

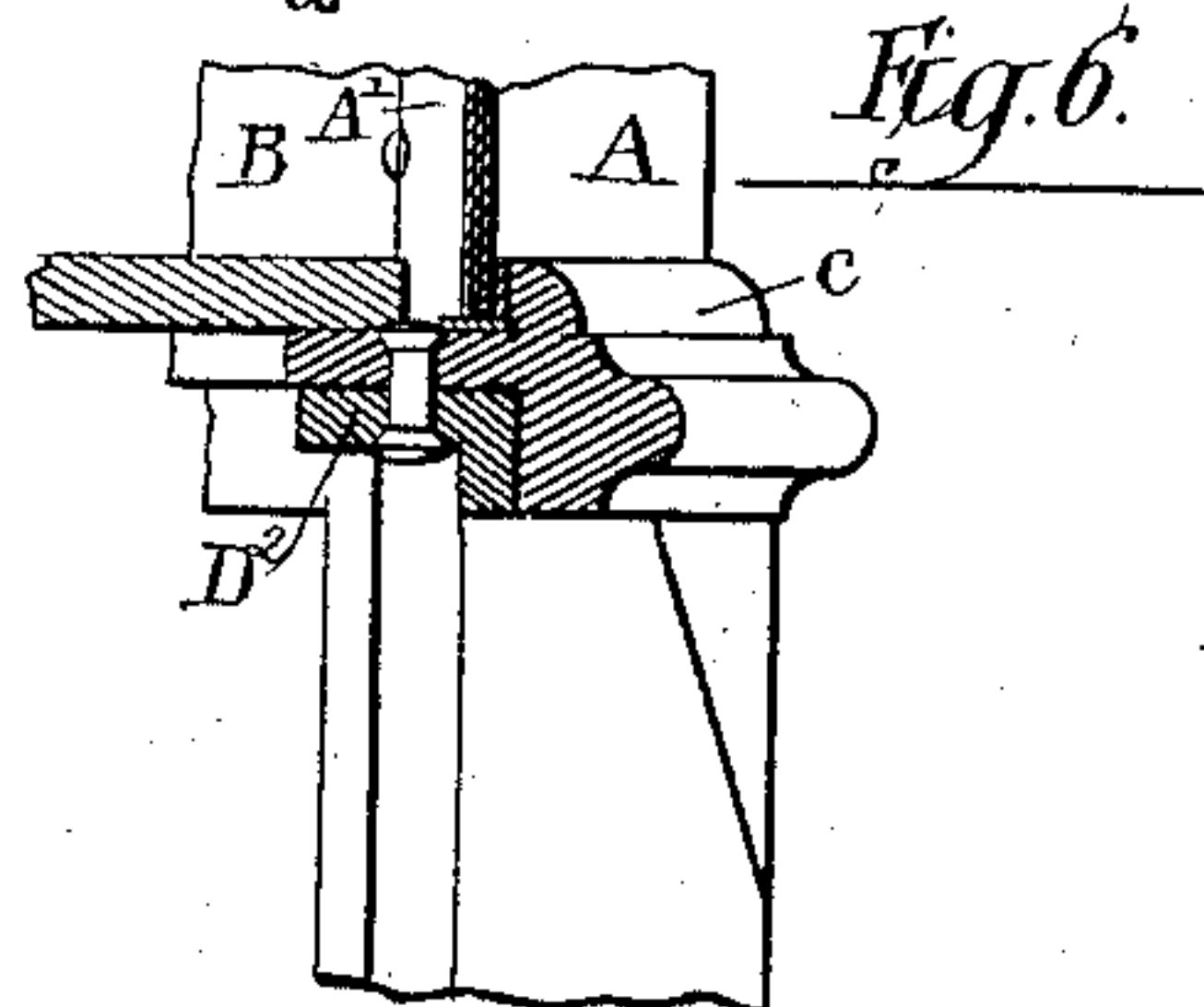
