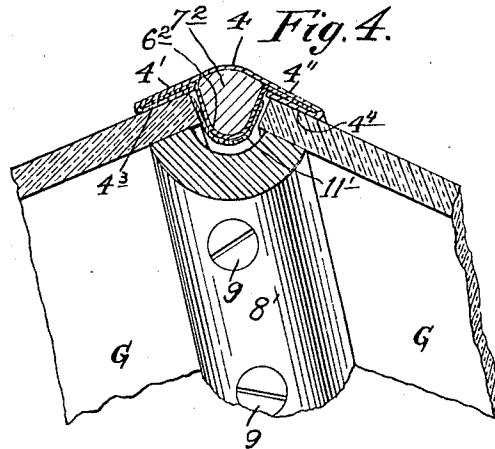
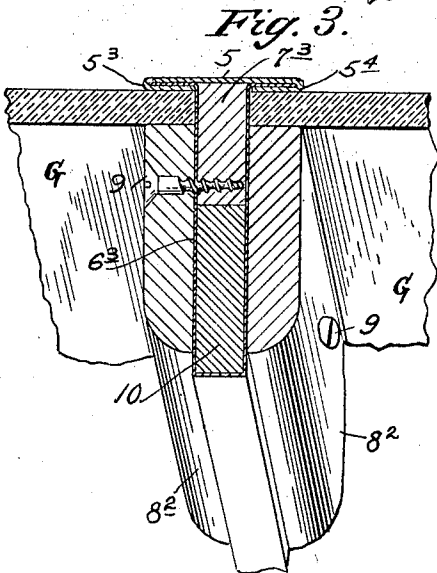
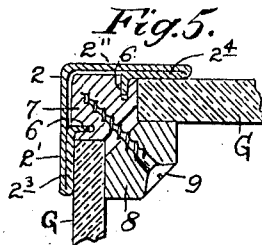
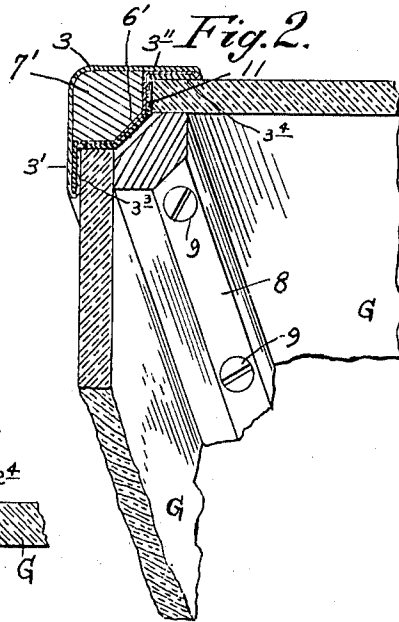
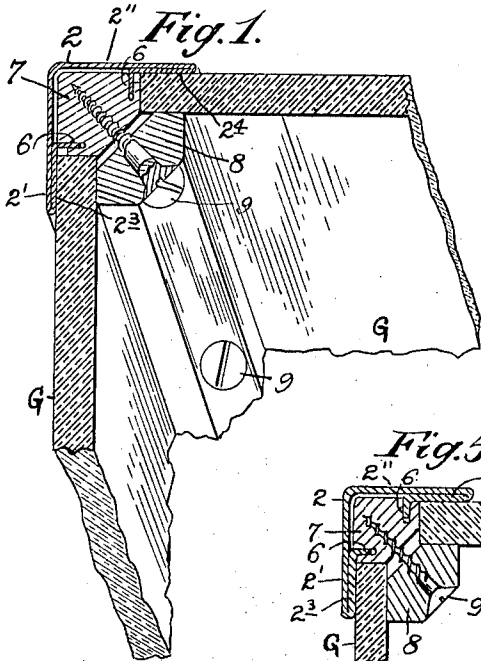


A. VOIGT.
 CONNECTOR FOR GLASS PLATES.
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945,351.

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CONNECTOR FOR GLASS PLATES.

945,351.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, ALBERT VOIGT, of the borough of Brooklyn, city and State of New York, have invented a certain new and useful Improvement in Connectors for Glass Plates, of which the following is a specification.

By this invention there is provided a simple strong and economical construction for joining the contiguous edges of panes or plates of glass forming constituent parts of store fronts, show cases, etc. The present construction enables the metallic outside or visible part of the connector construction to be so formed as to lie flat against and project but slightly beyond the planes of the outer surfaces of the glass plates and the portions superposed on the edge portions of the plates to connect with each other by a comparatively sharp bend when the panes are at an angle to each other. Such a flattened disposition adds materially to the light and graceful appearance of the joint.

Further features of the invention pertain to the provision of a construction adapted to readily connect plates of different thickness that is in those cases in which the plate on one side of the joint is of a different thickness to that on the other side thereof, to a construction in which the tendency to crack the glass during the act of fastening the parts together is minimized, to a construction in which the warping or contraction of the wooden parts usually embodied in such connections does not render the joint a leaky one, etc.

These various features are illustrated in the drawing accompanying the present specification in which—

Figure 1 is a sectional perspective of a glass plate connector embodying the features of the invention. Fig. 2 is a similar view of a modified construction. Fig. 3 is a similar view of the present invention as applied to the connection to glass plates lying substantially in the same plane. Fig. 4 is a similar view of the construction when the plates make an oblique angle with each other. Fig. 5 shows the construction of Fig. 1 applied to the connection of plates of different thickness.

