

E. MARSHALL.

WINDOW.

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978,768.

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Fig. 1.

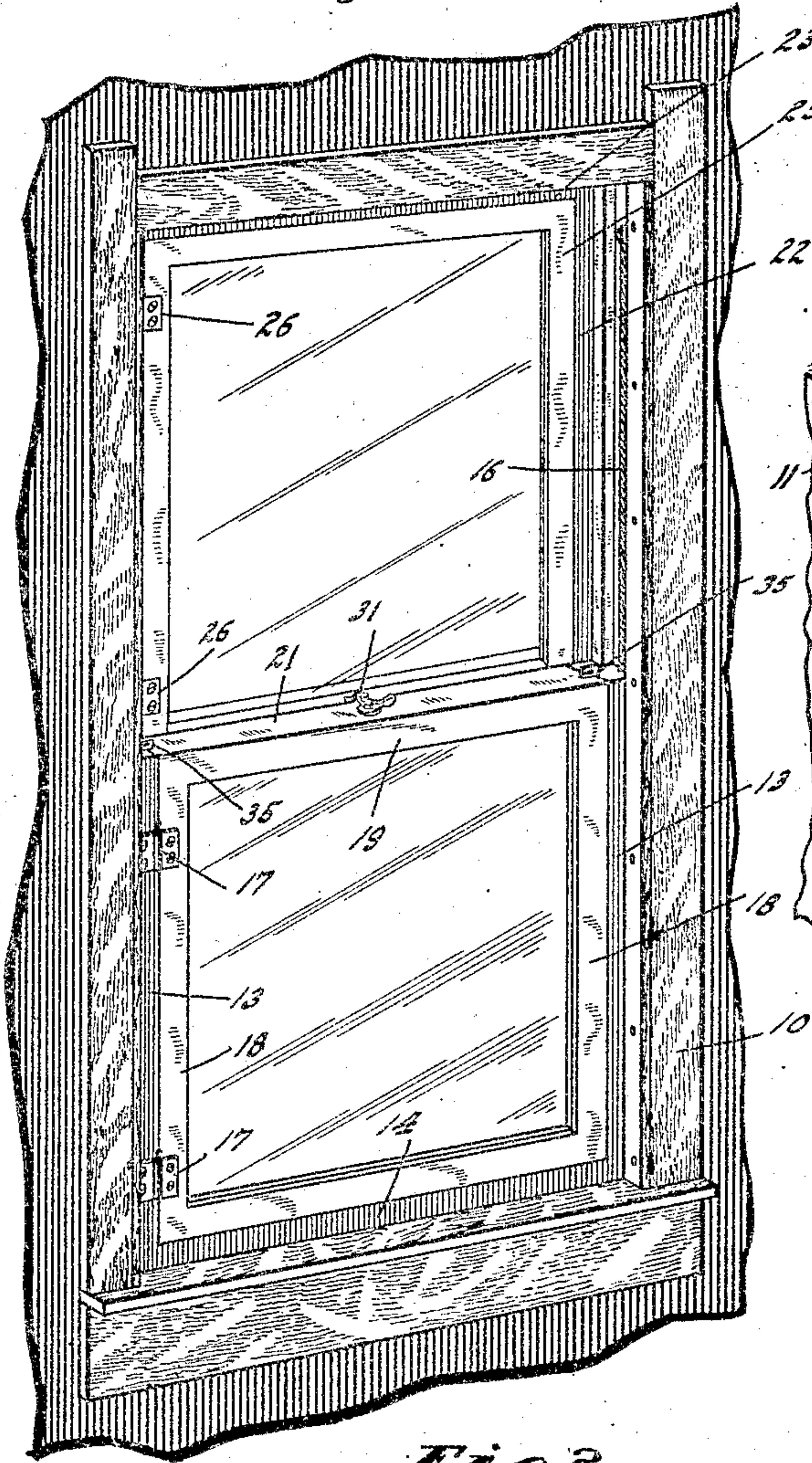


Fig. 3.

