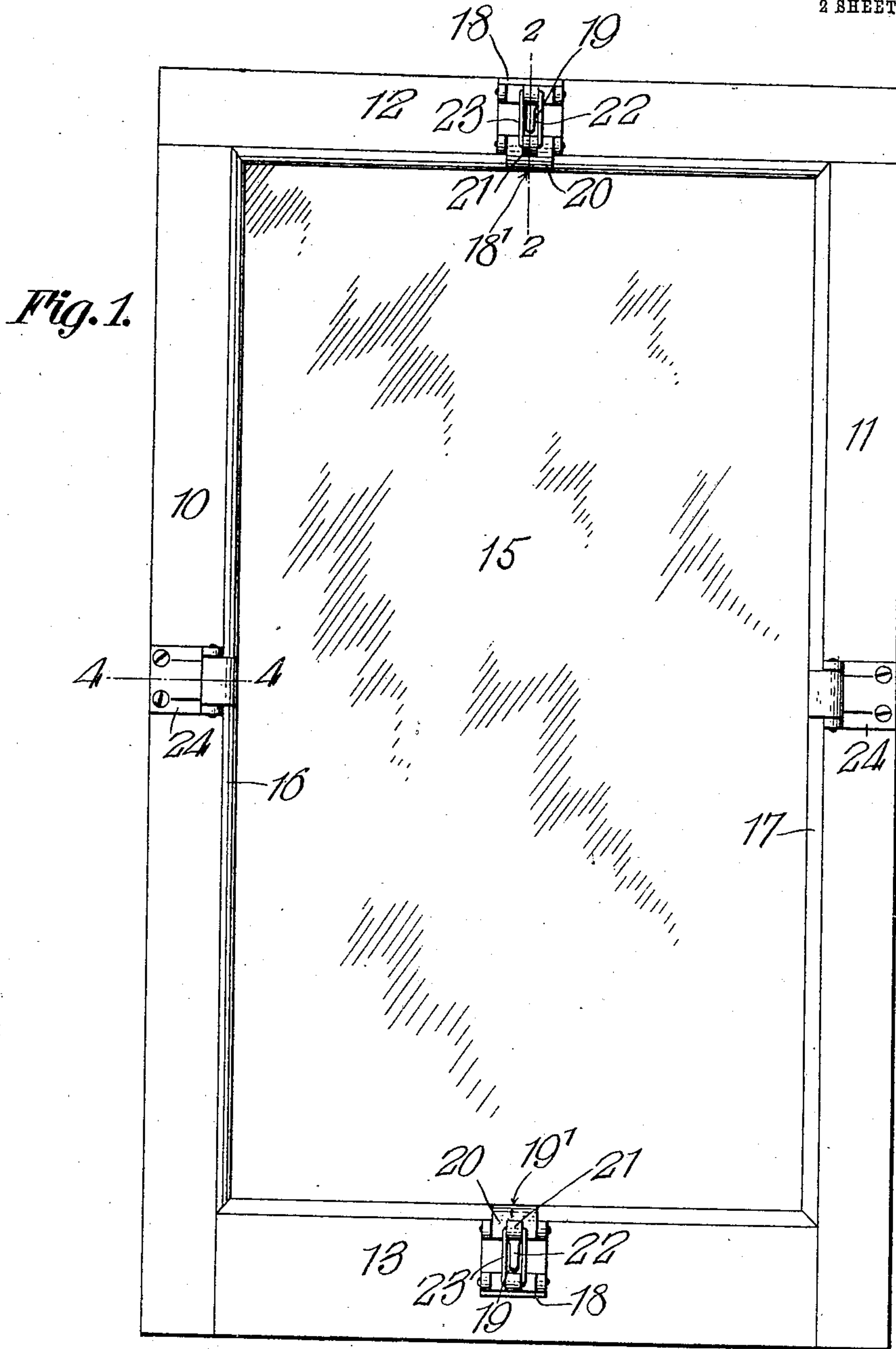


H. G. FRAZIER.
 WINDOW PANE FASTENER.
 APPLICATION FILED JUNE 9, 1908.

912,302.

