

I. D. STINE.
 CASEMENT WINDOW ADJUSTER.
 APPLICATION FILED DEC. 22, 1910.

1,002,940.

Patented Sept. 12, 1911.

Fig. 1.

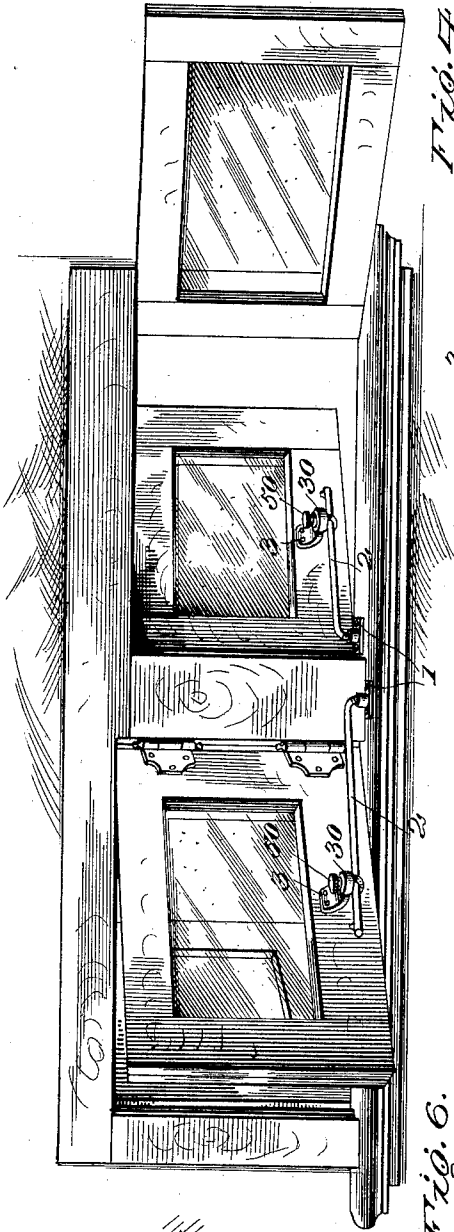


Fig. 6.

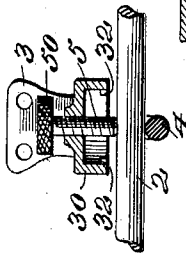


Fig. 2.

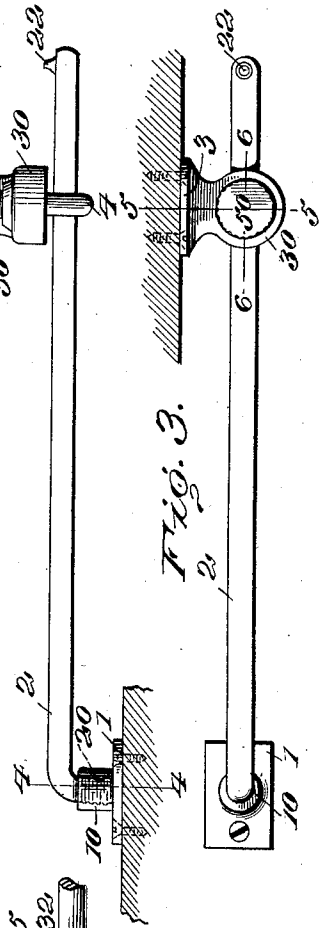


Fig. 3.

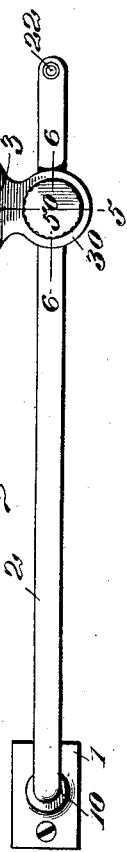


Fig. 4.

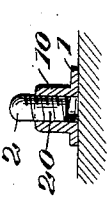


Fig. 7.

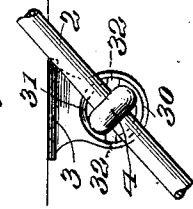
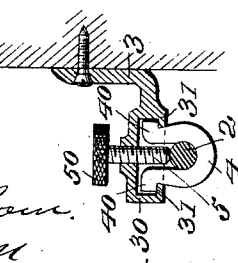


Fig. 5.



