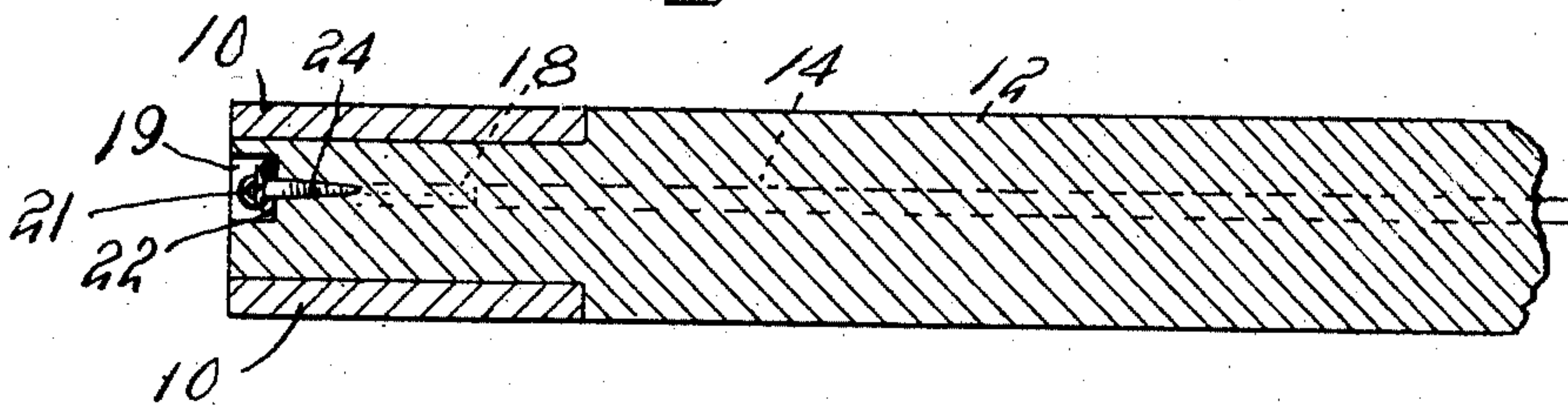
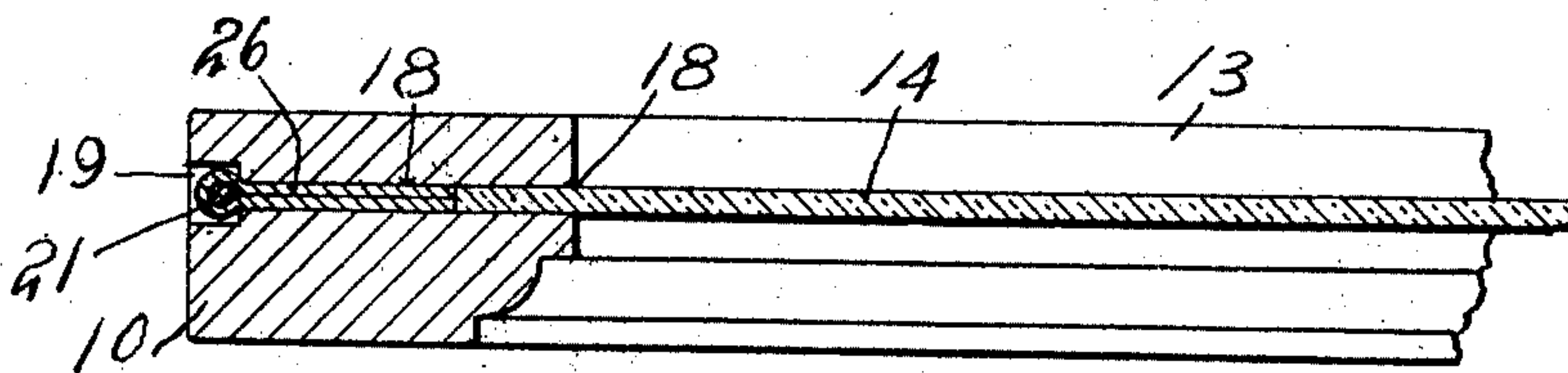
