O. M. EDWARDS.

WINDOW SASH.

APPLICATION FILED JAN. 7, 1910.

**1,147,008.** Patented July 20, 1915.

*Fig.1*

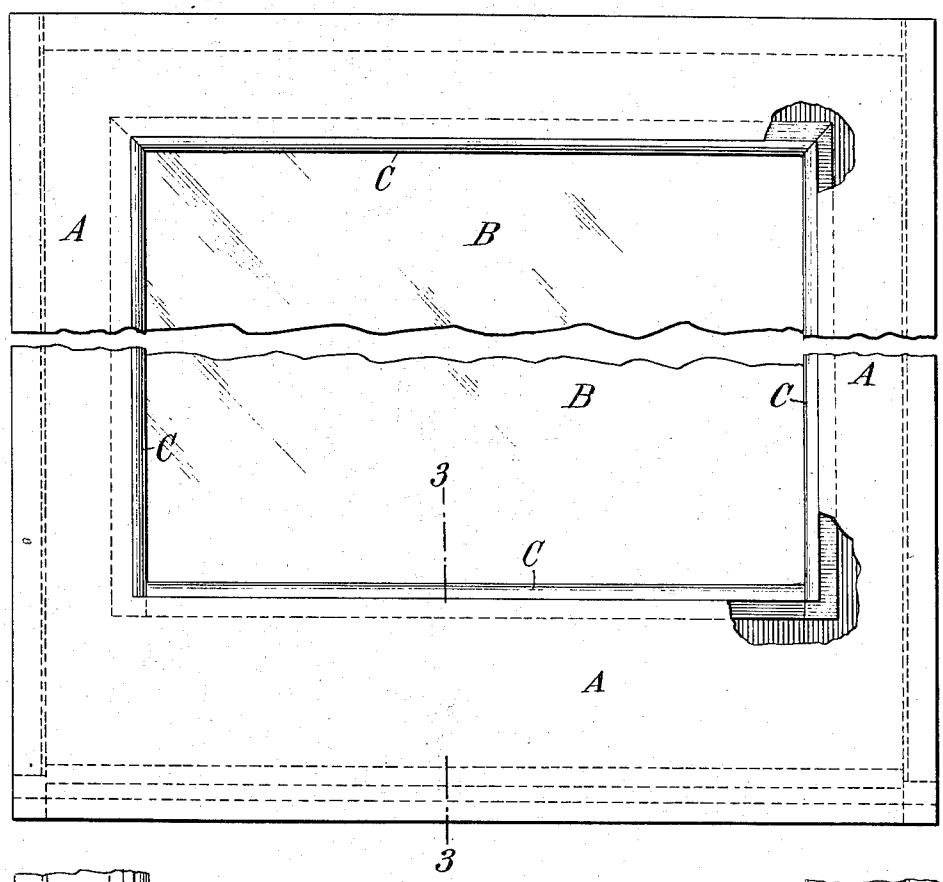



*Fig.2*

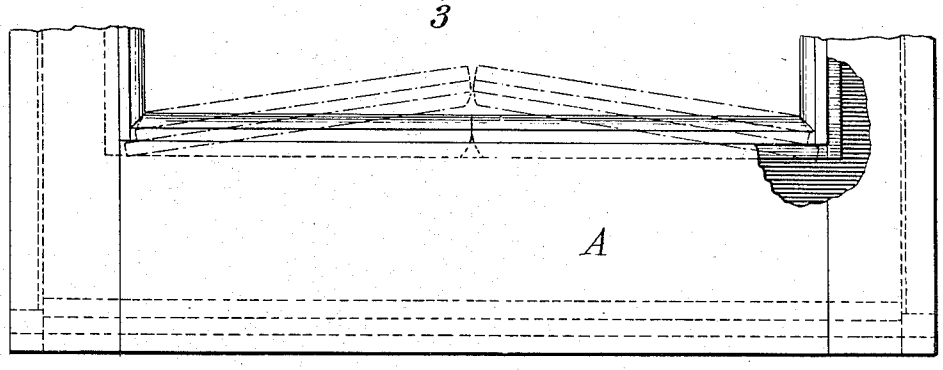



*Fig.3*

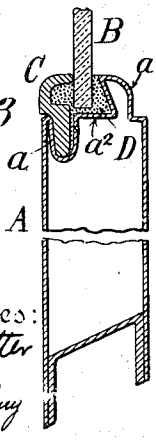
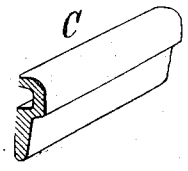



*Fig.4*




Witnesses:
Raphael Ketter
Florence E. Newbury

Inventor
Oliver M. Edwards
H. L. Newbury
Att'y.

