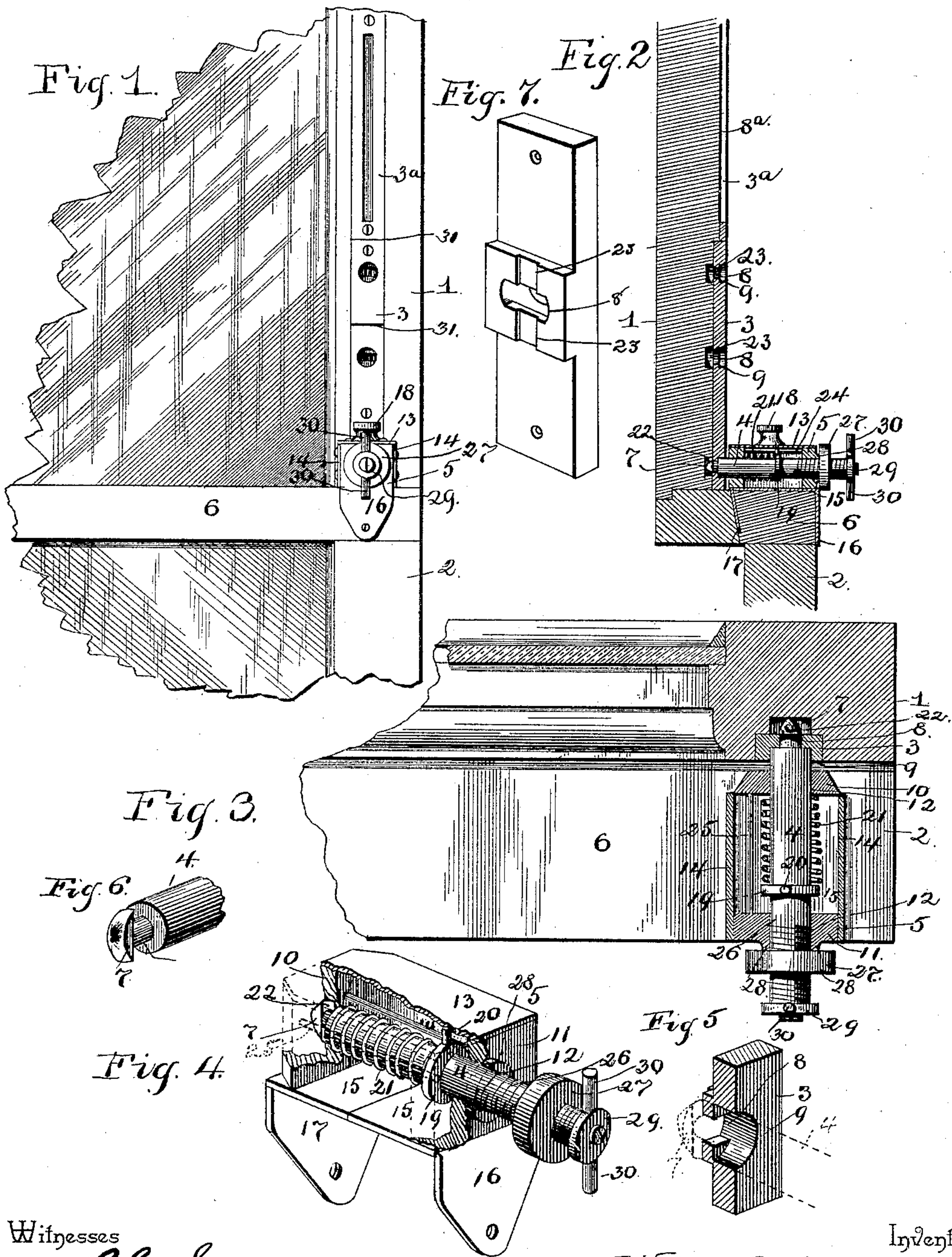


(No Model.)

W. W. DOTY.
SASH LOCK.

No. 452,776.

Patented May 26, 1891.



Witnesses

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UNITED STATES PATENT OFFICE.

WALLACE W. DOTY, OF PUEBLO, COLORADO.

SASH-LOCK.

SPECIFICATION forming part of Letters Patent No. 452,776, dated May 26, 1891.

Application filed December 4, 1890. Serial No. 373,603. (No model.)

To all whom it may concern:

Be it known that I, WALLACE W. DOTY, a citizen of the United States, residing at Pueblo, in the county of Pueblo and State of Colorado, have invented a new and useful Sash-Lock, of which the following is a specification.

The invention relates to improvements in adjustable combined sash-locks and anti-sash rattlers.

The object of the present invention is to provide a simple and inexpensive sash-lock capable of enabling the sashes of a window to be readily adjusted and secured at any desired position, either open or closed, and adapted to prevent the sashes rattling.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a side elevation of a window provided with a sash-lock and anti-rattler embodying the invention. Fig. 2 is a longitudinal sectional view. Fig. 3 is a horizontal sectional view. Fig. 4 is a detail perspective view of the casing and bolt, the casing being partially broken away. Figs. 5, 6, and 7 are detail views.

Referring to the accompanying drawings, 1 and 2 designate the upper and lower sashes of a window, the former of which is provided with socket-plates 3 and 3^a, arranged to be engaged by a sliding bolt 4, mounted in a casing 5, secured to the upper meeting-bar 6 of the lower sash 2. The inner engaging end of the bolt 4 is provided with an elongated T-shaped head 7, which has its outer end oppositely beveled or pointed, and the said head 7 is adapted to engage a groove 8 of the socket-plate 3, and after such engagement to be turned transversely of the groove. The plates 3 are provided with a circular opening or socket 9, having at its bottom the horizontal groove or slot 8, and the said sockets or openings 9 are arranged at suitable intervals.

