

F. RECHT.
BRACKET.

No. 498,027.

Patented May 23, 1893.

Fig. 1.

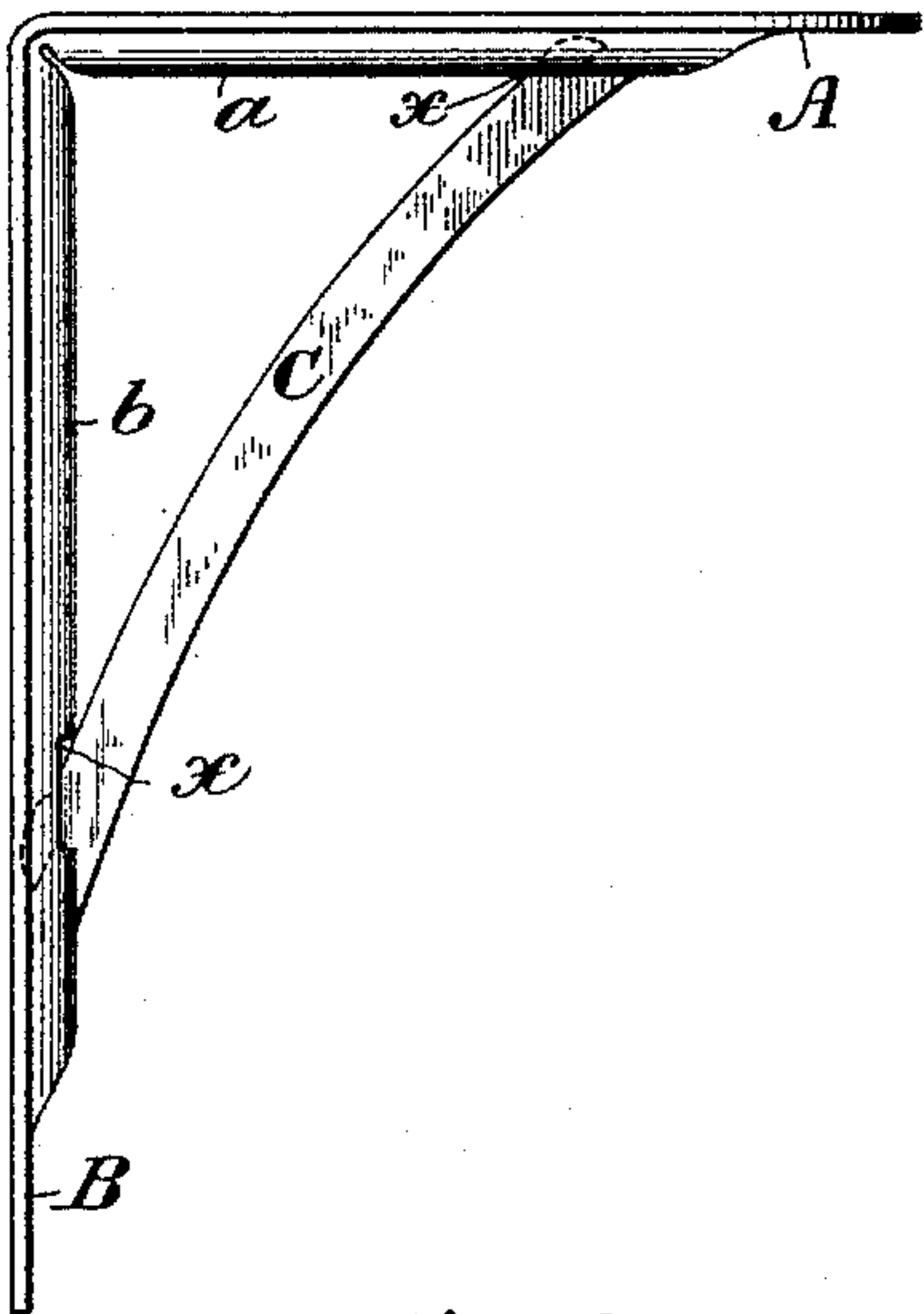


Fig. 2.



