

H. RHOADS.
WINDOW SASH.

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945,605.

Patented Jan. 4, 1910.

Fig. 1.

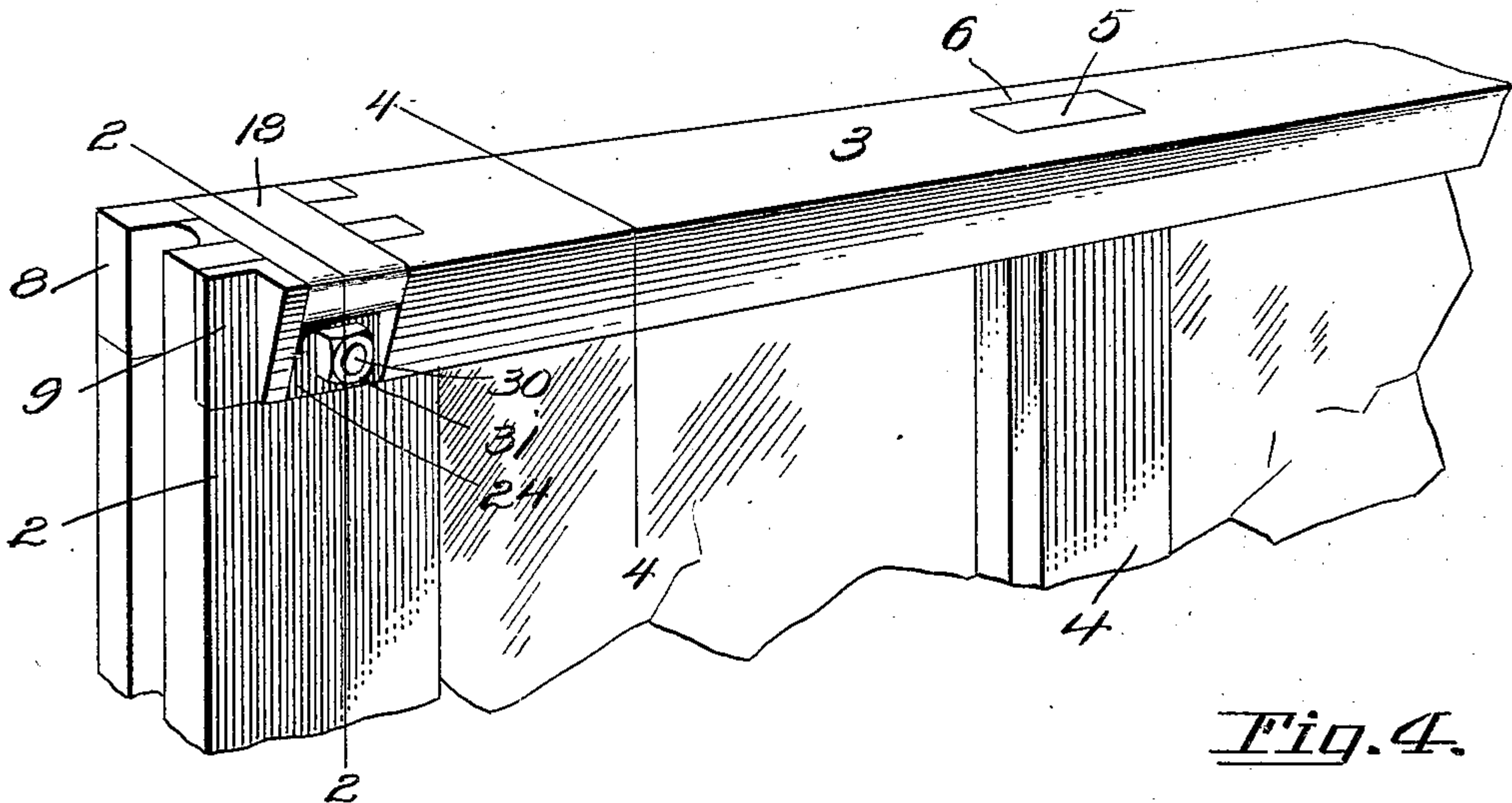


Fig. 4.

Fig. 2.

Fig. 3.

