

J. E. SMITH.
WINDOW PANE FASTENER.
APPLICATION FILED FEB. 23, 1909.

953,866.

Patented Apr. 5, 1910.
2 SHEETS—SHEET 1.

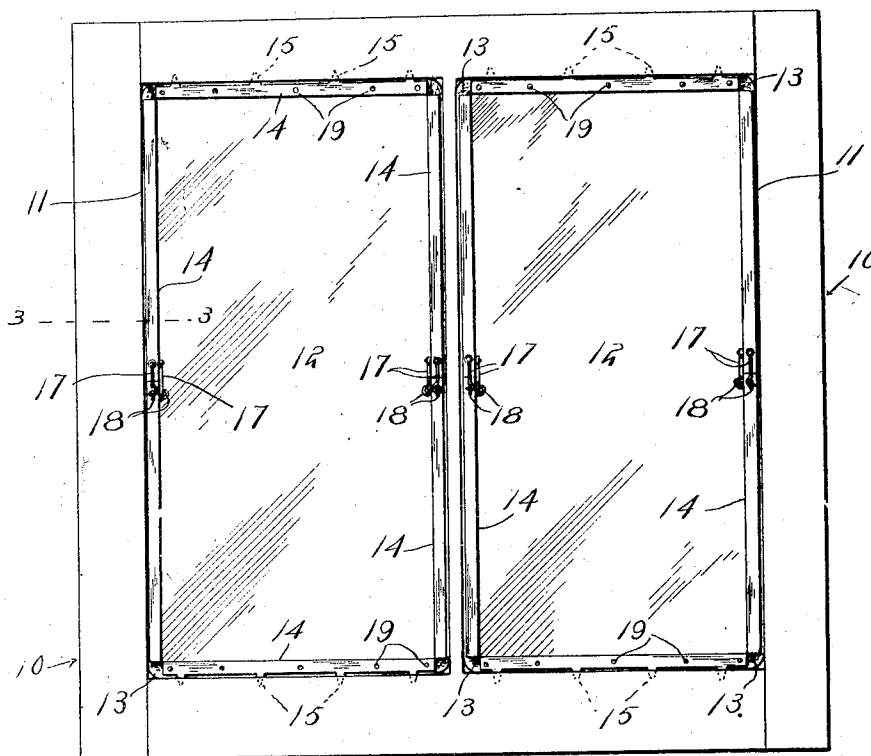


Fig. 1

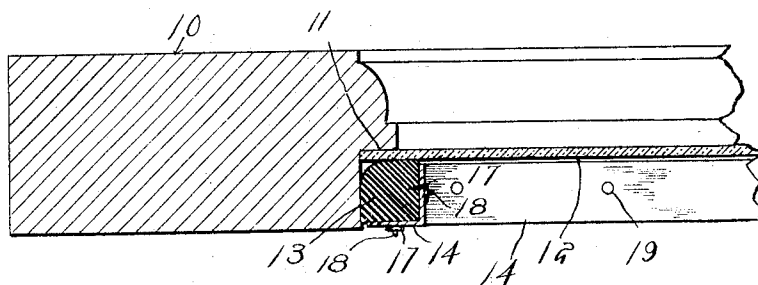


Fig. 3.

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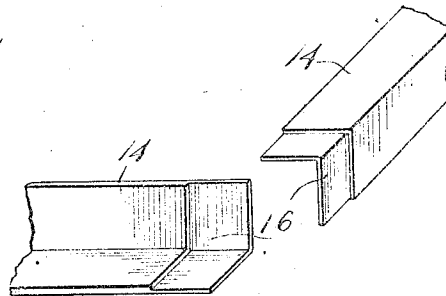
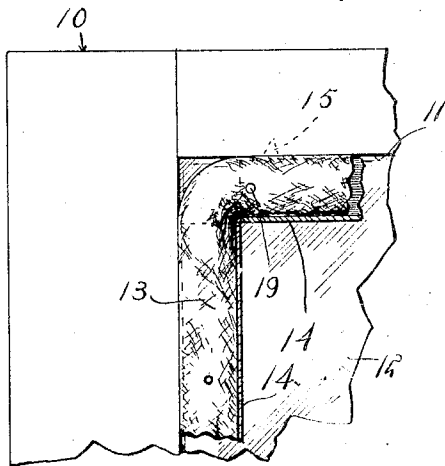
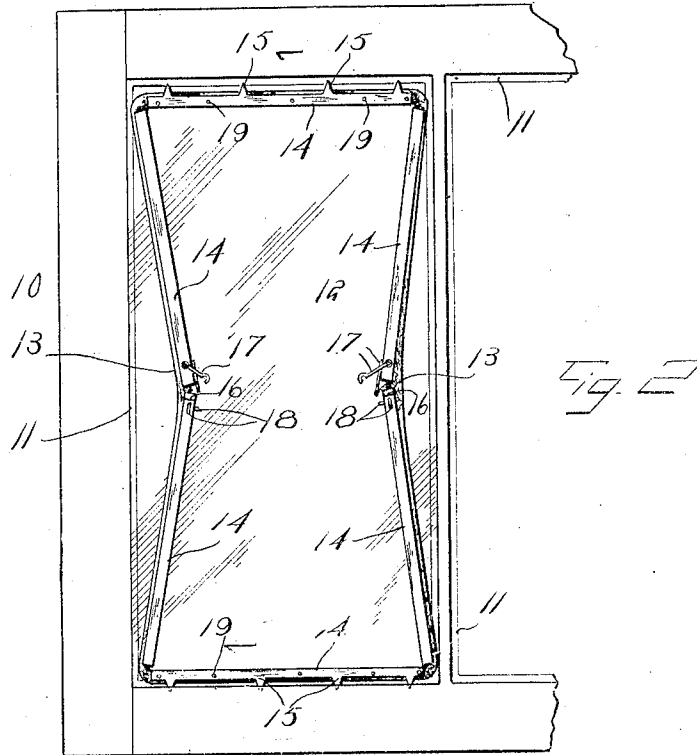


Fig. 4.

