(No Model.)

J. P. HIGLEY.

WINDOW.

No. 558,809. Patented Apr. 21, 1896.

Fig. 3

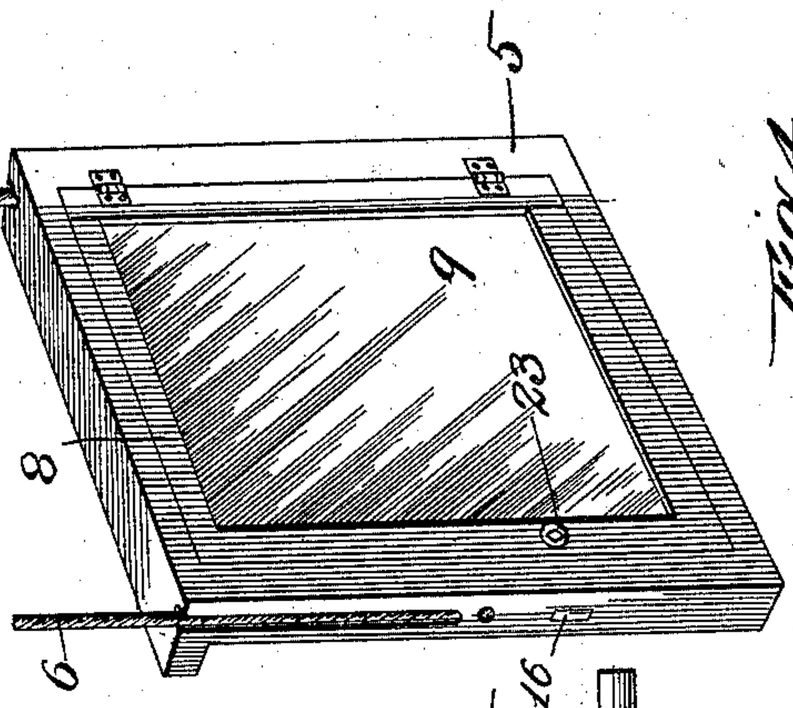


Fig. 4

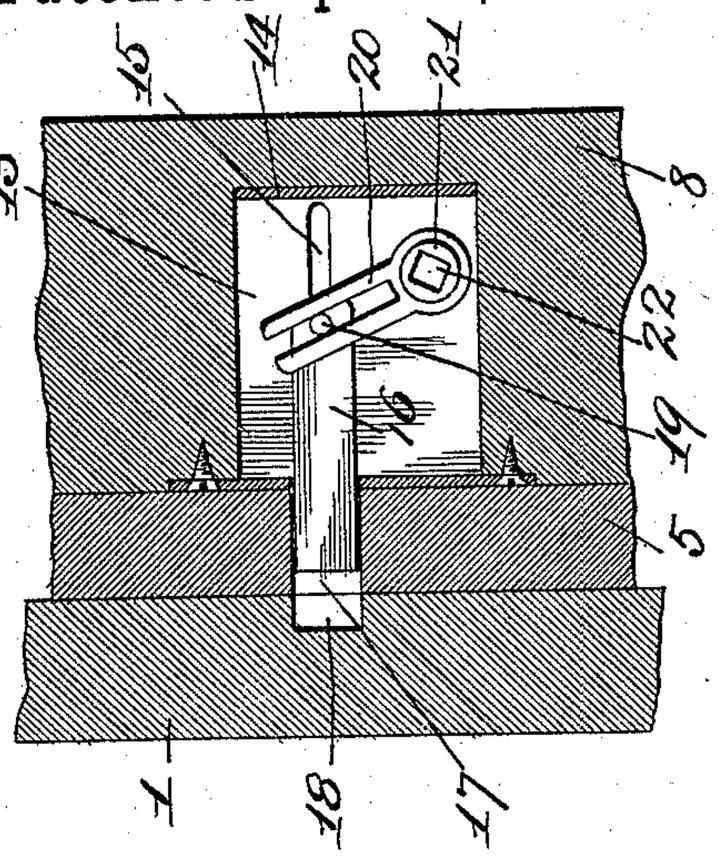