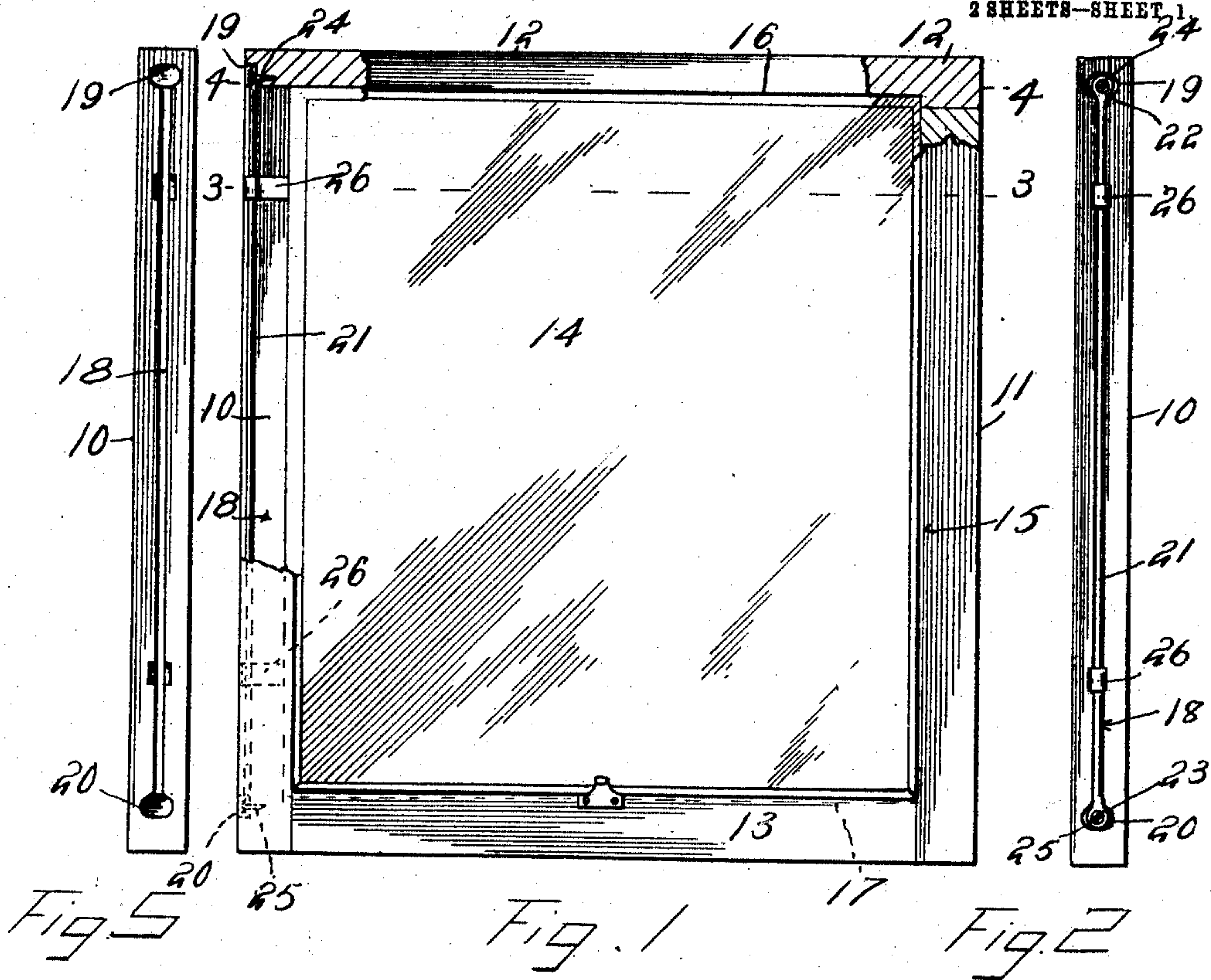