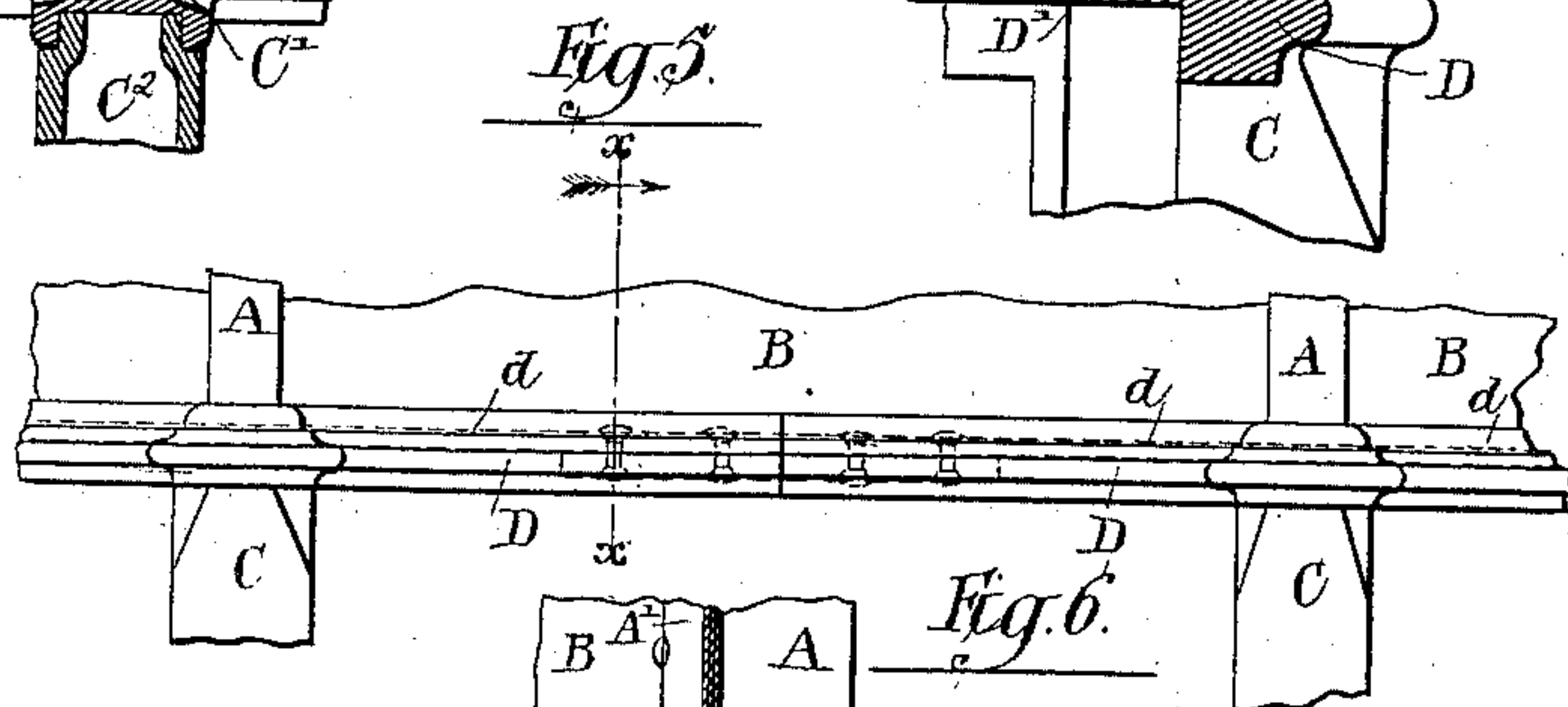
