J. T. FERRES.

METAL TRANSOM BAR.

APPLICATION FILED AUG. 16, 1909.

967,625. Patented Aug. 16, 1910.

Fig - 1 -

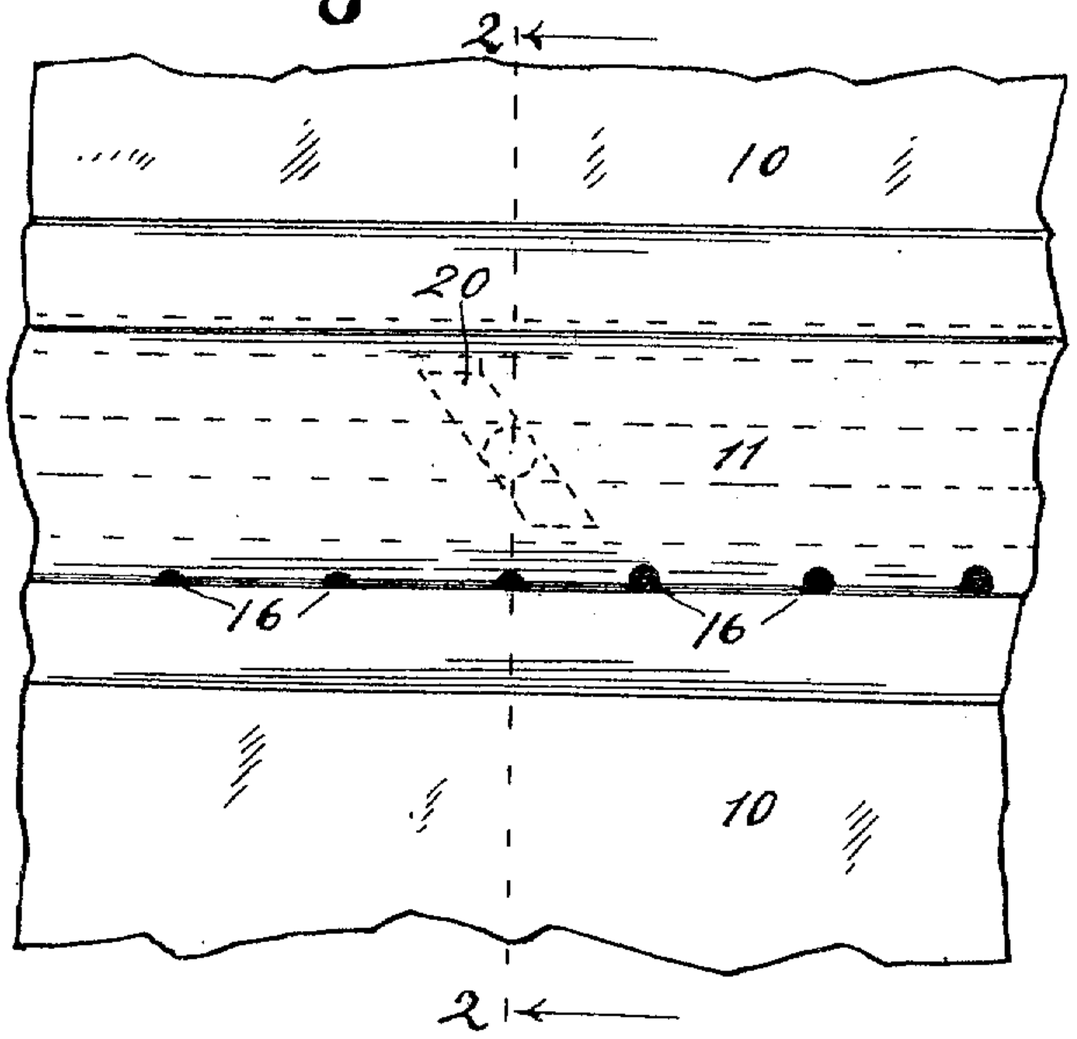