A. E. CHERRY.
WINDOW PANE FASTENER.
APPLICATION FILED AUG. 14, 1908.

928,359.

Patented July 20, 1909.

2 SHEETS—SHEET 1



Witnesses
J. C. Simpson.
M. H. Miller

Fig. 4. Addie E. Cherry.

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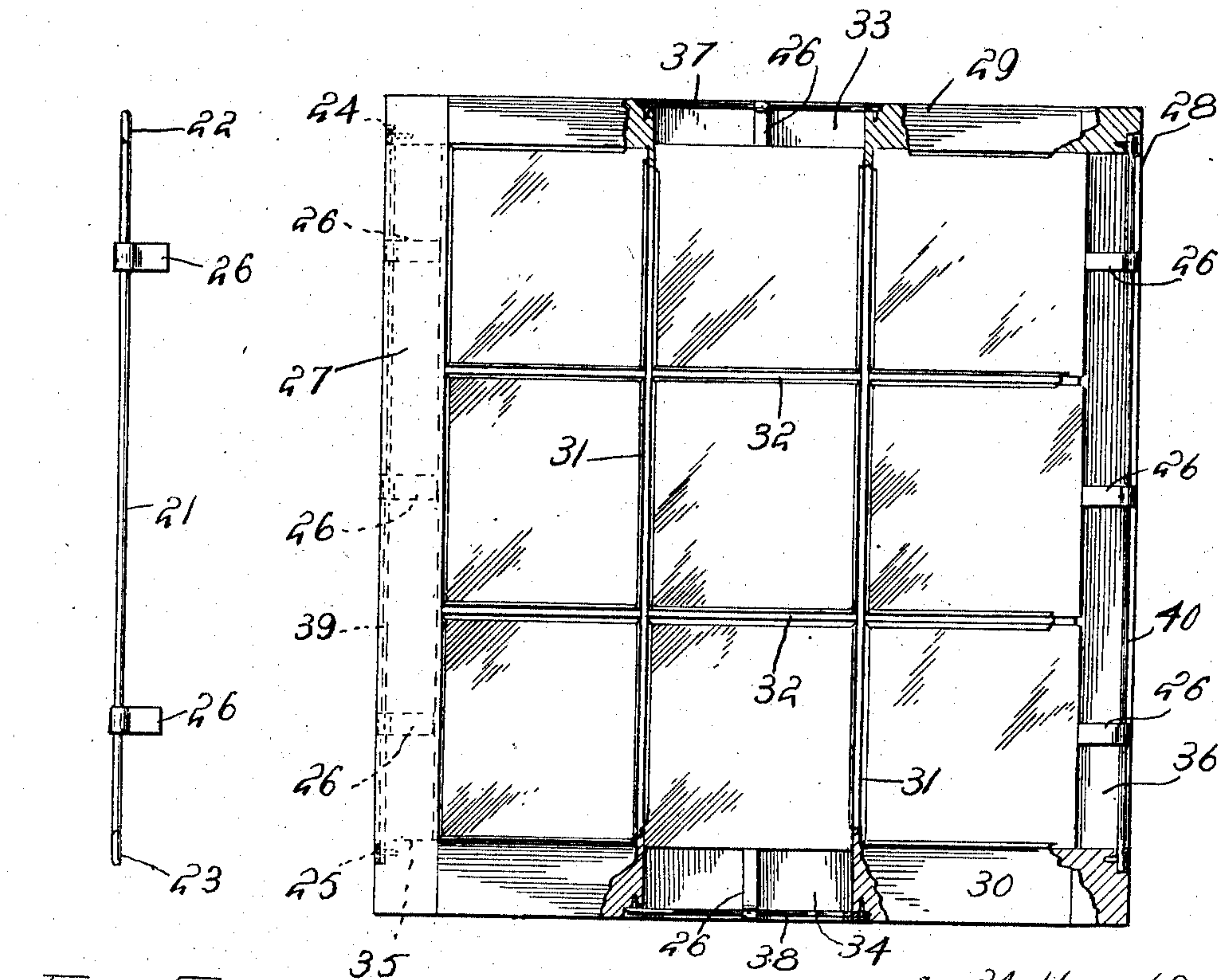


