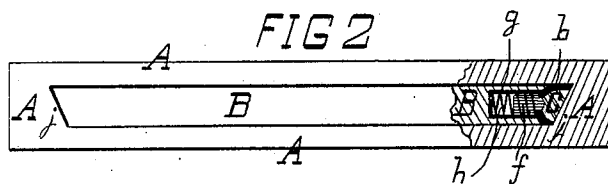
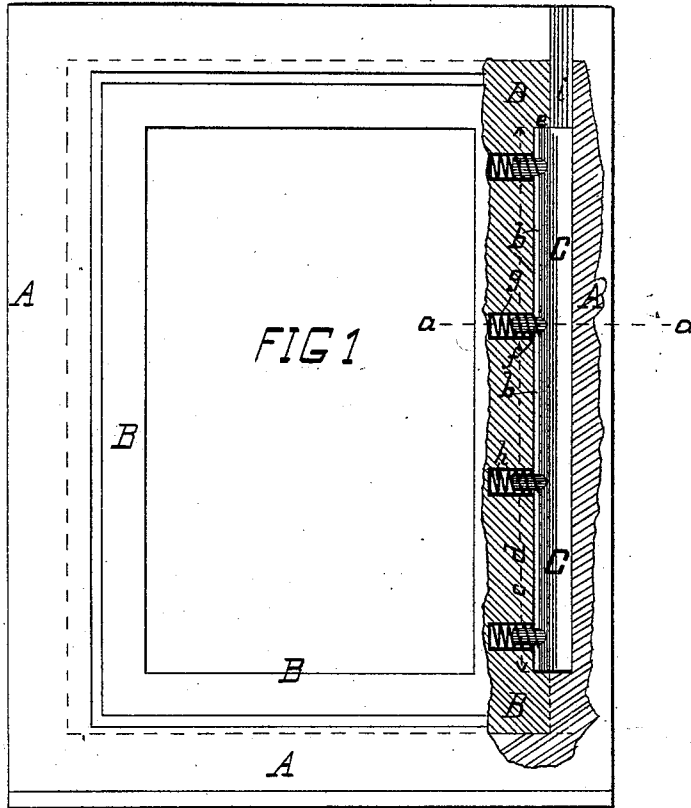


A. H. PETERSON.
WINDOW.

No. 177,420.

Patented May 16, 1876.



WITNESSES
Charles H. H. H. H.
Geo. C. H. H. H.

INVENTOR
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by Francis D. Pastorius
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UNITED STATES PATENT OFFICE.

ALBERT H. PETERSON, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN WINDOWS.

Specification forming part of Letters Patent No. **177,420**, dated May 16, 1876; application filed January 8, 1875.

To all whom it may concern:

Be it known that I, ALBERT H. PETERSON, of Philadelphia, Pennsylvania, have invented an Improved Window Frame and Sash, of which the following is a specification:

The invention consists of a window frame and sash having beveled contact edges, in combination with a pressure-strip, in a groove formed in the edge of the sash, and guide-pins and pressure-springs in sockets also formed in the edge of the sash, substantially as is hereinafter shown and described.

Figure 1 is a view of a window frame and sash sectioned on one side, to show the improvements. Fig. 2 is a top view of a window frame and sash, one side being sectioned on the line *a a*, Fig. 1. Fig. 3 is a view of the pressure strip and guide-pins.

A is a window-frame, and B the sash, of the pattern used in railway-cars. A groove, *b*, is formed in one or both of the side edges of the sash, which can extend the entire length of the sash or only a portion of it, as represented in length by the line *c d*, and in depth by the offset or shoulder *e*. C is a pressure-strip in the groove *b*. Its guide-pins *f* take into suitable openings *g* in the sash, and keep it from slipping from the groove when the sash is raised or lowered. *h* are springs, which are placed over the guide-pins *f* in the openings *g*. They press the strip C against the bottom of the groove in the frame.

When pressure-strips are used only on one side of the sash, the springs, when pressing the strip against the bottom of the groove *i* in the frame, also push the sash over until its opposite edge presses against the bottom of

the groove in the opposite side of the frame; but when pressure-strips are employed on both the opposite edges of the sash, then the springs will force the pressure-strips in the grooves of the frame, and cause the sash to be suspended between them on the pins *f*. The grooves in the sash and the pressure-strips can be of any transverse section. The pressure-strips can be of wood, metal, or other material that will slide freely in the grooves of the frame, and possess the necessary toughness.

As shown at Fig. 2, the edges of the sash and the bottoms *j* of the grooves *i* of the frame are inclined or beveled to make the groove and the sash wider at one side than at the other, so that when the springs and the pressure-strips bear respectively against the sash and the groove the sash will be forced in the direction of the outward incline, and thus form a perfect contact with the molding of the frame, which prevents the entrance of currents of air and dust.

I claim as my invention—

The window-frame A and groove *i*, in combination with the sash B, groove *b*, pressure-strips C, pins *f*, pin-openings *g*, and the springs *h*, substantially as and for the purpose shown and described.

In testimony whereof I hereunto sign my name in the presence of two subscribing witnesses.

ALBERT H. PETERSON.

Witnesses:

FRANCIS D. PASTORIUS,
J. J. CRANDALL.