

966,627.

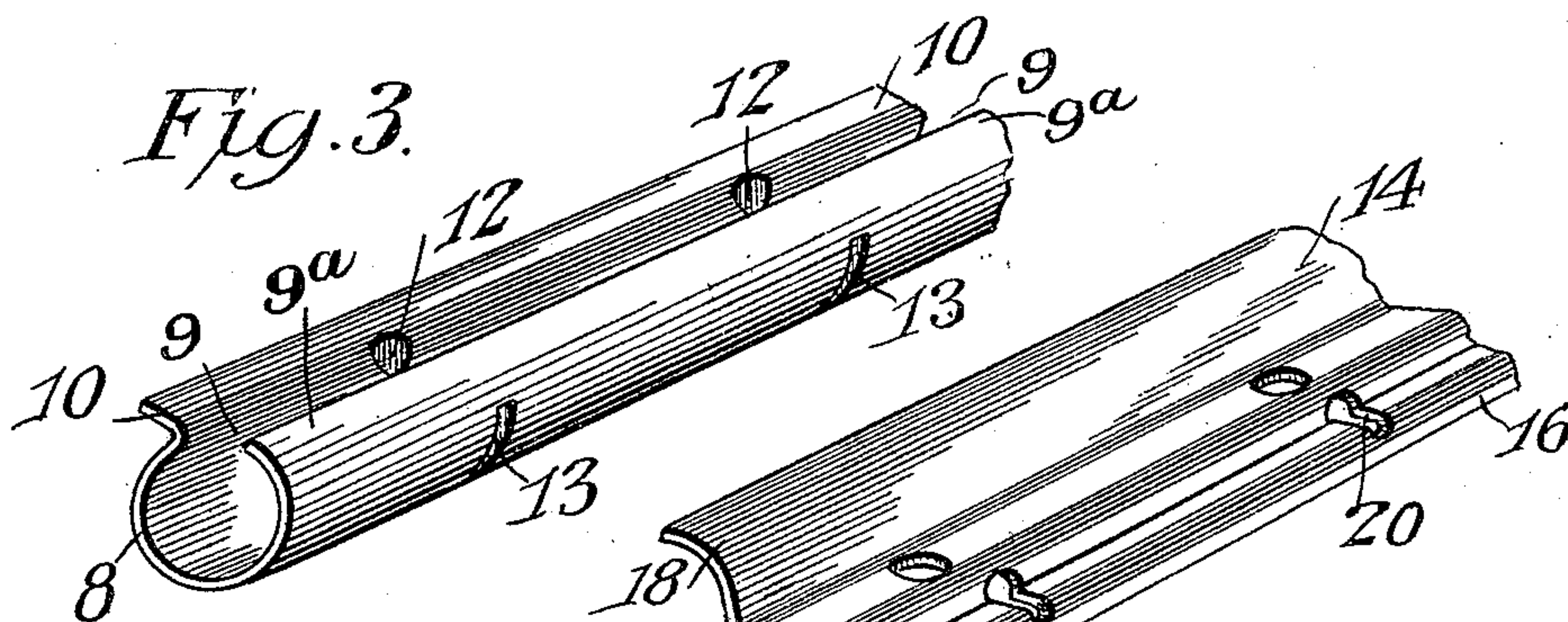