Fig. 3.

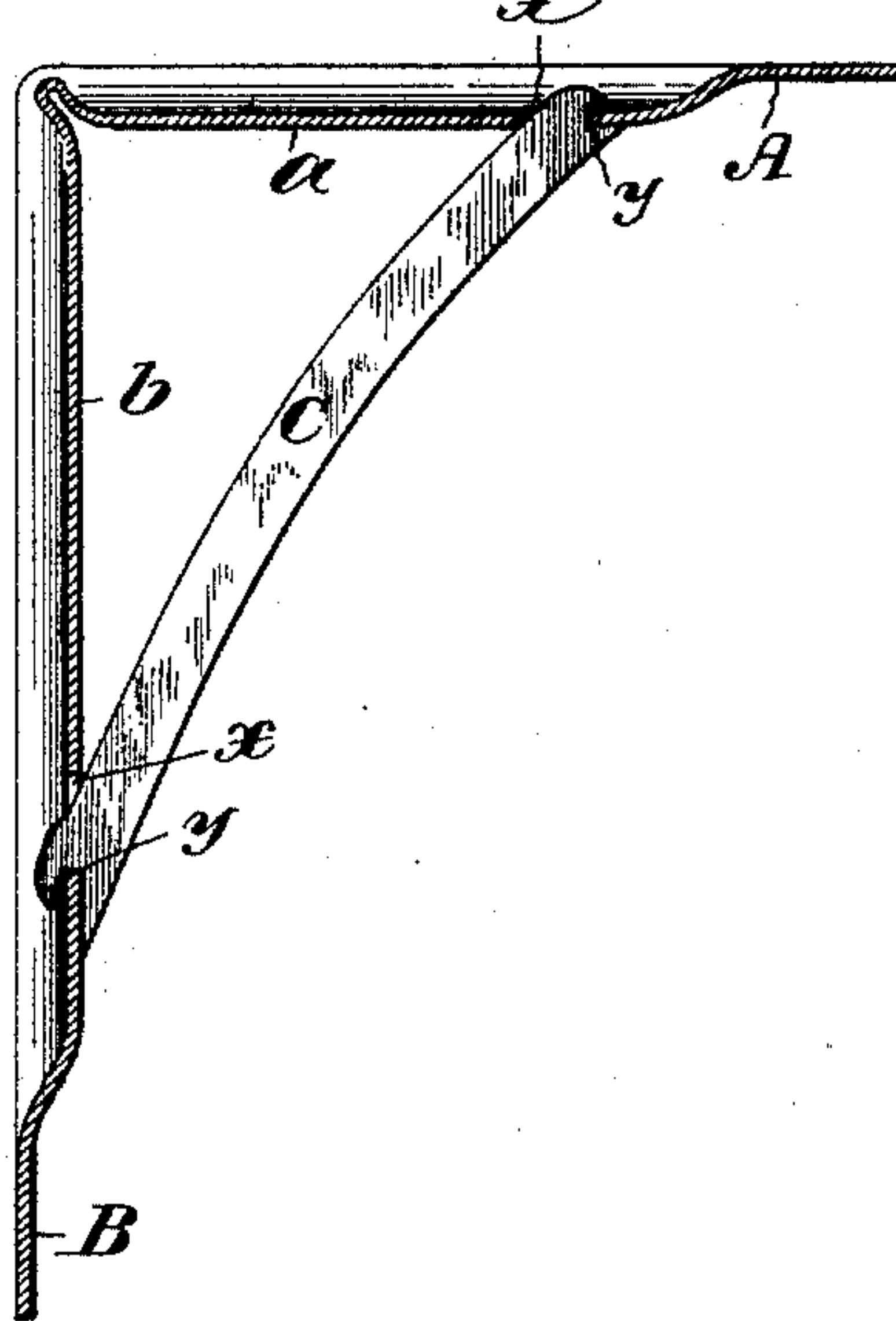


Fig. 4.

