(Model.)

W. J. ATCHISON.

SASH HOLDER.

No. 458,139. Patented Aug. 18, 1891.

Fig. 1.

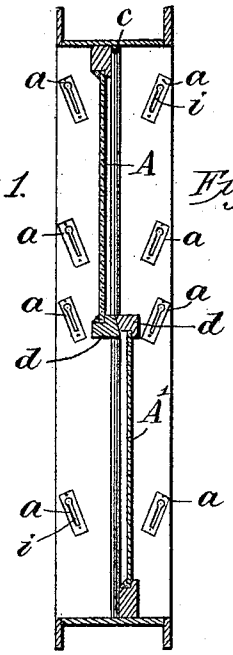


Fig. 2.

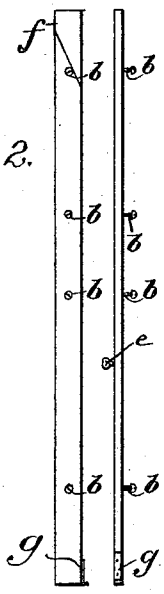


Fig. 3.

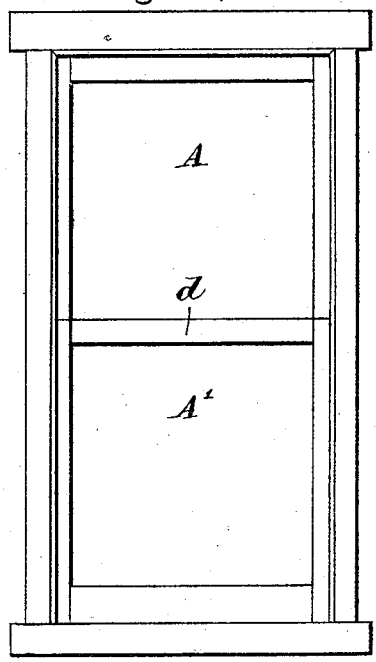


Fig. 4.

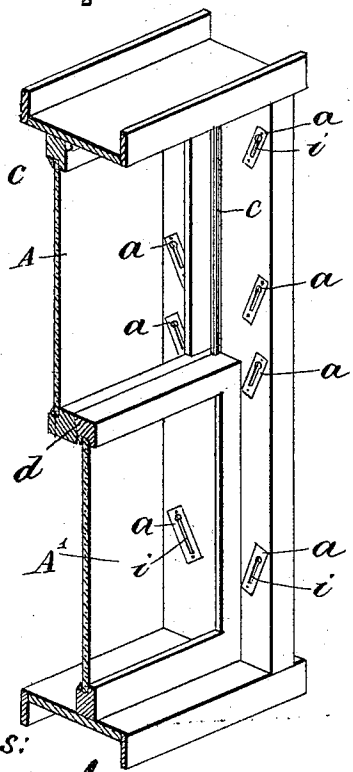
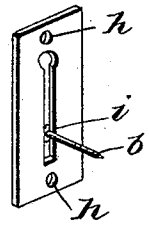


Fig. 5.



Witnesses:
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William J. Atchison
Inventor.

UNITED STATES PATENT OFFICE.

WILLIAM J. ATCHISON, OF CRAWFORDSVILLE, INDIANA.

SASH-HOLDER.

SPECIFICATION forming part of Letters Patent No. 458,139, dated August 18, 1891.

Application filed November 4, 1889. Serial No. 329,246. (Model.)

To all whom it may concern:

Be it known that I, WILLIAM J. ATCHISON, a citizen of the United States, now residing at Kansas City, in the county of Jackson and State of Missouri, (being the same WILLIAM J. ATCHISON who resided at Crawfordsville, in the county of Montgomery and State of Indiana, when his application Serial No. 329,246 was filed November 4, 1889,) have invented a new and useful Improvement Pertaining to Windows and Sliding Doors, of which the following is a specification.

My invention relates to improvements of sash strips, beads, or stops, sash-locks, and weather-strips of windows.

The object of my improvement is, first, to provide a convenient, adjustable, and movable sash-strip; second, a sash-lock that by force of gravity and by friction will automatically lock the sash at any elevation in the frame; third, to combine the two sash strips, beads, or stops of a window-jamb for a weather-strip, and, fourth, to place the device by which the strip is attached to the jamb and made adjustable and serviceable as a sash-lock and weather-strip on the under side of the sash-strip and in that part of the jamb immediately under the sash-strip, so that the entire contrivance for rendering the sash-strip movable and adjustable is concealed from view. I attain these objects by the device illustrated in the accompanying drawings, in which—

Figure 1 is a view of a window-jamb. Fig. 2 shows the window-bead or sash strip or stop detached. Fig. 3 is a front view of a window. Fig. 4 is a perspective of a window with strips detached. Fig. 5 is an enlarged view of a slotted plate or escutcheon.

