

S. M. CURWEN.  
CAR PANEL WITH MOVABLE SASH.  
APPLICATION FILED JUNE 3, 1909.

966,430.

Patented Aug. 9, 1910.

3 SHEETS—SHEET 1.

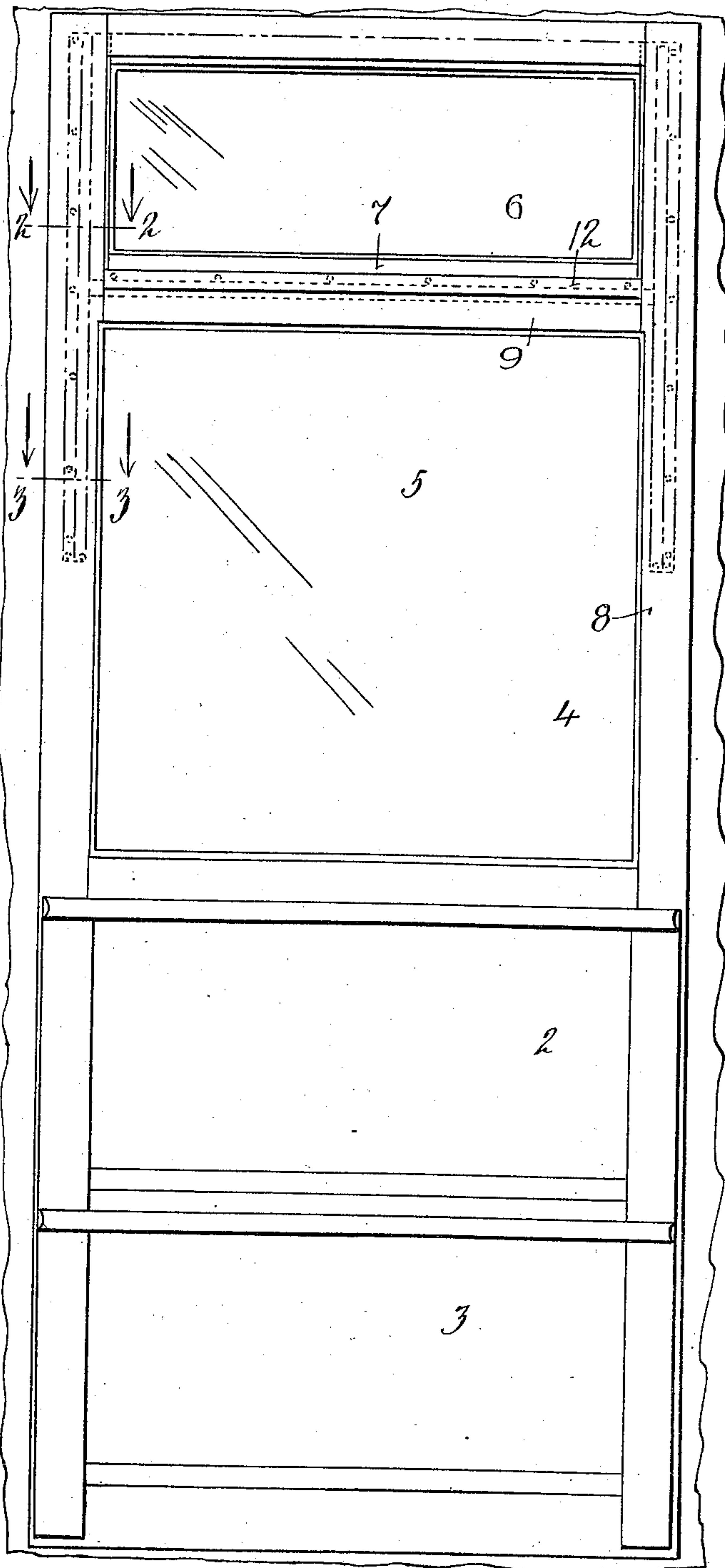


Fig. 1

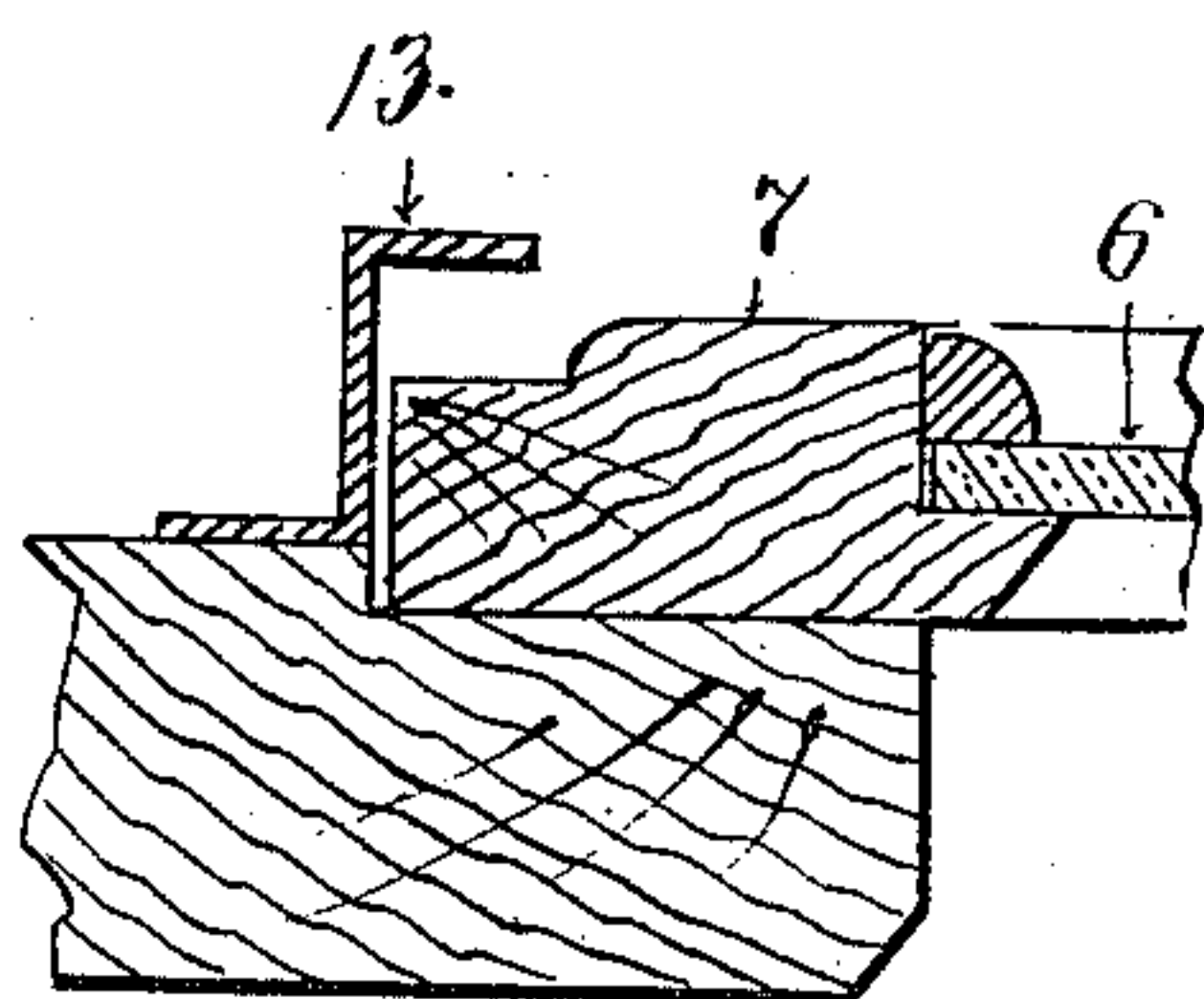


Fig. 2.