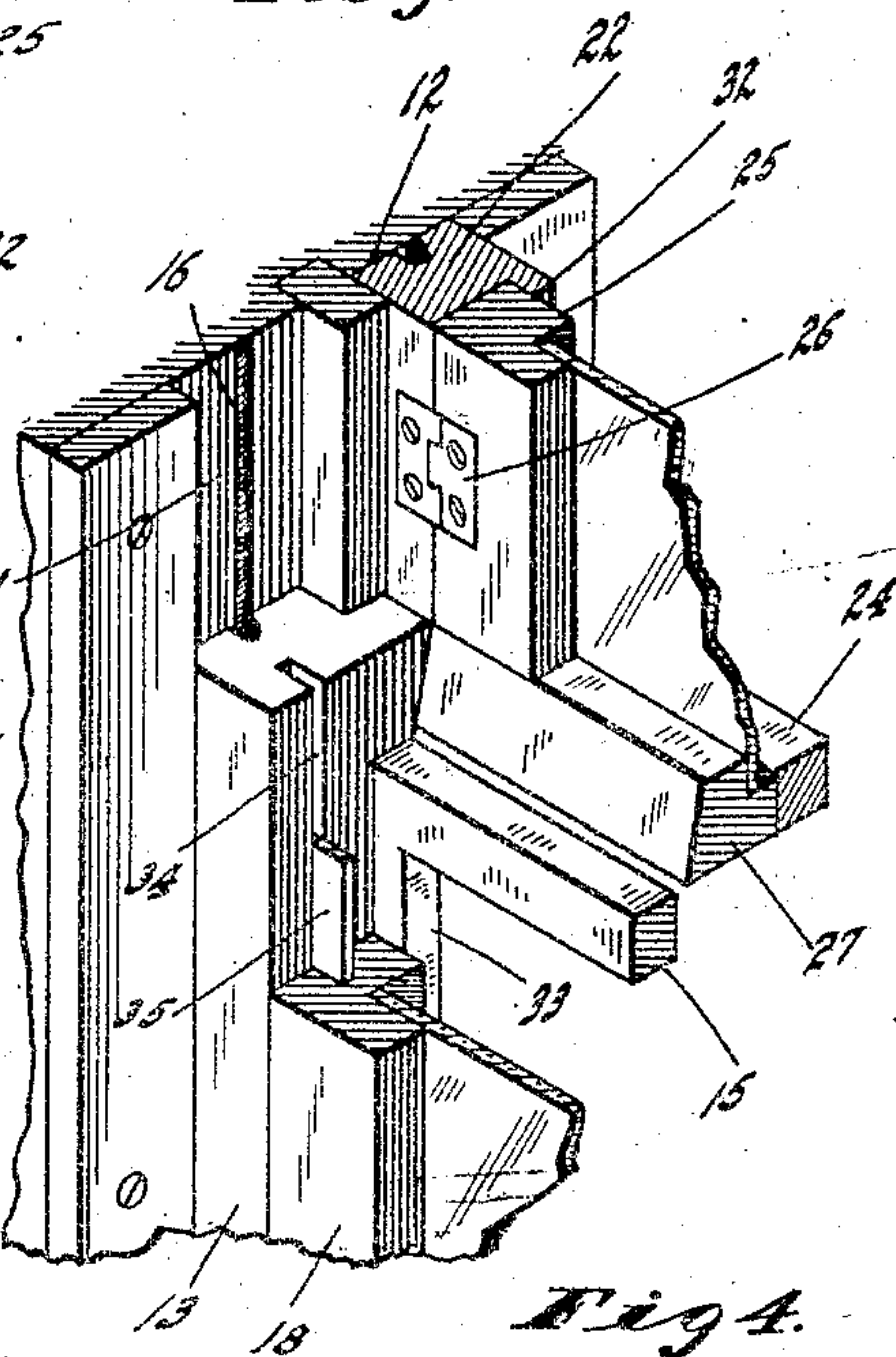


Fig. 4.