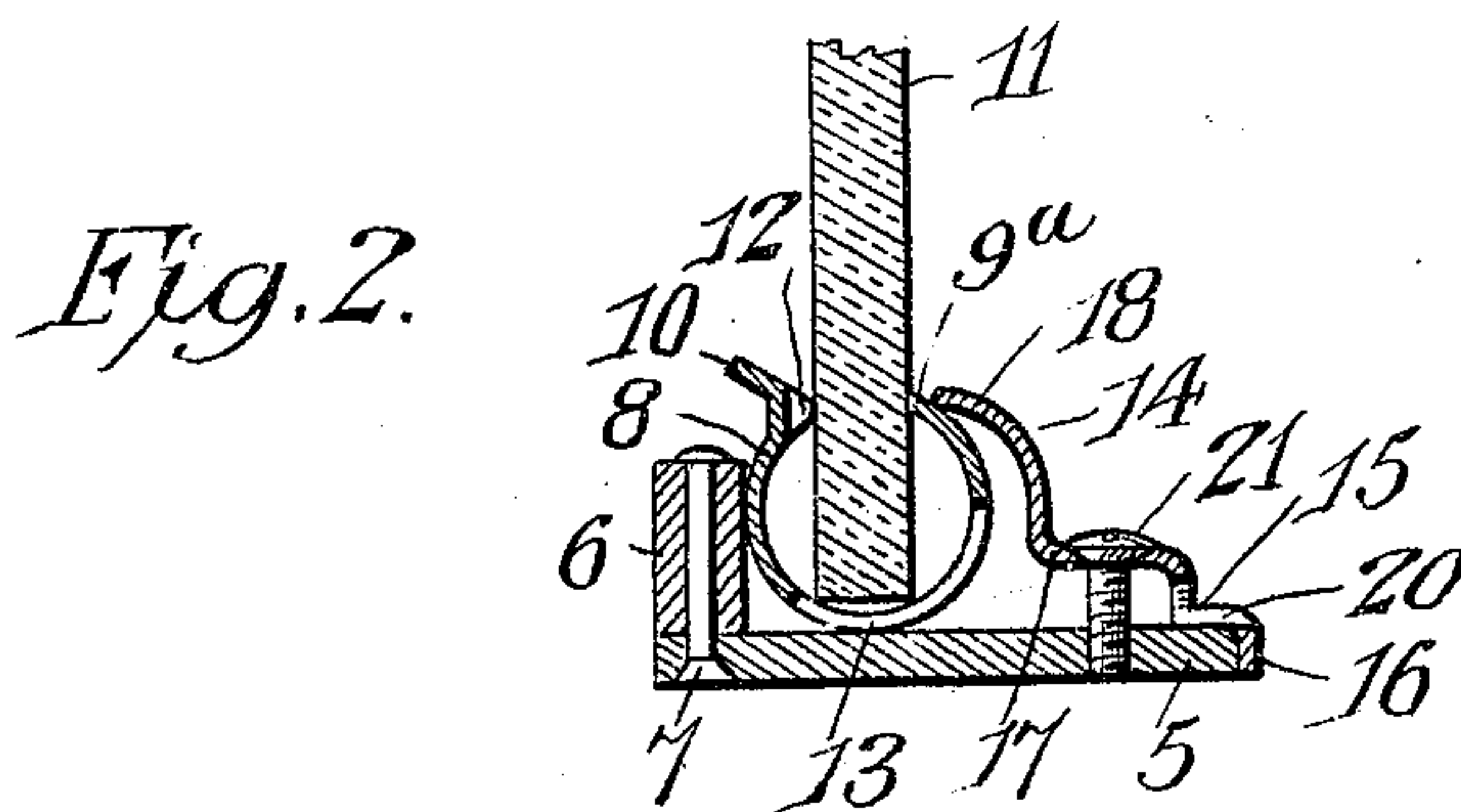
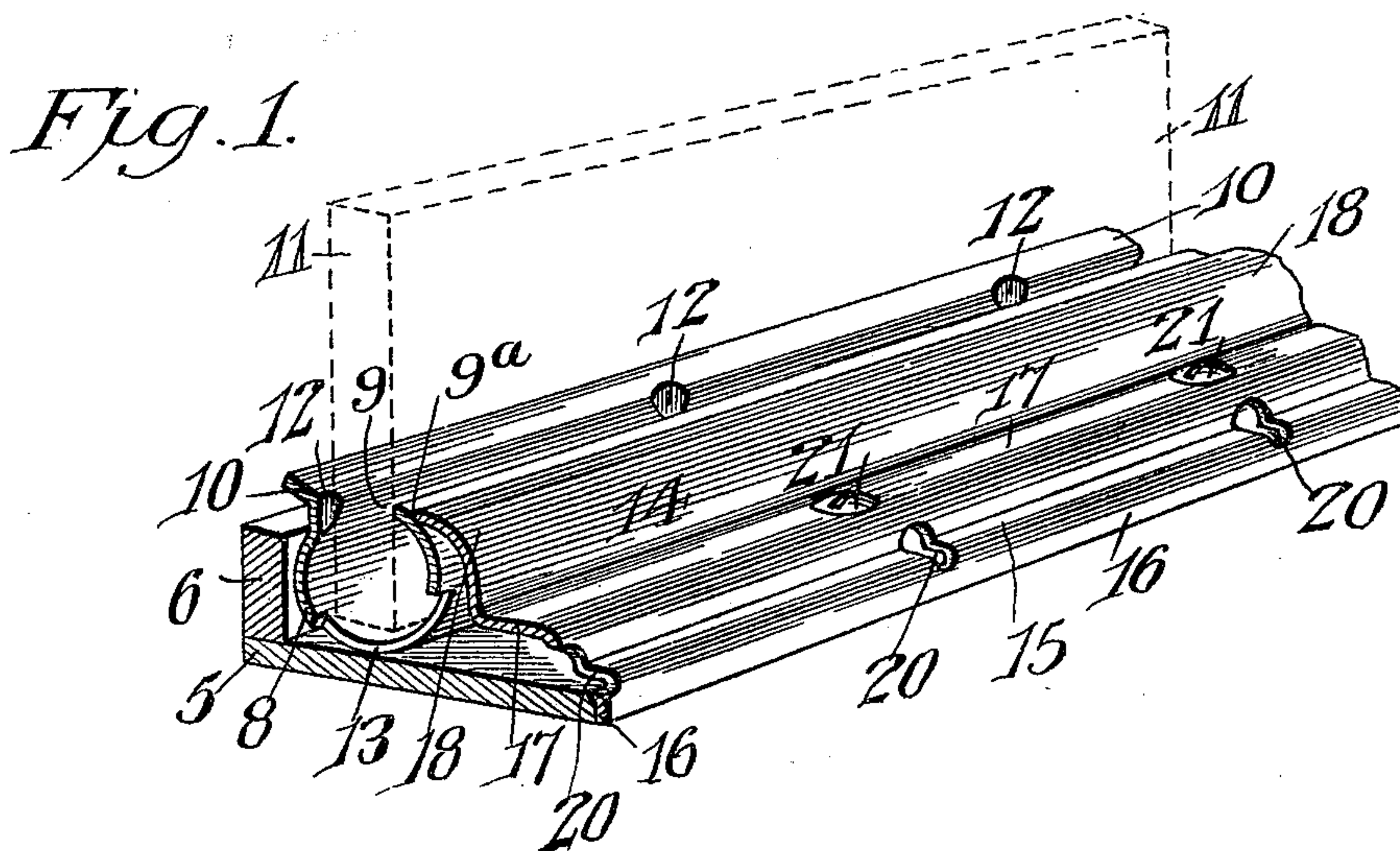