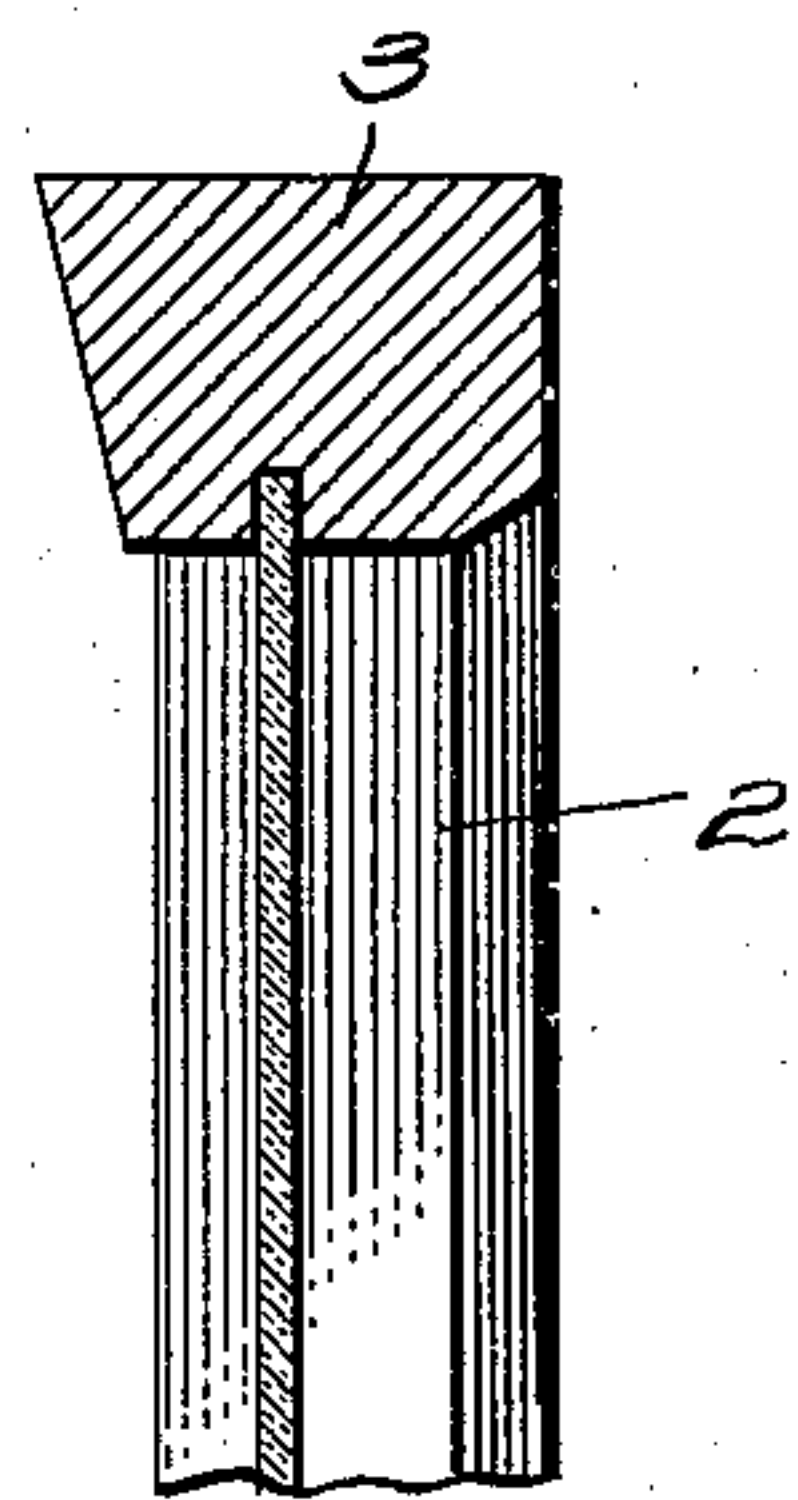
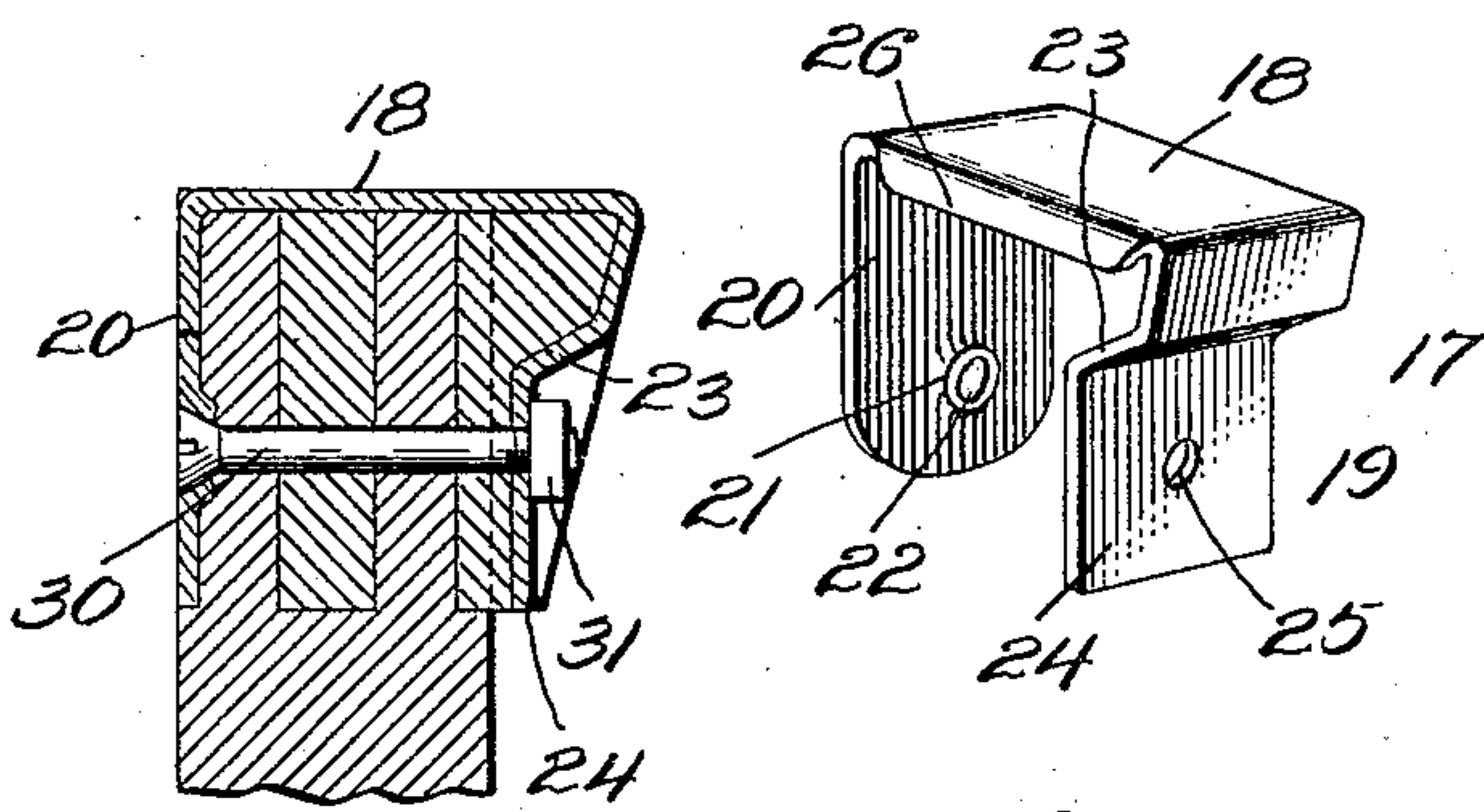
