

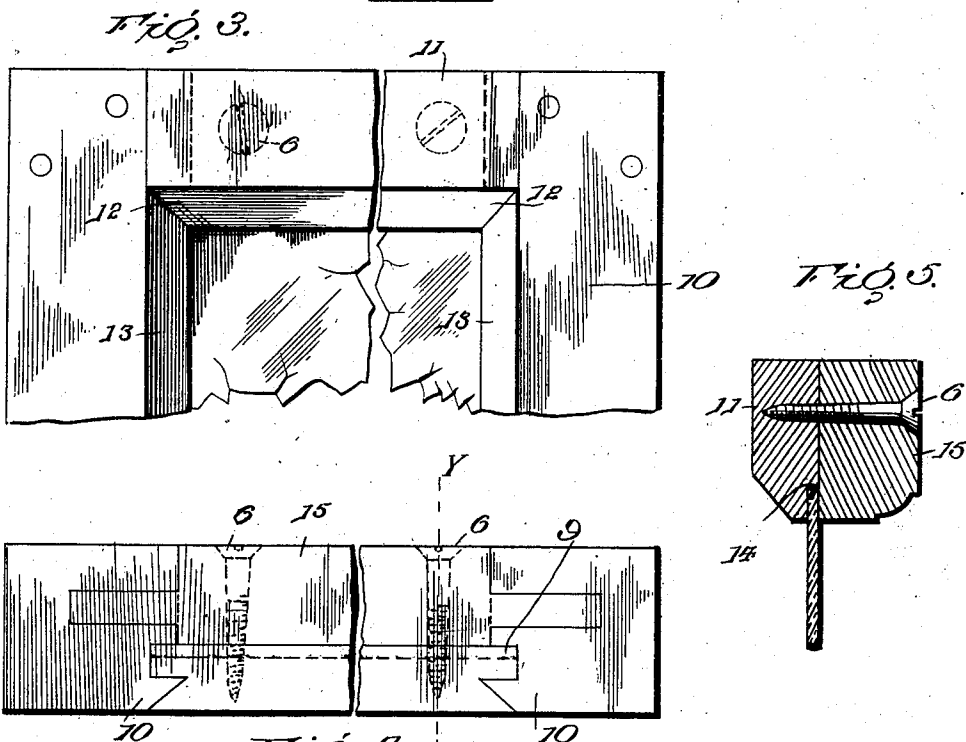
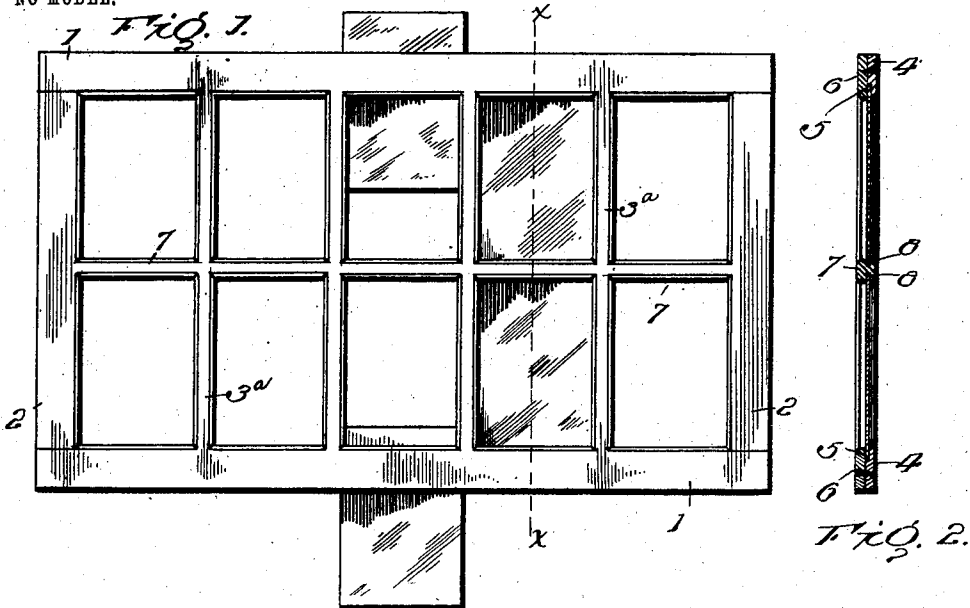
No. 737,144.