Fig. 5

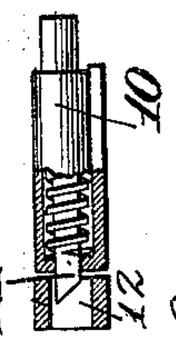


Fig. 2

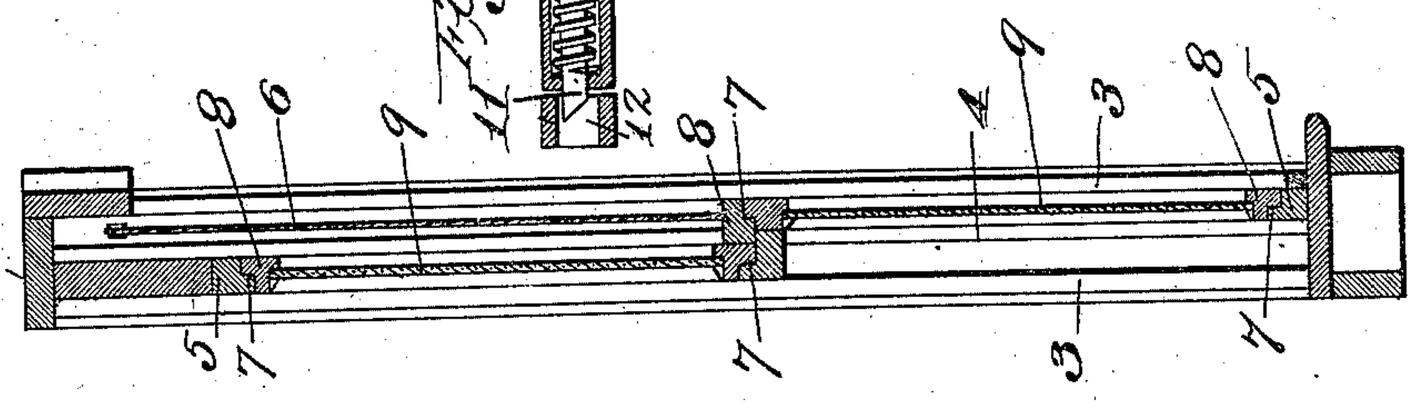
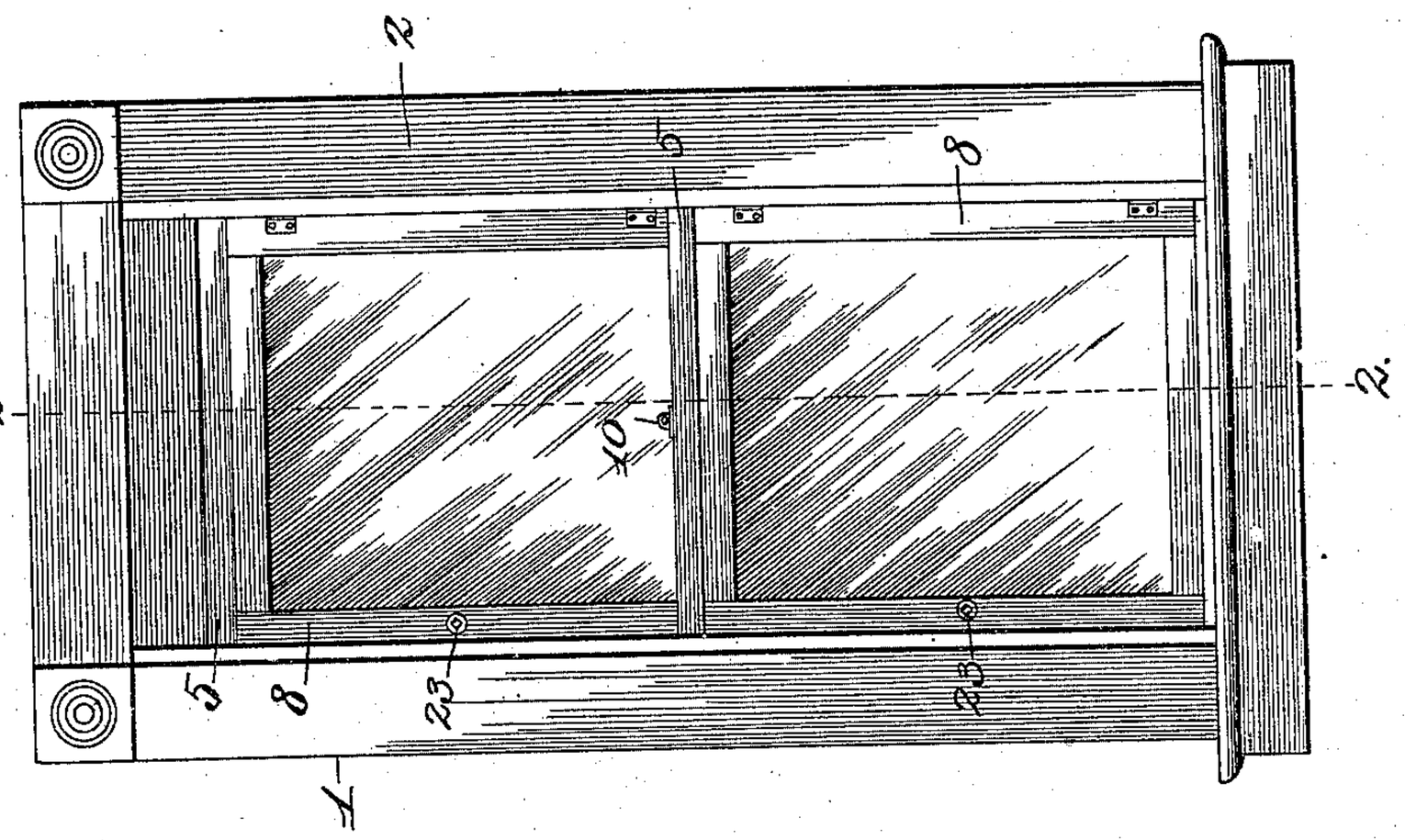