Fig. 6.

Fig. 7.

Fig. 8.

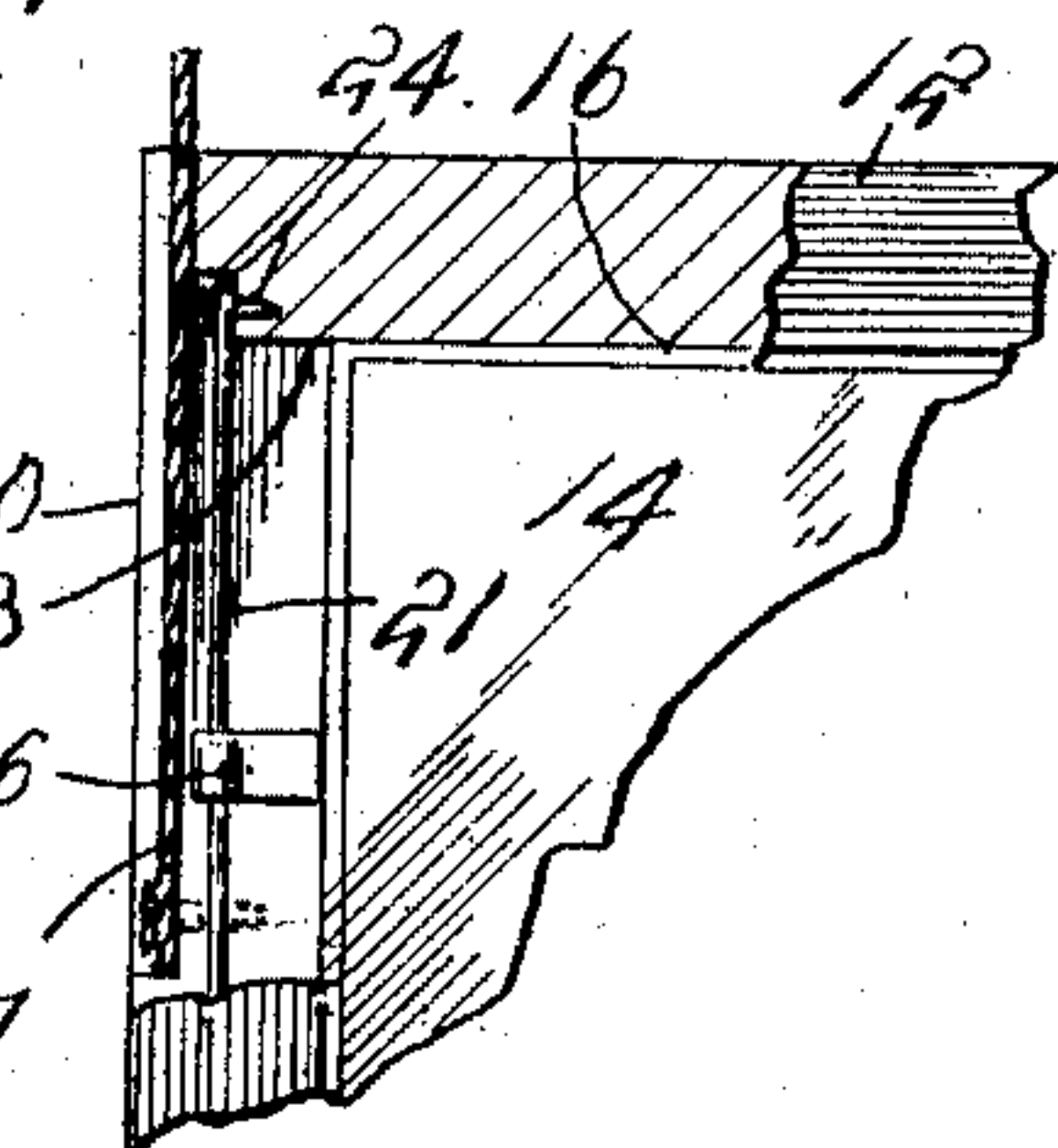
