

No. 889,378.

PATENTED JUNE 2, 1908.

O. E. & E. W. KNIGHT.

WINDOW SASH.

APPLICATION FILED MAR. 25, 1907.

2 SHEETS—SHEET 1.

Fig. 1.

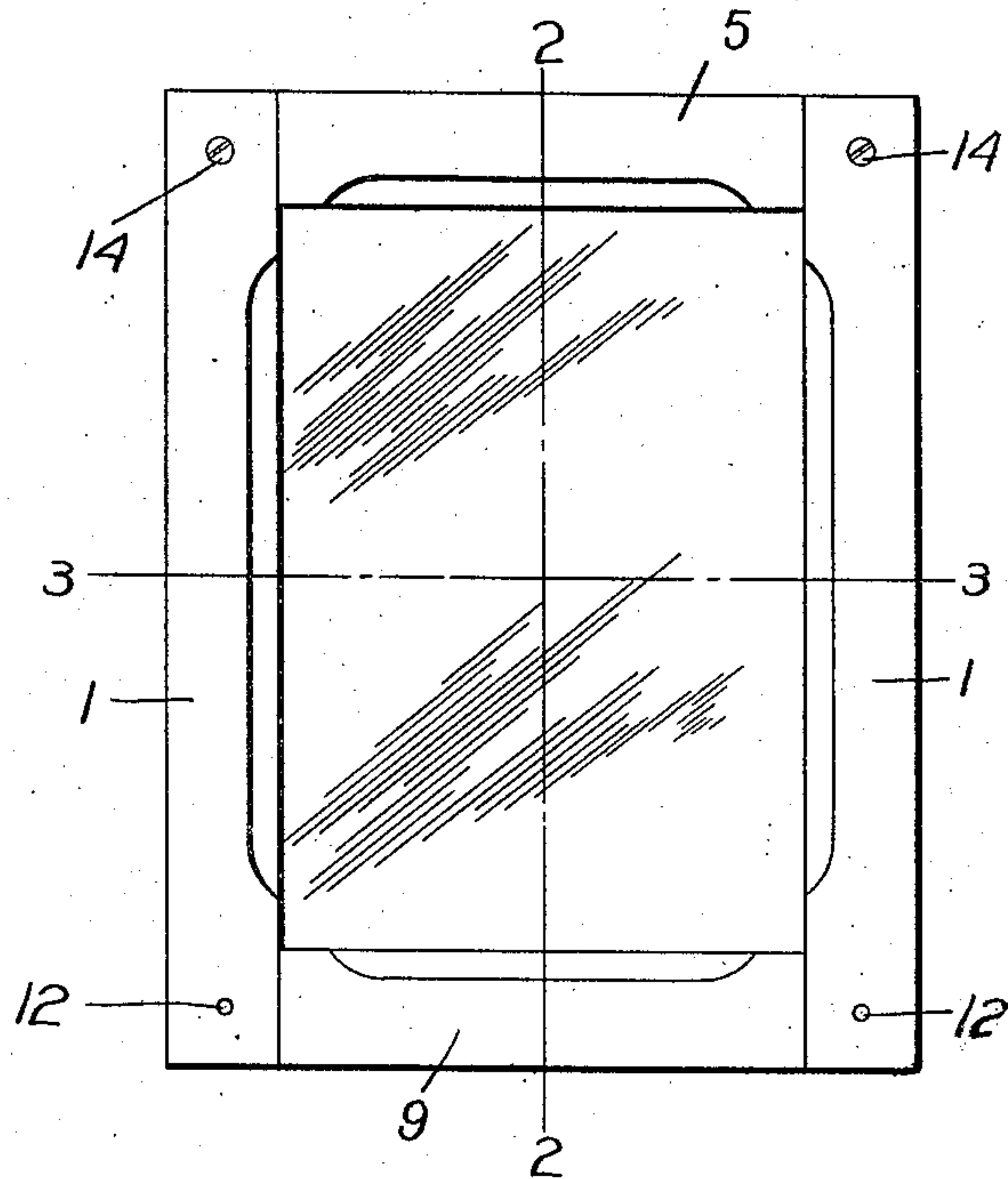


Fig. 2.

