

J. J. RICHARDSON.

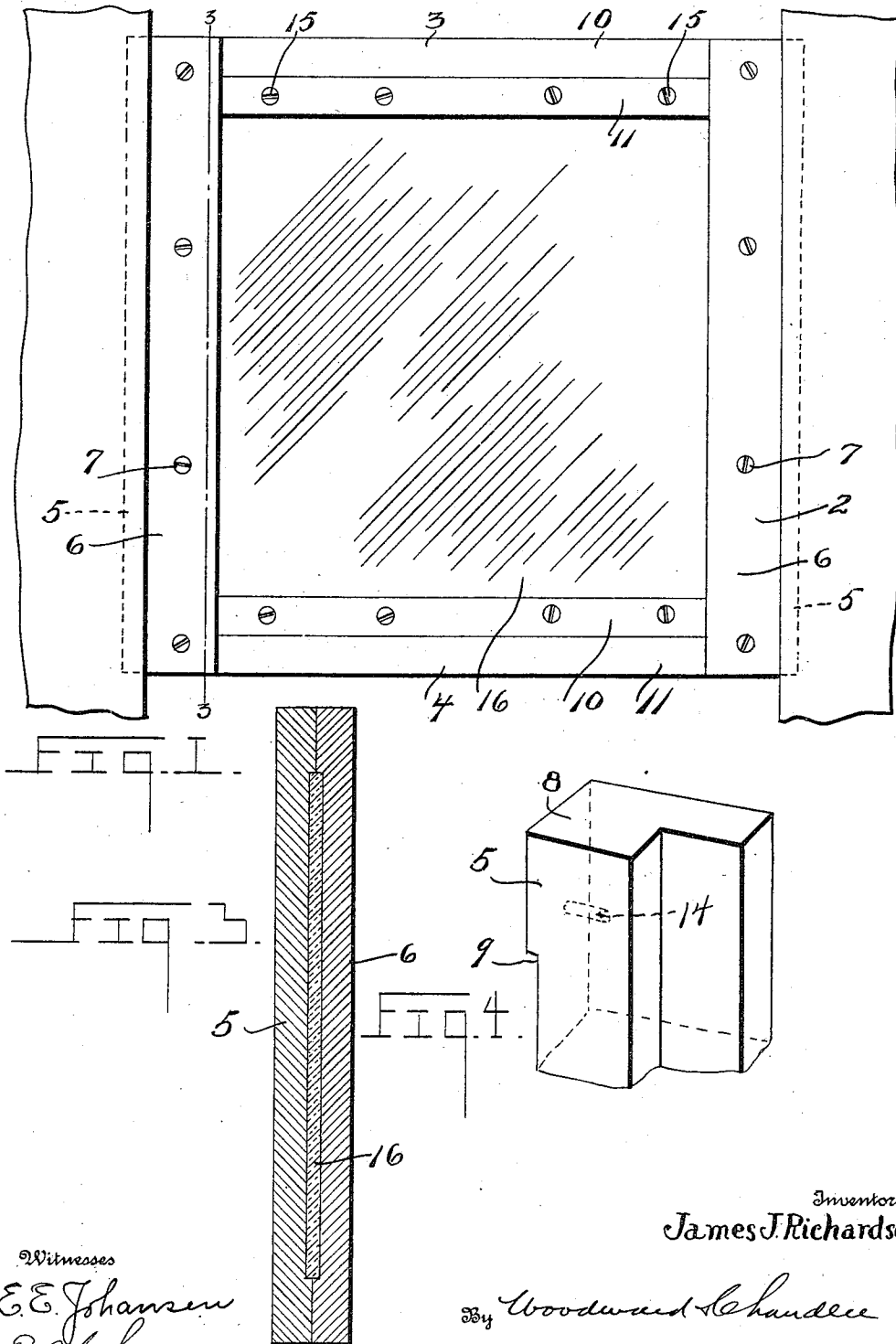
WINDOW SASH.

APPLICATION FILED MAR. 25, 1909.

Patented Nov. 15, 1910.

2 SHEETS—SHEET 1.

975,719.