Patented Feb. 16, 1909.
 2 SHEETS—SHEET 1.



Witnesses
Chas. C. Richardson,
C. H. Woodward.

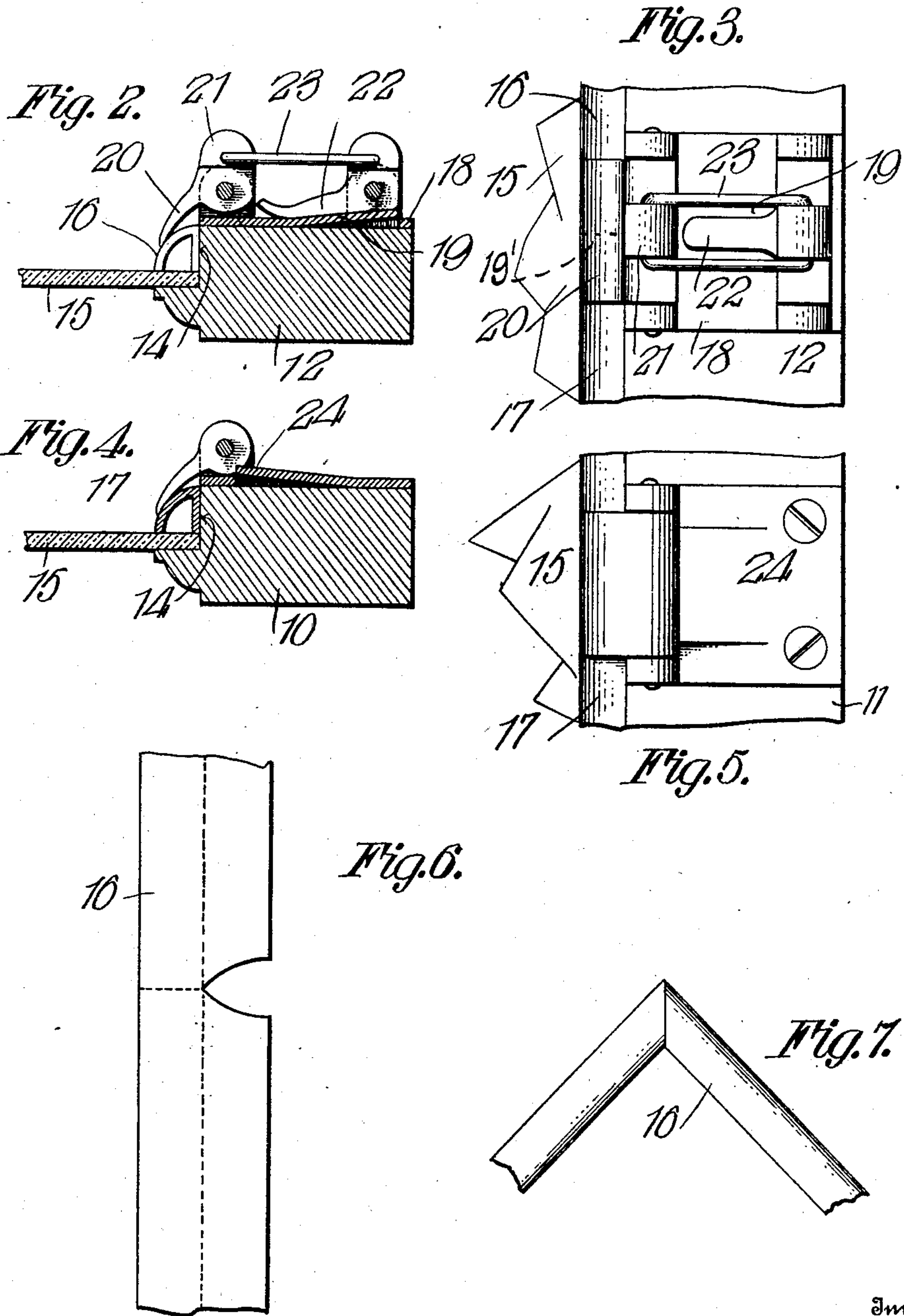
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UNITED STATES PATENT OFFICE.