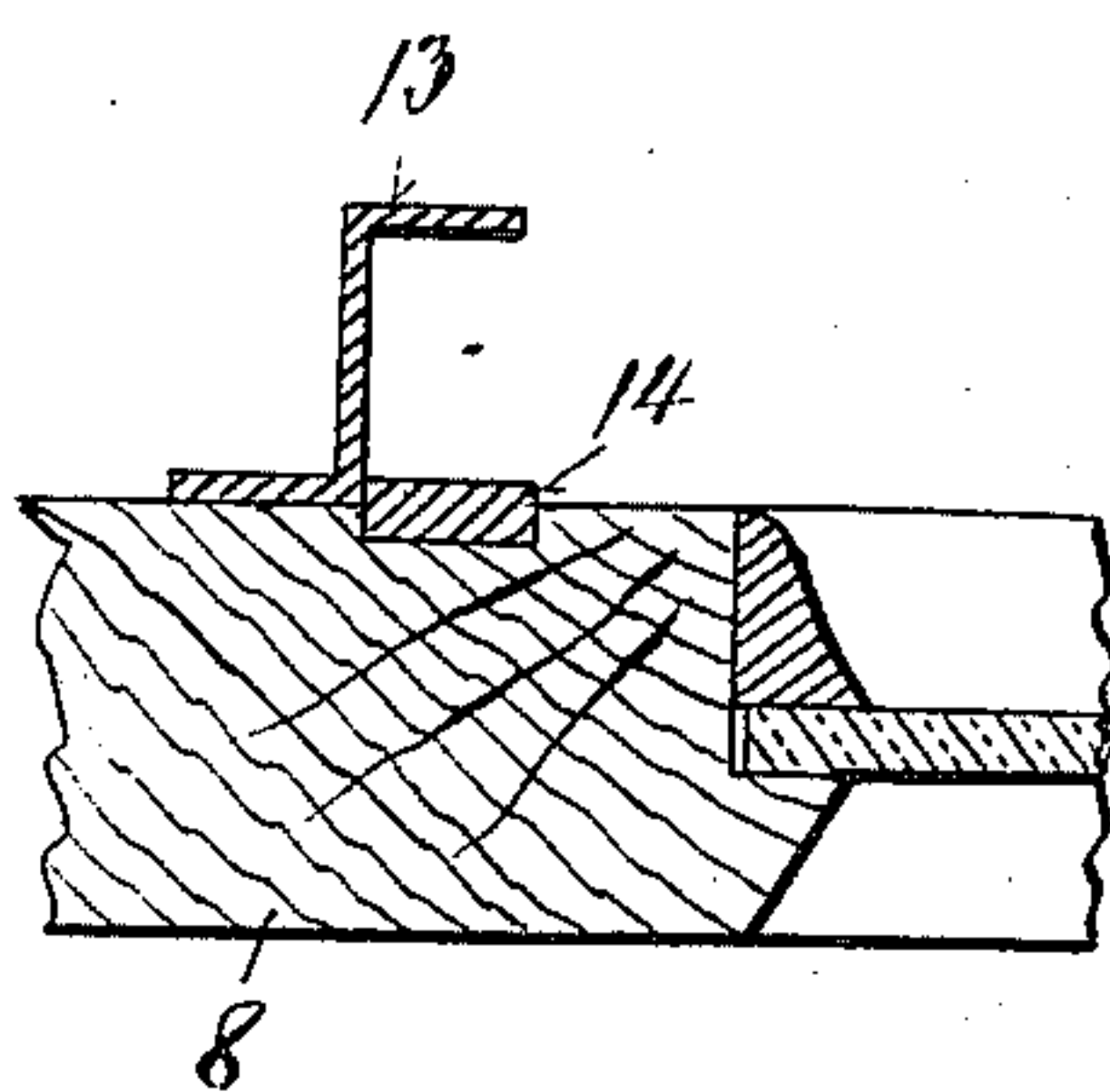


Fig. 3.