Fig - 2 -

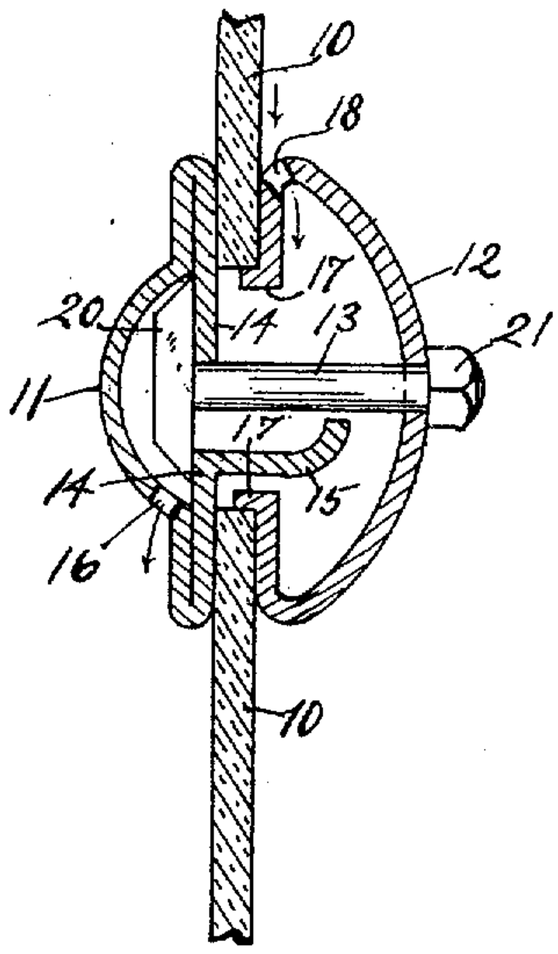


Fig - 3 -

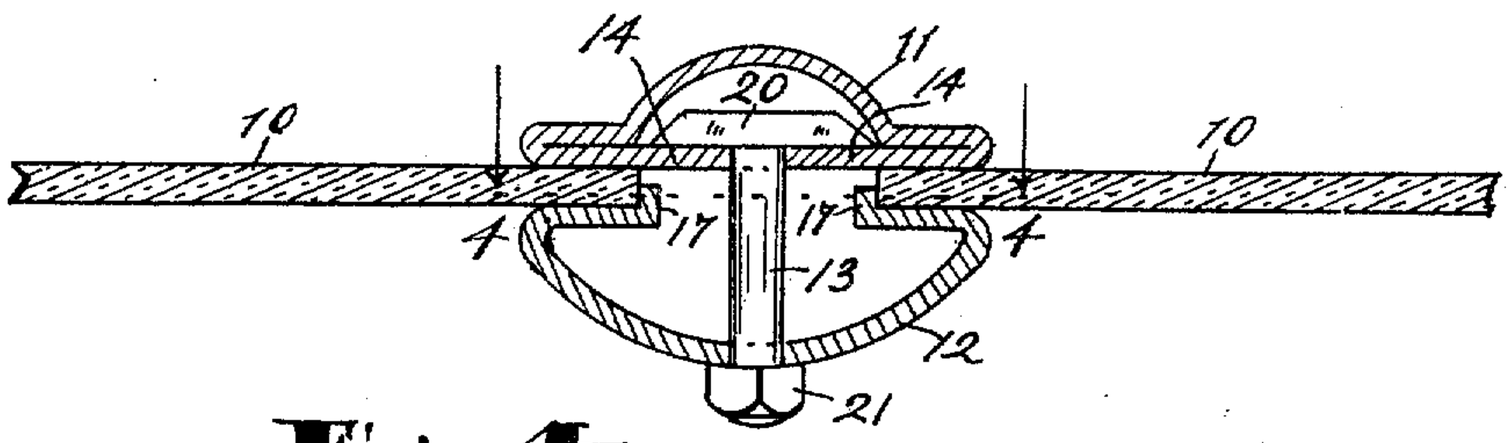
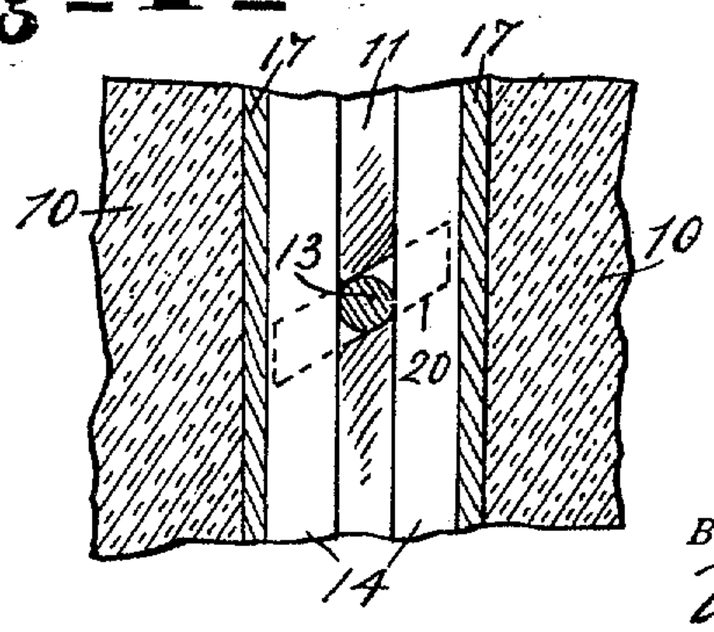