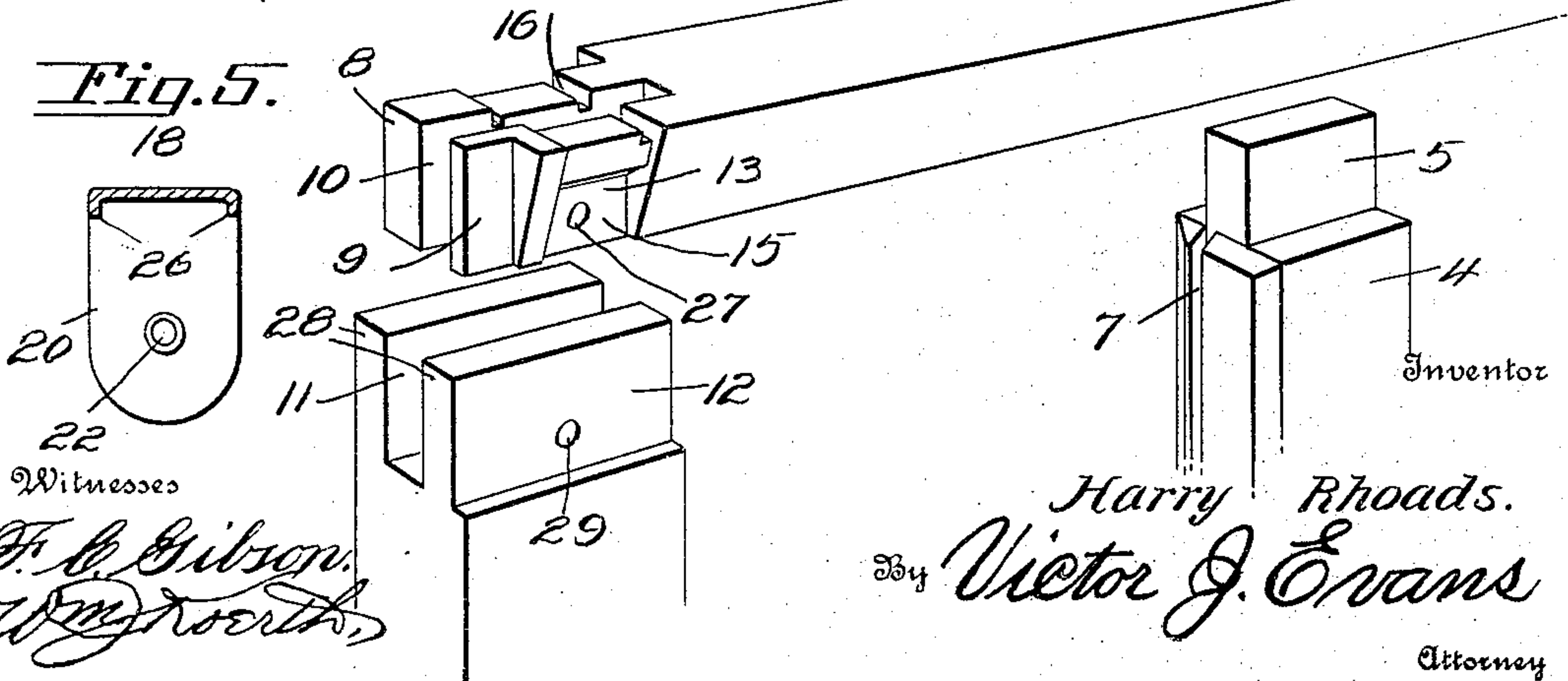