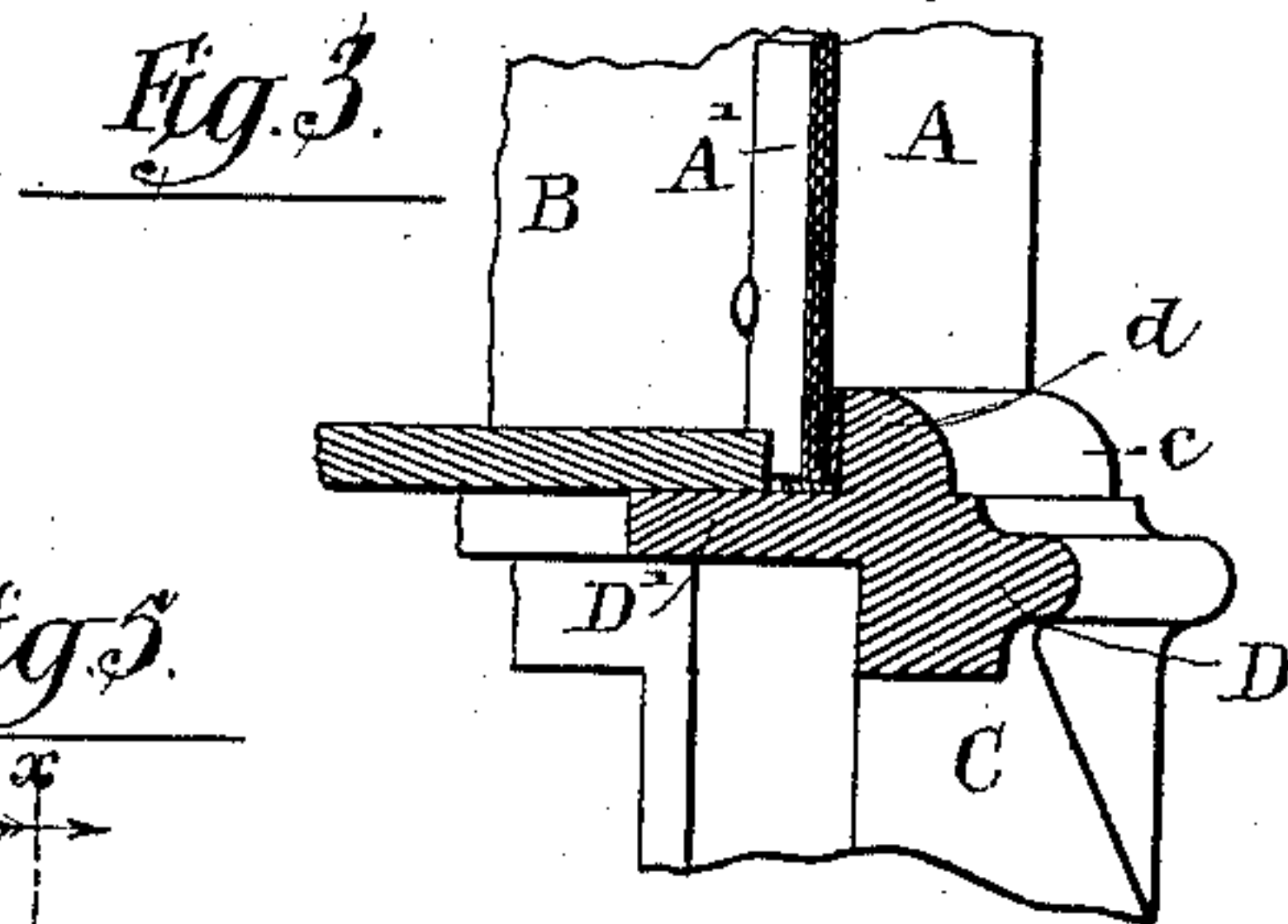
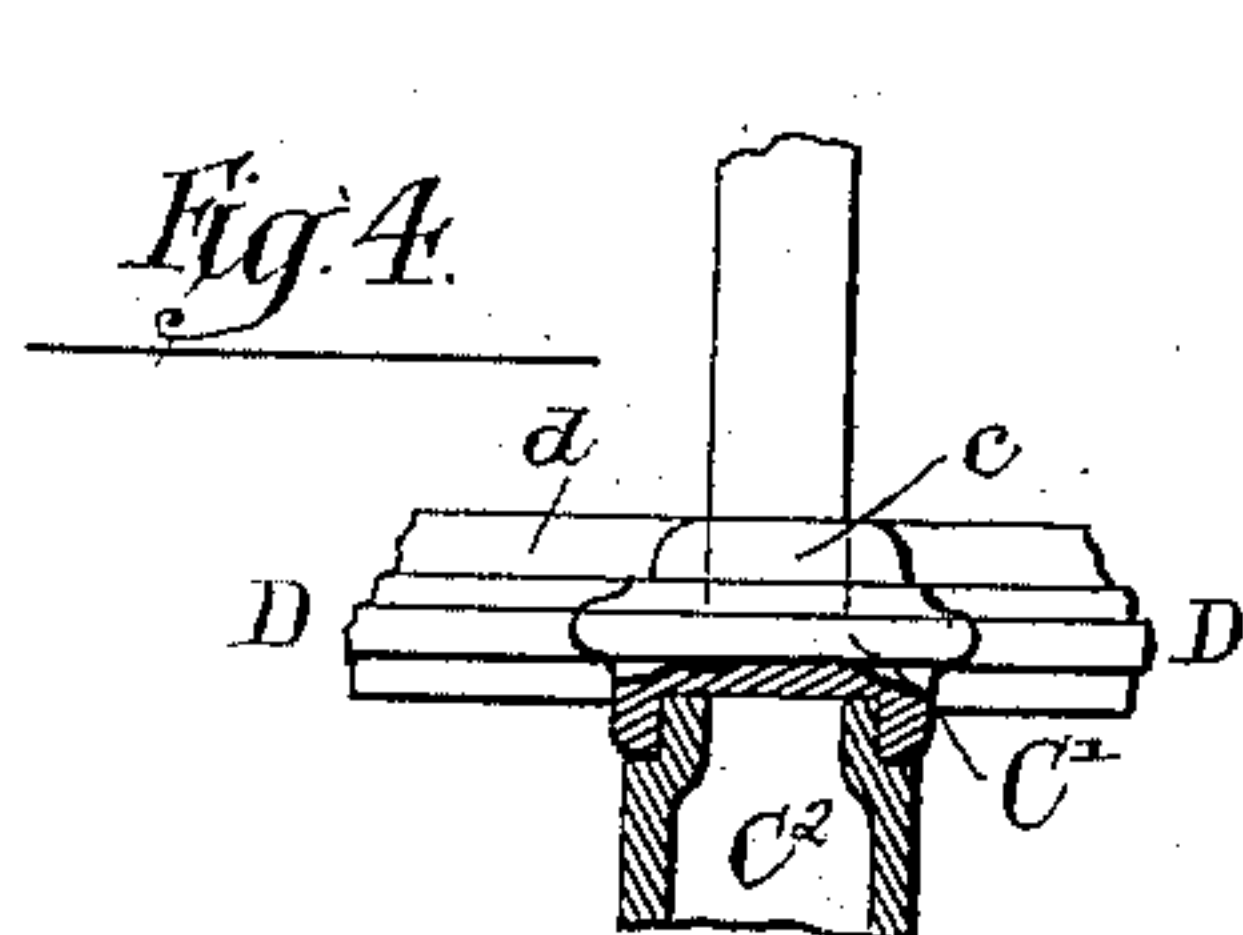