In the upper windows of a house where a sash-lock is unnecessary and it is only desirable to secure the windows at certain points of adjustment, plates 3^a are employed and are provided with a continuous groove or slot 8^a, which does not necessitate disengagement of

the bolt from the plate during the adjustment of the sashes, and the said plates 3 and 3^a are seated in suitable recesses. The bolt 4 is mounted in a rectangular casing 5, constructed of metal and having its inner and outer sides 10 and 11 provided with centrally-arranged and oppositely-disposed circular openings 12, in which is arranged the bolt 4, adapted to slide back and forth to bring its head or clutch 7 into engagement with the socket-plate and carry therefrom. The top 13 and sides 14 are secured to the inner and outer sides 10 and 11 by screws or other suitable means, which will enable the said parts to be readily removed when access to the interior of the casing is desired, and the bottom 15 is constructed of two sections secured to the meeting-bar 6 by screws and provided at their end with flanges 16 and 17, the latter of which is arranged at a slight angle to the side 12 to conform to the inclination of the adjacent face of the meeting-bar 6, and the said top is provided with a knob 18 to prevent the casing coming in contact with the window-frame when the lower sash is raised to the full extent. The bolt 4 is provided intermediate its ends with an annular flange 19, having a pin 20 projecting from its periphery, and arranged upon the bolt between the said flange 19 and the inner side 10 of the casing is a spiral spring 21, which normally holds the bolt out of engagement with the socket-plate, and when the bolt is engaged with the socket-plates it retains the shoulders 22 of the head 7 in oppositely-disposed notches 23, arranged at the inner face of the socket-plate on each side of the groove or slot 8. The pin 20 of the annular flange 19 is adapted to engage a guide-rod 24 and a stop-rod 25, both of which are arranged within the casing 5 parallel with the bolt and enable the latter to be readily controlled. The guide-rod 24 is arranged at one side of the bolt, and is adapted to be engaged by the pin 20 to hold the elongated head 7 horizontally and in proper position to enter the slot or groove 8 of the plate 3. Then the bolt is pushed against the action of the spiral spring 21, after the head has entered the slot or opening 8 the bolt is turned to the right until the pin 20 is brought into engagement with the stop-rod 25, when the head 7 will be at right an-

gles to its position on entering the socket and will be transversely of the slot or groove 8. The outer portion 26 of the bolt is threaded and is engaged by a thumb-nut 27, adapted to be adjusted along the bolt to limit the reach of the same, and to be screwed against the casing when the bolt is locked to prevent the bolt becoming disengaged from a socket of the plate 3, and the casing is provided with an annular flange 28, arranged around the opening 12 in the outer side 11 to prevent the thumb-nut coming in actual contact with the said side. When the bolt is locked and the shoulders 22 of the head 7 are in engagement with the recesses 23 of the socket-plate, if the thumb-nut 27 be screwed against the flange 28 it is impossible to disengage the bolt. It will thus be seen that the sash-lock is capable of securely fastening the sashes and preventing the same being separated without breaking their frames. The sashes can be adjusted for the purpose of ventilation and can be locked in such position, and when so locked are rigidly held together and can be moved together in the window-frame. When the bolt is locked and the thumb-nut is not against the flange 28 of the casing, the spiral spring will prevent the sashes rattling. The outer end of the bolt 4 is provided with a knob 29, having integral points or projections 30 arranged at diametrically-opposite points and extending in the direction of the pin 20, thereby indicating the position of the pin and facilitating the operation of the bolt. The head 7 of the bolt is oppositely beveled or pointed to direct the bolt into a socket of the plate 3 should the bolt strike the edge of a socket, and the vertical edges of the inner side 10 of the casing 5 are beveled and the face of the side is the same width as the socket-plate, which construction facilitates the adjustment of the sash-lock and enables the parts to be readily applied to a window. The sash-lock may be applied, as illustrated in the accompanying drawings, to the stiles of the sashes; but it may be used equally as well on the center muntins, and I desire it to be understood that I do not limit myself to the precise details of construction herein shown and described, as I may, without departing from the spirit of the invention, make minor changes therein.

It will readily be seen that the combined sash-lock and anti-rattler is simple and inexpensive in construction and capable of enabling the sashes to be adjusted as desired, and of securely locking them when adjusted, and that rattling and shaking of the sashes is prevented.

To assist the operator in determining when the point of the bolt is opposite a socket, the socket-plate is provided in its outer face with a series of horizontal grooves 31, which are arranged above the sockets a distance equal to the distance the point of the bolt is from the upper edge of the case, whereby when the upper edge of the case is brought opposite one of the grooves the point of the bolt will be opposite a socket.

Having thus described my invention, what I claim is—

1. In a sash-lock and anti-rattler, the combination of the socket-plate having the slot 8 and provided with notches arranged on opposite sides of the slot, the casing, the sliding bolt arranged in the casing and provided at one end with a beveled head 7, having shoulders 22 adapted to engage said notches, said bolt having the threaded portion 26, and the nut arranged on the threaded portion of the bolt, substantially as described.

2. The combination, in a sash-lock and anti-sash rattler, of the socket-plate, the casing, the bolt sliding in the casing and provided at one end with the head 7 and having near the opposite end the threaded portion 26, and provided intermediate its ends with an annular flange and having a pin projecting from the flange, the guide and stop rods arranged within the casing and adapted to be engaged by said pin, the thumb-nut arranged on the threaded portion of the bolt, and the knob secured to the outer end of the bolt and having projections extending in the direction of said pin, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

WALLACE W. DOTY.

Witnesses:

HENRY T. FULTON,
T. H. STITELER.