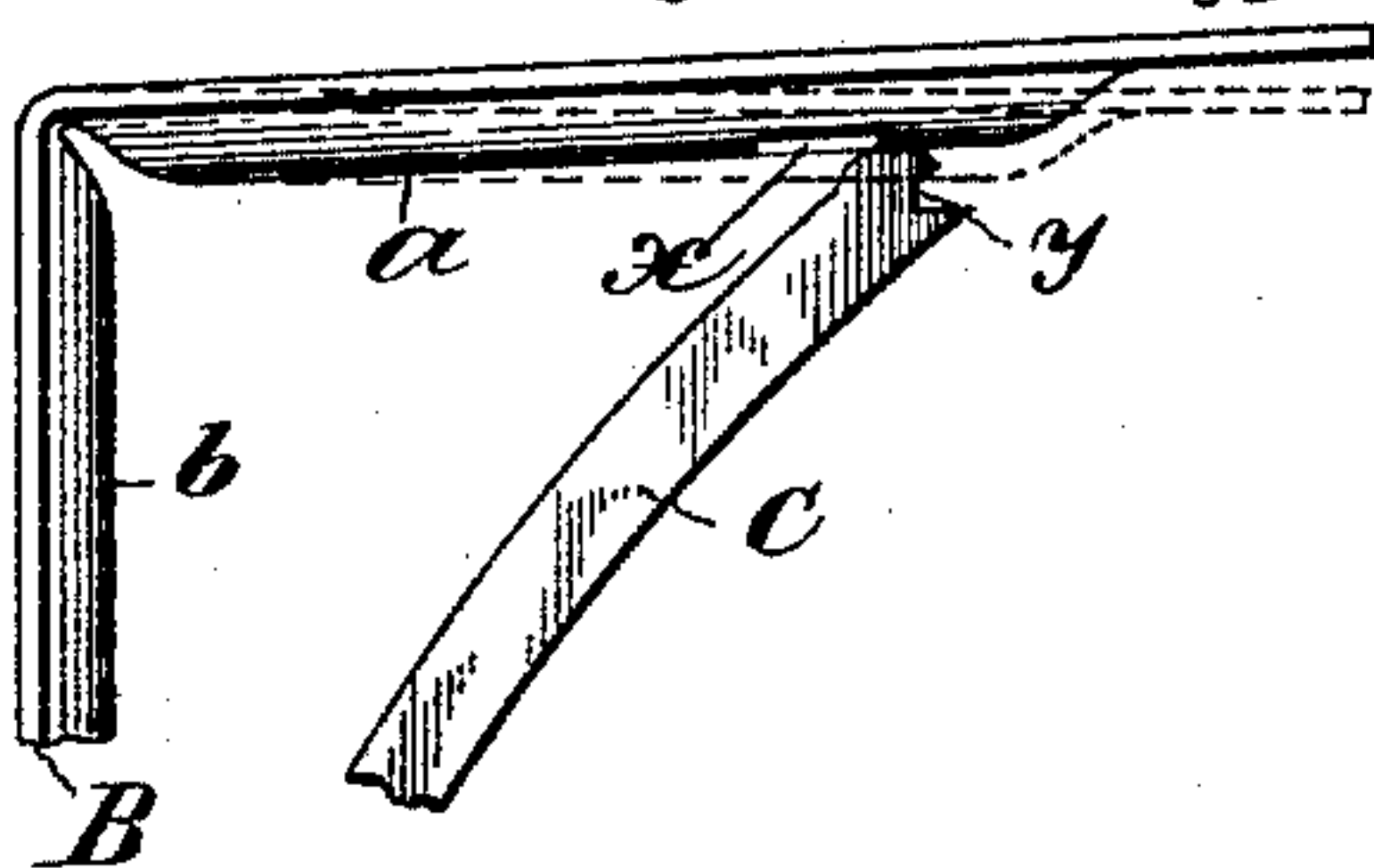


Fig. 6.

