; and

Figure 5 is a face view of one of the jaws of Figure 4 looking in the direction of either arrow.

Referring now to the drawing in detail: 5 represents an ordinary casement window which is hinged as at 6 to swing horizontally with respect to the sill 7. Such windows are generally provided with adjustable holding means, which permit the window to be held open in adjusted position to any desired degree, and the purpose of the present invention is to realize this end also, but with a most simple and yet effective device, and one that can be relied upon to react and hold the window unmovable against any wind pressure tending to close the window, and to otherwise meet and perform efficiently all requirements of a device of this character.

The holder comprises a mounting 8 which is screwed or otherwise fixed to the sash of the window 5, preferably the lower horizontal strip of the same, to provide a pivotal mounting as at 9 for the rod 10. The rod is thus attached to the window and capable of assuming various angular relations with the same, and when the window is closed it will lie longitudinally of the sill 7.

These various angular positions of the rod are confined within the limit of movement of the clamping means with which the rod cooperates to adjust the window, and for this reason it is highly desirable that such clamping means be capable of permitting the rod to assume all angular positions necessary for the desired opening and closing of the window. To accomplish this purpose, I provide means which will readily rotate without limitation and which means will also securely clamp the rod and hold the window in any open position including the closed position. In its preferred form it consists of a pair of cocking clamp jaws 11 and 12, having registering openings through which the rod 10 extends with freedom of sliding movement when not cocked. The jaws are mounted in a plate base or sill member 13 which may be screwed or otherwise anchored to the sill 7, and the base is made with a frustum-shaped central portion 14 having an opening 15 surrounded by a narrow flange 16. The mounting ends of the jaws are notched as at 17 and 18 with the width of the notches made to accommodate the thickness of the flange 16 and the cooperative function therewith.

To assemble the jaws in the base, first one is presented slantingly in a vertical plane in the middle of the opening 15, the notches engaging the flange, then the jaw is moved laterally and the other one likewise presented and moved laterally in the opposite direction. This presents the flange 16 in the notches 17 and 18 and supports the jaws in the mounting base, so that each is free to rotate about a vertical axis and tilt about a horizontal axis. The rotation permits adjustment to the changing angularity of the rod 10, and the tilting permits the jaws to cock and thereby clamp the rod against the edges of the openings or apertures in these jaws. The spring 19 is then introduced be-

tween the jaws in registry with the openings therein, and the rod then passed through while the jaws are compressed, the relation shown in Figure 4.

When the rod is thus mounted, the jaws are released to the action of the spring which spreads them apart angularly as shown in Figure 3, the edges of the hole in the jaws (and which holes are larger than the diameter of the rod) spring-press against the rod so that the latter cannot slide. The notched attachments for the holder provide a rotatable mounting, which will enable the binding jaws to rotate on an axis at a right angle to the plane of the base, when compressed while the rod slides as the window is opened to the desired angle or closed.

Having thus illustrated and described the preferred embodiment of my invention, I claim as new and desire Letters Patent therefor in the United States the following:

1. In a window holder, a rod for the window and means for clamping the rod to hold the window in an adjusted position; said means comprising a pair of clamping jaws through which the rod extends and is engaged thereby, said jaws adapted to be manipulated to release the rod for changing the adjusted position of the window, and a base in which said jaws are rotatably mounted, said base having a flanged opening and notches provided in the mounting ends of the jaws for engaging the flange of the opening.

2. In a window holder, a rod for the window and means for clamping the rod to hold the window in an adjusted position; said means comprising a pair of clamping jaws through which the rod extends and is engaged thereby, said jaws adapted to be manipulated to release the rod for changing the adjusted position of the window, and a base in which said jaws are rotatably mounted, said base having a flanged opening and notches provided in the mounting ends of the jaws for engaging the flange of the opening, and spring means for spreading the jaws apart and in clamping relation with the rod.

3. In a window holder, a rod for the window, and means for clamping the rod to hold the window in an adjusted position and comprising a pair of spring-pressed jaws, the jaws provided with registering openings through which the rod may pass, said jaws adapted to be manipulated for sliding the rod in said openings, and a base in which said jaws are rotatably mounted on an axis at a right angle to the plane of the base.

4. In a window holder, a rod for the window, and means for clamping the rod to hold the window in an adjusted position and comprising a pair of spring-pressed jaws, the jaws provided with registering openings through which the rod may pass, said jaws adapted to be manipulated for sliding the rod in said openings, and a base in which said jaws are rotatably mounted, said base adapted to be fixed to the window sill and provided with a flanged opening, and notches in the mounting ends of the jaws engaging the flange of said opening.

In testimony whereof, I affix my signature.

RUFUS A. SIMPSON