G. H. PADGETT.
Window-Sash.

No. 221,182. Patented Nov. 4, 1879.

*Fig. 1.*

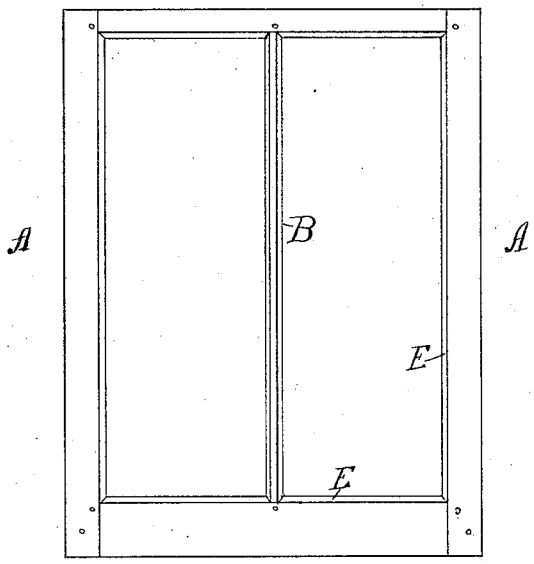



*Fig. 3.*

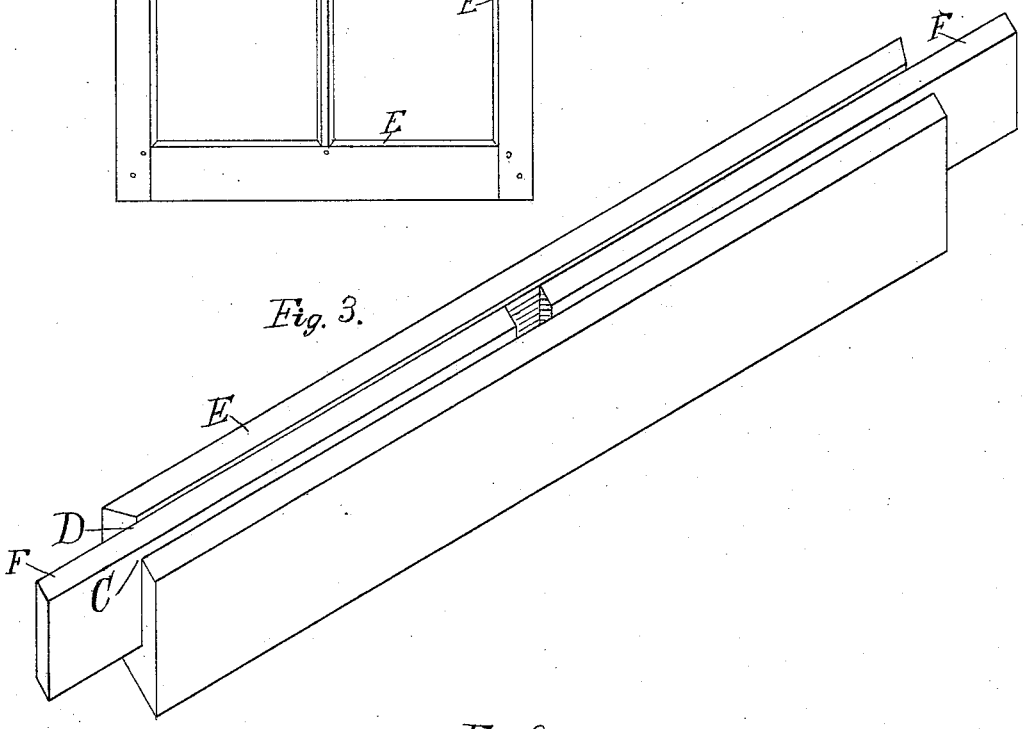
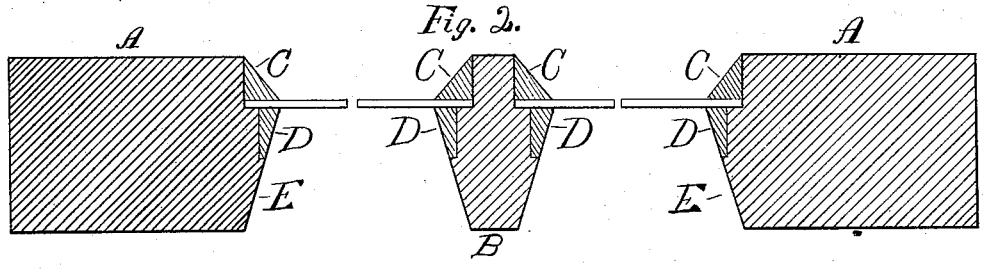



*Fig. 2.*




Witnesses:
James McKee Jr
James Brown

Inventor:
George H. Padgett

# UNITED STATES PATENT OFFICE.

GEORGE H. PADGETT, OF EDWARDS, NEW YORK.