Witnesses:  
G. J. Arnold

Inventor  
Samuel M. Curwen  
By his Attorney  
John L. Perry

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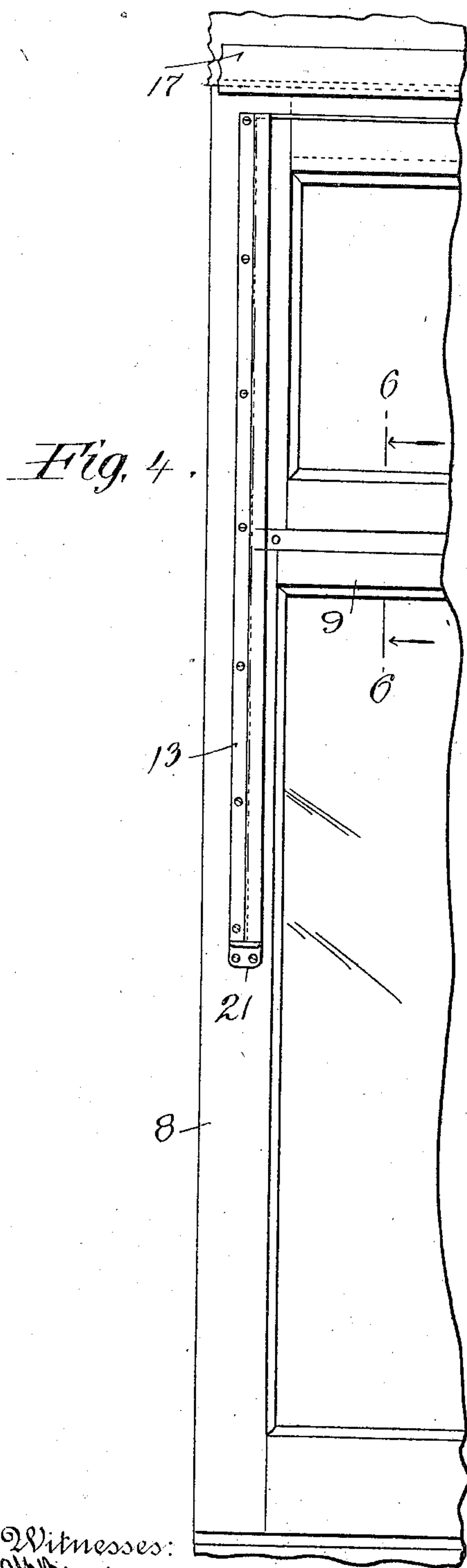


Fig. 4.

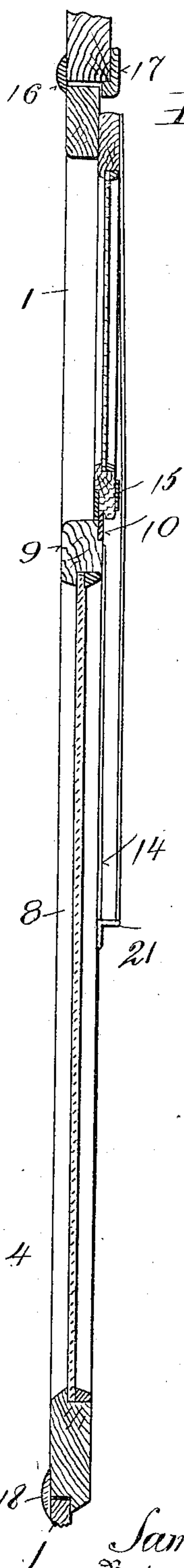


Fig. 5.