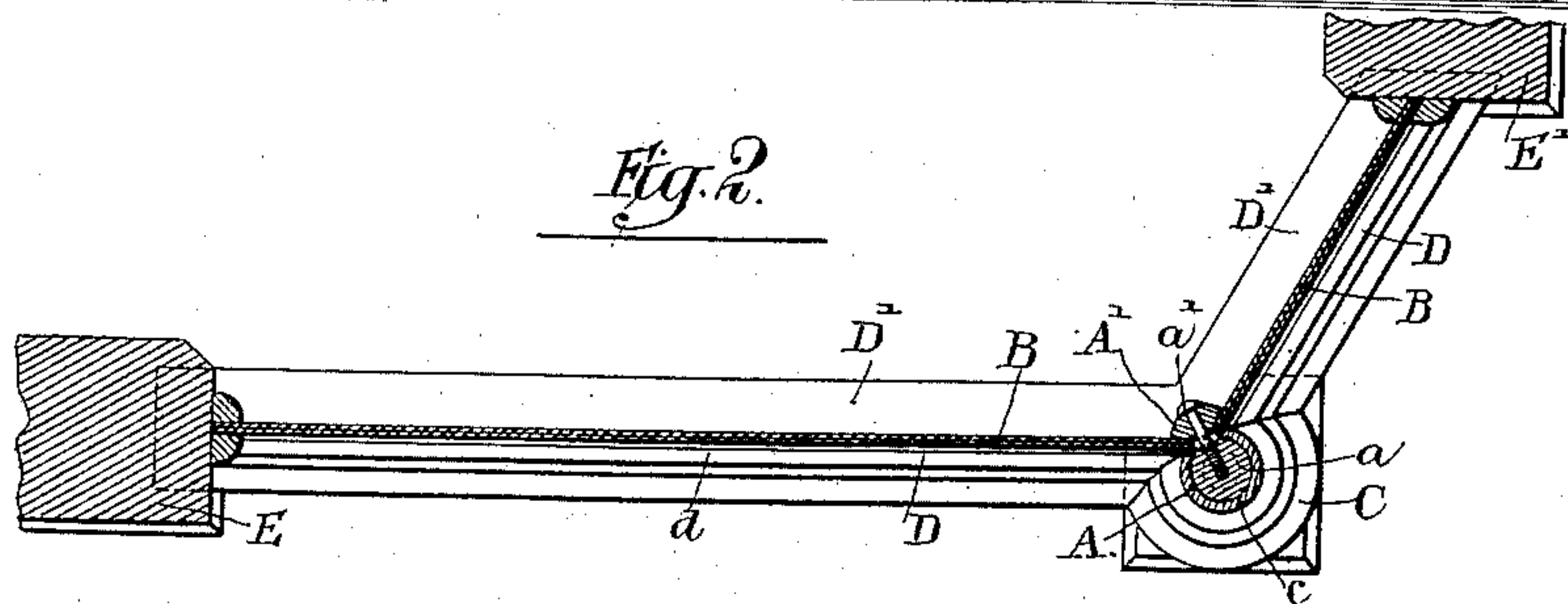