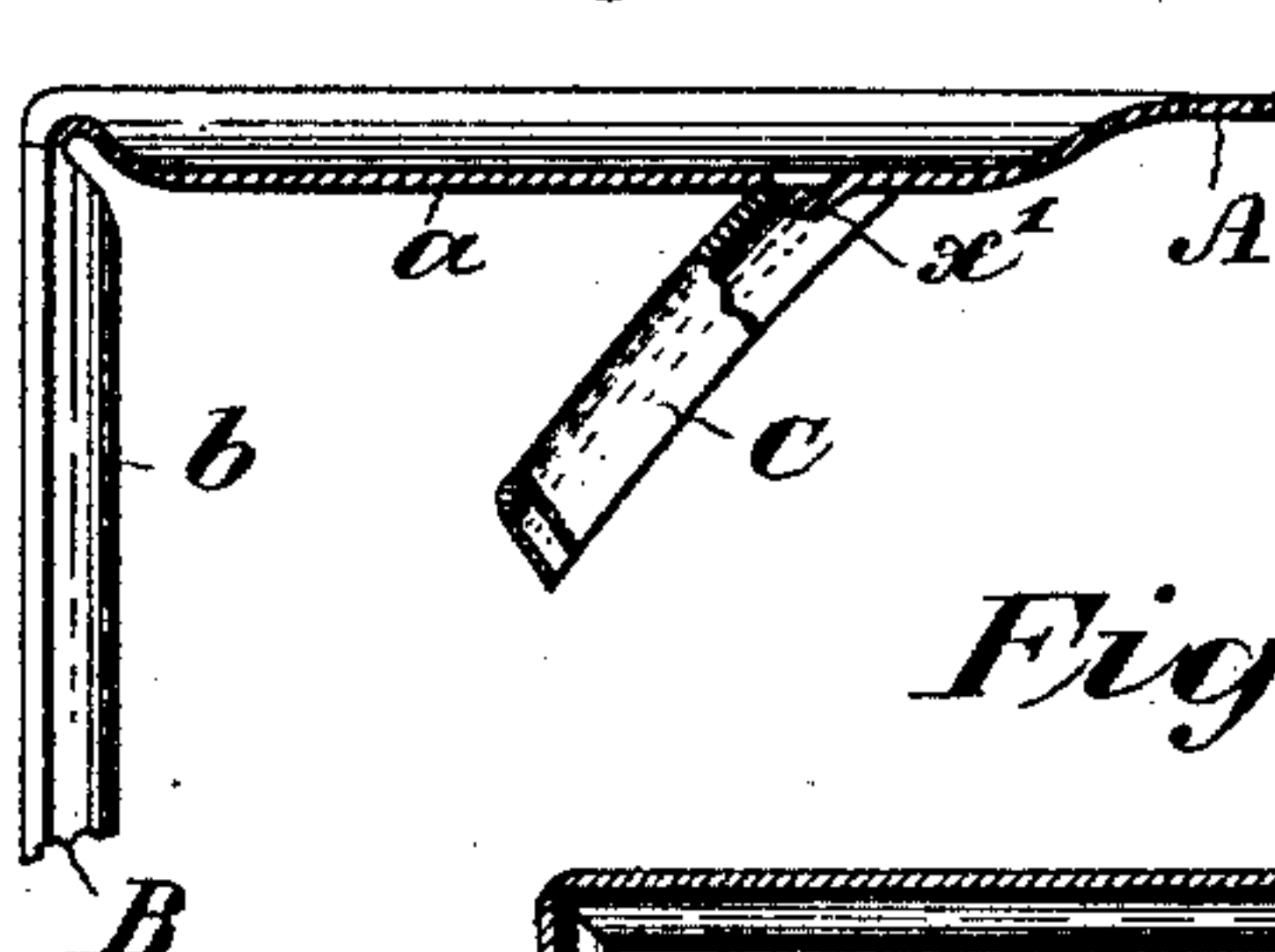


Fig. 5.