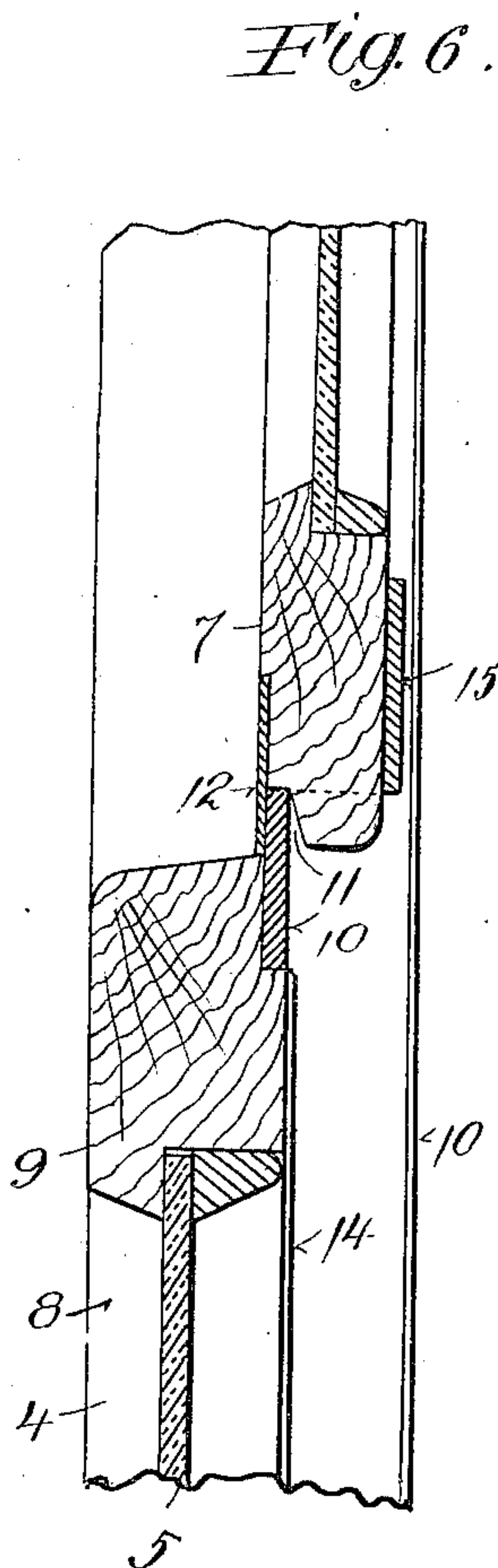


Fig. 6.

Witnesses:  
*W. J. Simpson*  
*A. J. Curwen*

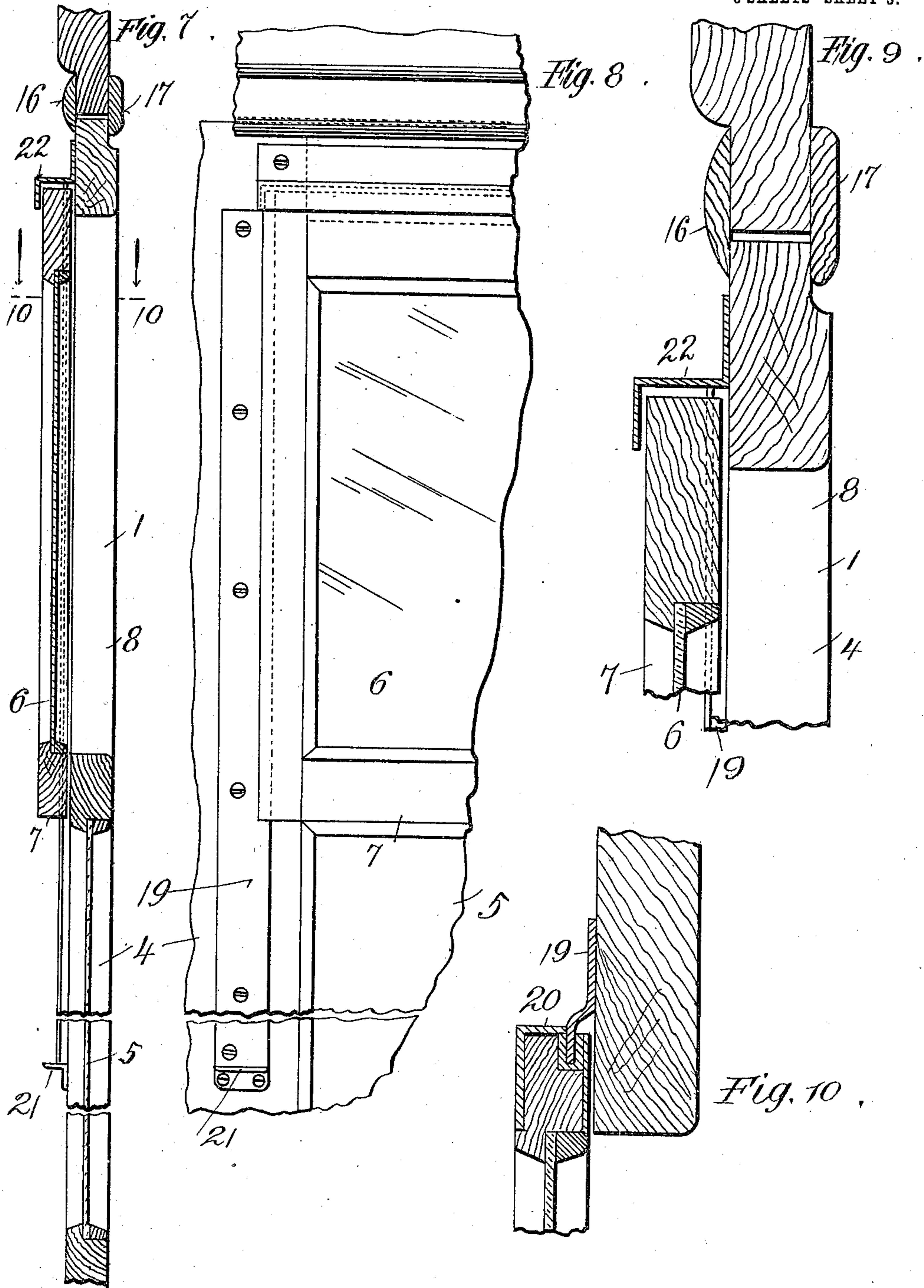
Inventor  
*Samuel M. Curwen*  
By *J. L. Levy* Attorney