Fig. 1



Witnesses:
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UNITED STATES PATENT OFFICE.

JOHN PARSONS HIGLEY, OF ST. LOUIS, MISSOURI.

WINDOW.

SPECIFICATION forming part of Letters Patent No. 558,809, dated April 21, 1896.

Application filed November 21, 1895. Serial No. 569,600. (No model.)

To all whom it may concern:

Be it known that I, JOHN PARSONS HIGLEY, of the city of St. Louis, State of Missouri, have invented certain new and useful Improvements in Windows, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to an improved window; and it consists in the novel construction, combination, and arrangement of parts hereinafter described and claimed.

In the drawings, Figure 1 is a front elevation of a window of my improved construction. Fig. 2 is a vertical sectional view taken approximately on the indicated line 2 2 of Fig. 1. Fig. 3 is a view in perspective of one of the sash of my improved window. Fig. 4 is an enlarged detail sectional view of a lock made use of in my improved window. Fig. 5 is a detail view, partly in section, showing a spring-actuated latch for my improved window.

Referring by numerals to the accompanying drawings, 1 indicates a window-frame of the ordinary construction, and 2 the face-casing therefor. Arranged upon the inner faces of the vertical side rails of the window-frame 1 are retaining-strips 3, between which is located the usual parting-strip 4. Arranged to slide between said retaining-strips 3 and the parting-strip 4 in the usual manner are the window-sash 5, the same being provided with the usual weighted cords 6. The top rail of the top sash and the lower rail of the lower sash are of the same thickness as is the space between the retaining-strips 3 and the parting-strip 4, while the top rail of the lower sash and the lower rail of the top sash are of a thickness equal to the space between the retaining-strips and the parting-strip together with the width of said parting-strip. Consequently when the top and bottom sash are in proper position, the top rail of the lower sash will overlap the lower rail of the top sash.

