

No. 887,170.

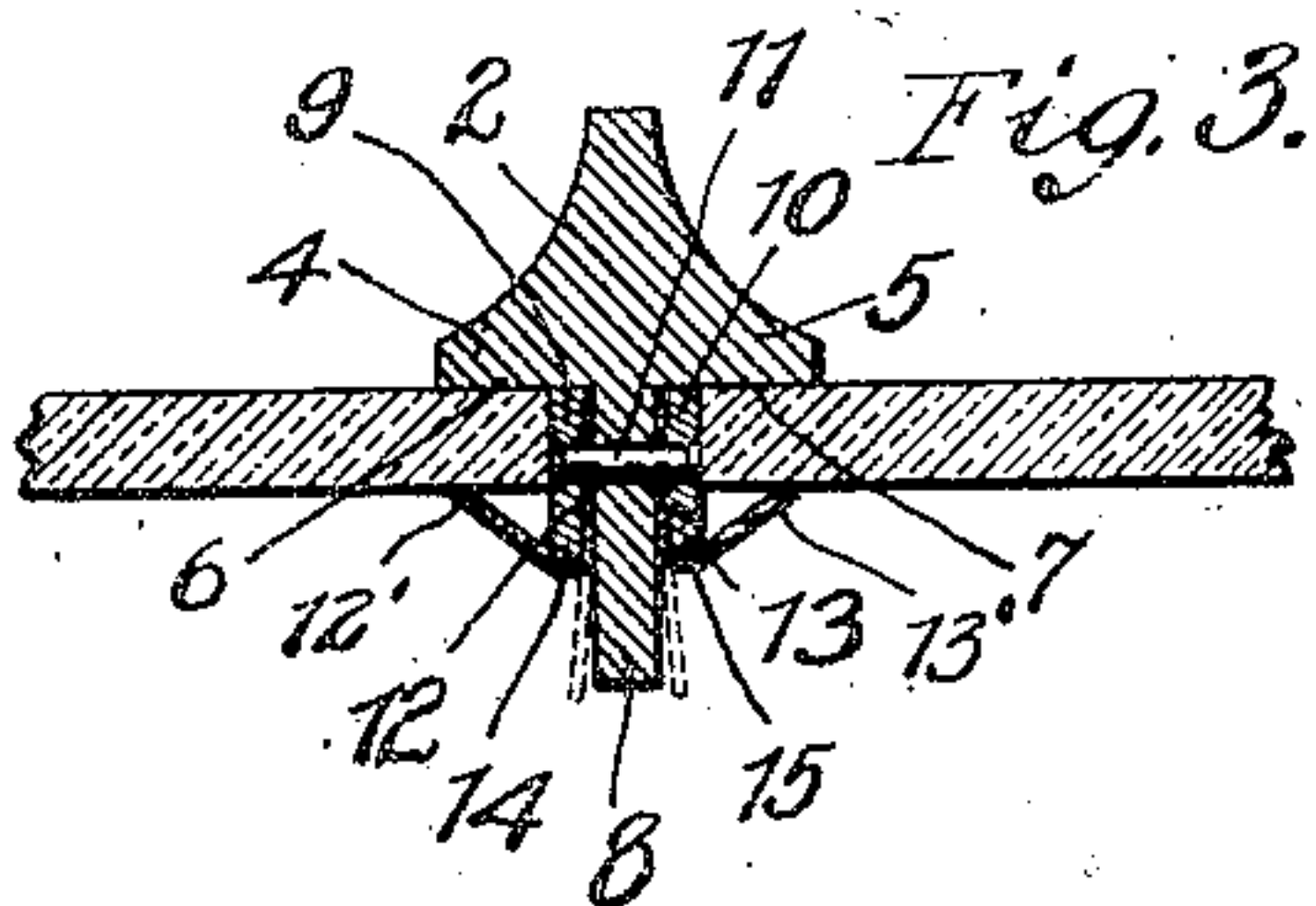
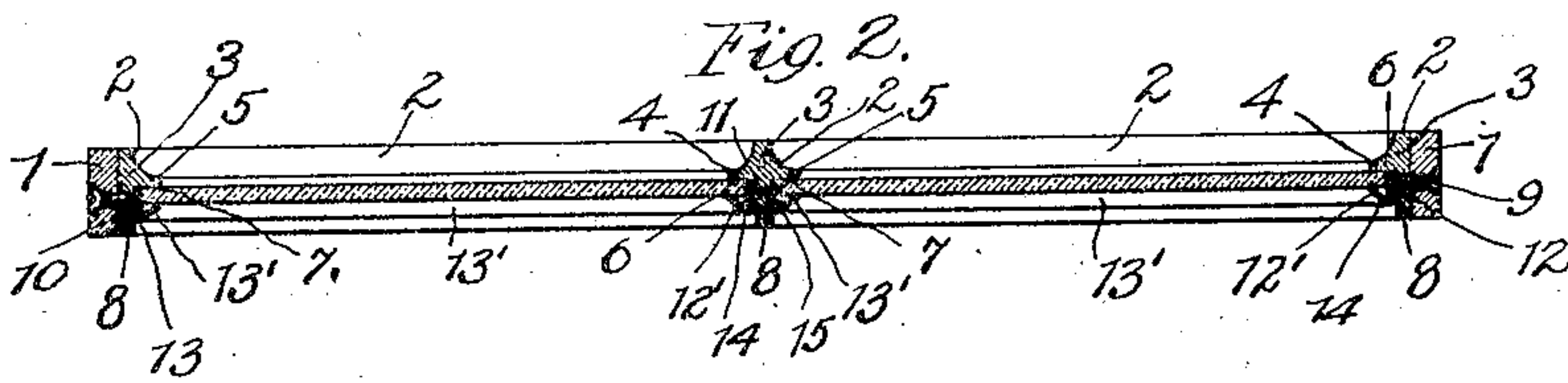