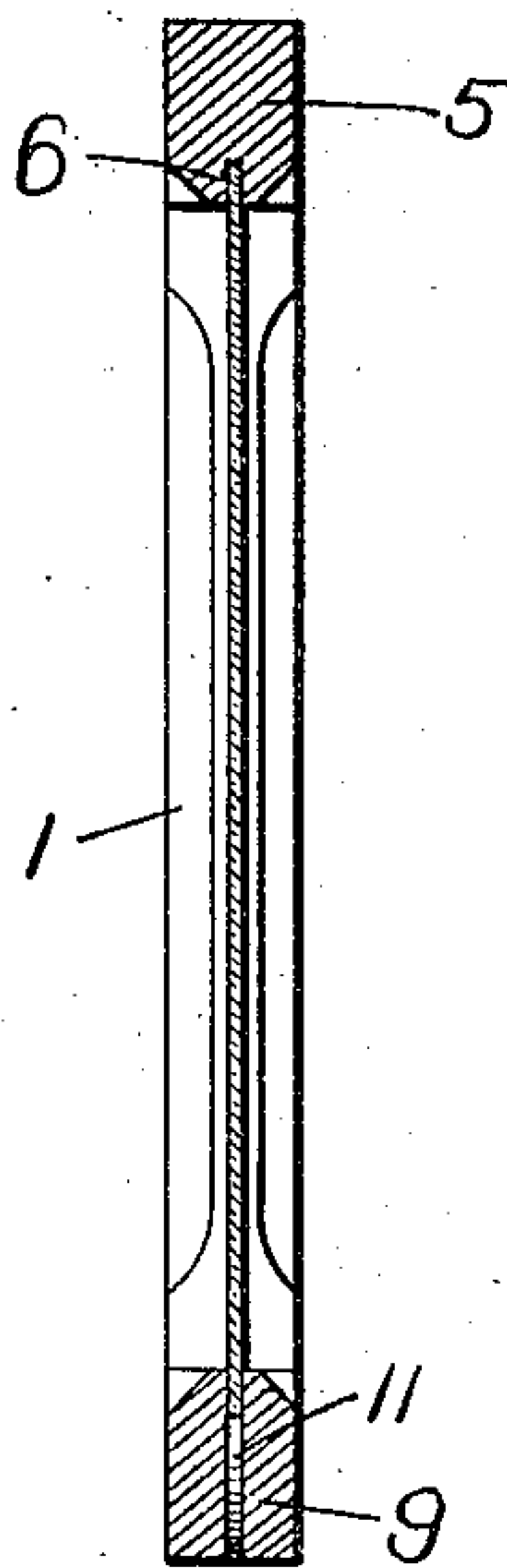


Fig. 3.