Formed on the inner edges of the sash are continuous rectangular grooves 7, into which grooves are located the edges of rectangular frames 8, that are hinged at one side to the sash 5. These frames 8 are provided with panes of glass 9, the same being held in position in the usual manner. Located on the top of the top rail of the lower sash and at the center thereof is a tubular casing 10, carrying a spring-actuated bolt 11, the point of which is arranged to engage beneath a clip 12, located upon the top of the lower rail of the top sash. Formed in the edges of the frames 8 opposite from the edges that are hinged to the sash 5 are rectangular recesses 13, in which are located sheet-metal casings 14, the sides of which are provided with horizontal slots 15.

16 indicates a bolt that is arranged to move transversely through the aperture formed in the front of the casing 14 and through an aperture 17, formed in one of the vertical rails of the sash 5. Recesses 18 are formed in the inner faces of the vertical rails of the window-frame at points immediately opposite where the bolts 16 of the window-sash are located when said sash are in their normal positions. The rear ends of the bolts 16 are provided with laterally-extending pins 19, that engage in the horizontal slots 15, and said pins 19 are engaged by yokes 20, that are formed integral with circular heads 21, arranged for rotation in the casings 14, and said heads 21 are provided with rectangular recesses, such as 22. Immediately opposite these heads 21 and in the frames 8 are formed keyholes or apertures 23.

When a proper key is inserted through the keyhole 23 and into the recess 22 of the head 21 and the yoke 20 turned so that the end of the bolt 16 is withdrawn from the recess 18 in either one or both of the sash and the bolt 11 withdrawn from the clip 12, said sash may be raised and lowered in a manner every way similar to the raising and lowering of ordinary sash.

Should it be desired to swing the glazed frame of the lower sash open, the bolt 16 must necessarily be withdrawn from the aperture 17 and said glazed frame can now be swung open without raising the sash. Should it be desired to swing open the glazed frame of the upper sash, it will be necessary that the lower sash be raised to a position immediately adjacent or in front of the position normally occupied by the upper sash, and said upper sash must be moved downwardly into a position immediately to the rear of the point usually occupied by the lower sash. Whenever the sash are properly positioned relative

one another, the point of the bolt 11 will automatically engage beneath the clip 12, and if the bolts 16 be thrown to their limit of movement by manipulating the yokes 20 with the proper key the swinging frames 8 will be locked to the sash and said sash in turn locked to the window-frame. By forming a rectangular groove on the inner edge of the window-sash and a corresponding tongue on the swinging frames, joints are formed that will very effectually exclude cold air, dust, &c.

A window of my improved construction possesses superior advantages in point of simplicity, durability, and general efficiency, is easily operated, and can be easily and quickly cleaned.

I claim—

In a window, the combination with a window-frame and face-casing, of the retaining-strips 3, the parting-strip 4, the window-sashes 5, the weighted cords 6, the rectangular frames 8 hinged at one side to the sash 5, and the opposite side being located in the rectangular grooves 7 formed in the inner edges of the sash 5, panes of glass in the frames 8, the tubular casing 10 in the top rail of the lower sash, the spring-actuated bolt 11 in said casing, the clip 12 located upon the top of the lower rail of the top sash to receive the bolt 11, the sheet-metal casings 14 located in the rectangular recesses 13 formed in the edges of the frames 8, said casings being provided with the horizontal slots 15, the bolt 16 arranged to move transversely through the aperture in the casing 14 and through an aperture 17 formed in one of the vertical rails of the sash 5, said window-frame having the recesses 18 in the inner faces of the vertical rails to receive the bolts 16 when the sash is in its normal position, the laterally-extending pins 19 on the rear ends of the bolts 16 to engage in the slots 15, and the circular heads 21 having the yokes 20 to engage said pins 19 and also having the rectangular recesses 22, said frames 8 having keyholes 23 immediately opposite the heads 21, all arranged substantially as and for the purposes stated.

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

JOHN PARSONS HIGLEY.

Witnesses:

JOHN C. HIGDON,

MAUD GRIFFIN.