Fig - 4 -



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METAL TRANSOM-BAR.

967,625. Specification of Letters Patent. Patented Aug. 16, 1910.

Application filed August 16, 1909. Serial No. 513,163.

To all whom it may concern:

Be it known that I, JEFFREY T. FERRES, of Anderson, county of Madison, and State of Indiana, have invented a certain new and useful Metal Transom-Bar; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which like letters refer to like parts.

The object of this invention is to provide a metal transom or dividing bar for connecting two plates of plate glass and the like, when said plates are substantially in the same plane, and so constructed and arranged as to be extremely simple and effective, and also to completely drain and discharge outwardly the moisture that may run down the surface of the glass above the transom or dividing bar.

To those ends one feature of the invention consists in forming said transom bar of two members adapted to be placed on opposite sides of the adjacent plates of glass, or the like, one of said members, preferably the outer one, being centrally and outwardly bowed or curved to give it rigidity and having both lateral edges bent inwardly so as to be in the same plane and fit against the glass, and the other member is likewise bowed or curved to give it rigidity and has outwardly extending flanges that project across the edges of the plate of glass; and a bolt for securing and clamping the members together and upon the sheets of glass.

Another feature of the invention consists in providing the outer clamping member with a slot and employing a bolt with an elongated head that is insertible through said slot, whereby the clamping bolt may be readily put in place or removed.

Another and very important feature is the provision of means in connection with the fastener whereby all the moisture flowing down the inner surface of the upper glass plate will be caught and conveyed between the two glass plates and discharged outwardly.

The nature of the invention will be understood from the following description and claims and the accompanying drawings.

In the drawings Figure 1 is an elevation of the outside of a pair of glass plates connected by a horizontal metal fastener, the head of the clamping bolt being indicated by dotted lines. Fig. 2 is a vertical section on the line 2—2 of Fig. 1. Fig. 3 is a horizontal section through a portion of a pair of plates of glass and a vertically disposed metal fastener for uniting them together. Fig. 4 is a vertical section on the line 4—4 of Fig. 3, the head of the bolt being shown by dotted lines.