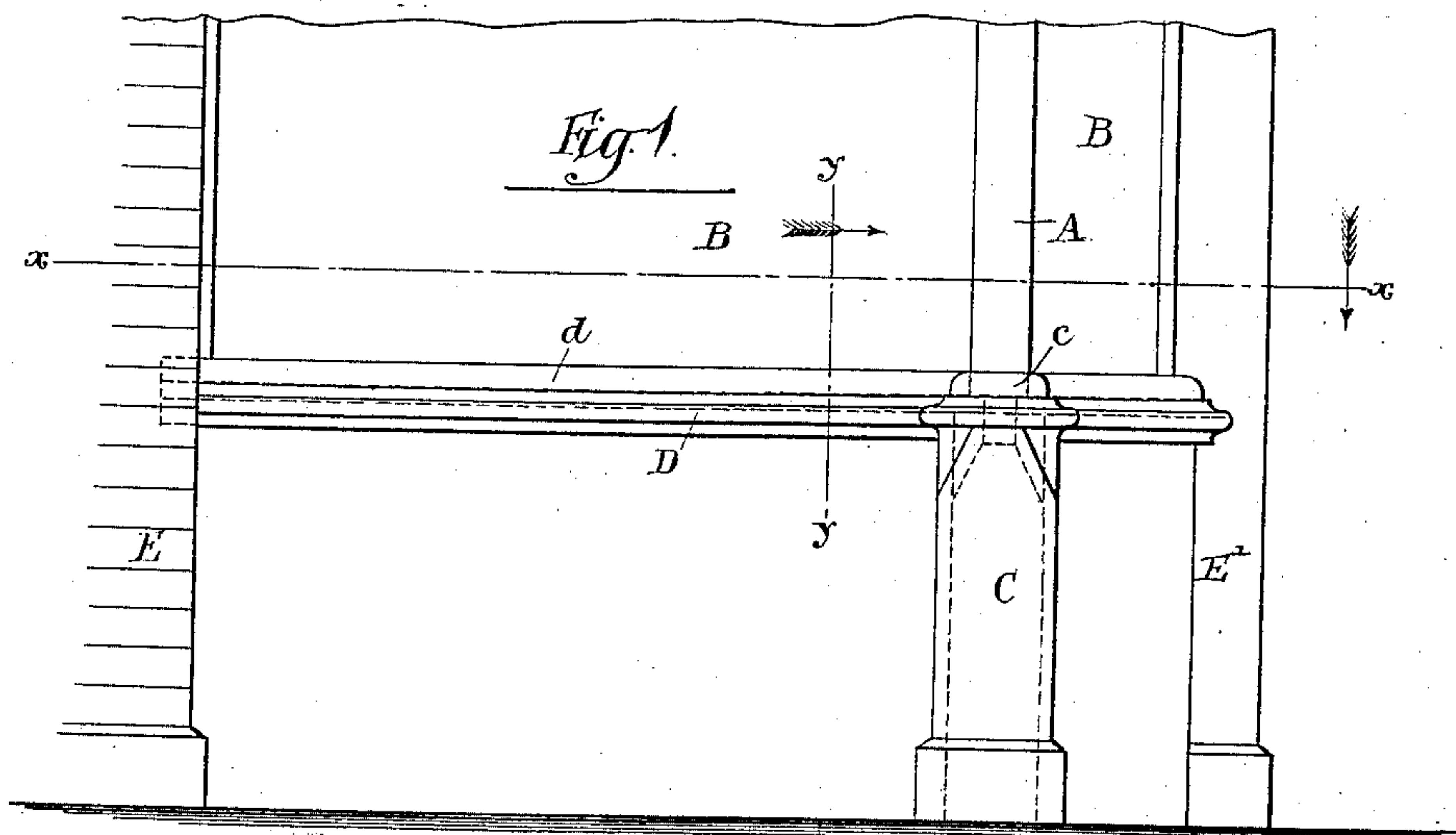
(No Model.)

