Feb. 16, 1926. 1,573,456

E. J. SIBLEY

FRICTION CASEMENT ADJUSTER

Filed April 6, 1925

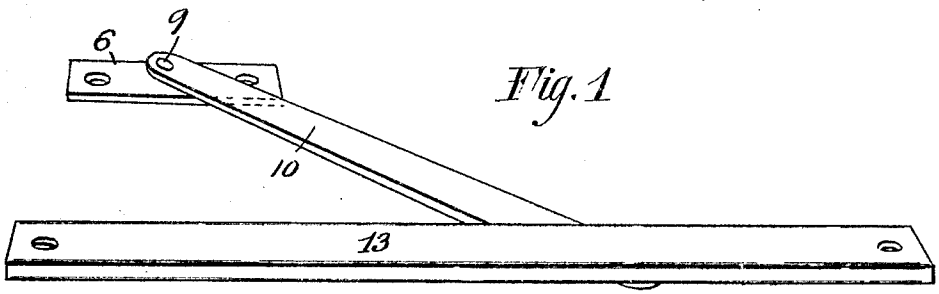


Fig. 1

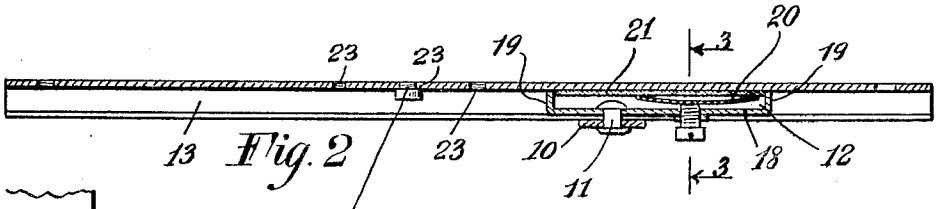


Fig. 2

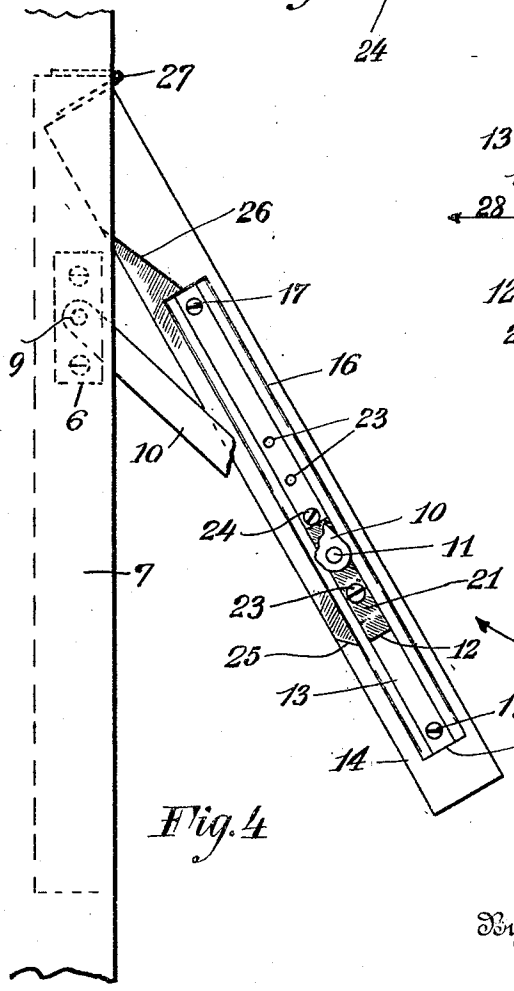


Fig. 4

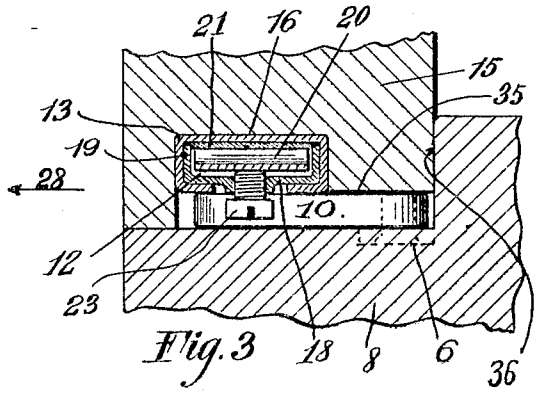


Fig. 3

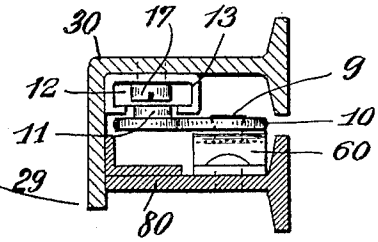


Fig. 5

Edwin J. Sibley Inventor

By his Attorney

Joan E. G. Konigsberg

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UNITED STATES PATENT OFFICE.

