

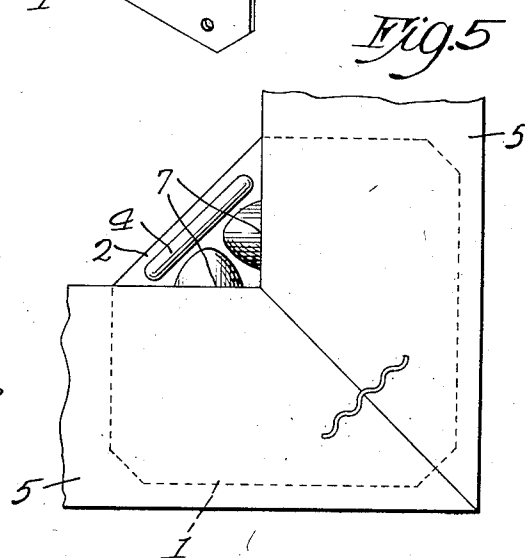
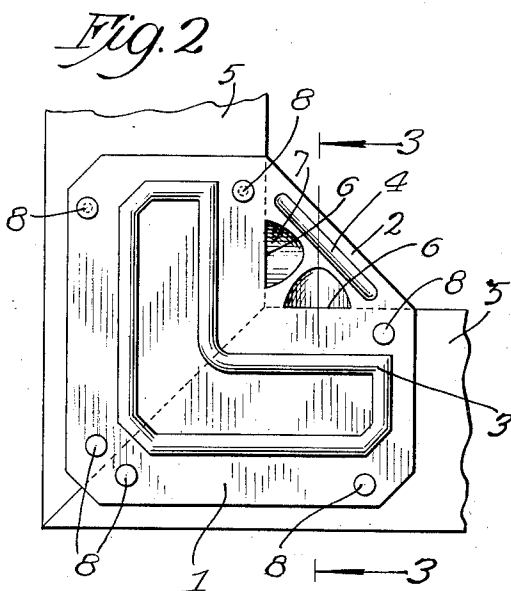
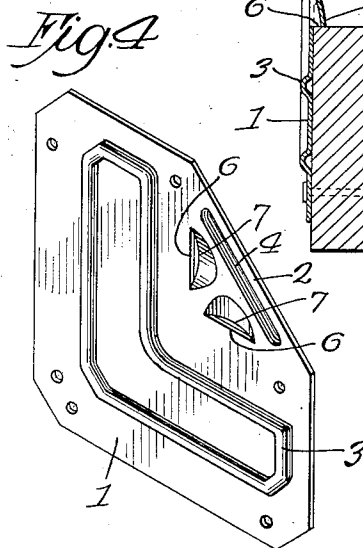
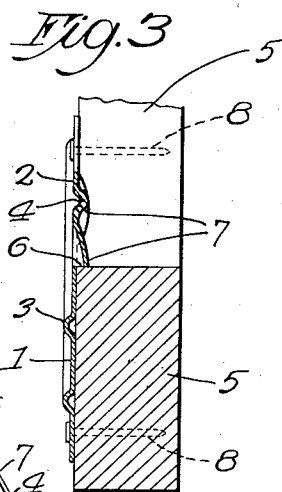
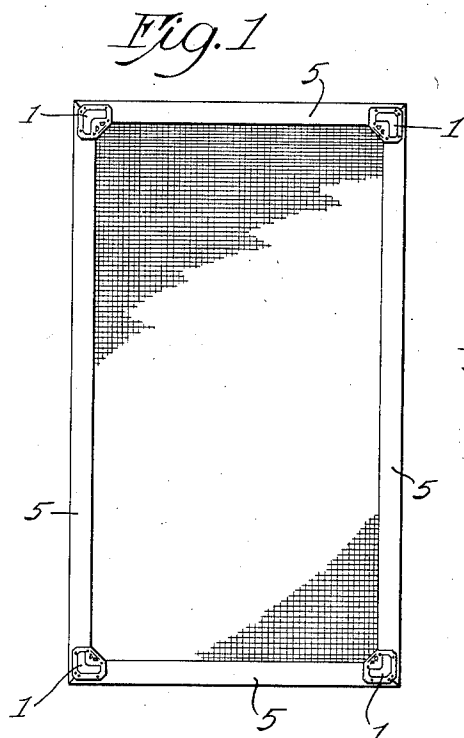
Aug. 6, 1935.

W. D. FERRIS

2,010,660

CORNER BRACE PLATE

Filed July 11, 1934



Inventor
William D. Ferris
By Arthur F. Furand *Atty.*

UNITED STATES PATENT OFFICE

2,010,660

CORNER BRACE PLATE

William D. Ferris, Sterling, Ill., assignor to Frantz
Manufacturing Co., Sterling, Ill., a corporation
of Illinois

Application July 11, 1934, Serial No. 734,612

7 Claims. (Cl. 20—92)

This invention relates to metal brackets for reinforcing the corners of frames, such as the wooden frames of window screens, and for similar purposes.