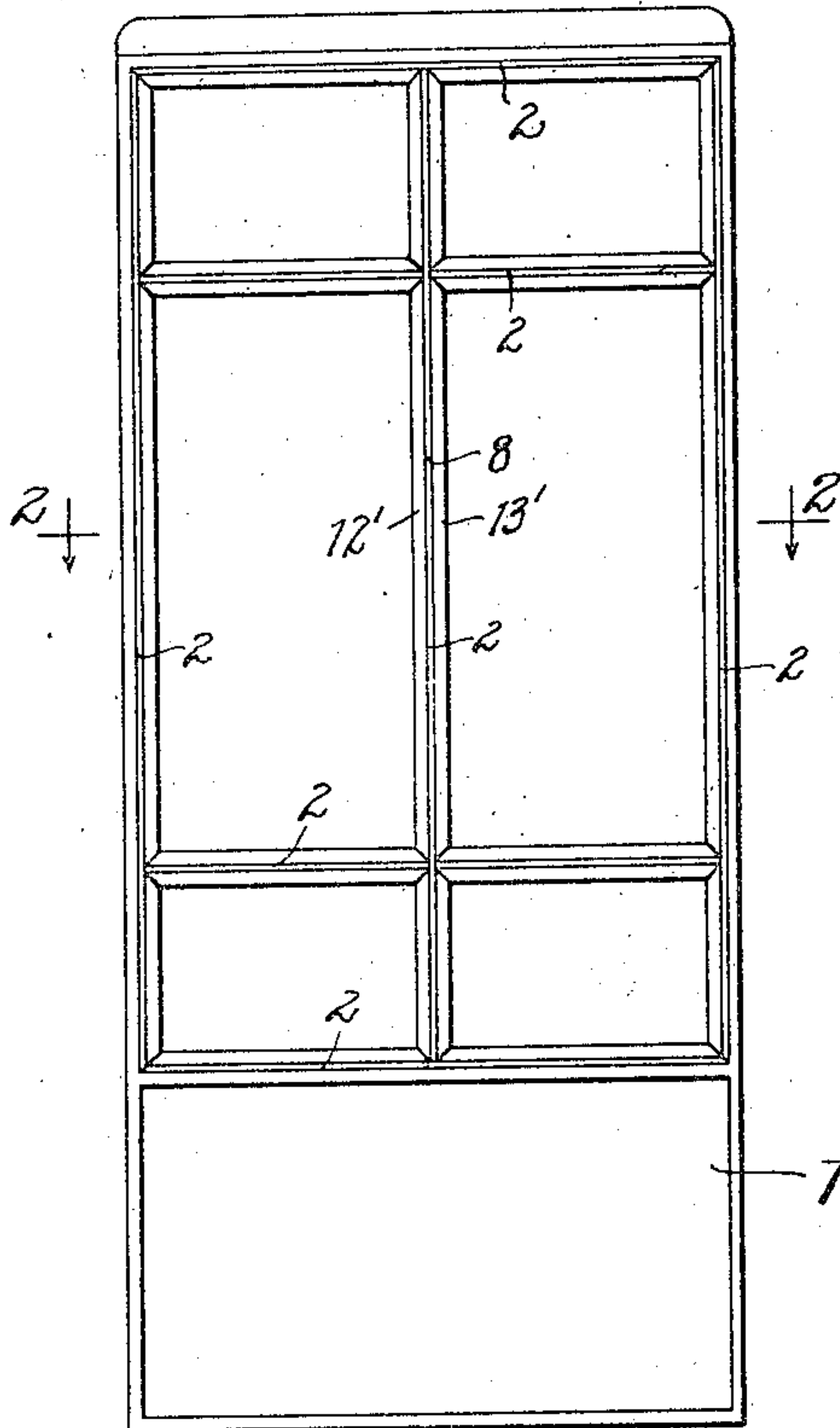
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F. A. WINSLOW.

