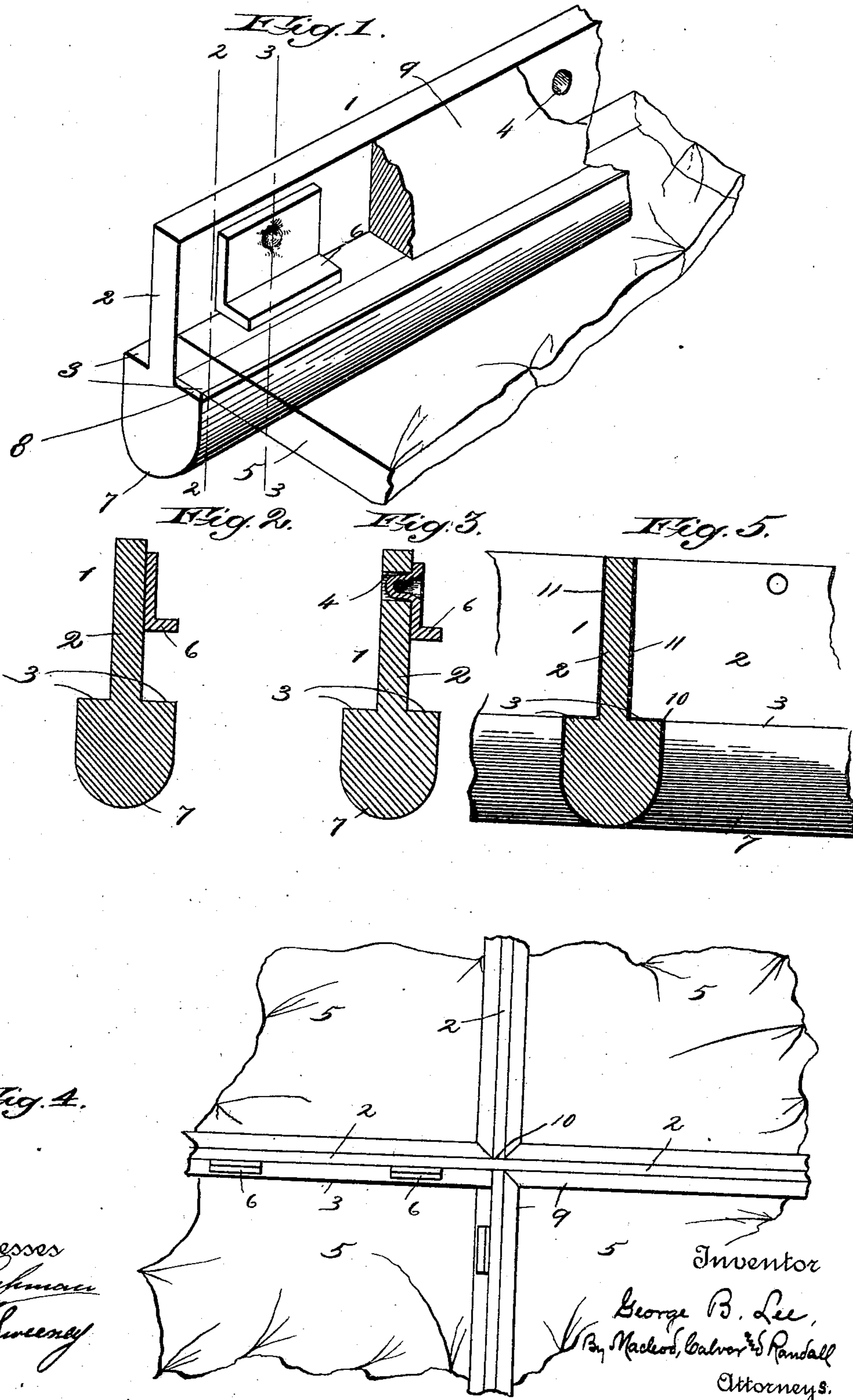


(No Model.)

G. B. LEE.
METALLIC SETTING FOR STAINED GLASS WINDOWS.
No. 500,587. Patented July 4

Patented July 4, 1893.



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UNITED STATES PATENT OFFICE.

GEORGE B. LEE, OF PROVIDENCE, RHODE ISLAND.

METALLIC SETTING FOR STAINED-GLASS WINDOWS.

SPECIFICATION forming part of Letters Patent No. 500,587, dated July 4, 1893.

Application filed February 9, 1893. Serial No. 461,609. (No model.)

To all whom it may concern:

Be it known that I, GEORGE B. LEE, a citizen of the United States, residing at Providence, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Metallic Settings for Stained-Glass Windows, &c., of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates mainly to the metallic settings which are employed for the purpose of uniting and sustaining in place the pieces of glass and of other materials, of various colors, shapes, and sizes, that make up the glazed portion of an ornamental or stained-glass window, panel, or the like article.