In the drawings 10 represents plates of glass arranged in the same plane, and in Figs. 1 and 2 one of these plates is located above the other and the two are secured together by a horizontal metal fastener. This metal fastener consists of an outer member 11, an inner member 12 and clamping bolts 13. These members 11 and 12 are bars extending preferably for the full width of the plates of glass. The outer member 11 consists of a sheet of metal that is provided with a central longitudinally extending convex bow or bend for the purpose of increasing the stiffness of the bar. The two lateral wings or portions of said bar are then bent upon themselves so that the inwardly extending portions thereof will be substantially in the same plane and adapted to bear against the plates of glass and to extend partially across the concavity formed by the centrally curved portion 11 somewhat in the nature of a web. The inwardly extending portions 14, however, preferably do not touch each other but are spaced apart to leave a longitudinal slot between them, and the lower portion 14 is turned inwardly for some distance to form a water catching strip 15. This strip 15 extends for the full length of the bar or full width of the glass, and the major portion is transversely horizontal, but its inner edge is turned upwardly flange-like, so that any water that may drip or run into said water catching strip will flow therefrom outwardly and discharge through holes 16 located in the lower part of the outwardly curved portion of the bar. These vents 16 are located at intervals throughout the length of the bar. The inner member 12 is likewise provided with a central transversely curved portion for giving it stiffness, and the lateral edges are first turned inwardly so as to extend toward each other in the same plane, and then are turned outwardly at a right angle to form the flanges 17, which fit over the edges of the glass plates 10. Said member is provided at intervals with holes through which bolts 13 may be inserted. There are also holes 18 arranged at intervals in the upper part of the member 12 adjacent the upper

plate of glass and so located as to receive the water that flows down the plate of glass, which is due to the condensation of moisture on the inner surface of the glass. Therefore, the water from the upper plate of glass in this arrangement flows into the metal fastening and drips down upon the water catching strip 15 and flows out through the vents 16, as heretofore explained. It is, therefore, necessary that the water catching strips 15 extend inwardly far enough to catch the water dripping from the holes 18.

The clamping bolt 13 has a head 20 that is elongated and as here shown is in the form of a trapezoid. It is made narrow enough to be readily insertible through the slot in the outer member 11, and after insertion, it is turned crosswise so as to engage the inward portions 14 of said fastening member 11. A nut 21 screws on the inner end of said bolt for clamping the fastening members together and also against the plates of glass.

The modified form shown in Figs. 3 and 4 is substantially the same as that shown in Figs. 1 and 2, excepting it omits the drainage features thereof, as the fastener shown in Figs. 3 and 4 is vertically instead of horizontally disposed, and therefore no drainage is required.

What I claim as my invention and desire to secure by Letters Patent is:

1. The combination with plates of glass and the like arranged in substantially the same plane, of a metal fastener for holding the adjacent edges of said plates in position, said fastener consisting of an outer member formed of a metal plate centrally bowed outwardly and with its lateral edges turned inwardly against the glass and in the same plane, an inner member with its central portion bowed to give it stiffness and the lateral portions turned inwardly in the same plane and the extreme edges thereof being turned outwardly so as to engage the edges of the plates, a bolt for clamping said members together and against the plates said bolt having an elongated head insertible between and overlapping the inner lateral edges of said outer member, and a nut on the inner end of the bolt.

2. The combination with plates of glass and the like arranged one above the other, of a metal fastener for holding the adjacent edges of said plates in position, said fastener consisting of an outer member adapted to overlap the edges of said plates and provided with drainage openings along the lower part thereof, an inner member adapted to overlap the edges of the plates and provided along its upper edge with openings through which moisture from the upper plate may pass, a water catching strip secured to one of said members in position to catch the water entering the inner member and discharge it into the outer member, and means for clamping said fastening members together and against the plates.

In witness whereof, I have hereunto affixed my signature in the presence of the witnesses herein named.

JEFFREY T. FERRES.

Witnesses:

F. V. Powell,

M. L. Twomley.