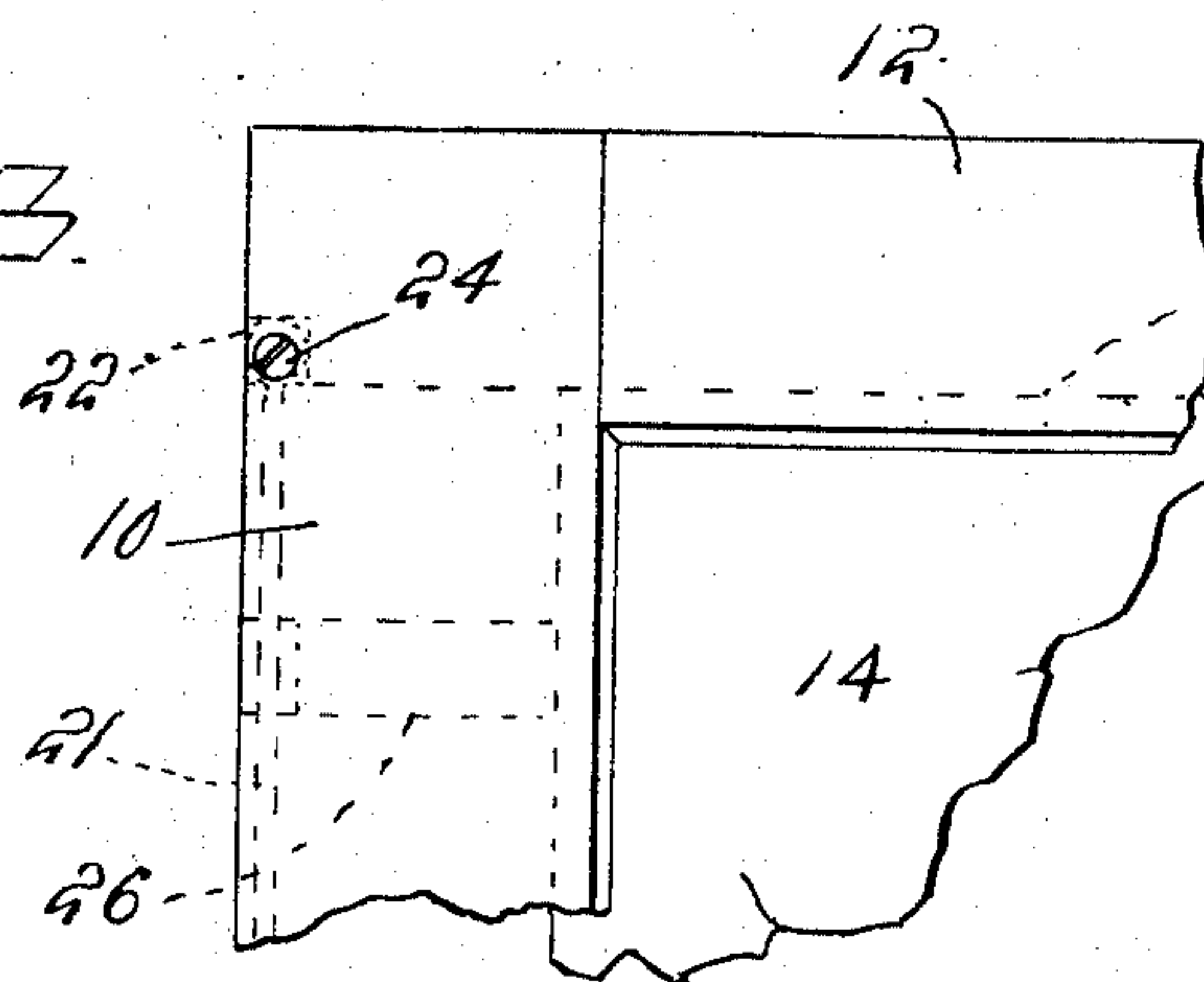