Similar characters of reference designate corresponding parts in all figures.

The present corner post and division bar connector embodies in a general way an outside finish and clamping member preferably

made of sheet metal and having provision for more or less loosely holding a wooden strip for the engagement of clamping screws which pass through an inner wooden clamping member.

Referring to Fig. 1, the right angled connected glass plates are designated by G. Exteriously there is superposed on the contiguous edge portions of these plates an exterior finish and clamping member or angle strip 2. This latter is preferably made of sheet metal formed or bent longitudinally to correspond to the angle of the plates. That is to say, if the two plates are substantially right angled the strip is bent longitudinally intermediate its edges to form preferably flat parts lying in the planes of the connected plates. In Figs. 1 and 5 these parts 2', 2'' of strip 2 are right angled being connected by a curve of short radius, as also parts 3', 3'' of strip 3, Fig. 2. In Fig. 4 the parts 4', 4'' of strip 4 make an oblique angle with each other while in Fig. 3, strip 5 is straight from one side to the other. Each longitudinal edge portion of the strip is preferably bent or folded over upon itself to form flat faces that are pressed against and make a tight joint with plates G, G. These plate-contacting folded over parts are designated by 2³, 2⁴ in Figs. 1 and 2, 3³, 3⁴ in Fig. 2, 5³, 5⁴ in Fig. 3 and 4³, 4⁵ in Fig. 4. Each of the finish and clamping members or strips, 2, 3, 5 and 4 is provided with means extending inwardly across the respective spaces between the parallel planes of the surfaces of the connected plates for holding more or less loosely (to allow for contraction and expansion) and against lateral dislodgment, a longitudinal wooden screw engaging strip. For instance in the construction illustrated in Figs. 1 and 5 the finish strip is formed with inwardly extending longitudinal flanges 6, 6 which enter corresponding grooves in wooden strip 7; in Fig. 2, strip 7 is held in place by a thin perforatable piece of sheet metal 6' whose edges are tightly clamped by the bent over edges of the metallic finish piece; in Fig. 4 strip 7² is similarly held by a similarly functioning sheet metal piece 6²; while in Fig. 3, strip 7³ is likewise secured by a sheet metal piece 6³.

Interiorly of the assembled glass plates there is provided a companion clamping member which preferably consists of a longitudinal wooden strip or batten. In Figs. 1 and 5 clamping strip 8 has two plate con-

tacting faces disposed at substantially the same relative angle as the planes of glass plates G, G. It may be placed in position so as to press against the faces of the plates whereupon the usual wood screws 9 may be engaged into it and strip 7 at the desired points and all parts firmly clamped against the plates; similarly as to Fig. 2 the metallic sheet metal piece being readily perforated. In Fig. 4 the angle between the plate-contacting edges of clamping strip 8' necessarily differs from the corresponding angle of Figs. 1 and 2. In the division bar indicated in Fig. 3 two clamping strips 8², 8² are indicated firmly held in place by wood screws 9 while the bearing surface and lateral stiffness are increased by a filler 10 of suitable material as metal.

Obviously the glass may be laid in putty or cement or other packing, as paper, etc., may be used to secure a tight joint or prevent any single glass plate from being clamped in contact with two metallic surfaces. Such an inserted paper strip is indicated in Figs. 2 and 4 being designated by 11 and 11' respectively. It is obvious, also, that should the joined plates be of different thicknesses as in Fig. 5, the construction is readily applied without change to their connection.

It will be noted that in all the illustrated constructions wooden strip 7 of Fig. 1, and the part analogous thereto in the other figures, is held against lateral dislodgment, or in other words the pull of the holding screws, by means which extend from the finish and clamping member inwardly across the respective spaces between the parallel planes of the surfaces of the connected plates.

Having described my invention, I claim:

1. In a joint for connecting glass plates, the combination of an exterior finish and clamp-forming member, a wooden screw-engaging strip, means extending inwardly from said finish and clamp-forming member across the spaces between the respective

parallel planes of the connected glass plates for holding said strip in lateral relation to said member, an inner wooden clamping member, and fastening screws.

2. In a joint for connecting glass plates, the combination of an exterior finish and clamp-forming member having folded over flat plate-contacting edge portions, a wooden screw-engaging strip, means extending inwardly from said finish and clamp-forming member across the spaces between the respective parallel planes of the connected glass plates for holding said strip in lateral relation to said member, an inner wooden clamping member, and fastening screws.

3. In a joint for connecting glass plates, the combination of an exterior finish and clamp-forming member having folded over flat plate-contacting edge portions, a wooden screw-engaging strip, means extending inwardly from said finish and clamp-forming member across the spaces between the respective parallel planes of the connected glass plates for holding said strip in lateral relation to said member, an inner wooden clamping member and fastening screws.

4. In a joint for connecting glass plates, the combination of an exterior finish and clamp-forming member comprising flat parts disposed substantially parallel to the planes of the connected plates and having folded over flat plate-contacting edge portions, a wooden screw-engaging strip, means extending inwardly from said finish and clamp-forming member across the spaces between the respective parallel planes of the connected glass plates for holding said strip in lateral relation to said member, an inner wooden clamping member and fastening screws.

In witness whereof I have signed this specification in the presence of two subscribing witnesses.

ALBERT VOIGT.

Witnesses:

RICHARD W. NEW,
ADOLPH WELSING.