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3 SHEETS—SHEET 3.



Witnesses.  
G. J. Curwen

Inventor  
Samuel M. Curwen.  
By his Attorney  
Joseph L. Curwen



# UNITED STATES PATENT OFFICE.

SAMUEL M. CURWEN, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO THE J. G. BRILL COMPANY, OF PHILADELPHIA, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

CAR-PANEL WITH MOVABLE SASH.

966,430.

Specification of Letters Patent.

Patented Aug. 9, 1910.

Application filed June 3, 1909. Serial No. 500,035.

*To all whom it may concern:*

Be it known that I, SAMUEL M. CURWEN, a citizen of the United States, and a resident of the city and county of Philadelphia and State of Pennsylvania, have invented a new and useful Improvement in Car-Panels with Movable Sashes, of which the following is a specification.

The object of my invention is to provide a device of this class in which a sash may be raised or lowered either within or without the structure which is partially inclosed by the panel, which panel may be removed bodily from the structure, if so desired to leave a larger opening than that made by the shifting of the sash.

More particularly, this invention relates to structures known as convertible cars, where panels are inserted or moved bodily from the cars so as to close or open large windows, for the winter and summer seasons, respectively. This object is accomplished by my invention, certain embodiments of which are more particularly described below.

For a more definite description of my invention, reference is to be had to the accompanying drawing, forming a part hereof, in which:

Figure 1 is an exterior view, looking inwardly, of a portion of a structure provided with my improved panel. Figs. 2 and 3 are sectional views taken on the lines 2—2 and 3—3, respectively, of Fig. 1, looking in the direction of the arrows. Fig. 4 is an enlarged elevation of a portion of the panel. Fig. 5 is a sectional view taken at right angles of the structure shown in Fig. 4. Fig. 6 is an enlarged sectional view taken on the line 6—6 of Fig. 4, looking in the direction of the arrows. Fig. 7 is a longitudinal section showing a modified structure, in which the movable sash is placed exterior to the panel instead of within. Fig. 8 is a view taken at right angles to the structure shown in Fig. 7, parts being broken away. Fig. 9 is an enlarged sectional view of the structure shown at the top of Fig. 7. Fig. 10 is a sectional view taken on the line 10—10 of Fig. 7, looking in the direction of the arrows.