Fig. 5.

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UNITED STATES PATENT OFFICE.

JAMES ELMER SMITH, OF ELLINWOOD, KANSAS.

WINDOW-PANE FASTENER.

953,866.

Specification of Letters Patent.

Patented Apr. 5, 1910.

Application filed February 23, 1909. Serial No. 479,336.

To all whom it may concern:

Be it known that I, JAMES ELMER SMITH, a citizen of the United States, residing at Ellinwood, in the county of Barton, State of Kansas, 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 window panes in their 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.

With this 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 claims, and in the drawings illustrative of the preferred embodiment of the invention, Figure 1 is a view of a window sash including its sash supporting rabbet and the glass bearing upon the rabbet, with the improved fastening device in holding position. Fig. 2 is a similar view with the holding device in disconnected position. Fig. 3 is a transverse section, enlarged, on the line 3—3 of Fig. 1. Fig. 4 is a sectional detail of one corner of the sash. Fig. 5 is a detail perspective view of the meeting ends of two of the rigid members, illustrating the manner of forming the joint between them.

The improved device may be applied to any size or form of sash, or to sashes containing any number of panes of glass, but for the purpose of illustration a double pane sash is shown and represented as a whole at 10, and formed with the usual glass supporting rabbet 11, with the glass represented at 12 bearing upon the rabbet.

The improved holding device comprises an endless strip of flexible material, such as rubber represented at 13, and bearing within the rabbet and against the portion of the glass which bears upon the rabbet. This flexible element may be of any required form transversely, but will preferably be cylindrical or circular, as shown in Fig. 3.

Bearing upon the flexible member 13 are a plurality of rigid members 14, preferably in L shape transversely. One of the rigid members will be connected to the flexible

member opposite the end members of the sash, and two of the rigid members will be connected to the portion of the flexible member opposite each of the side rails of the sash, with the abutting ends of the rigid members 60 closely engaging, as shown. The rigid members which are located adjacent to the end members of the sash are each provided with a plurality of spaced spurs 15, adapted to be embedded in the sash when pressure is applied, as hereafter explained. The abutting ends of the rigid members which are connected to the flexible member opposite the side rails of the sash are preferably telescoped for a short distance, as represented at 70 16, and likewise provided with a hook 17 swinging from one of the rigid members and engaging with a loop 18 upon the other rigid member, whereby the rigid members of the side rails are firmly connected when in position, to retain the device coupled to the sash. The rigid members 14 are connected to the flexible member in any suitable manner but preferably by rivets represented at 19. 80

To apply the improved device the hooks 17 are detached and the rigid members which are to bear against the side rails of the sash moved inwardly, or toward each other. This action will also move the rigid members which are to be engaged with the end members of the sash toward each other, and cause the device to assume the position shown in Fig. 2, and when in this position the device is adapted to be arranged upon 90 the glass, and the rigid side members moved outwardly until they are in longitudinally aligned positions, as shown in Fig. 1. This movement forces the rigid members which are provided with the spurs against the end 95 members of the sash, and presses the spurs into the same and forces the rigid members in position to be coupled by closing the hooks 17.

It will be understood that the lengths of 100 the flexible member 13 and the rigid members 14 will be arranged to correspond to the size of the sash to which the device is applied, so that when arranged in position as above described, the parts will fit closely 105 within the sash, and be firmly locked therein. The rigid members 14 are preferably of sheet metal, and may be of brass or other metal or metallic compounds, and may be plated, painted or otherwise coated as may 110

be preferred. The rigid members may be of any desired ornamental configuration, and will add to the appearance of the sash.

What is claimed, is:—

- 5 1. A window pane fastener comprising a plurality of strips L-shape transversely and corresponding in length respectively with the inner faces of the members of a window sash and with their terminals unconnected,
- 10 an endless strip of flexible material adapted to bear upon the glass and within the rabbet of a sash, and connecting means between said strips and said flexible member whereby the flexible member forms the only coupling
- 15 means between the several strips.

2. A window pane fastener comprising a plurality of strips L-shaped transversely, two of said strips corresponding in length with

the inner faces of the end members of a sash and the remaining strips arranged in pairs 20 and corresponding in length to the side members of a sash, the contiguous ends of each pair of said side strips being arranged to telescope for a short distance, an endless strip of flexible material adapted to bear 25 upon the glass and within the rabbet of a sash, and connecting means between said flexible member and said strips and constituting the only coupling means between the several strips. 30

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

JAMES ELMER SMITH.

Witnesses:

GEO. J. DOTTER,

NICHOLAS SPRINKER.