Fig. 9.

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UNITED STATES PATENT OFFICE.

ADDIE E. CHERRY, OF BELLWOOD, PENNSYLVANIA.

WINDOW-PANE FASTENER.

No. 928,359.

Specification of Letters Patent.

Patented July 20, 1909.

Application filed August 14, 1908. Serial No. 448,567.

To all whom it may concern:

Be it known that I, ADDIE E. CHERRY, a citizen of the United States, residing at Bellwood, in the county of Blair, State of Pennsylvania, have invented certain new and useful Improvements in Window-Pane Fasteners; and I 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 devices for securing glass in window sashes without the use of putty, and has for one of its objects to simplify and improve the construction and increase the efficiency and utility of devices of this character.

Another object of the invention is to provide a simply constructed device of this character whereby the glass may be inserted and removed without destroying any parts, and without interfering with the operations of the weight cords or other suspending means or any of the ordinary fastening means.

With these and other objects in view the invention consists in a sash provided with glass receiving grooves in three of its members and an open slot in the other member through which the glass is inserted into the grooves and a holding means in the form of a wire inserted into the slot and provided with clips bearing against the glass, the wire having suitable securing devices such as screws to retain it in place.

The invention further consists in certain novel features of construction as hereafter shown and described and then specifically pointed out in the claims, and in the drawings illustrative of the preferred embodiment of the invention, Figure 1 is an elevation of a window sash partly in section with the improved device applied. Fig. 2 is an edge view of the sash with the improved glass holder applied. Fig. 3 is a transverse section enlarged on the line 3—3 of Fig. 1. Fig. 4 is a section enlarged on the line 4—4 of Fig. 1. Fig. 5 is an edge view of the sash with the glass securing device removed. Fig. 6 is a side elevation of the securing rod together with two of the holding clips. Fig. 7 is a representation of a sash having a plurality of window panes, illustrating the manner of applying the improved device to a sash of this character. Fig. 8 is a detail illustrating a modification in the con-

struction. Fig. 9 is a sectional detail illustrating the manner of applying the improved device to sashes having weight cords.

The improved device may be applied to any of the various sizes and forms of window sashes, and for the purpose of illustration is shown applied to a conventional form of sash, the side rails or stiles represented respectively at 10—11, the top rail at 12, the bottom rail at 13, and the glass at 14. One of the stiles, for instance the stile 11, is provided with a longitudinal groove 15 and the top and bottom rails are provided respectively with glass receiving grooves 16—17 while the remaining stile 10 is provided with a transverse longitudinal slot 18, the ends of the slot being even with the grooves 16—17 so that the glass 14 may be inserted into the grooves in the sash through the slot. At its ends the slot 18 is extended in the form of shallow recesses 19—20 and enlarged laterally, and fitting into the slot outside the glass is a rod 21 having eyes 22—23 at the ends adapted to fit into the recesses 19—20 and secured in place by screws 24—25 passing through the eyes and into the end rails 12—13. Connected to the rod 21 are clips 26, preferably formed by bending a strip of sheet metal such as tin around the rod with the ends projecting into the slot and against the adjacent edge of the glass and thus holding the glass in position. The rod 21 will preferably be of resilient metal such as steel or hardened brass and the clips 26 will be slightly longer than the distance between the rod and the adjacent edge of the glass so that a slight degree of strain is applied to the glass when the screws 24—25 are turned "home", and thus impart a sufficient pressure upon the glass to prevent it from rattling.