Fig. 4.

17  
15  
16 34

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# UNITED STATES PATENT OFFICE.

GEORGE M. VOLTZ, OF ST. JOSEPH, MISSOURI.

## SILL-BAR.

966,627.

Specification of Letters Patent.

Patented Aug. 9, 1910.

Application filed November 29, 1909. Serial No. 530,516.

*To all whom it may concern:*

Be it known that I, GEORGE M. VOLTZ, citizen of the United States, residing at St. Joseph, in the county of Buchanan and State of Missouri, have invented a new and useful Sill-Bar, of which the following is a specification.

This invention relates to an improvement in sill bars, and although especially adapted for use in connection with store windows, it can be employed with equal success with windows for other purposes.

It is a well known fact that steam generated in the interior of a room will accumulate on the inside of the glass, and the condensation will trickle down the window to the sill bar, and as there is no outlet for the same in the constructions now generally employed, the water will accumulate on and around the said sill bar.

The principal object of this invention is to provide a novel construction of sill bar whereby the water of condensation may readily pass from the inside to the outside.

Another object of the invention is to provide a device of the character described which will securely clamp the glass in position, is simple in construction, and may be conveniently assembled or disassembled.

A still further object of the invention is to provide a sill bar of the character described, which is composed of a minimum number of parts, and is consequently cheap to manufacture.

With these and other objects in view, the invention consists in the construction, and novel combination of parts hereinafter fully described, illustrated in the accompanying drawing, and pointed out in the claims hereto appended; it being understood that various changes in the form, proportion, size, and minor details of construction, within the scope of the claims, may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawing:—Figure 1 is a detail perspective view of the invention showing a portion of plate glass arranged therein. Fig. 2 is a vertical transverse sectional view through the same. Fig. 3 is a perspective view of the carrier tube. Fig. 4 is a perspective view of the clamping plate.

Like reference numerals designate corresponding parts in all the figures of the drawing.

Referring to the drawing, the invention

comprises a sill bar 5 having an upstanding longitudinal rail or flange 6 which is arranged along the inner edge thereof, and is preferably secured thereto by rivets 7 or other suitable fastening means. Arranged on the sill bar and adjacent the rail, is a pane-receiving carrier tube 8 having a longitudinal slot 9, which is formed by bending one edge of the tube longitudinally to form an inclined lip 10, which projects outwardly and upwardly over the rail 6, the said slot being adapted to receive a pane of glass 11. The carrier tube is interiorly provided at the juncture of the lip 10 with a plurality of spaced depressions 12. These depressions are made in the angular engaging edge of the tube and press the material outwardly. The carrier tube is further provided with a plurality of transverse curved slots 13 which are formed therein partially around the bottom opposite the opening 9, and are preferably arranged in alinement with the depressions 12, being equal in number thereto.