## IMPROVEMENT IN WINDOW-SASHES.

Specification forming part of Letters Patent No. **221,182**, dated November 4, 1879; application filed June 17, 1879.

*To all whom it may concern:*

Be it known that I, GEORGE H. PADGETT, of Edwards, in the county of St. Lawrence and State of New York, have invented a new and useful Improvement in Windows, of which the following is a specification.

This invention relates to the manner of glazing or cementing the glass to the sash or frame.

Heretofore windows have been constructed by securing panes of glass to a sash or frame having a simple rabbet to receive the same, first, by strips of wood or metal; second, by the use of putty or cement upon the outer side of the window, the inner side of the glass being supported by the shoulder of the rabbet. The glass is also commonly embedded in putty by first applying putty to the shoulder of the rabbet and pressing the glass firmly into place, for the purpose of securing a perfect bearing for the glass and to render the connection of sash and glass more nearly perfect.

The first method is objectionable for the reason that it is expensive, and hence impracticable for the ordinary window. The second method is objectionable because of the free access of moisture between the inner side of the glass and the shoulder of the rabbet, which the process of embedding before described does not prevent. The pressing of the glass upon the bedding of soft putty squeezes it out irregularly, and leaves it to dry in a porous state.

The condensation of the vapor in a heated room upon the surface of the glass by the colder air without produces a continuous state of moisture, more noticeable in cold weather, when water rapidly collects upon the glass and falls to the sash. This falling water removes the paint from the sash at the base of the glass, gradually wears the wood away, and by the force of gravitation permeates the imperfect bedding of putty, and is carried by capillary attraction to every part of the wood sash. This condition of moisture loosens the putty upon the outside of the window and causes it to cleave off.

The object of my invention is to construct windows so as to secure a perfect joining of sash and glass, also a smooth non-wearing body at the base of the glass to resist the action of the falling water.

The invention consists in spreading putty smoothly upon the inner side of the glass in a manner similar with the outer side, the putty thus applied to form a part of and finish the design of the molded edge of the sash in its approach to the glass.

To accomplish this, first, I construct a sash after any of the approved designs, having the usual rabbet to receive the glass. I then make a second rabbet, extending from the shoulder of the first rabbet toward the inner side of the sash, of sufficient width for the purpose, and of about one-half the depth of the first rabbet. I then place the glass in its usual position, and fasten there with the zinc points commonly used in glazing. I then proceed to apply the putty, first, for convenience, to the inner side in the second rabbet made for the purpose, and finish upon the outer side of the sash; or, second, a sash may have the single rabbet only, and bevel the shoulder of the rabbet sufficiently to receive the putty; or, third, the sash may have the single rabbet only and square shoulder, with the rabbet only of sufficient depth to sustain the glass while glazing, and thus allow the putty to be spread upon the sash on the inner side without giving the same an uncouth appearance.

I prefer the sash with the second rabbet to receive the putty.

In the accompanying drawings, in which similar letters of reference indicate like parts, Figure 1 is an elevation of a window-sash. Fig. 2 is a cross-section of the same. Fig. 3 is a perspective of a sash-rail with my improvement in construction.

A B represent the frame-work of the sash, the manner of constructing which is well known to all mechanics in house-building, E being the inner molded edge of the sash, and C the ordinary rabbet to receive the glass. At D is shown the second rabbet, of sufficient width to just square the face of the tenon at F.

The glass is placed in the sash, and secured by means of the zinc points commonly used in glazing. Putty is then applied to the sash

in the usual manner at C and D, filling the rabbet at D, and completing the bevel or other design of the molded edge E, the putty at D forming a perfect joining of sash and glass, to the exclusion of all moisture and air, and forming a hard non-wearing body at the base of the glass.

I disclaim the ordinary process of embedding before described; also the ordinary "back-puttying" (by which the embedding is supplemented) on sash having a single rabbet with the shoulder a right angle, when only the space formed by the irregular surface of the glass and shoulder of the rabbet is filled with putty.

What I claim is—

1. A window-sash provided with a second rabbet, or depression adjacent to the ordinary rabbet and inside the window-pane, and putty or the like applied therein, as and for the purpose set forth.

2. The combination, with the sash having an additional rabbet or depression inside the window-pane, of putty applied therein in conformity with the design of the molded edge.

GEORGE H. PADGETT.

Witnesses:
JAMES MCKEE, Jr.,
JAMES BROWN.