Witnesses

E. E. Johansen
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Inventor
James J. Richardson

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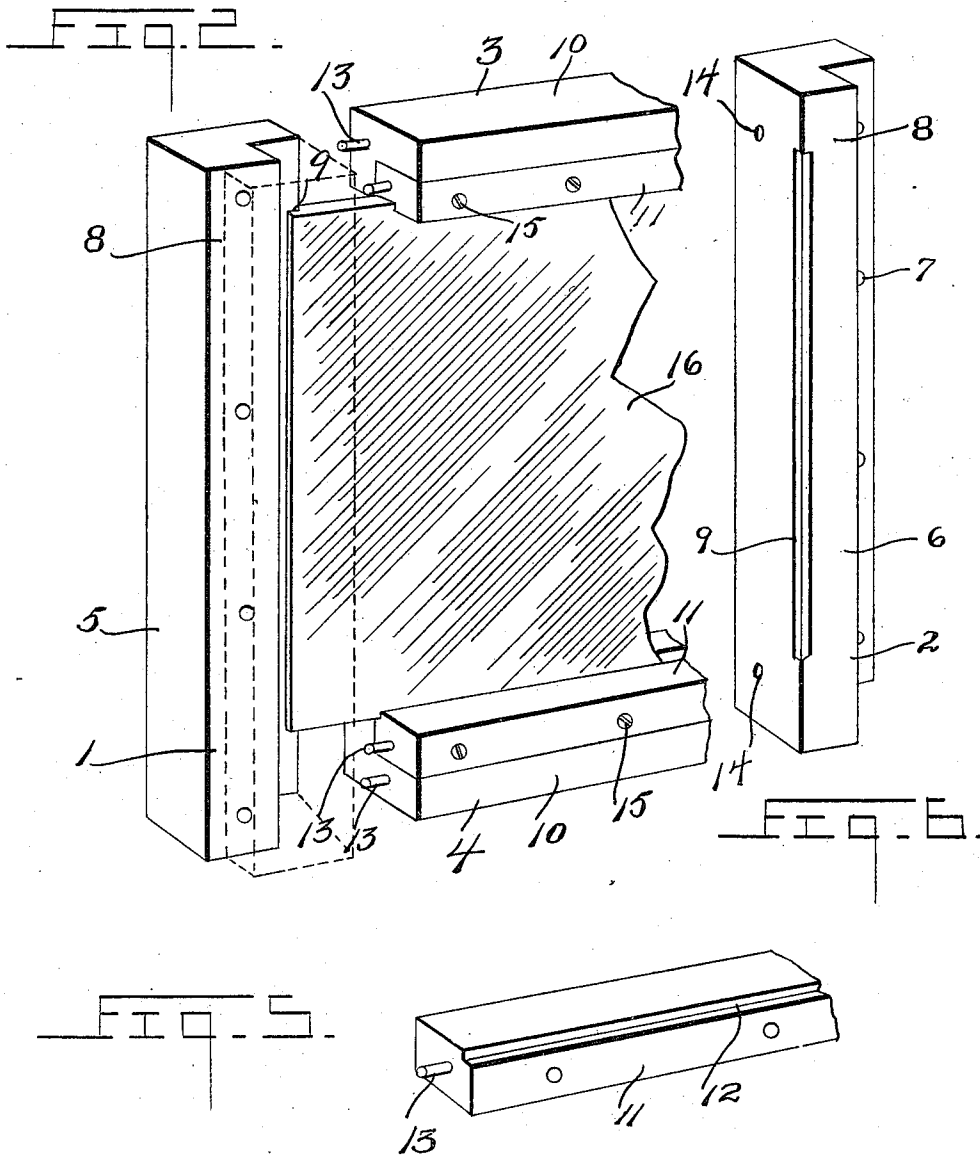
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Witnesses
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UNITED STATES PATENT OFFICE.

JAMES J. RICHARDSON, OF SAVANNE, ONTARIO, CANADA.

WINDOW-SASH.

975,719.

Specification of Letters Patent. Patented Nov. 15, 1910.

Application filed March 25, 1909. Serial No. 485,773.