Associated with the sill bar 5 and the carrier tube 8, is a retaining or clamping plate 14. This plate is arranged longitudinally of the sill bar, and comprises a longitudinal base portion 15 which engages the bar 5, the said portion terminating in a downwardly extending lip 16 which extends over and engages the outer longitudinal edge of the bar. The plate is curved upwardly and inwardly from the base portion 15 to form an intermediate wall 17 which is substantially parallel with and spaced from the bar 5. This plate then extends upwardly and inwardly in a curved line to form the main clamping portion 18, the longitudinal edge thereof being arranged to bear upon and engage the free edge 9<sup>a</sup> of the carrier tube. The clamping plate is provided with a plurality of openings 20 which are preferably arranged in alinement with the depression 12 and the slots 13 of the carrier tube. These openings are arranged in the base portion 15 and the curved portion of the wall 17, the bottom walls of the openings being arranged flush with the top of the sill bar 5. A plurality of screws 21 for securing the clamping plate in position, are arranged to pierce the wall 17, and engage the sill bar 5.

From the foregoing, it will be readily apparent that the glass is first positioned within the carrier tube. The clamping plate is then applied to the sill bar in the described position, and the screws 21 adjusted so that



the clamping plate will be caused to tightly press upon the free edge 9<sup>a</sup> of the carrier tube and thereby clamp the plate glass within the said tube. In practice, the water of condensation will flow down the glass and along the lip 10 of the carrier tube, until it reaches one of the depressions 12 through which it passes into the said tube. The water will then pass from the tube through the slots 13 thereof and under the clamping plate, and thence to the outside of the window through the openings 20. It will be noted that between the depressions 12, the bent inner edge of the carrier tube where it joins with the lip is caused to firmly engage the glass, and generally the water of condensation will only find an outlet into the tube through the said depressions. The clamping plate may be caused to engage the outer side of the carrier tube with greater pressure by turning the screws 21, which being mounted in the intermediate wall 17, and spaced from the sill bar, permit a certain measure of adjustment.

What I claim is:—

1. A pane-receiving tube having a slot along one side to receive the pane of glass within the same, one edge of the tube at the slot being caused to engage with one face of the pane, and the other edge being bent outwardly to form an inclined lip, the said tube engaging with the pane at the base of the lip, and depressions formed in the tube at the point where the lip joins therewith, and means for holding the tube in place.

2. A window structure comprising a sill bar, a longitudinally slotted carrier tube having one edge bent to form an upwardly and outwardly projecting longitudinal lip, the tube being provided with a plurality of depressions interiorly formed at the juncture of the tube and lip, and a plate for clamping the carrier tube, the said plate being secured to the sill bar and provided with a depending lip which engages one edge of the sill bar.

3. A window structure comprising a sill bar, a longitudinally slotted carrier tube having one edge bent to form an outwardly projecting longitudinal lip, the tube being provided with a plurality of depressions interiorly arranged at the juncture of the tube

and the lip, the tube being also provided with a plurality of spaced transverse slots which are respectively arranged in alinement with the said depressions, and a plate for clamping the carrier tube, the said plate being secured to the sill bar and provided with a series of outlet openings.

4. A window structure comprising a sill bar, a longitudinally slotted carrier tube having one edge bent to form an upwardly and outwardly projecting longitudinal lip, the tube being provided with a plurality of depressions interiorly arranged at the juncture of the tube and the lip, the tube being also provided with a plurality of spaced transverse slots which are respectively arranged in alinement with the said depressions, a plate for clamping the carrier tube, the said plate being provided with a longitudinal base portion which engages the sill bar, the said portion terminating in a downwardly extending lip which extends over and engages one edge of the said bar, the plate being curved upwardly and inwardly from the base portion to form a spaced intermediate wall, and provided with a plurality of openings which communicate with the space under the plate, the said plate terminating in an upwardly and inwardly curved clamping portion, arranged upon and engaging the carrier tube, and screws engaging the plate and the sill bar for clamping the said tube carrier.

5. A window structure, comprising a sill bar, a pane-receiving tube mounted thereon and having a longitudinal slot therein to receive one edge of the pane of glass, and a clamping plate for holding the tube on the sill bar, said clamping plate including a raised intermediate wall, a clamping portion, and screws arranged within the raised wall and adapted to force the clamping portion against one wall of the tube and clamp the same against the glass.

In testimony, that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

GEORGE M. VOLTZ.

Witnesses:

JOHN HOCHENAUER,  
BLANCHE M. VOLTZ.