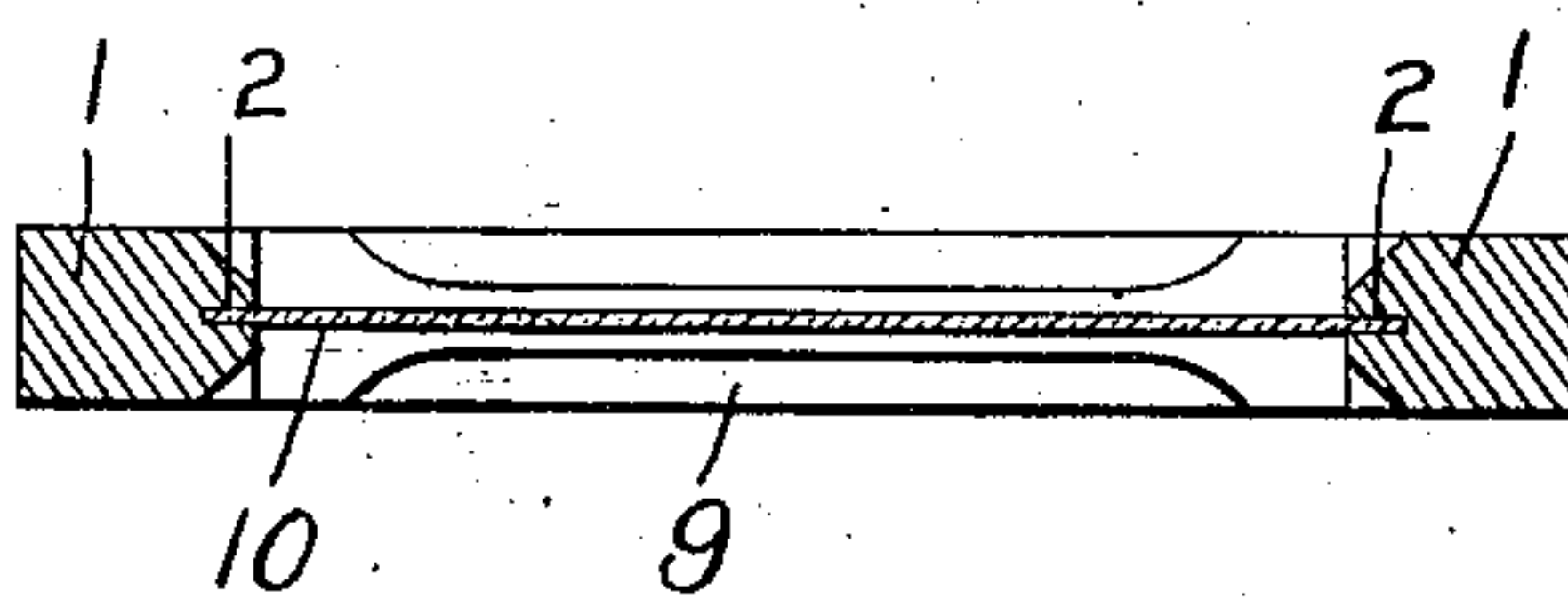
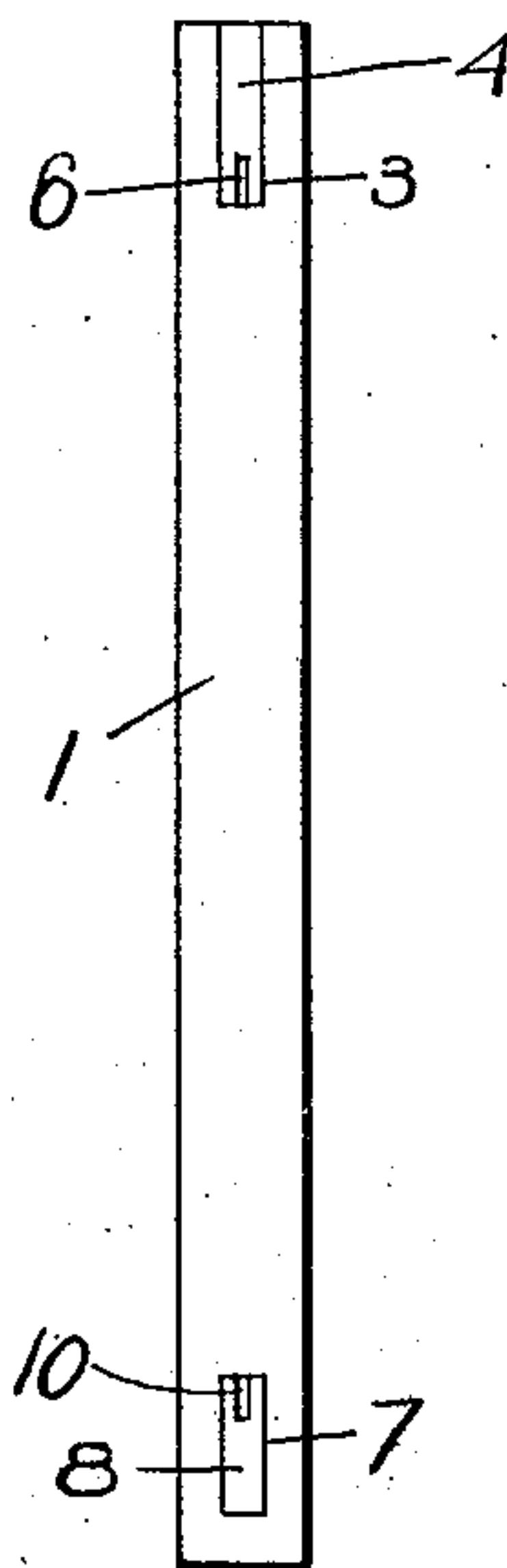