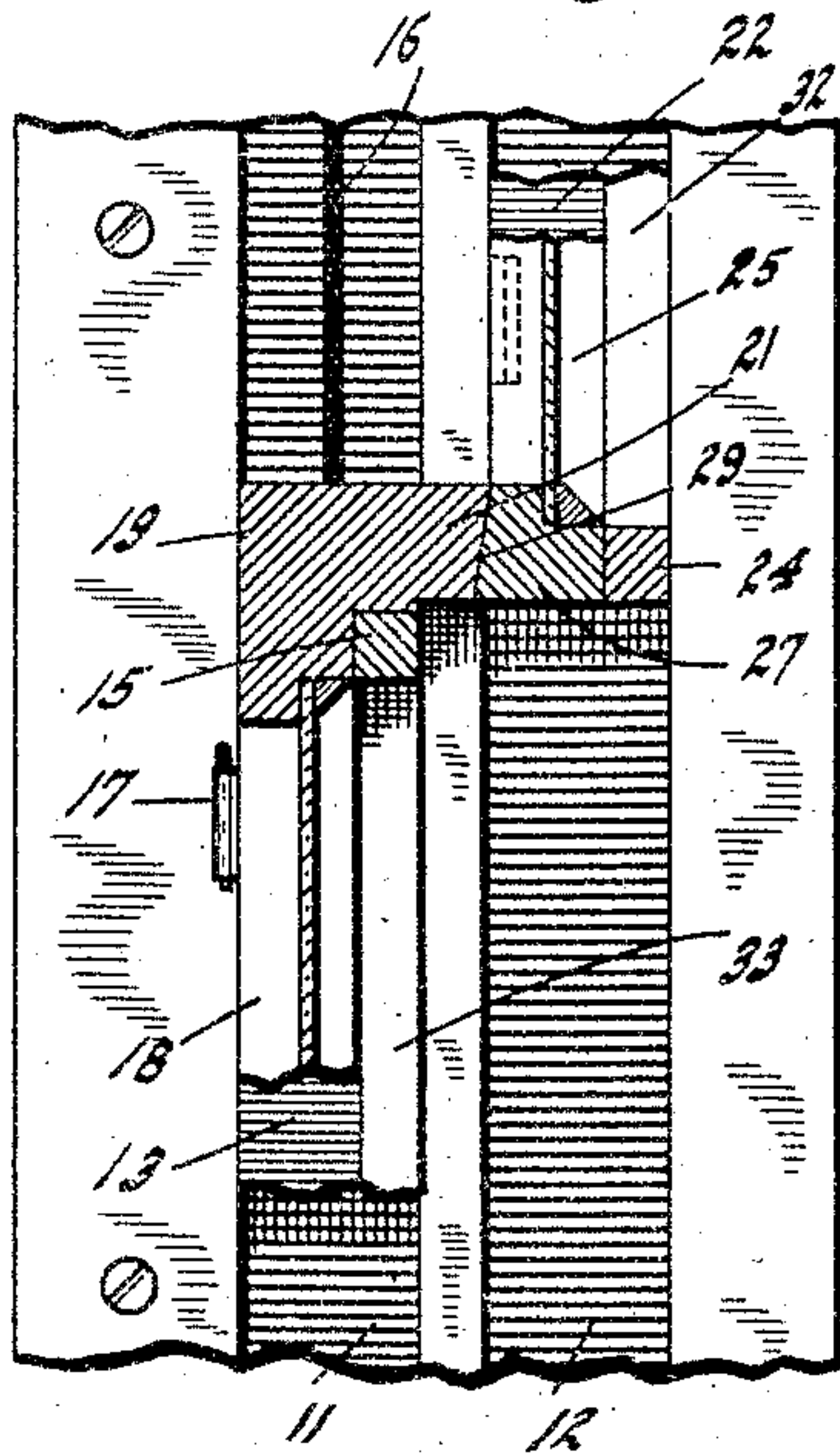
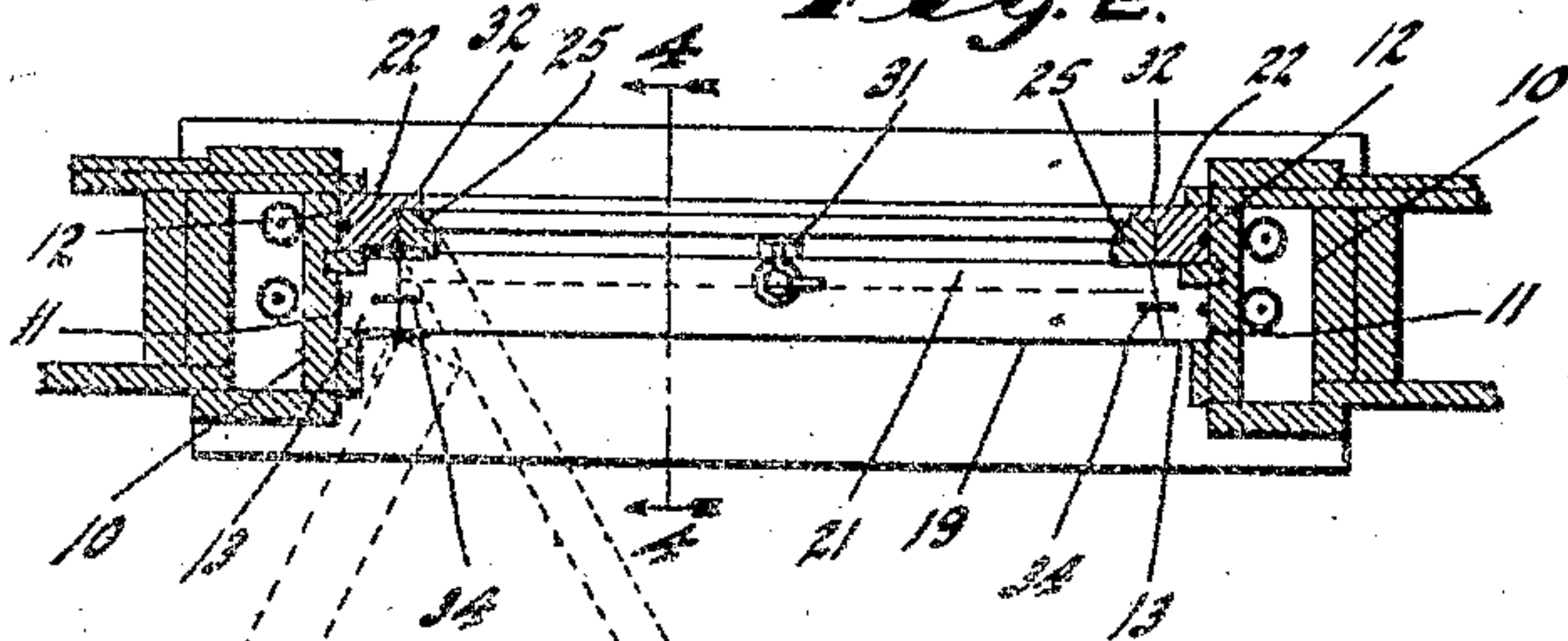