Similar letters refer to similar parts throughout the several views, and the words "bead," "strip," and "stop" are synonymous in this specification.

In the accompanying drawings, A A′ designate the sashes in their usual position in the frame with parting-strip *c* between them, and with sash-strips removed (except in Fig. 3) in order to show the slotted plates *a a a a* in position.

In Fig. 2, *b b b b* are ordinary screws with hemispherical heads used as guide-pins.

e is a button on the sash-strip for moving the strip. *f* shows where the strip is cut, for reasons hereinafter given.

g is a hook attachment for holding the hook tight when the sash rests on it. Screw-holes in the slotted plate or escutcheon are shown by *h h*, and the slot is shown by *i*, Fig. 5.

In Fig. 1, *d* shows meeting-rails of sash.

The slotted plates are metal—usually iron or brass—and of a convenient size. The slots therein terminate in a circle at the uppermost end, in order that when fastened in proper position in the jamb the guide-pins *b b b b* on the sash-strip, Fig. 2, may be inserted. Usually four plates are necessary for each strip, with four guide-pins on the strip to correspond with the four plates in the jamb. These guide-pins may be ordinary metal screws with hemispherical heads and are of a convenient size. They must, however, be no larger than the circular end of the slot, and yet have a diameter greater than the width of the remaining portion of the slot. The guide-pins are attached to the strips at distances corresponding with the distances between the slotted plates in the jamb in which they are to work, being run into the strip with a sufficient space left between the shoulder and the strip for the head of the pin to be easily inserted into its corresponding slot. The slotted plates, whether on the inside or outside of the sash, all have the lower ends of the slots pointing toward the parting-strip of the jamb in such a direction that the angle formed by the straight side of the slot, if extended, and the parting-strip would be between ten degrees and fifteen degrees, in order that the strip, by its own weight, may drop down freely and bind the sash, on the principle of the wedge. These slotted plates may, if convenience requires it, be attached to the strip and the guide-pins to the jamb.

The sash-strip is first cut the length of the window-jamb. A short piece is then cut off the upper end of the strip, leaving the lower piece shorter than the jamb by as much as is the length of the base of a right-angle triangle whose hypotenuse is the length of a slot of a plate in position, whose perpendicular is a line vertical to the parting-strip, and whose third side is parallel to the parting-strip—*i. e.*, the lower piece is shortened not quite as much

as is the length of a slot in a plate. The strip is not cut squarely in two; but the line of section is a little less oblique toward the parting-strip than are the slots of plates in position. The upper or short piece is fastened in place in the jamb. When the sash is to be raised, a slight push of the strip upward by means of the button brings the strip upward in an oblique direction from the sash corresponding with the direction of the slots in the plates. At the same time the movable part of the strip sustains itself by means of friction against the upper piece at the point of section; but not so tightly, if the section be properly made, as to be difficult of manipulation. Now the guide-pins in the strips and the plates with the slots terminating in a circle at the uppermost end for the insertion of the hemispherical heads of the guide-pins render the strip adjustable and movable, this being the attainment of the first object desired. The plates being set obliquely in the jamb, so that the strip when adjusted may be pushed down, forcing the sash against the parting-strip, locks the sash or door at any elevation in the frame and without any other attachment to the strip—the attainment of the second object desired. The inside and outside strips of a jamb being adjusted with both the upper and lower sash in place and closed, a gentle push downward on the strips forces the sash against the parting-strip, the upper and outer sash being forced inward and the lower and inner sash outward, bringing the meeting-rails of the two sash together, thus preventing any rattling of windows and shutting off all dust and drafts of air that usually pass between the meeting-rails of the two sash and between the jambs and the sash—the attainment of the third object desired.

I do not claim to be the inventor of sash-strips or sash-locks or weather-strips generally.

What I do claim, and desire to secure by Letters Patent, is—

1. In a fastener for window-beads or sash-strips, the strip formed in two parts, one of which is fixed to the window-casing, the other provided with a series of headed pins attached to the under side thereof, but not extending through the same, in combination with the casing provided with a series of plates having key-hole slots placed obliquely downward toward the sash in said casing, whereby the pins are concealed from view, and by their engagement with the slotted plates the sash may be locked by the adjustment of said movable strip, substantially as described.

2. The combination, in windows and sliding doors, of an ordinary sash-strip cut in two pieces, as at *f*, having guide-pins *b* in the jamb side of it, a button *e* on the face side of it, and a hook attachment *g* on the lower end of it on the edge toward the sash, and having slotted plates *a* set obliquely in the window-jamb corresponding with the guide-pins of the strips, as substantially set forth, or with the guide-pins in the jamb and the corresponding plates in the sash-strips.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

WILLIAM J. ATCHISON.

Witnesses:
JOHN R. BONNELL,
ALBERT D. THOMAS.