To all whom it may concern:

Be it known that I, JAMES J. RICHARDSON, a subject of the King of England, residing at Savanne, in the Province of Ontario and Dominion of Canada, have invented certain new and useful Improvements in Window-Sash, of which the following is a specification.

This invention relates to window sashes, and has for its object to provide an improved construction of window sash in which the glass may be readily inserted without the use of putty or other adhesive material.

Another object is to provide a sash, the various sections of which may be very quickly attached and detached.

A further object is to provide a sash of this class in which all danger of the breaking of the glass through carelessness on the part of the workman is avoided.

With these and other objects in view, the present invention consists in the combination and arrangement of parts as will be hereinafter more fully described, and particularly pointed out in the appended claim, it being understood that changes in the specific structure shown and described may be made within the scope of the claim without departing from the spirit of the invention.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is an elevation of my improved window sash showing the same in position in a window frame. Fig. 2 is a perspective view of one side of the sash, showing the same partially disassembled, Fig. 3 is a vertical section on the line 3—3 of Fig. 1, the sash being removed from the frame. Fig. 4 is a detail perspective view of one of the sections of the stiles, Fig. 5 is a similar view of one of the sections of the rails of the sash. Fig. 6 is a perspective view of the inner section of the stile which I employ in carrying out my invention.

Referring to the drawings, 1 and 2 indicate the stiles of my improved sash, and 3 and 4 the top and bottom rails thereof respectively. The stiles are each formed in two sections 5 and 6 secured together by means of the screws 7. The vertical section 6 of the stile is of less width than the section 5 thereof and may be removed as desired, as will be later described. The outer portion of the section 6 and the inner por-

tion of the section 5 are reduced and form shoulders 8 in the opposed faces of said sections which abut against each other and form in effect an interlocking construction, which after the screws have been inserted, forms a very strong and rigid construction of sash. The inner meeting edges of the sections are each provided with one-half of a vertically extending groove as shown at 9. The top and bottom rails 3 and 4 are also formed in two sections 10 and 11, the section 10 being mortised to receive the section 11 flush with the outer walls thereof. The rear corners of the sections 11, in opposed relation to each other, are formed with the rabbet 12 and together with the grooves formed in the edges of the stiles securely confine the pane of glass 16 therebetween. Tenons 13 are provided at the opposite ends of the sections 10 and 11 of the rails 3 and 4, which when the sash is assembled are inserted into the mortises 14 formed in the inner edges of the stiles 5 and 6 at the upper and lower ends thereof. The sections 10 and 11 of the upper and lower rails are securely held together by means of the screws 15. As shown in Fig. 1 the section 6 of the stiles does not engage with the sides of the window frame and may be easily removed together with the section 11 of the rails when it may be desired to insert a new pane of glass, without removing the sash from the frame.

By constructing a sectionalized window sash in the manner shown and described, a complete inner and outer frame is provided for holding the glass, and it will be seen that by removing the screws 15 from the inside sections 6 of stiles 1 and 2 the sections 11 of rails 3 and 4 will be removed constituting the inner frame, the tenons 13 connecting the corners of said section holding the same together.

It will be seen that by the construction above described, the sash may be readily assembled and disassembled, and the glass securely retained therein. As no putty or other adhesive material is employed, all liability of the glass falling out of the sash, as is often the case when the putty becomes dry and cracked, is obviated.

What is claimed is:

A window sash comprising stiles formed in two sections, grooves formed on one of the edges of each section and extending the full length of the same, the inner sections

being provided with rabbeted edges terminating at a suitable distance from the ends of said sections, top and bottom rails likewise formed of two sections, said latter sections having one of their edges rabbeted along its entire length, suitable fastening devices inserted from the inside stiles and rails and into the outer ones for securing the frames together, tenons provided upon the ends of each of the sections of said rails and adapted to be received by openings formed in the adjacent edges of both sections of

the stiles adjacent to the ends thereof, whereby a continuous rabbet is formed for removably receiving the glass to be secured between the frames, and said glass being removable by detaching the inner frame by removing the fastening devices. 15

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

JAMES J. RICHARDSON.

Witnesses:

W. McBRADY,
I. M. LAMONT.