The above description assumes that the slot 18 and the rod 21 are to be formed in one side of the sash, but it will be obvious that the slot and rod may be applied to one of the end members 12—13 if preferred without structural changes in the device, but as this modification does not call for any structural change it is not deemed necessary to illustrate this means of applying the invention.

When the improved device is applied to sashes to which weight cords are applied the recesses 19—20 will be of sufficient depth to enable the rod 21 to be disposed sufficiently deep in the side of the sash to permit the location of the upper end of the usual cord

securing cavity and groove without interfering with the rod, as shown at 7 in Fig. 9.

In Fig. 7 is shown the manner of applying the improved device to a sash having a plurality of small panes of glass, the panes being separated by division members or mullions of the usual form. For the purpose of illustration a sash having nine panes of glass is shown, the stiles or side members represented at 27—28, the top rail at 29, and the bottom rail at 30, the vertical division members at 31 and the horizontal division members at 32. When applying the improved device to a sash of this form slots 33—34 are formed in the end rails 29—30 their entire length, and slots 35—36 are formed in the side members 27—28 opposite the space between the transverse division members 32, while slots are also formed through the division members 32 between the division members 31, while glass receiving grooves will be formed in the inner faces of the side members 27—28 between the end rails 29—30 and the transverse members 32 respectively, and glass receiving grooves will also be formed in the side faces of the vertical division members 31 respectively between the end rails 29—30 and the transverse division members 32 and also in the upper face of the upper division member 32 and the lower face of the lower division member 32 respectively between the side rails 27 and the vertical division members 31. By this means it will be obvious that three panes of glass may be inserted through each of the slots 35—36, and three panes of glass with their edges engaged through each of the slots 35—36, and wise through the slots in the central portion of the division members 32. The panes of glass thus inserted are then secured in place by a rod 37 inserted into the slot 33, a rod 38 inserted into the slot 34 and rods 39—40 inserted respectively into the slots 35—36, these rods being provided with the clips 26 and secured in place by the screws, as above described.

While I have been particular in thus describing the details of the construction shown in Fig. 7 it will be obvious that the improved device may be applied to sashes containing any number of the panes of glass without

structural change in the improved security means, and it is not deemed necessary therefore to fully illustrate all of the various forms of sashes to which the improved device may be applied.

In Fig. 8 a slight modification is shown in the construction consisting in turning the rod 21 with the eyes 22—23 flatwise of the sash and inserting the screws 24—25 through the inner face of the sash member, which arrangement may be employed under some circumstances if required, but it is obvious that this modification does not constitute a departure from the principle of the invention as the results produced and the mode of operation are substantially the same.

The improved device is simple in construction, can be readily applied to the sash and holds the glass firmly in place without the use of putty or other similar fastening means, and in event of the breakage of a pane of glass a new one may be readily inserted by any person without previous skill, and without destroying any parts of the device.

What is claimed, is:—

1. In a device of the class described, a sash having glass receiving grooves in three of its members and an open slot in the other member through which the glass is inserted into the grooves, said slot having recesses at its ends, a rod engaging in said slot with eyes at the ends bearing in said recesses, clips carried by said rod and adapted to bear against the glass, and fastening means operating through said eyes.

2. In a device of the class described, a sash having glass receiving grooves in three of its members and an open slot in the other member through which the glass is inserted into the grooves, a rod engaging in said slot, clips carried by said rod and adapted to bear against said glass, and fastening means operating to secure said rod to said sash.

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

ADDIE E. CHERRY.

Witnesses:

F. HOOVER,

J. T. CRISWELL.