P. J. BROSNAN.

WINDOW SASH.

No. 338,474.

Patented Mar. 23, 1886.



Witnesses:-

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UNITED STATES PATENT OFFICE.

PATRICK J. BROSNAN, OF CHICAGO, ILLINOIS.

WINDOW-SASH.

SPECIFICATION forming part of Letters Patent No. 338,474, dated March 23, 1886.

Application filed January 8, 1886. Serial No. 187,952. (No model.)

To all whom it may concern:

Be it known that I, PATRICK J. BROSNAN, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Window-Sashes; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to an improved construction in the frames or sashes for store-windows; and it consists in the matters hereinafter described, and pointed out in the appended claims.

The invention embraces features of construction in the lower sash-bar, wherein the latter is made of cast metal, and in one piece with the part supporting the corner-post or sash sustaining the vertical edge or edges of the glass, whereby a rigid and unyielding support is obtained for sustaining the weight of the glass, as will hereinafter more fully appear.

The invention may be more fully understood by reference to the accompanying drawings, in which—

Figure 1 is a front elevation of the lower part of a store-window constructed in accordance with my invention. Fig. 2 is a sectional plan view of the same, taken on line *x x* of Fig. 1. Fig. 3 is an enlarged sectional view taken on line *y y*, Fig. 1, through the lower sash-bar, showing the supporting-post therefor in elevation. Fig. 4 is a detail elevation with parts in section, showing another form of the base or support for the post. Fig. 5 illustrates a modified form of the device hereinafter described. Fig. 6 is a sectional view taken upon line *x x* of Fig. 5.