Fig. 6.

Fig. 5.



Witnesses

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WINDOW-SASH.

945,605.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, HARRY RHOADS, a citizen of the United States, residing at Novinger, in the county of Adair and State of Missouri, have invented new and useful Improvements in Window-Sashes, of which the following is a specification.

This invention is directed to improvements in window sashes, and the object of the invention is to provide a window sash so constructed and arranged that either the end stiles or top bar may be removed for replacing a broken glass without interfering with the glass positioned between the central stile and the opposite end stile.

With the above, and other objects in view, which will appear as the description progresses, the invention resides in the novel construction and arrangement of parts hereinafter fully described and claimed.

In the accompanying drawing, Figure 1 is a perspective view of the upper portion of a sash constructed in accordance with this invention. Fig. 2 is a sectional view upon the line 2—2 of Fig. 1. Fig. 3 is a perspective view of one of the clamps. Fig. 4 is a sectional view upon the line 4—4 of Fig. 1. Fig. 5 is a sectional view of the clamp. Fig. 6 is a perspective view, illustrating the top bar elevated from the side stile and central mullion.

The improved frame has its lower portion constructed in a similar manner to that of sashes now in common use. These ordinary sashes have their bottom rails provided with tongues and a central groove, the tongues being adapted for engagement with recesses provided by the side stiles and the central groove being adapted for the reception of a suitable tongue provided upon the central mullion. The bottom rail and sides as well as the central mullion are each connected together through the medium of suitable wooden pegs. As this construction is well known to the art it has been deemed unnecessary to illustrate the same in the accompanying drawing.