HENRY G. FRAZIER, OF BASIC CITY, VIRGINIA.

WINDOW-PANE FASTENER.

No. 912,302.

Specification of Letters Patent.

Patented Feb. 16, 1909.

Application filed June 9, 1908. Serial No. 437,585.

To all whom it may concern:

Be it known that I, HENRY G. FRAZIER, a citizen of the United States, residing at Basic City, in the county of Augusta, State of Virginia, 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 holding window glass in the sash without the use of putty or like securing means, 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 a broken pane of glass may be quickly removed and a whole pane inserted without removing the sash from the frame.

With these and other objects in view the invention consists in certain novel features of construction as hereafter shown and described and then specifically pointed out in the claim, and in the drawings illustrating the preferred embodiment of the invention, Figure 1 is a view of a window sash with the improvement applied. Fig. 2 is a section enlarged on the line 2—2 of Fig. 1. Fig. 3 is a plan view of the catch device shown in Fig. 2. Fig. 4 is a section enlarged on the line 4—4 of Fig. 1. Fig. 5 is a plan view of the parts shown in Fig. 4. Fig. 6 is a detail enlarged of a portion of one of the holding members before it is bent into U shape. Fig. 7 is an enlarged view of one of the folded corners of one of the U shaped holding members.

The improved device may be applied to window sashes of the ordinary construction and for the purpose of illustration is shown thus applied, the side members or stiles of the sash being represented at 10—11, the top member or rail at 12, and the bottom member or rail at 13, with the glass receiving rabbet at 14, and the glass at 15 bearing at its edges in the rabbet.

The retaining element comprises two U shaped members 16—17 bearing in the rabbet and against the glass and with their terminals meeting at 18'—19' intermediate two of the opposite sash members, preferably

the rails 12—13, as shown. The retaining element is preferably curved in transverse section, as shown, and occupies the space in which the putty is usually employed. The retaining element will be of metal, preferably of brass nickel plated, or otherwise protected or ornamented.

Spring actuated catch devices are arranged upon the sash and bearing over the members 16—17 at their meeting points, to retain them in place and releasable when the members are to be removed, one catch device only being employed at each side and engaging the confronting portions of both of the members 16—17. Spring actuated retaining devices are also employed to hold the members 16—17 at one or more intermediate points, as shown.

One of the catch devices for holding the confronting ends of the members 16—17 is shown enlarged in Figs. 2 and 3 and consists of a base plate 18 connected by screws or other fastening means to the sash members and provided with a spring 19. Swinging from the base 18 is an arm 20 swinging from the plate 18 and bearing over the confronting portions of the members 16—17, the arm 20 having an extension 21 and the base 18 having a lock lever 22 engaging the spring 19 and coupled to the extension 21 by a link 23. By this means when the lock lever is in closed position as in Fig. 2, the arm 20 will be held with sufficient firmness to prevent accidental displacement of the retaining elements, while at the same time the lock levers are easily releasable when the glass is to be renewed.

Disposed upon the side members of the sash are spring catches 24, bearing over the adjacent portions of the U members and holding them yieldably in position.

The device is simple in construction, can be applied to all sizes and forms of sashes and either inside or outside of the window, but will preferably be applied to the insides of the sash so that the glass will not be in danger of being surreptitiously removed.

The U shaped holding members are each formed from a single strip of metal bent upon itself longitudinally with the sides spaced apart and one side bearing against the inner face of the rabbet and the other side bearing by its edge against the glass, the strip formed with a cleft extending half way across it at the points where it is to be bent

and then folded together to dispose the end portions at right angles to the connecting portion, as shown.

What is claimed, is:—

5 The combination with a sash frame having a glass receiving rabbet, of retaining elements comprising U frames bearing in the rabbet and against the glass and meeting intermediate the sash members at opposite
10 sides, spring controlled catch devices car-

ried by said sash and bearing over said frames at their meeting points, and devices carried by the sash and bearing over said retaining elements intermediate their ends.

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

HENRY G. FRAZIER.

Witnesses:

SAML. H. ARNALL,
GUY B. WILLSON.