Generally stated, the object of the invention is to provide a metal bracket plate of simple and inexpensive form, one that may be inexpensively manufactured, and that can easily be applied.

It is also an object to provide an improved construction and arrangement whereby a bracket plate of this kind does not need to have any right angle portions such as portions that are punched out and bent at right angles to the plane of the plate, thereby to simplify the process of manufacture, as well as to render the bracket plate in some ways more satisfactory and effective in use.

To the foregoing and other useful ends, the invention consists in matters hereinafter set forth and claimed and shown in the accompanying drawing, in which—

Fig. 1 is a front elevation of a window screen frame provided with corner bracket plate reinforcing means embodying the principles of the invention.

Fig. 2 is an enlarged front elevation of one of said bracket plates, and the adjacent portion of the frame to which it is attached.

Fig. 3 is a vertical section on line 3—3 in Fig. 2 of the drawing.

Fig. 4 is a perspective of one of said bracket plates.

Fig. 5 is a rear view of the corner portion of the frame with the said bracket plate attached thereto.

As thus illustrated, the invention comprises what is fundamentally a flat and square plate 1, with the corners cut off, as shown, the corner portion which overhangs the recess in the corner of the frame being cut off more than the others, thereby forming a straight edge portion 2 that extends from one side to the other of the right angle recess in the corner of the frame. The body portion of the bracket plate, or its outer surface is formed with an upstanding bead 3, which is L-shaped in form, the bead being endless, with flat space between the sides thereof, whereby the body of the plate is effectively stiffened. The edge portion 2 is provided on its under or inner side with a depending bead 4, which stiffens the brace thus formed across the recess or gap in the corner of the frame 5, which latter may be an ordinary window screen frame.

Also, in the portion of the plate that overhangs the recess in the corner of the frame, two slots 6

are cut, and the metal outside of these slots is forced down to provide curved edges 7 that engage the inner edges of the adjoining frame members.

It will be seen that nails 8 are inserted through the body of the plate, into the adjoining members of the frame, to secure the bracket plate in place.

With this arrangement, the bracket plate has an upstanding bead formation 3, and an inside bead formation 4, tending to stiffen the plate, and in addition edge portions 7 are provided that bear against the inner edges of the frame, whereby the plate, although practically entirely flat, is effective to brace the corner portion of the frame against strains in different directions. There are no punched out right angle portions, such as portions that are sometimes punched out and bent at right angles to the plane of the plate, for engagement with the frame, and hence the bracket plate is easier and less expensive to manufacture, and is at the same time in some ways more effective and satisfactory in use.

By pressing the edges 7 inwardly, it will be seen that the plate is substantially entirely flat, and has no other edges that are not in the plane of the body of the plate, and that in this way the plate has edgewise engagement with the edges of the frame, in the corner of the frame, under the overhanging section of the plate. In this way, the plate is practically not weakened, by any cut-out portions and the overhanging section of the plate is practically as stiff, if not stiffer, than it would be without the indentations that result in the edges 7 that engage the edges of the frame to properly position the plate.

What I claim as my invention is:

1. A reinforcing bracket plate for the corners of frames, formed with a substantially or practically flat body adapted to overlie the adjoining frame members and having a flat section thereof overhanging the recess inside the corner of the frame, said overhanging section being provided with portions pressed inwardly to provide the flat bottom of said section with edges that bear against the inner edges of the frame, so that except for said overhanging section the flat bottom or inner surface of the plate is practically flush, and whereby the plate has edgewise engagement with the inner edges of the frame to position it over said recess.

2. A structure as specified in claim 1, said overhanging portion having a stiffening bead extending obliquely of the corner, between said

depressed portions and the free edge of said overhanging section.

3. A structure as specified in claim 1, the body portion of the bracket plate having an L-shaped stiffening portion overlying the adjoining members of the frame, formed by an endless bead, whereby said L-shaped portion has a flat inner area surrounded by said bead.

4. A structure as specified in claim 1, said overhanging portion having a stiffening bead extending obliquely of the corner, between said depressed portions and the free edge of said overhanging section, said bead being formed on the under or inner side of said overhanging portion.

5. A structure as specified in claim 1, the body

portion of the bracket plate having an L-shaped stiffening portion overlying the adjoining members of the frame, formed by an endless bead, whereby said L-shaped portion has a flat inner area surrounded by said bead, said bead being formed on the exposed outer surface of the plate, parallel with the outer edges of the plate, and with the edges of the frame.

6. A structure as specified in claim 1, in which except for said engaging edges all other edges of the plate are in the plane of the body thereof.

7. A structure as specified in claim 1, said plate adjacent the corners thereof having holes for nails or screws.

WILLIAM D. FERRIS. 15