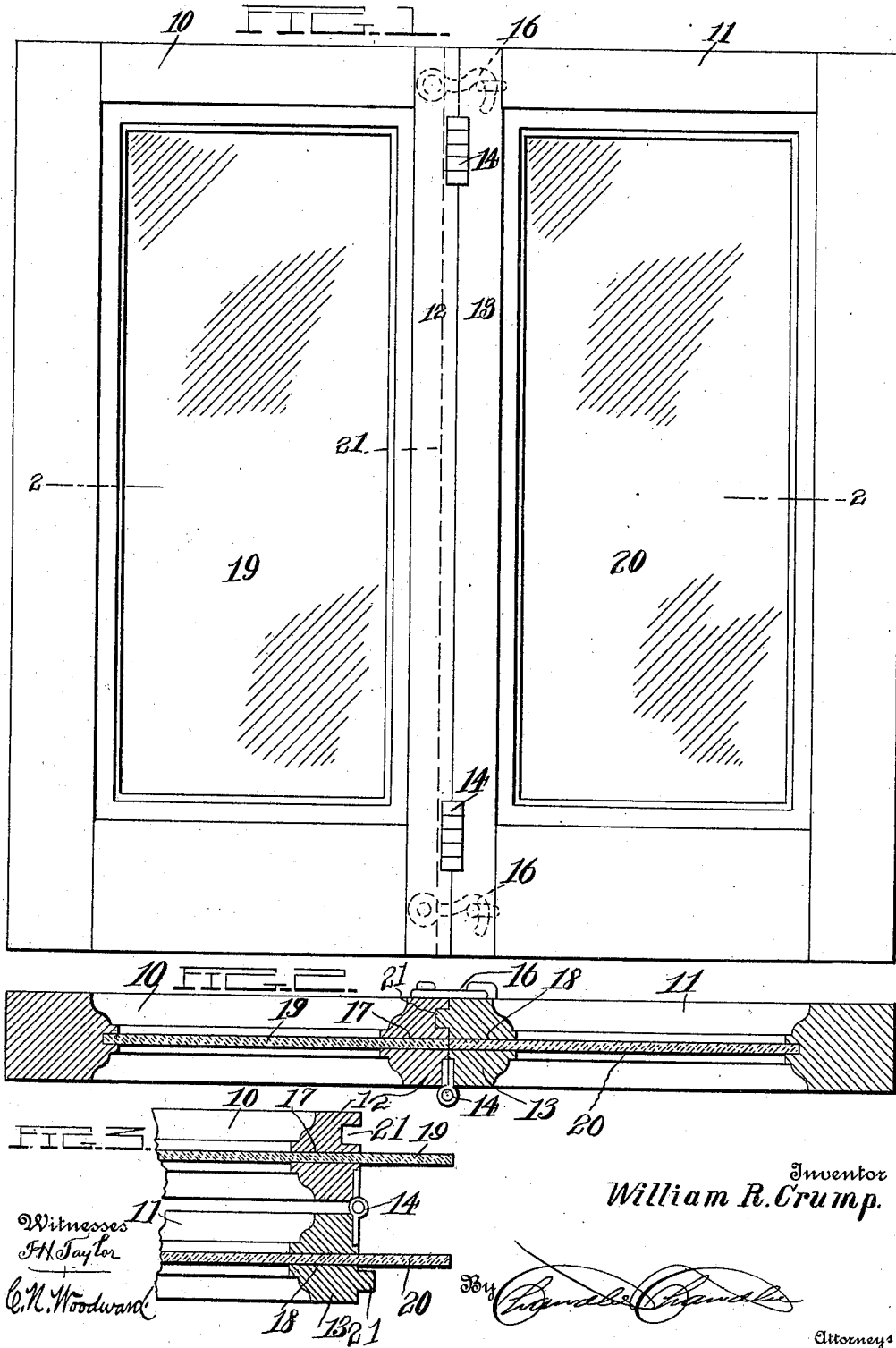


W. R. CRUMP.
WINDOW SASH.
APPLICATION FILED MAY 31, 1910.

977,712.

Patented Dec. 6, 1910.



UNITED STATES PATENT OFFICE.

WILLIAM R. CRUMP, OF COLLINSVILLE, TEXAS.

WINDOW-SASH.

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Specification of Letters Patent.

Patented Dec. 6, 1910.

Application filed May 31, 1910. Serial No. 564,247.

To all whom it may concern:

Be it known that I, WILLIAM R. CRUMP, a citizen of the United States, residing at Collinsville, in the county of Grayson, State of Texas, have invented certain new and useful Improvements in Window-Sashes; 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 improvements in window sashes, more particularly to devices of this character in which the window glass is secured in the sash without the use of putty and similar fastening devices, 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 device of this character which may be applied without structural changes to sashes of various sizes and to sashes containing any required number of panes of glass.

With these and other objects in view, the invention consists in certain novel features of construction as hereinafter 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 side elevation of the device with the sash constructed in accordance with the improved device, Fig. 2 is a section on the line 2—2 of Fig. 1 with the sash in open position, Fig. 3 is a sectional detail illustrating the arrangement with the sash in open position or arranged to permit the insertion or removal of the panes of glass, and showing the panes of glass partly removed.

The improved device is formed in two sections, preferably divided longitudinally, the sections being represented as a whole respectively at 10—11. Each of the sash sections is formed with outer side members and end members of the usual form and with inner side members represented at 12—13 and united preferably by hinges 14 at one side, and with hooks or other suitable fastening devices 16 at the opposite side. By this arrangement the sash mem-

bers may be maintained in open position, as shown in Fig. 1 and occupy the same relative position as an ordinary sash, and presents the same appearance as an ordinary two-pane sash.

The outer end members of the sash sections 10—11 are provided with glass receiving channels, while the inner members 12—13 are provided with glass receiving slots indicated at 17—18, the slots extending entirely through the members 12—13 so that when the sash sections are arranged in open position as shown in Figs. 1 and 2, the slots 17—18 are continuous, as shown in Fig. 2. By this arrangement it will be obvious that when the sash sections 10—11 are swung upon their hinges 14 into the position indicated in Fig. 3 the slots 17—18 are exposed so that the panes of glass, represented respectively at 19—20, may be inserted into the channels in the slots, and then when the sash sections are arranged in alignment as shown in Figs. 1 and 2, and the hooks 16 connected, the panes of glass will be held in position and prevented from removal, and require no further securing means, care being taken that the panes of glass are so cut that their confronting edges will be located in relatively close engagement, to prevent rattling or looseness.

If preferred the members 12—13 may be formed with a tongue and groove joint represented at 21, to render the joint between the sash sections air-tight, and likewise to increase the strength and relieve the hinges and hooks largely from strain.

What is claimed is:—

1. A window sash formed in two sections having glass receiving channels in their members and arranged edge to edge, the channels of the confronting members of the sash sections being extended entirely through the same to permit the glass to engage edge to edge, hinges uniting the confronting members of the sash sections at one side, and fastening means uniting said confronting members at the opposite sides.

2. A window sash formed in two sections having glass receiving channels in their members and arranged edge to edge, the channels of the confronting members of the sash sections being extended entirely through

the same to permit the glass to engage edge
to edge and the adjacent faces of the con-
fronting sash members tongued and grooved
longitudinally at one side of the glass re-
ceiving channel, hinges uniting the con-
fronting members of the sash sections at one
side, and fastening means uniting said con-
fronting members at the opposite side.

In testimony whereof, I affix my signa-
ture, in presence of two witnesses.

WILLIAM ^{his} X R. CRUMP.
mark

Witnesses:

J. H. HULME,

D. L. STEPHENSON.