Aug. 25, 1931. T. R. WILSON 1,820,206

FASTENING MEANS FOR CORNER FRAME STRIPS

Filed Aug. 18, 1930

Fig.1.

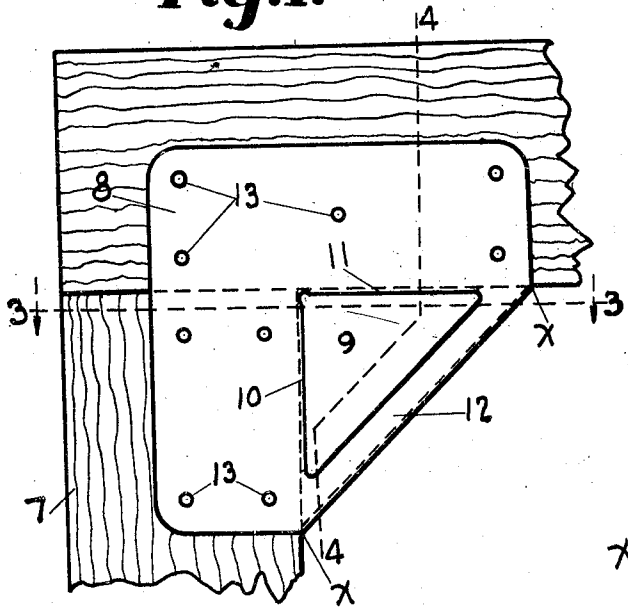
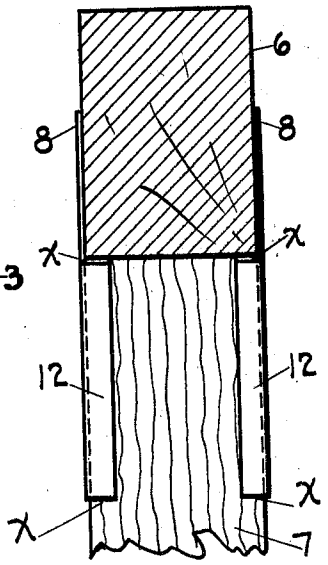


Fig.2.



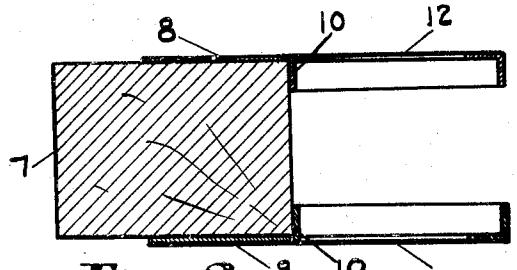


Fig.3.

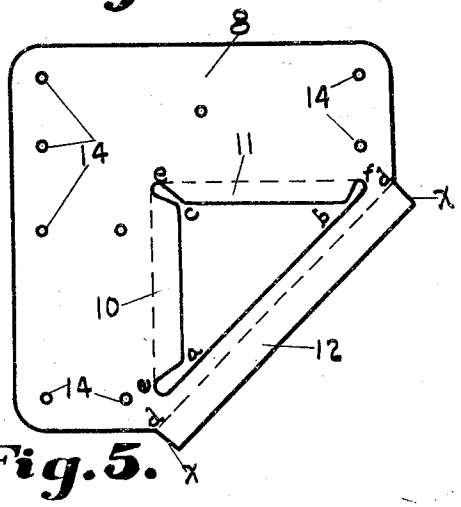


Fig.5.

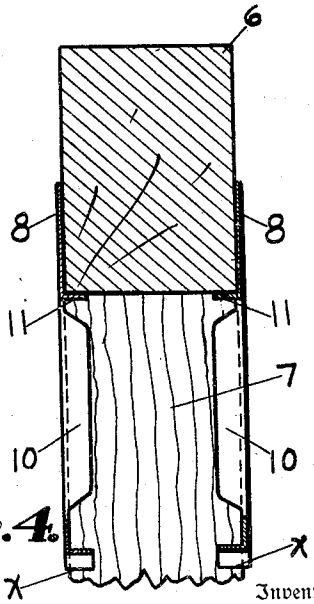


Fig.4.