Witnesses

Nora Graham.
 A. J. Glynn.

334

Inventor

Iraal J. Stine,
 Ino C. Graham.

Attorney

UNITED STATES PATENT OFFICE.

ISAAC D. STINE, OF DECATUR, ILLINOIS.

CASEMENT-WINDOW ADJUSTER.

1,002,940.

Specification of Letters Patent. Patented Sept. 12, 1911.

Application filed December 22, 1910. Serial No. 598,874.

To all whom it may concern:

Be it known that I, ISAAC D. STINE, a citizen of the United States, residing at Decatur, in the county of Macon and State of Illinois, have invented certain new and useful Improvements in Casement-Window Adjusters, of which the following is a specification.

This invention relates to certain improvements in adjusting and fastening devices for windows and the like; and the objects and nature of the invention will be readily understood by those skilled in the art in the light of the following explanation of the accompanying drawings showing what I now consider my preferred embodiment from among other formations and arrangements within the spirit and scope of my invention.

An object of the invention is to provide an improved easily applied device applicable to either right or left hand, and to either inwardly or outwardly swinging windows, shutters or the like, for locking the same at the desired angle, and which can be readily adjusted to permit free swinging of the window or shutter to the desired position and can then be easily adjusted to lock the same in the desired adjustment.

The invention consists in certain novel features in construction and in combinations and arrangements as more fully and particularly set forth and specified hereinafter.

Referring to the accompanying drawings;—Figure 1, is a perspective view of several casement windows equipped with the holding and adjusting device of my invention. Fig. 2, is a side elevation of the device of my invention, a portion of the casement sill being shown in cross section. Fig. 3, is a top plan view of the device of my invention, a portion of the casement window being shown in horizontal section. Fig. 4, is a detail section on the line 4—4, Fig. 2. Fig. 5, is a detail section on the line 5—5, Fig. 3. Fig. 6, is a detail section on the line 6—6, Fig. 3. Fig. 7, is a detail bottom plan of the clamping device secured to the window and a portion of the connecting rod.

The device consists of an attaching socket, bracket or other suitable device for fastening to the window or casement sill, a swingable connecting rod or link anchored thereby, and a clamping device carried by the

shutter, window or the like and receiving said swinging and connecting rod. 55

In the drawings, 1, is the bracket or plate adapted to be fixedly secured by screws or other suitable means to the window or casement sill to form and constitute the means for attaching the swinging link to said sill. This base 1 is formed with a vertical boss 10, having a vertical threaded hole or bore extending therethrough and forming a threaded socket for the reception of the screw threaded lateral end 20, of the swinging connecting rod 2. The end 20, forms the pivot axis on which said rod swings as the window or shutter is swung toward open or closed position. When applying the device to a window or shutter, the desired vertical position of the rod 2, can be attained by screwing the socket plate 1, to the necessary extent up or down on the threaded end 20, as will be readily understood by those skilled in the art. 75

The means for attaching the rod to the window or shutter consists of a bracket 3, adapted to be fixed by screws or other means to the shutter or swinging window. This bracket is formed with a hollow approximately cylindrical casing 30 having a bottom opening surrounded by an inwardly extending flange, ledge or shoulder 31, notched at diametrically opposite points 32. 80

A connecting rod receiving and clamping member 4, depends from the casing 30, and forms a transverse eye or loop for the reception of the connecting rod 2. This member or eye 4, is formed by a U-shaped yoke, loop or shackle extending upwardly into said casing, through the bottom opening thereof and at its top portion and within the casing formed with opposite lateral or outward supporting ends 40, resting on the shoulder or ledge 31, of the casing. The depending portion of the yoke forms a central eye below the casing receiving the connecting rod 2, and of such size that the connecting rod can freely slide therethrough or the yoke can freely slide on and longitudinally of the rod, when the clamping screw is loosened. 95 100

The connecting rod is clamped or secured to hold the window or shutter in the desired position, by a clamping screw 5, working in a screw threaded opening arranged in the 105

center of the top wall of the casing. The screw passes down through the casing and between the two upturned ends of the yoke and into clamping contact with the top surface of the connecting rod. The lower or abutting end of the screw is preferably flat and the connecting rod is preferably round in cross section so that there is but a line contact or what might be termed "hair" contact between the screw and rod, and the same is true of the contact between the round rod 2, and the rounded surface of the yoke, whereby the yoke and rod are easily adjusted one on the other without objectionable friction and binding and yet but comparatively slight movement of the screw is required to release and tightly lock the parts together. The clamping screw is provided at its upper end with a readily accessible milled head or finger wheel 50, whereby the screw can be easily and quickly operated to lock and release the parts. The outer or free end of the rod 2, is preferably provided with a stop 22, to engage the clamping screw and thereby prevent accidental slipping of the rod from the clamping yoke.