Fig. 4.



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2 SHEETS—SHEET 2.

Fig. 5.

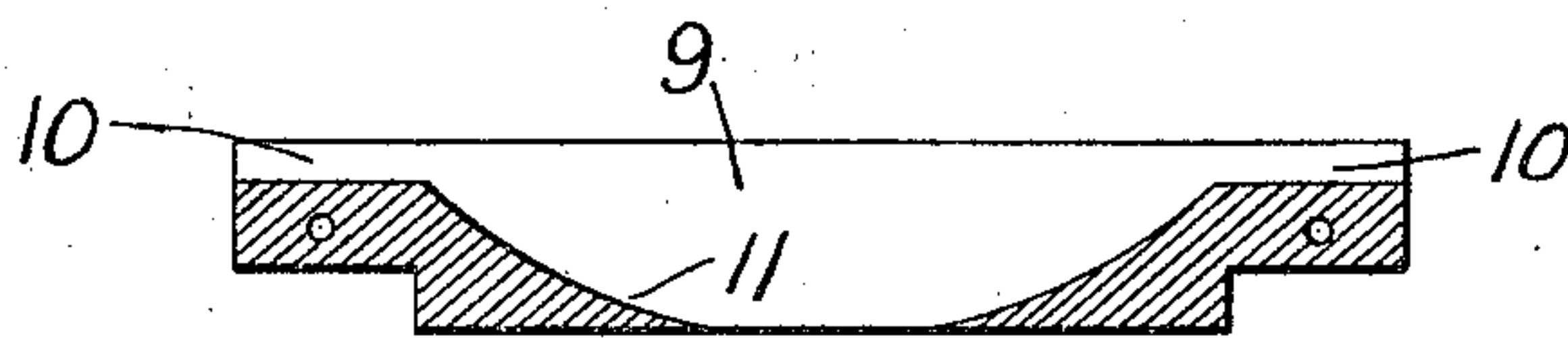


Fig. 6.