Fig. 2.



Witnesses  
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# UNITED STATES PATENT OFFICE.

EDMUND MARSHALL, OF INDIANAPOLIS, INDIANA.

WINDOW.

978,768.

Specification of Letters Patent.

Patented Dec. 13, 1910.

Application filed February 4, 1910. Serial No. 542,063.

*To all whom it may concern:*

Be it known that I, EDMUND MARSHALL, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented a new and useful Window, of which the following is a specification.

The object of my invention is to produce an improved window sash, varying but little in aspect from ordinary window sashes, in which it is possible to swing the glass-carrying members inwardly so as to render the outer face of the glass accessible from the interior of the room for ready cleansing.

The accompanying drawings illustrate my invention.

Figure 1 is a perspective view of a pair of cooperating window sashes constructed according to my invention; Fig. 2 a horizontal section through the upper sash looking downward; Fig. 3 a fragmentary detail, and Fig. 4 a section, on an enlarged scale, on line 4-4 of Fig. 2.

In the drawings, 10 indicates the ordinary window frame having the runway 11 for the lower sash and the runway 12 for the upper sash. Slidably mounted in runway 11 is a sliding frame comprising uprights 13, 13, bottom bar 14 and top bar 15 which may be provided with the usual counterweight cords 16. The upper cross bar 15 may be omitted if desired but I believe, for practical purposes, that said upper bar is desirable as it serves to stiffen and keep separated the upper ends of the vertical members 13.

Hinged to one of the vertical members 13, either by the visible hinges 17, or by invisible hinges or otherwise, is the glass-carrying frame 18 of ordinary form, said frame 18 having an upper cross bar 19 provided with a rearward extension 21 which overhangs the cross bar 15.

Slidably mounted in the runway 12 is a sliding frame comprising the vertical members 22, 22, the upper bar 23 and lower bar 24. Hinged to one of the members 22 is a swinging glass-carrying frame 25 supported by suitable hinges 26. The lower bar 27 of frame 25 is provided with an ordinary beveled face which mates with the correspondingly beveled face of the rear edge of extension 21 as shown at 29 (Fig. 4).

An ordinary fastening 31 may be mounted upon the upper faces of bars 19 and 27, as shown in Fig. 1.

In order to keep out the wind through the vertical joints between the sliding upper sash and the swinging sash 25, the bars composing the sliding sash may be caused to overlap the swinging sash as shown at 32 (Fig. 3). Similarly overlapping portions 33 may be provided to close the vertical joints between the lower sliding frame and the swinging sash 18.

If desired vertical registering slots 34 may be formed in the adjacent faces of the swinging sash and its carrying sliding frame, and a thin flexible metal strip 35 removably inserted therein when the swinging sash is in normal position, said strip being withdrawn before the swinging sash can be opened.

It will be noticed that the construction above described differs but little from present standard construction so that windows embodying my invention may be readily constructed by manufacturers equipped with ordinary window producing tools. It will also be noticed that the construction is such that the glass-carrying members may be readily swung inwardly into a room so that the outer face of the glass may be readily cleansed.

I claim as my invention:—

The combination, with a suitable supporting frame having a pair of vertical runways formed therein, of a pair of sliding frames one mounted in each of said runways, and each comprising two vertical members and two cross members, and two swinging glass-carrying members each hinged to a vertical member of one of the sliding frames upon a vertical axis, the lower swinging frame having an upper bar extending over the upper bar of its carrying frame and mating with the lower bar of the swinging frame of the upper carrying frame.

In witness whereof, I, have hereunto set my hand and seal at Indianapolis, Indiana, this 31st day of January, A. D. one thousand nine hundred and ten.

EDMUND MARSHALL. [L. S.]

Witnesses:

ARTHUR M. HOOD,

THOMAS W. McMEANS.