It has among its objects to provide an improved metallic setting of cheap and simple character which may be used in all cases where the ordinary lead strip or came has been used heretofore, which may be worked and bent as may be required for the purpose of fitting the outlines of the pieces of glass or other material that are used in any pattern or design, which shall retain the glass, &c., in place without the soldering heretofore required, which shall give great stiffness and strength to the window, panel, or the like article in which the same is used and thereby prevent bulging and collapsing, and which shall enable an air-tight and watertight joint to be made.

The invention consists in a metallic setting possessing certain novel features of construction as hereinafter is fully set forth, and it first will be described with reference to the accompanying drawings, and then will be particularly pointed out and clearly defined in the claims at the close of this specification, forming a part hereof.

In the drawings, Figure 1 is a perspective showing the character of my improved metallic setting, and the manner in which the glass is held thereto. Fig. 2 is a view in section on the line 2—2 in Fig. 1. Fig. 3 is a view in section on the line 3—3 in Fig. 1. Fig. 4 is a view of a small portion of an ornamental window, showing the application and use of my invention. Fig. 5 is a sectional view illustrating the manner in which joints are made.

At 1 is shown a strip of any suitable metal,

the same being formed with a transverse web 2 and a laterally projecting flange or flanges 3. The web 2 has holes 4 made in or through the same at suitable intervals as shown in Fig. 1. The flange or flanges 3 serve for the support of the glass or other material 5, which rests thereon as shown in Fig. 4, the glass being held from rising therefrom by strips or cleats 6, preferably of L-shape in cross-section, which are applied to the web 2 above the glass and the inner edges whereof bear against the glass. For the purpose of securing the cleats or strips in place, portions of the material thereof are punched or driven by a suitable tool into the holes 4, as shown most clearly in Fig. 3. The strip 1 will be made of some metal which is sufficiently pliable to enable the strip to be bent to the various curves and angles which it may be required to have it assume, so as to enable it to be used like the ordinary lead strip or came and wherever the latter admits of being used. The metal used, however, preferably will possess a certain degree of stiffness so as to enable it to hold well the form which is given to it by the bending, and the shape given to the strip, as shown, also is such as to permit it to be bent transversely with comparative readiness, but to restrain it from bending edgewise. For the latter reason a window built up with my metallic setting will be free from the tendency to bulge and collapse which is so commonly observed in the case of stained-glass windows made as heretofore. The edge 7 of the strip will be made rounded, or like a bead or molding, and thereby will be given an ornamental character.

Preferably in practice, a thin bed 8, Fig. 1, of putty or like cement will be applied to each flange 3 before resting the glass or other material thereon, and after fastening the cleats or strips 6 in place, putty or the like cement will be applied over the glass and cleats or strips, as shown in Figs. 1 and 4 at 9, thereby rendering the structure air and water-tight, and making it far stronger and more durable than stained-glass windows and similar articles have heretofore been made. As will be obvious, repairs may be made quickly and readily.

To join the end of one portion of the strip 1 to the side of another portion, I first cut

away the said end at 10 so as to form a recess to receive the projecting portion of the said side, and I then apply solder 11 in the rabbet and to the straight webs, none being
5 permitted to appear on the face.

It is obvious that I may employ my invention in the construction of all kinds of windows, panels, and all similar articles wherein pieces of glass and other materials are set
10 and secured in ornamental and other patterns and arrangements.

When glass is located at only one side of the strip 1, as around the edges of a window, then only one flange will be necessary on the strip 1.

15 I claim as my invention—

1. The combination with a pliable supporting strip having a transverse web formed with holes, and also having a glass-sustaining flange, of a glass-retaining cleat or strip applied to the said web and having a portion or
20 portions of its substance punched into one or more of the said holes whereby to hold the cleat or strip in place, substantially as described.

25 2. The combination with a pliable supporting-strip having a transverse web formed with holes, and also having lateral glass-sustaining flanges, of glass-retaining cleats or strips applied to the said web and having portions of
30 their substance punched into said holes where-

by to hold the cleats or strips in place, substantially as described.

3. The combination with a pliable supporting-strip having a transverse web formed with holes, and also having a lateral glass-sustaining flange, of a piece of glass resting on said
35 flange, a glass-retaining cleat or strip applied to said web, bearing against the said glass, and having a portion of its substance punched into one of the said holes to hold the cleat or
40 strip in place, and putty or cement applied to the parts and making a tight joint, substantially as described.

4. The combination with a pliable supporting-strip having a transverse web formed with
45 holes, and also having lateral glass-sustaining flanges on its opposite sides, of pieces of glass resting on said flanges, glass-retaining cleats or strips applied to said web, bearing against the glass, and having portions of their sub-
50 stance punched into the said holes, whereby to hold the cleats or strips in place, and putty or cement applied to the parts and making a tight joint, substantially as described.

In testimony whereof I affix my signature in
55 presence of two witnesses.

GEORGE B. LEE.

Witnesses:

JOHN A. VICKERY,
FRED A. WILDE.