MEANS FOR HOLDING PANELS OR PLATES OF MATERIAL TO FRAMES.

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Fig. 1.



Witnesses:
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UNITED STATES PATENT OFFICE.

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MEANS FOR HOLDING PANELS OR PLATES OF MATERIAL TO FRAMES.

No. 887,170.

Specification of Letters Patent.

Patented May 12, 1908.

Application filed January 2, 1907. Serial No. 350,323.

To all whom it may concern:

Be it known that I, FRANCIS A. WINSLOW, citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Means for Holding Panels or Plates of Material to Frames, of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

My invention relates to means for holding panels or plates of material to frames or supports, the primary utility of my invention being its association with doors and windows having a metal framework.

My invention contemplates the provision of suitable strips or pieces of bendable material, preferably soft metal, which are adapted to be secured to frames of doors and windows, and after the insertion of plates of glass are bent into engagement therewith.

One of the objects of my invention is that plates of glass or other material can be quickly secured in position upon the associated frame, or they can be easily removed therefrom when desired.

My invention will be best understood by reference to the accompanying drawing in which

Figure 1 illustrates a door having my invention associated therewith; Fig. 2 is an enlarged sectional view taken on line 2—2 of Fig. 1, and Fig. 3 is an enlarged sectional view.

In order to clearly illustrate the principle of my invention, I have shown in the drawings an embodiment thereof consisting of a door 1 to which is fastened a framework 2, 2, consisting of a series of bearing members for supporting the panels or plates of glass of a door. These bearing members may comprise the body portion 3 having outward extensions 4 and 5 forming lateral bearing surfaces 6 and 7 for the plates of glass or material.

Extending from the main portion of each bearing member is a reduced portion 8 to which the metal bars 9 and 10 are secured by means of rivets 11. In order to supply simple and reliable means to securely hold plates of glass or material in the door, strips 12 and 13 of soft, bendable and inelastic metal such as zinc, iron or lead are provided, portions of which are secured between the bars 9 and 10

and the reduced portion 8, there being free ends 12' and 13' which are adapted to be bent over the rounded ends 14 and 15 of the bars 9 and 10 and into engagement with the glass plates, thus securely and rigidly holding the glass in position. It will be apparent that I employ very simple and efficient means for retaining the plates of glass in position on the frame, and I obviate the necessity of using means which have heretofore been employed that have been expensive and difficult to handle.