# UNITED STATES PATENT OFFICE.

OLIVER M. EDWARDS, OF SYRACUSE, NEW YORK.

## WINDOW-SASH.

1,147,008. Specification of Letters Patent. Patented July 20, 1915.

Application filed January 7, 1910. Serial No. 536,838.

*To all whom it may concern:*

Be it known that I, OLIVER M. EDWARDS, a citizen of the United States, residing in Syracuse, in the county of Onondaga and State of New York, have invented a new and useful Window-Sash, of which the following is a specification.

This invention relates to window sashes and similar frames and particularly to means for retaining the panes of glass in the frames, which retaining means is readily removable and replaceable and is held in position without the use of fastening members; and the invention consists in the novel features of construction hereinafter set forth and claimed.

In describing this invention reference is had to the accompanying drawing in which like characters designate corresponding parts in all the views.

Figure 1 is a front elevation, partly broken away and partly in section, of one form of my invention. Fig. 2 is a front elevation of a portion of a sash provided with another form of my invention. Fig. 3 is a sectional view taken on line 3—3, Fig. 1. Fig. 4 is a detail view of the holding means shown in Fig. 3.

A designates the frame or sash of the window, B the pane of glass held by the sash, and C the glazing or holding means for retaining the pane B in position.

The frame or sash A may be of any desirable form, size or construction and as shown in Fig. 3 may be bent from sheet metal into the desired form in any well known manner as will be understood by those skilled in the art.

The frame A is formed with a continuous inwardly facing groove or recess $a$ extending entirely around the opening in which the pane of glass B is arranged, such recess or groove being located on the inner side of the general plane of the pane B and to the outward of the edge of such pane; and the frame A is also formed with an inwardly projecting shoulder $a'$ extending entirely around the central opening of the sash or frame B and being located on the outer side of the pane and opposed to the margin thereof. The frame A is also formed with a continuous surface or flange $a^2$ opposed to the edge of the pane B, said surface together with the parts $a$, $a'$, and C forming a channel for receiving the margin of the pane B and a yielding filler D.

The retaining means C comprises four relatively non-resilient sections for engaging the top, two sides and the bottom of the pane, each section having a portion for fitting into the groove $a$ and another portion projecting out of the groove into a position opposed to the margin of the front or inner face of the pane B. The window frame A and retaining means C are thus provided with interfitting means and one of said interfitting parts is provided with resilient means which acts to increase the friction between said interfitting parts, and as shown in Fig. 3, owing to the sheet metal construction of the sash A, such sash or rather the walls of the groove $a$ are resilient and clamp the part C in position.

Preferably the lower section C at the bottom of the pane is removable and formed of one piece which has its opposite ends squared and abutted against the side sections. However, if desirable, such bottom section may be formed of two pieces as indicated in Fig. 2, each of the pieces having its outer end mitered to fit the lower mitered end of the contiguous side section C, and in placing the bottom pieces in position they are moved from the position shown in dotted lines, Fig. 2 to that shown in full lines.

It will be understood that no fastening members are employed to hold the retaining means C in position, said retaining means being held in position by the resiliency of members coacting therewith.

What I claim is:

A window frame comprising a frame or sash formed with a continuous inwardly projecting shoulder having an undercut face opposed to the margin of one face of the pane of glass of the window, and with a continuous inwardly facing groove arranged on the opposite side of the plane of the pane of glass from that on which said undercut surface is located, and retaining means including sections, each section being relatively nonresilient and having a portion extending into the groove and frictionally engaging

the walls thereof and having a portion projecting out of the groove and opposed to said shoulder, and the interposed margin of the pane of glass, the last-mentioned portion being formed with a channel opening toward the pane of glass and opposed to said undercut surface, a filler interposed between the under cut surface and the pane of glass, and a filler in the channel, substantially as and for the purpose described.

OLIVER M. EDWARDS.

Witnesses:

ANNA A. CAHILL,

N. I. GIFFORD.