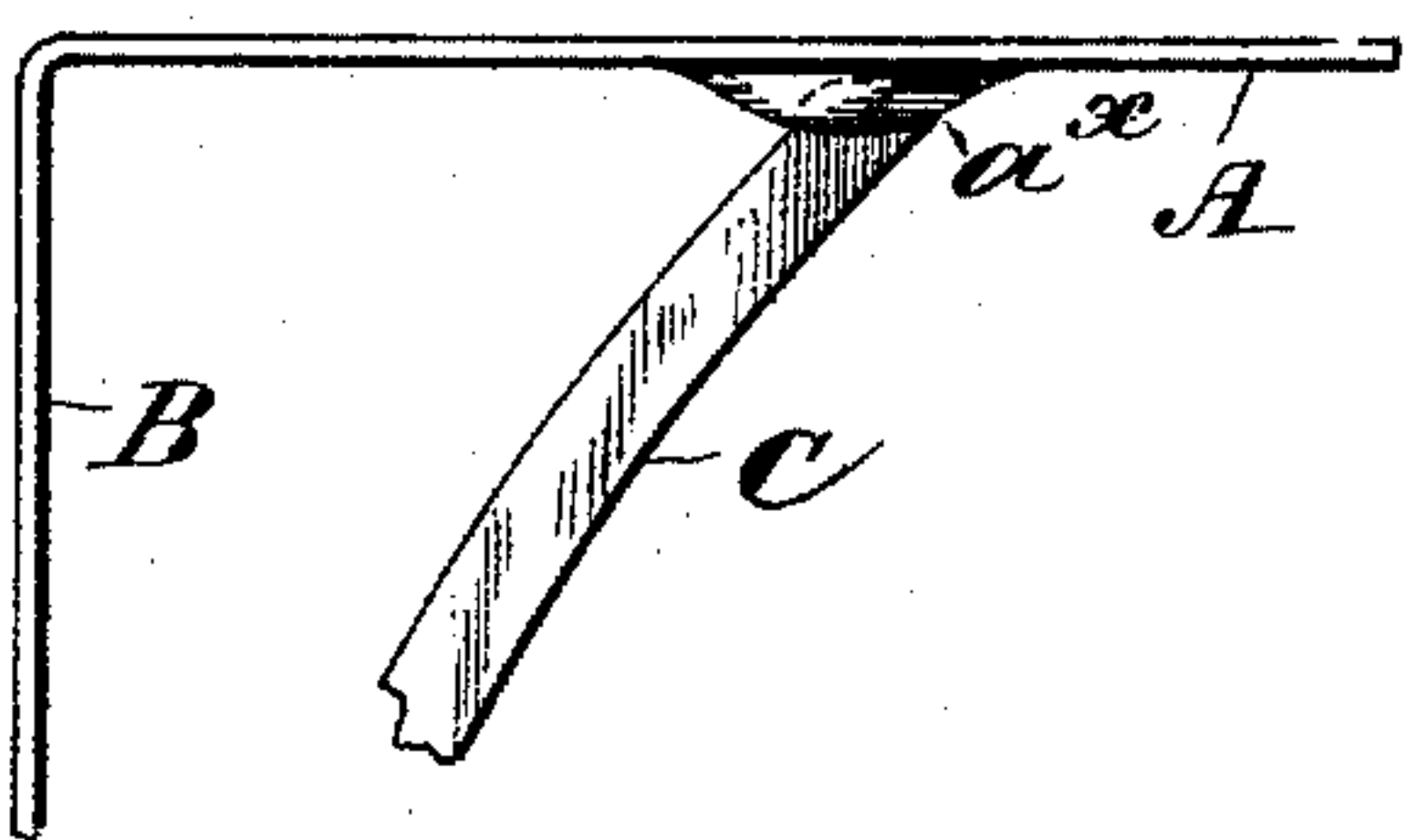


Fig. 7.