While I have herein shown and described but one embodiment of my invention, it is apparent that modifications may be made without departing from the spirit and scope of my invention. I do not, therefore, wish to be limited to the exact construction as set forth, but

I desire to secure by Letters Patent:

1. In a structure of the class described, the combination with a frame, of a plate adapted to fit therein, and a strip of bendable inelastic material, one edge of which is secured to said frame adjacent to the edge of said plate, said strip being adapted to be bent after the plate is in place so that the portion of the strip not attached to the frame will lie at an angle to the plane of said plate and so that the edge will rest against said plate and hold it in position.

2. In a structure of the class described, the combination with a frame, of a plate adapted to fit therein, and a strip of soft metal, one edge of which is secured to said frame adjacent to the edge of said plate, said strip being adapted to be bent after the plate is in place so that the portion of the strip not attached to the frame will lie at an angle to the plane of said plate and so that the edge will rest against said plate and hold it in position.

3. In a structure of the class described, the combination with a frame, of a plate adapted to fit therein, and strips of soft metal having edges attached to said frame and adapted to be bent after the plate is in place so that the portion of the strips not attached to the frame will be at an angle to the plane of said plate, the edges of said strips being adapted to rest upon said plate and hold it in position.

4. In a structure of the class described, the combination with a frame, of a plate adapted to fit therein, a strip of metal, one edge of which is adapted to be fastened to said frame,

a metal plate secured against and at one side of said strip of metal, the other edge being adapted to hold said plate in position.

5 5. In a structure of the class described, the combination with a frame, of a plate adapted to fit therein, and strips of soft metal, the inner edges of which are adapted to be secured to said frame, the outer edges being adapted to be bent over the ends of bars and
10 into engagement with said plate of glass to hold said plate in position upon said frame.

6. In a structure of the class described, the combination with a frame, of a panel adapted to fit therein, and strips of bendable material, the inner edges of which are secured to said frame bars engaging the inner edges of said strips and also secured to said frame and having rounded edges over which said strips of material are adapted to be bent and
20 into engagement with said panel to hold said panel in position upon said frame.

7. In a structure of the class described, the combination with a suitable frame, of a plate adapted to fit therein, a strip of bendable material 13, a strip of relatively rigid material interposed between said soft metal strip and said plate whereby the edge of said soft metal strip may be bent to engage the plate and hold it in position.

30 8. In a structure of the class described, the combination with a frame, of a plate adapted to fit therein, lateral extensions against which said plate is adapted to rest, pieces of relatively rigid material between the edge of said plate and the frame, pieces of bendable material between said rigid pieces and the frame, the outer portion of said bendable material extending beyond said rigid pieces

and being adapted to be bent down and into engagement with the plate whereby said 40 plate is held in position, substantially as described.

9. In a structure of the class described, the combination with a frame, of a plate adapted to fit therein, lateral extensions against 45 which said plate is adapted to rest, pieces of relatively rigid material longer than the thickness of said plate, between the edge of said plate and the frame, pieces of bendable material between said rigid pieces and the 50 frame, the outer portion of said bendable material extending beyond said rigid pieces and being adapted to be bent down and into engagement with the plate whereby said plate is held in position, substantially as de- 55 scribed.

10. In a structure of the class described, the combination with a frame, of a plate adapted to fit therein, extensions upon said frame forming lateral bearing surfaces for 60 the said plate, the projecting portion 8, the strip 10 attached to said projecting portion 8, the strip 13 secured between said part 8 and said piece 10 and having a free portion 13' which is adapted to be bent over the said 65 piece 10 and into engagement with said plate, substantially as and for the purpose specified.

In witness whereof, I hereunto subscribe my name this 26th day of December, A. D., 70 1906.

FRANCIS A. WINSLOW

Witnesses:

LEONARD W. NOVANDER,
ARTHUR H. BOETTCHER.