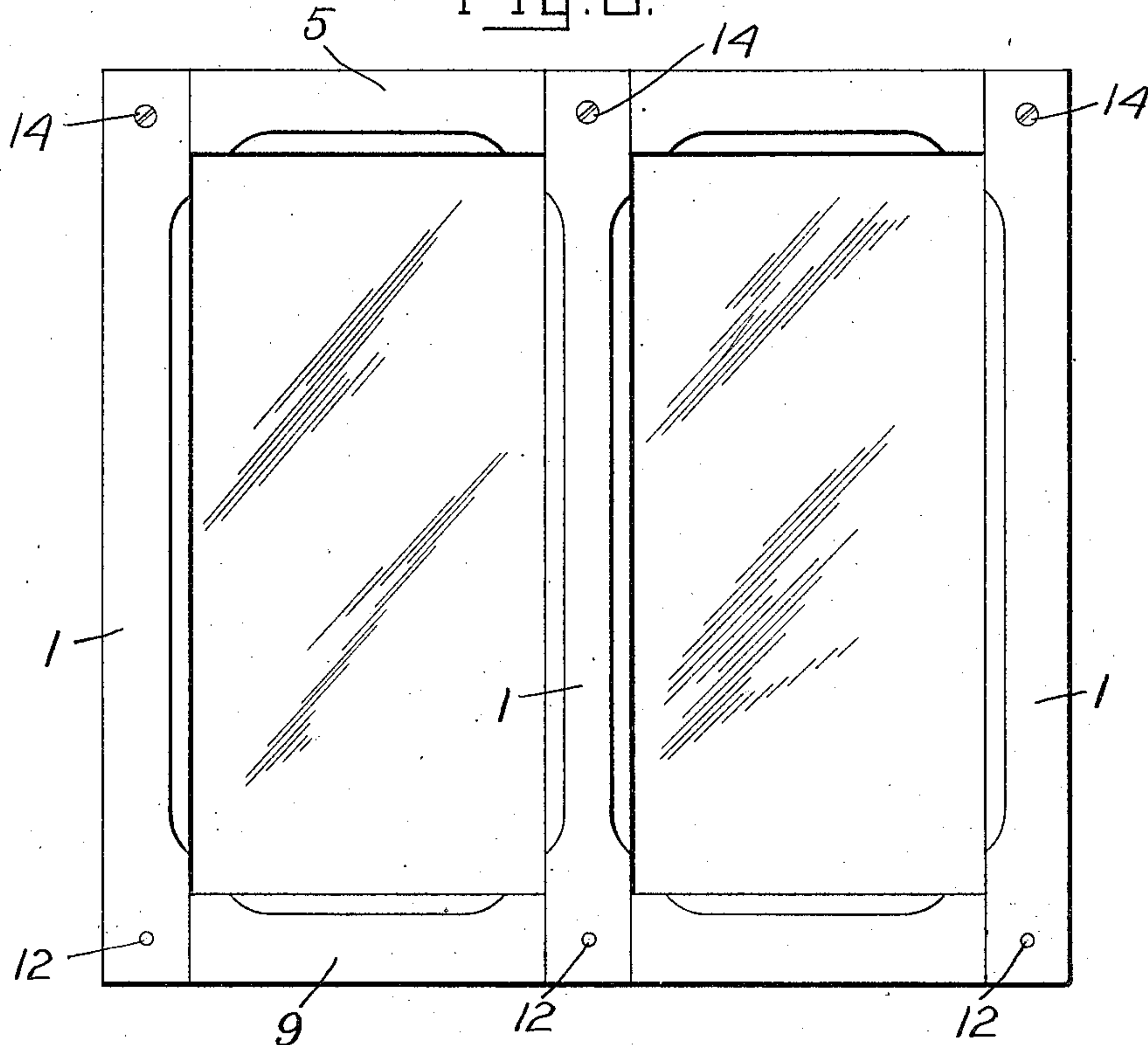
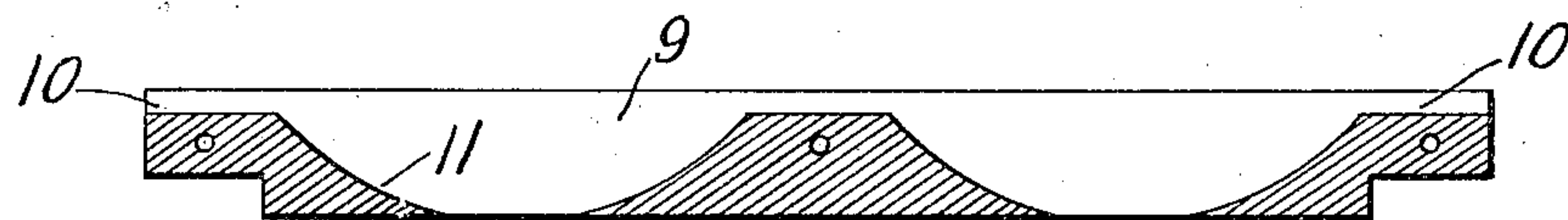


Fig. 7.



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WINDOW-SASH.

No. 889,378.

Specification of Letters Patent.

Patented June 2, 1908.

Application filed March 25, 1907. Serial No. 364,383.