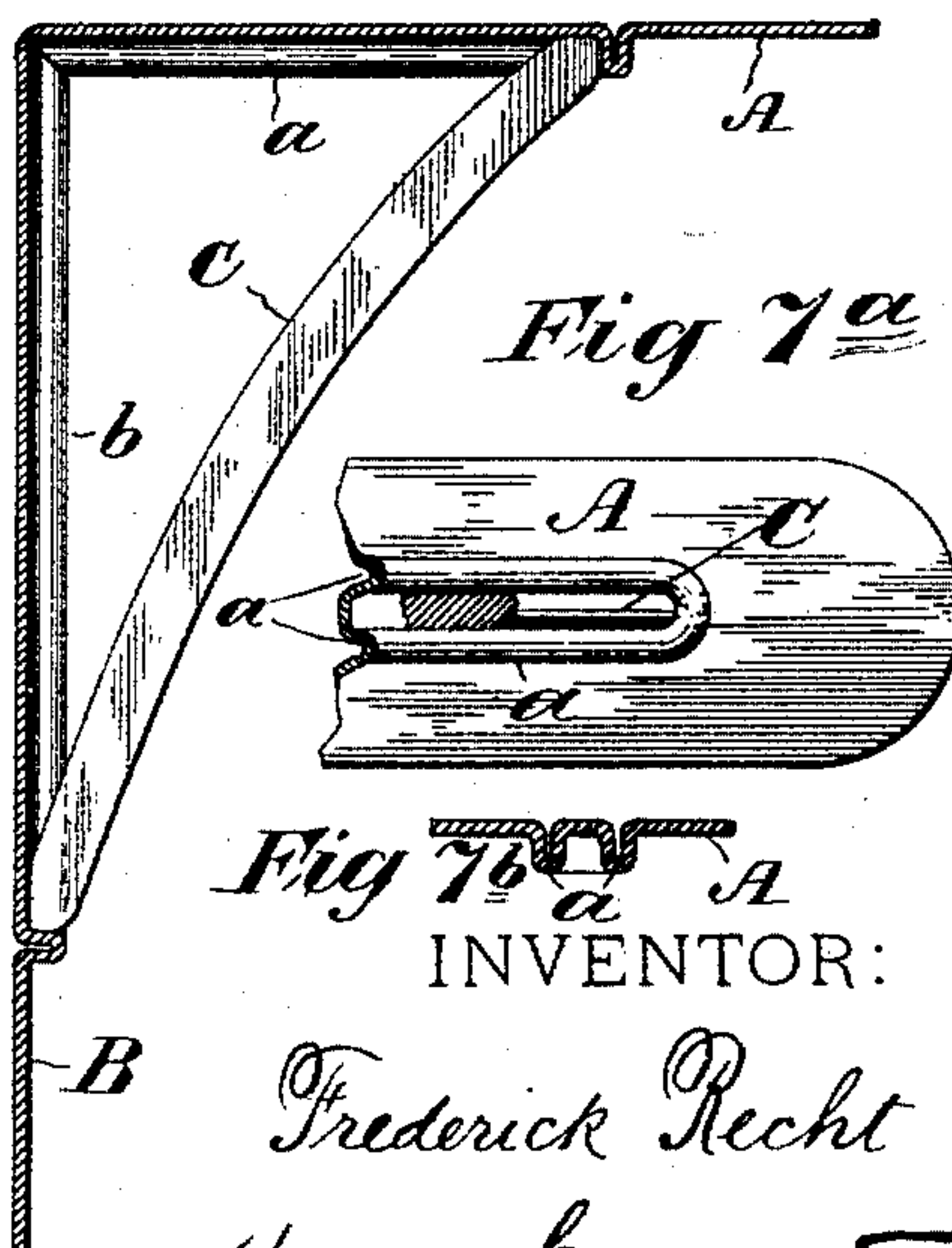


Fig. 7b.

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WITNESSES:

Peter A. Ross
Herbert Blossom.

By

(No Model.)