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UNITED STATES PATENT OFFICE

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FASTENING MEANS FOR CORNER FRAME STRIPS

Application filed August 18, 1930. Serial No. 475,968.

This invention relates to a fastening means for corner frame-strips, being an improvement of the sheet metal corner pieces used generally upon screen frames for windows and doors as a substitute for mortising.

The invention has for its object, broadly, to provide a fastening means which may be readily applied to the end-portions of the frame-strips by any person of ordinary skill, and when applied will form a joint more firm and rigid than ordinary.

One of the specific objects of the invention is to provide means for fastening the parts mentioned which will permit planing of the horizontal and vertical frame-strips at their outer edges when fitting the frames into an opening. Another object is to provide fastening means which may be used upon frame-strips generally, regardless of the width or thickness of said strips.

With the foregoing objects in view and others to be mentioned, the invention presents a new and useful construction, combination and arrangement of parts as described herein and claimed, and as illustrated in the accompanying drawings, it being understood that changes may be made in size, proportion and minor details, said changes being within the scope of the invention as claimed.

In the drawings, Fig. 1 is a side view showing the end-portions of a horizontal and vertical strip fastened together by means of the device. Fig. 2 is an end view of the same. Fig. 3 is a sectional view on line 3—3 of Fig. 1. Fig. 4 is a sectional view on line 4—4 of Fig. 1. Fig. 5 is a plan view showing a metallic sheet incised and adapted to be bent to form a side plate.

Referring now to the drawings, the invention is shown and described in connection with a horizontal frame-strip 6 and vertical frame-strip 7, said strips being disposed in abutting position at right-angles to each other in forming a corner for a frame.

Numerals 8 indicate a pair of metallic plates, each incised on lines *a*—*b*, *b*—*c* and *c*—*a* to provide an opening 9 and bent at right-angles on the dotted lines *e*—*e* and *e*—*f* to provide the respective flanges 10 and 11, and bent on the dotted line *d*—*d* at right-angles to provide a brace-member 12 of L-shape in cross section.

In operation, the metallic plates 8 are placed upon opposed sides of the abutting strips 6 and 7, the flanges 10 being disposed upon the inner side of the frame-strip 7, the flanges 11 being disposed on the inner side of the frame-strip 6, the ends of the brace-members 12 also engaging the inner sides of said strips 6 and 7, each end-portion *x* of said brace-member snugly engaging a frame-strip in alignment with a flange. Thereafter, suitable keepers 13 are used for securing the plates to the frame-strips, apertures 14 being formed in the plate for this purpose.

It will be seen that the fastening-means as described may be used regardless of the width or thickness of the frame-strips, and this is a great advantage as a commercial feature.

Also while generally used in pairs a single plate 8 may be used, and will be effective as a means for fastening the frames together, and since the plates on the opposed sides of the frame-strips are alike in all respects they may be nested compactly to occupy a limited space, and this is an advantage when shipping the product from the factory.

It will be appreciated that a fastening means for the purpose mentioned should be effective in providing a rigid joint, and it will be seen that the flanges 10 and 11 together with the ends *x* of the brace 12 bear upon the horizontal and vertical frame-strips to prevent any relative movements thereof. Also since each ends *x* of the brace is in alignment with a flange they co-operate to advantage in producing a rigid joint for the frame.

I claim as my invention,—

A corner brace for frame members comprising an integral plate having substantially right angularly extending leg portions which engage the sides of the frame members to be braced and an integral connecting portion connecting said leg portions, flanges struck out from said leg portions and engaging the frame members within the plane of their joint, and a flange extending from the connecting portion of said plate to lie within the plane and across the joint of the frame

members, said flange being substantially rectangular in shape and reinforced by said connecting portion with the free edges of said flange contacting with the sides of the frame members.

In testimony whereof, I affix my signature.

THEODORE R. WILSON.