PATENTED AUG. 25, 1903.

G. W. RICHARDSON.
WINDOW SASH.

APPLICATION FILED JUNE 15, 1903.

NO MODEL.



WITNESSES:

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UNITED STATES PATENT OFFICE.

GEORGE W. RICHARDSON, OF SPARTA, WISCONSIN.

WINDOW-SASH.

SPECIFICATION forming part of Letters Patent No. 737,144, dated August 25, 1903.

Application filed June 15, 1903. Serial No. 161,569. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. RICHARDSON, a citizen of the United States, residing at Sparta, in the county of Monroe and State of Wisconsin, have invented certain new and useful Improvements in Window-Sashes, of which the following is a specification.

This invention has relation to sash or frames designed to receive panes of glass, the purpose being to obviate the use of putty, which is difficult of removal when it becomes necessary to replace a broken light or pane of glass.

This invention materially stiffens the frame, as well as providing means to admit of a broken pane of glass being easily and quickly removed and a new one placed in position and secured.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result reference is to be had to the following description and drawings hereto attached.

While the essential and characteristic features of the invention are susceptible of modification, still the preferred embodiment of the invention is illustrated in the accompanying drawings, in which—

Figure 1 is a front view of a sash secured in place in accordance with this invention. Fig. 2 is a section on the line X X of Fig. 1. Fig. 3 is a view of the upper end of a sash having a single pane of glass. Fig. 4 is a top edge view of the sash shown in Fig. 3. Fig. 5 is a section on the line Y Y of Fig. 4.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The invention is adapted to be applied to sash of every variety, whether the same contain a single pane of glass or a number of panes. Fig. 1 illustrates the invention applied to a sash containing a plurality of panes of glass, said sash being constructed in any approved manner. The rails 1 and stiles 2 are adapted to receive clamp-strips 4, which have the edge portions bordering upon the openings rabbeted, as shown at 5, to receive the edge portions of the panes of glass. These clamp-strips are secured to the respective bars

of the sash by screws 6 or like fastenings, so as to admit of their ready removal. The bars 3^a 7, subdividing the sash, have their edge portions grooved, as shown at 8, to receive the panes of glass, which are slid into place after the clamp-strips have been removed. The grooves 8 in opposite edges of the bars may be formed in any convenient way.

In the construction shown in Fig. 3 the sash is adapted to receive a single pane of glass, which is held in place by a clamp-strip 11, secured either to the upper or the lower rail of the sash, as desired. This clamp-strip is formed at its ends with tenons 9 to enter mortises in the sides of the stiles 10, near their upper ends, and with beveled extensions 12 to overlap the beveled edges 13 of said stiles. This construction is shown most clearly in Fig. 4. The lower edge of the clamp-strip is rabbeted, as shown as 14, to receive the end of the pane of glass clamped thereby. Upon removing the clamp-strip 11, secured to the rail 15, the pane of glass may be slipped into position in the sash, the edge portions running in grooves formed in the stiles 10.

The construction provides firm securing means for the panes of glass, strengthens the sash, and admits of a broken pane of glass being easily and quickly removed and replaced by a new one, thereby obviating the annoyance and loss of time occasioned by the employment of putty in the accustomed way.

Having thus described the invention, what is claimed as new is—

In a sash, oppositely-disposed bars having mortises at one end and an adjacent edge portion beveled and having the opposing edges grooved to receive the opposite edges of the pane of glass, and a clamp-strip having tenons at its ends to enter the mortises of the said side bars and having beveled extensions to match the beveled edge portions of said bars, said clamp-strip being rabbeted to receive and confine the edge portion of the pane of glass, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE W. RICHARDSON. [L. s.]

Witnesses:

J. P. RICE,

L. J. ROBERTS.