EDWIN J. SIBLEY, OF WESTBURY, NEW YORK.

FRICTION CASEMENT ADJUSTER.

Application filed April 6, 1925. Serial No. 20,947.

To all whom it may concern:

Be it known that I, EDWIN J. SIBLEY, a citizen of Canada, and resident of Westbury, in the county of Nassau and State of New York, have invented certain new and useful Improvements in Friction Casement Adjusters, of which the following is a specification.

This invention relates to friction adjusters for casement windows and transoms. The object of the invention is to provide a friction adjuster having an adjustable friction element and designed with the purpose of providing a generally improved adjuster, strong and simple in construction and peculiarly well adapted for quantity production.

With these objects in view the invention is disclosed in an adjuster arranged and constructed as hereinafter set forth and as illustrated in the accompanying drawing in which—

Figure 1 is a perspective view of an adjuster embodying the invention.

Figure 2 is a longitudinal sectional view with parts omitted.

Figure 3 is a transverse sectional view showing the adjuster affixed to a window.

Figure 4 is a side view showing the adjuster in use on a transom.

Figure 5 is a sectional view of a standard metal window construction to which my adjuster is applied.

Referring to the drawing the adjuster comprises a bracket 6 adapted to be secured to the frame 7 of a transom, Figure 4; or to the sill 8 of a window, Figure 3. To the bracket 6 there is pivoted at 9 an arm 10. The outer free end of the arm is pivoted at 11 to a friction box 12 mounted to slide within a channel member 13 secured to the side of the transom 14, Figure 4; or underneath the window sash 15, Figure 3.

The channel 13 is countersunk in the sash in a recess 16 therein and secured by screws 17.

The friction box 12 slides in the channel with an easy fit. The box has a bottom 13 which carries the arm pivot 11 and four sides 19, 19. Within the box is contained a spring 20 which bears against a friction shoe 21 preferably of bronze or other suitable material. The shoe 21 fits within the four sides of the box, and is pressed against the channel bottom whereby the required friction is obtained. A friction adjusting screw 22 passes through the bottom of the box and bears against the spring 20.

The channel 13 may be provided with a plurality of holes 23 for the reception of a screw 24, which limits the movement of the friction box in one direction within the channel to limit the swing of the transom or window.

The bracket 6 is secured to the frame 7 to control the swing of the transom which is at all times under the control of the adjuster because of the friction elements 20—21 which are interposed between the arm 10, pivoted on the fixed member the frame 7, and the channel 13, which is secured to the movable member, the transom.

As the transom is opened, the friction box slides inwardly towards the pivot 27, and outwardly away from the pivot when the transom is closed. As shown in Figure 4, when the screw 24 is inserted in one of the holes 23, said screw limits the inward sliding movement of the friction box within the channel and consequently prevents further opening of the transom. This limiting feature is very desirable in many installations, for instance, in factories or schools to prevent persons falling out or bulky articles being thrown out.

It will be further apparent that it is an easy matter to adjust the friction by reaching out through the opening with one hand employing a screw driver to the screw 23.

The inner face of the transom frame 14 is cut away as at 25 and 26 to provide space for the arm 10. The shoulder at 26 may also act as a stop for the arm 10 when the transom is wide open.

Referring to Figure 3 it will be seen that the adjuster is completely concealed within the window sash 15. The window being opened in the direction of the arrow 28. The numeral 35 denotes that part of the sash which is cut away between the shoulders 25 and 26 to provide space for the arm 10. At the same time there is sufficient room on the face or portion 36 for the use of a weather strip.

Figure 5 illustrates another feature of the invention, namely its adaptability for use with metal windows or transoms, which are extensively used, particularly in modern factories.

This figure illustrates a typical modern metal transom construction in cross section.

The transom frame 30 swings outwardly in the direction of the arrow 29. The numeral 80 denotes the fixed transom frame. By means of a bridge bracket 60 which replaces the bracket 6 in Figure 1, the pivot 9 is raised sufficiently to permit the arm 10 to operate.

While I have disclosed my invention in its preferred form, nevertheless I do not wish to be limited thereto otherwise than required by the legitimate and intended scope of the appended claim.

I claim:—

The combination with a window frame and window sash, of a friction adjuster therefor comprising a channel formed member having a slot secured in a recess in the bottom edge of the window sash, a friction box slidably carried with said channel member, a friction shoe within said friction box and in sliding contact with said channel member, a spring interposed between the friction box and the friction shoe, means for varying the pressure of the said spring against the friction shoe, a bracket secured to the window, an arm pivoted to the bracket and the friction shoe for slidably operating the latter within the said channel, said arm being operable below the window sash and adjustable means in said channel member for limiting the sliding movement of the friction box therein.

EDWIN J. SIBLEY.