In assembling the parts, the yoke is slipped onto the rod, and the casing is then placed on the upper ends of the yoke so that the lateral supporting ends thereof pass up through the notches 32, and the casing is then turned to bring said ends over the unbroken portions of the internal shoulder or ledge 31.

The device described can be applied to either right or left hand swinging windows, and to inwardly or outwardly opening windows inasmuch as the casing (when the screw is loosened) can be turned a complete rotation on the upper ends of the yoke so that the base of the bracket to be secured to the window can be located on either the left or right hand sides of the casing as will be readily understood by those skilled in the art.

The device is exceedingly simple and effective and is composed of a minimum number of parts, to wit;—the securing plate for fastening to the sill, the connecting arm, the clamping yoke, the bracket to be secured to the window, and the clamping screw.

It is evident that various changes and modifications might be resorted to in the forms and arrangements of parts without departing from the spirit and scope of my invention and hence I do not wish to limit myself to the exact disclosure hereof.

What I claim is;—

1. An adjusting device for swinging windows and the like, comprising a plate adapted to be secured to the sill and having an internally threaded socket extending vertically therethrough, a swinging connecting rod having a downwardly bent threaded end fitting and vertically adjustable in said

socket and forming the axis on which the rod swings, and a bracket adapted to be secured to the window and provided with clamping mechanism receiving said rod, substantially as described.

2. An adjusting device for swinging windows, and the like, comprising a connecting rod, a bracket adapted to be secured to the window and formed with a hollow open bottom casing, the casing formed with an internal shoulder around said bottom opening, a clamping yoke depending from said casing and receiving said rod in longitudinal adjustment, said yoke having supporting portions engaging said shoulder, and a clamping screw carried by said casing and adapted to engage said rod.

3. An adjusting device for swinging windows, and the like, comprising a connecting rod, a bracket adapted to be secured to the window and formed with a hollow open bottom casing, and a clamping device carried by said casing and comprising an adjusting clamping screw and a clamping member encircling said rod and consisting of an approximately U-shaped yoke depending from said casing and receiving said rod below said casing.

4. An adjusting device for swinging windows, and the like, comprising a connecting rod, a bracket formed with a horizontally disposed casing having a vertical opening therethrough, said bracket having a portion extending laterally from said casing and provided with a vertical portion to be secured to the window and a clamping device carried by said casing and comprising an approximately V-shaped yoke depending from said casing and encircling said rod and adjustable longitudinally thereof, said casing being rotatable about said clamping device to locate said vertical portion of the bracket on either the right or left hand side of the casing, substantially as described.

5. An adjusting device for swinging windows, and the like, comprising a connecting rod, a bracket adapted to be secured to a window and comprising a hollow casing having a bottom opening surrounded by an internal shoulder, and an approximately U-shaped clamping yoke depending from said casing and loosely receiving said rod, the upper ends of said yoke having out turned portions within the casing and resting on said shoulder, and a clamping screw passing through the casing and between the ends of said yoke to engage the upper surface of said rod.

6. An adjusting device for swinging windows, and the like, comprising a connecting rod, a bracket adapted to be secured to a window and comprising a hollow casing having a bottom opening surrounded by an internal shoulder having diametrically opposite notches therethrough, an approxi-

mately U-shaped clamping yoke depending from said casing to receive said rod, the engaging portions of the rod and yoke being rounded, the upper ends of said yoke having out turned supporting portions within the casing and resting on said shoulder and movable to and from the casing through said notches, and a clamping screw adjustable through the casing and having a flat end to engage the rounded surface of said rod.

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

ISAAC D. STINE.

Witnesses:

ROSA VOELCKER,
E. S. McDONALD.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