In the drawing the numeral 1 designates the sash which is provided with the usual side stiles 2, top rail 3 and central stile or mullion 4. The central stile or mullion is provided with an extending tongue 5 which is adapted to engage within a centrally arranged recess 6 provided within the top bar 3. This tongue 5, while fitting snugly

within the recess 6 is at the same time free to be removed therefrom when desired, this being essential when a new pane of glass is to be positioned upon the sash.

All of the members comprising the frame are provided with meeting recesses 7, preferably centrally arranged and adapted for the reception of the panes of glass.

The connecting ends of the top rails of the frame are provided with spaced tongues designated by the numerals 8 and 9 so as to provide an intermediate groove 10. The tongues 8 and 9 are adapted to engage within a recessed portion 11 provided upon the top of the end stile 2 and with a cut away portion 12 provided upon one face of the upper portion of the said stile 2. By reference to Figs. 1, 2 and 6 of the drawing, it will be noted that the tongue 8 is positioned a suitable distance away from the outer face of the bar 3 so that when the said tongue 8 is inserted within the recess 11 the faces of the bar 3 and the stile 2 will be in a direct plane with each other. The inner face of the bar 3 is provided with the usual bevel whereby it will be brought into close contact with the beveled bar of the upper sash, and the said bar 3 adjacent its outer end is provided with a continuous vertical and horizontal cut away portion 13 at a point occupied by the tongues 9 and 10. The tongue 9 has its outer extremity reduced, as clearly illustrated in Figs. 1 and 6 of the drawings, so as to allow the sash to slide freely within the pocket of the frame provided by the spaced beads. The vertical wall of one side of the cut away portion 13 is formed with a depression as at 15, while the horizontal faces of the said cut away portion are also provided with depressions 16 adjacent to their points of connection with the spaced tongues 9 and 10.

The numeral 17 designates the clamping device for the end of the sash frame. This device 17 is preferably constructed of a single strip of resilient material and comprises a top portion 18 having vertically depending portions 19 and 20. The depending portion 20 is provided with an integrally formed projection 21 surrounding an opening 22. The vertical member 17 is provided with an offset 23 from which depends an extending portion 24, thus providing one side of the device corresponding with that of the recess 13 of the top bar 3. This de-

pending portion 24 is also provided with an opening 25, alining with the opening 22 upon the opposite vertical member 20. The transversely extending edges of the member 5 17 are bent downwardly to provide lips 26 and these lips are adapted to engage within the depressions 16 provided by the horizontal cut away portions of the tongues 9 and 10. The vertical faces of the depression 13 are provided with suitable openings 27, and the tongues 28 provided upon 10 each side of the slotted portion 11 of the stile 2 are also provided with alining openings 29, and all of these openings, together 15 with the openings 25 and 22 of the member 17 are adapted for the reception of a removable retaining member 30. This member 30 comprises preferably a threaded bolt, having its head positioned within the outer 20 face of the inturned portion 21 of the member 17 and its threaded extremity provided with a nut 31 which is adapted to be positioned within the depressed portion of the said member 17 so as not to interfere with 25 movement of the sash in either direction and at the same time maintain a comparatively tight joint between the upper and lower meeting bars of the sashes.

While I have illustrated and described 30 the improvement as being connected with the upper bar of the lower sash, it is to be understood that the device is adapted to be likewise provided upon the lower bar of the upper sash, and the opposite bars of either 35 of the sashes may be also constructed as described, if it is found desirable.

Having thus fully described the invention what is claimed as new is:

1. In combination with a sash having its corners provided with vertical and alining 40 transverse grooves, a substantially U-shaped clamp for the grooves, and means for connecting the arms of the clamp transversely of the sash.

2. In combination with a sash having its 45 corners provided with the usual tongues and grooves, said corners being provided with alining vertical and transverse grooves, a resilient U-shaped clamp for the grooves, said clamp having the edges of its connect- 50 ing portion provided with depending lips and its arms provided with alining openings and a securing element engaging the openings of the arms or the corners of the sash. 55

3. The herein described connecting clamp for window sashes providing a substantially U-shaped resilient member, said mem- 60 ber having the edges of its connecting portion bent to form lips, one of the arms of the member being offset and provided with an opening, the opposite arm being provided with a forwardly projecting portion having a central opening alining with the opening 65 of the opposite arm.

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

HARRY RHOADS.

Witnesses:

J. W. VANLAWINGHAM,
J. B. HOPSON.