Throughout the various views of the drawing, similar reference characters designate similar parts.

My improved panel 1 is provided at its bottom with suitable solid panels 2 and 3,

which are surmounted by a sash 4, composed of a lower glass 5 and an upper glass 6. The glass 6 is held in the conventional manner in a suitable frame 7 and the glass 5 is held by the frame 8 of the sash 4, also in the conventional manner. The glass 6 with its frame 7 (the two together hereinafter designated as the top sash) may be either on the interior or exterior of the panel 1. In Figs. 1 to 6 inclusive, it is shown on the interior, and in the remaining figures it is shown on the exterior.

Referring to the structure shown in Figs. 1 to 6 inclusive, the upper edge 9 of that part of the frame 8 which is above the glass 5 is provided with a suitable metallic or similar strip 10 which runs the length thereof and fits in a groove 11 at the bottom of the frame 7 and this frame 7 has an overlapping metallic strip 12, which rests snug against the projecting strip 10 as shown in Figs. 5 and 6, thereby forming a weather-tight joint. The interior sides of the frame 8 are provided with angle metal guides 13, which are preferably made substantially Z-shaped in cross section and the upper sash slides between these guides. To make a tight joint and prevent scratching, a metallic strip 14 is inserted in the lower portions of the guides 13 and immediately below the strip 10. The guides 13 do not run parallel to the face of the sash 4 above the strip 10, but taper in at the top so as to fit snug against the top of the upper sash and prevent rattling. On the interior of the frame 7 and on its lower bar at each end are provided suitable cushions 15, which are adapted to rub against the guides 13. The sash 4 is held in the remainder of the panel 1 by means of suitable strips 16 and 17 at the top and 18 at the bottom. Only one strip is needed at the bottom because the sash 4 is here grooved so as to fit with one strip at this part.

Obviously, the sash 4 can be removed from the remainder of the panel by simply removing any one of the strips 16, 17 or 18, together with any other strips not shown, which may run longitudinally of the sash 4.

The structure shown in Figs. 7 to 10 inclusive, is somewhat modified. In this structure the sash 4 is provided with external guides 19 that run parallel and vertically and on each side of the upper sash. These guides are similar to the guides 13 in



a general way but differ in detail. Each side of the frame 7 of the upper sash is provided with a groove formed by metal bent as shown in Fig. 10 and designated by the character 20, so that said upper sash can move vertically on the sash 4 until its movement is checked in the bottom by a stop 21 and at the top by a suitable cover 22, which forms a weather-tight joint with the said upper sash and the guides 19. The said upper sash is provided with suitable fixtures, not shown, by which it may be supported in any desired position so that the window may be more or less open or closed, as desired, by simply adjusting the upper sash. It is also obvious that these angle metal strips are secured to the sashes by means of screws or other suitable devices.

From the foregoing, it is apparent that my invention may be embodied in various forms, the essential features being a panel in which is placed an upper sash which may be slid over a portion of the adjacent panel whereby a window in said panel may be opened for ventilating purposes and my invention is not restricted to the precise embodiments herein shown and described, but is broad enough to cover all structures that come within the scope of the annexed claims.

What I claim is:—

1. In a device of the class described, a

panel having angle metal guides secured thereto, an upper sash engaging said guides and having its movement determined thereby, a groove on the lower edge of said upper sash and a projection on said panel adapted to engage said groove.

2. In a device of the class described, a panel having angle metal guides secured thereto, an upper sash engaging said guides and having its movement determined thereby and cushions on said upper sash.

3. In a device of the class described, a panel having angle metal guides secured thereto, an upper sash engaging said guides and having its movement determined thereby, and strips 14 to prevent said sash from rubbing against said panel.

4. In a device of the class described, a panel having angle metal guides secured thereto, an upper sash engaging said guides and having its movement determined thereby and a stop 22 to limit the movement of said panels in one direction.

Signed at the city and county of Philadelphia, State of Pennsylvania, this 4th day of May, 1909.

SAMUEL M. CURWEN.

Witnesses:

J. H. OHLSSON,

HENRY C. ESLING.