

J. PETRI.
WINDOW-SASH.

No. 189,384.

Patented April 10, 1877.

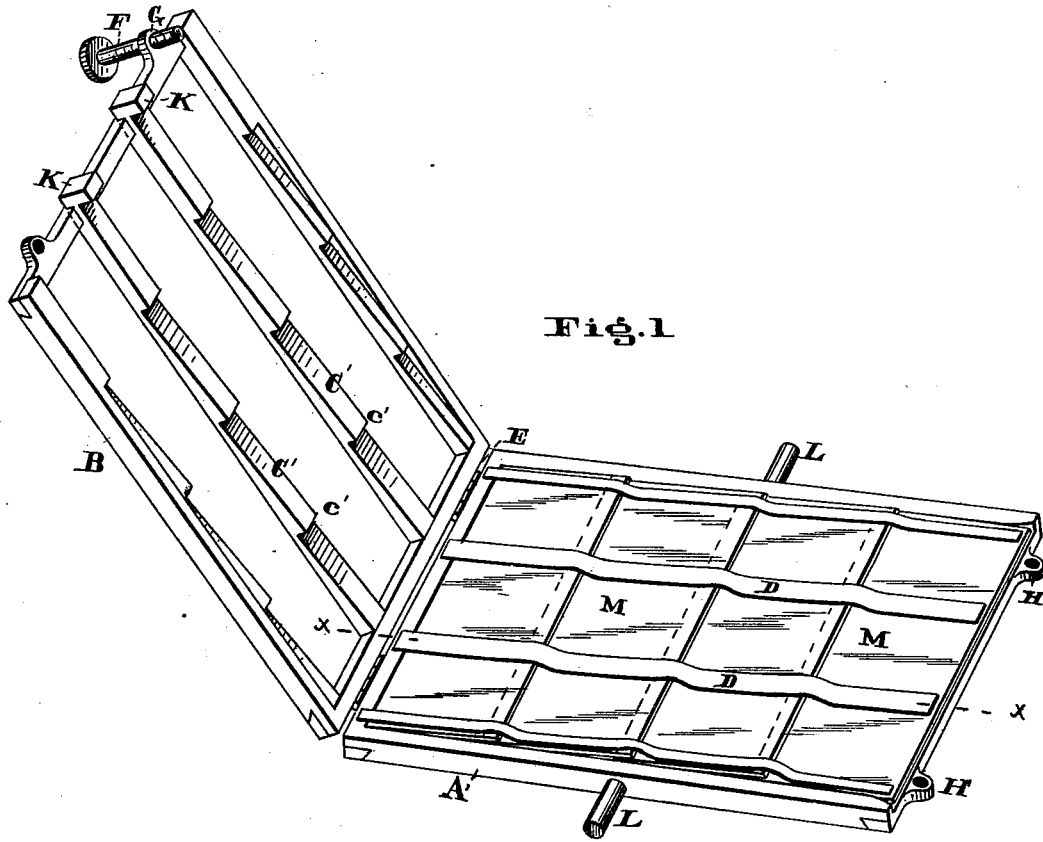


Fig. 1

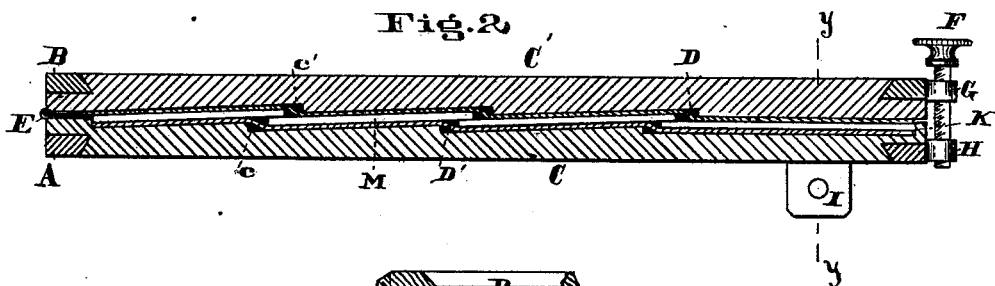


Fig. 2

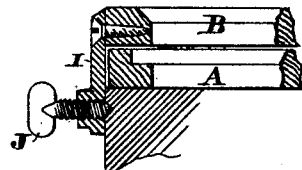


Fig. 3

Attest
Harry Knight
Walter Knight

John Petri
By Knight Bros.
Attys

UNITED STATES PATENT OFFICE.

JOHN PETRI, OF COVINGTON, KENTUCKY.

IMPROVEMENT IN WINDOW-SASHES.

Specification forming part of Letters Patent No. **189,384**, dated April 10, 1877; application filed March 9, 1877.

To all whom it may concern:

Be it known that I, JOHN PETRI, of Covington, Kentucky, have invented a new and useful Improvement in Sashes, of which the following is a specification:

This invention relates to an improved construction of those window-sashes whose panes of lights are secured between two open and separable clamps or frames, so as to dispense with the use of putty, and to make the operation of glazing comparatively simple, cheap, and easy.

In the accompanying drawing, Figure 1 is a perspective view of a sash embodying my improvements, the upper member of the clamping-frame being thrown open. Fig. 2 is a section at line *x x*, but on a larger scale, and in the closed condition of the sash. Fig. 3 is a partial section at *y y*, on same scale as Fig. 2, and, like it, in the closed condition.

A and B represent, respectively, two similar rectangular frames, crossed by a series of parallel bars or muntins, C C', whose opposing edges are notched or stepped, *c c'*, in the manner indicated, so as to form a succession of inclined planes, parallel to, but removed from, one another a distance equal to the thickness of a sheet of glass, so that the consecutive panes, when in place, shall just overlap flatly upon one another.

Narrow strips or gaskets of india-rubber, D D', being interposed between the glass and the frame, serve to render the whole both air and water tight, and to guard the glass from

liability to fracture by the pressure of the framing.

The two members A and B are hinged to one another at E, and their free edges are capable of being clamped together by means of screws F, occupying eyes G, projecting from the upper frame B, and screwing into nuts H, that project from the lower frame A.

Lips I, depending from the side of the upper frame B, may serve to guide the latter in closing to its place on the lower frame A, and having screws J tapped through them, said screws may be made available to hold the sash firmly to its box or other proper support.

Lips K, which project from the free edge of the upper frame B, as in Fig. 1, or of the lower frame A, as in Fig. 2, coact with the notches *c c'* to hold the panes securely in place.

When used for skylight or transom the frame may be provided with a pair of customary trunnions, L.

I claim as new and of my invention—

The described combination of stepped frames A C c B C' c', lips K, gaskets D D', hinges E, and screw-fastenings F G H, as and for the purpose set forth.

In testimony of which invention I hereunto set my hand.

JOHN PETRI.

Attest:

GEO. H. KNIGHT,
L. H. BOND.