As illustrated in the said drawings, A indicates the vertical post sustaining the edge or edges of the glass B; C, a standard or support for the lower end of the post A, and D the lower sash-bar, which is cast integral with the upper part of the base or standard C, sustaining the post A. The said post A, as herein shown, is constructed of a pipe or tube cut away or slotted longitudinally at its inner side, and provided with a filling, *a*, of wood, the edges of the glass B being held in contact with

the post by means of a fillet, A', secured against the margins of the glass by screws *a'*, passing through said fillet and into the filling *a*. The said post A is held at its lower end in a socket, *c*, formed to receive it in the upper end of the metal support or standard C, said socket in the particular construction herein shown being desirably formed by the continuation of the fillet *d* extending along the top surface of the metal sash-bar D, and forming, with the horizontal inwardly-projecting flange D' upon said bar, the rabbet in which the lower edge of the glass B is held. The said flange D' also preferably forms the support for the boards or planks composing the bottom or flooring of the window, the said bar D being made of sufficient strength both to sustain the glass and the said planks.

In the case of a window having a single post at the meeting angle of two panes of glass, as herein shown, the bars D will preferably extend in both directions from the standard C, and will be supported at their free ends in the adjacent columns or walls E E' of the building.

In the case of a window having two or more posts A, as shown in Fig. 5, the lower sash-bar, D, will preferably be cast partially upon each of the standards C, the adjacent ends of the said bars being bolted to a connecting-bar, D², as clearly shown in Fig. 6, and in dotted lines in Fig. 5, or otherwise, as desired.

The important purpose of making the bars D and the support for the post A in one piece is to prevent relative movement of the parts, and for this purpose the part immediately supporting the post need not necessarily form the entire standard by which the said bar and post are sustained from the sidewalk or foundation of the building. The standard C may therefore be made in two parts, C' C², as shown in Fig. 4, the part C' in such case containing the socket *c*, and being made in one piece with the bar or bars D, and the part C² consisting of a post or standard adapted to properly sustain the part C'.

When the standard C is made in two parts, as last above set forth, said parts will be provided with suitable interfitting projections or flanges, as clearly shown in Fig. 4, so that they will be held in proper relative position without the use of other devices for this purpose.

The important advantage of the use of a metal sash-bar in place of the wooden bar heretofore employed is, that the metal bar will more certainly and reliably sustain the weight of the glass without liability of shrinkage, warping, and of giving away by decay so as to allow the settling of the glass, as is liable to occur in the construction of these parts commonly used.

In the common construction of buildings for mercantile purposes, also, the spaces between the window and sidewalk is utilized to give light to a room beneath the store to which the main window belongs; and in view of the great weight of large panes of glass generally used it has been necessary to make a wooden cross-piece forming the lower sash of considerable depth, and to sustain it by heavy framing occupying the space at the sides of the opening, to properly uphold the glass. By the use of a metal sash-bar, as herein proposed, a relatively small part of the opening beneath the window will be occupied by the supports for the glass, so that a much larger space than heretofore may be obtained for the lighting of the lower room.

It has been common heretofore to employ a post for sustaining the edge of the glass, formed of pipe or tubing, and also to use a cast-metal base or standard for sustaining the said post; but in connection with the said metal post and standard a wooden framing has generally been employed to form the lower sash-bar, said frame having had no positive connection with the metal base or standard, but being merely built against the latter and sustained by resting upon the sidewalk or other supporting-

surface at the base of the building, so as to uphold the lower sash-bar independently of the said standard.

The construction herein described and claimed has the general advantage over that last above referred to in sustaining the glass directly from the base or support for the post, and from the walls or columns of the building.

I claim as my invention—

1. A frame or sash for store-windows, comprising a vertical post for the side edge of the sash, a metal support or base sustaining said post, and a horizontal lower sash-bar made of metal and cast integral with the said support or base, substantially as described.

2. The combination, with a post, A, of a cast-metal support or base provided with a socket for said post, and a horizontal metal sash-bar, D, cast integral with the said base, substantially as described.

3. The combination, with the post A, of a metal support or base provided with a socket, c, for the lower end of the post, and a metal sash-bar cast in one piece with the support and provided with an inwardly-extending horizontal flange, D', affording support for the glass, and located in the same plane with the bottom of the socket c, substantially as described.

In testimony that I claim the foregoing as my invention I affix my signature in presence of two witnesses.

PATRICK J. BROSNAN.

Witnesses:

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V. F. MAYER.