To all whom it may concern:

Be it known that we, OKIE E. KNIGHT and EARL W. KNIGHT, citizens of United States, residing at Burnsville, in the county of Braxton, State of West Virginia, have invented certain new and useful Improvements in Window-Sashes; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to new and useful improvements in window sashes; and it has particular reference to a sash in which the bars are so articulated as to permit of the ready removal of a pane of glass, should the latter become broken and the insertion of a new pane in its stead be necessary.

In connection with the window sash of the above type, the invention aims as a primary object to provide frame bars so constructed that they serve the dual function of including a joint for the bars adjacent thereto, and of serving as a water drain, to prevent the collection of moisture between the pane interstices.

The detail construction will appear in the course of the following description, in which reference is had to the accompanying drawings forming a part of the specification, like numerals designating like parts throughout the several views, wherein,

Figure 1 is a plan view of a window sash constructed in accordance with my invention. Fig. 2 is a central vertical section on the line 2—2 of Fig. 1. Fig. 3 is a central transverse section on the line 3—3 of Fig. 1. Fig. 4 is a side elevation thereof. Fig. 5 is a central longitudinal section of one of the frame bars, to be hereinafter specifically referred to. Fig. 6 is a plan view of a sash adapted to hold two panes of glass, and Fig. 7 is a central longitudinal section of a bar of the sash illustrated in Fig. 6.

The invention in its practical embodiment comprises side bars 1 having their adjacent inner surfaces formed with longitudinal grooves 2. The bars 1 are arranged in parallelism, and at their upper ends are recessed transversely, as at 3, to receive the mortised projections 4 of an upper transverse frame bar 5, the latter having its lower surface provided with a groove 6, extending the entire width thereof and aligned with the grooves 2. The bars 1, at their

lower ends, are formed with registering openings 7, to receive the mortised projections 8 of a lower transverse sash bar 9. The bar 9 is formed in its upper surface with a groove 10 extending the entire width thereof and registering with the grooves 2. The bar 9 is also provided with a curved channel 11, communicating with the groove 10 and also with the exterior of said bar, as is clearly shown in Fig. 5. It is preferred that fastening means 12 be employed to hold the bar 9 against displacement with relation to the bars 1, and that fastening means 14 be employed to hold the bar 5 against displacement with relation to said bars 1. It is preferred to constitute the fastening means 14 of screws, which may be readily removed to permit of the detachment of the upper bar 5. This detachment is necessary whenever a pane of glass is to be inserted or removed, these operations being possible owing to the registering relation of the several grooves 2, 6, and 10.

By reference to Fig. 4 it will be noted that the grooves of the upper and lower frame bars 5 and 9 extend to the end faces thereof, and that the projections 4 and 7 extend wholly through the side bars and to the side faces thereof. Any moisture collecting in the groove 6 of the bar 5 will readily pass by way of the grooves 2 to the groove 10, and from thence will exhaust through channel 11. In like manner, any moisture collecting in the groove 10 will exhaust similarly.

In Fig. 6, it will be noted that the sash is adapted for use with more than one pane, two parallel panes being arbitrarily shown. In such cases the bar 9 is formed with channels corresponding in number and arrangement to the panes, and being individually of the same construction as the channel 11.

It will be readily apparent from the foregoing description that a sash constructed in accordance with this invention is self sustaining, and that no extraneous means is required to hold the pane of glass in position against displacement from wind pressure.

While the elements herein shown and described are well adapted to serve the functions set forth, it is obvious that various minor changes may be made in the proportions, shape, and arrangement of the several parts, without departing from the spirit or scope of our invention, as defined by the appended claims.

What is claimed, is—

In a window sash, side bars formed with longitudinal grooves to receive the edges of a pane of glass and a lower cross bar formed
5 at its ends with longitudinal grooves to receive the edges of said pane and being in registry with said first named grooves, said cross bar being formed between its ends with
10 a centrally located channel communicating with said grooves, and with the lower face of said cross bar, said cross bar having its end

portions extended wholly through the side bars, the grooves in said cross bar extending to the end faces thereof.

In testimony whereof, we affix our signatures, in presence of two witnesses. 15

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