2 Sheets—Sheet 2.

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Fig. 8.

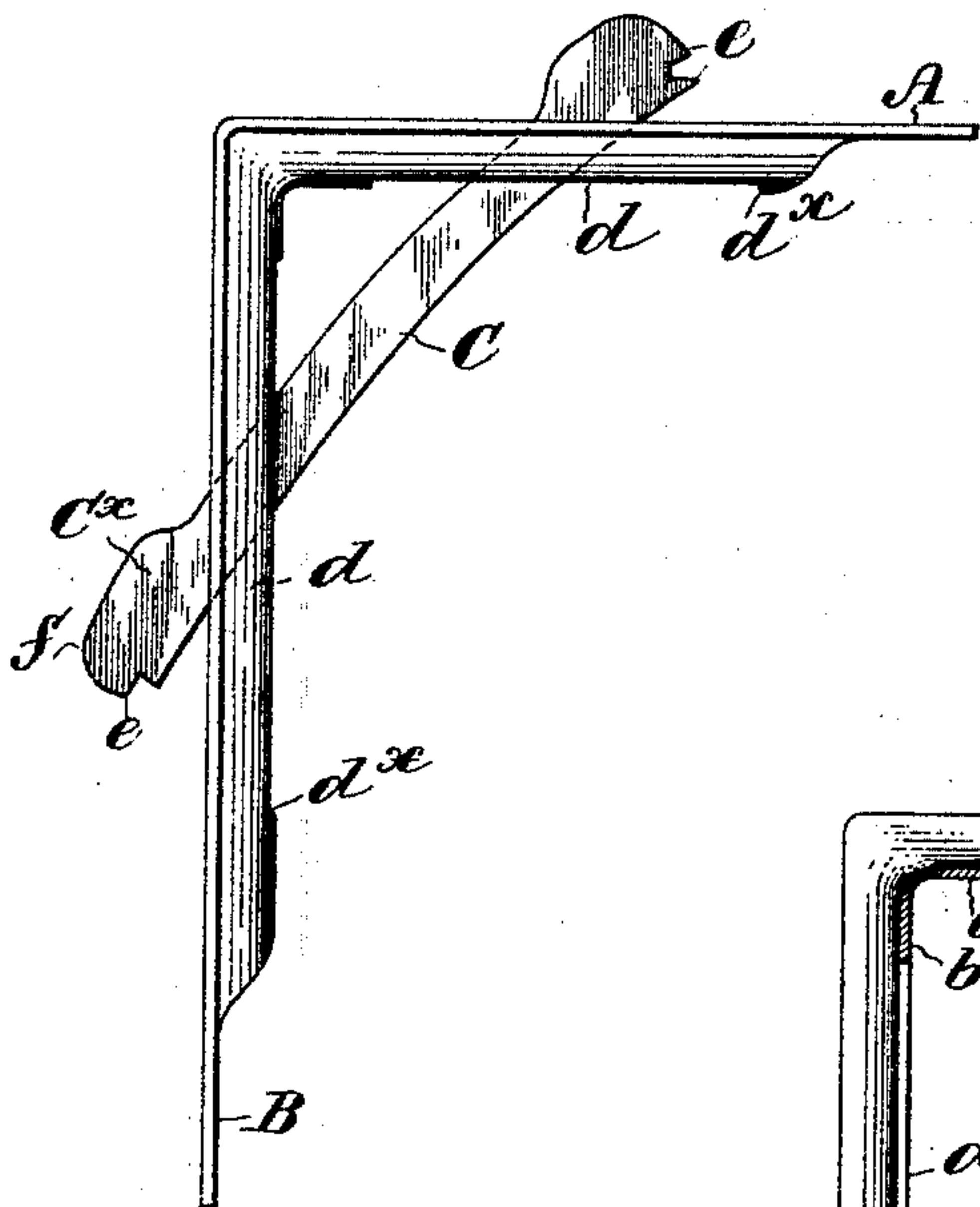
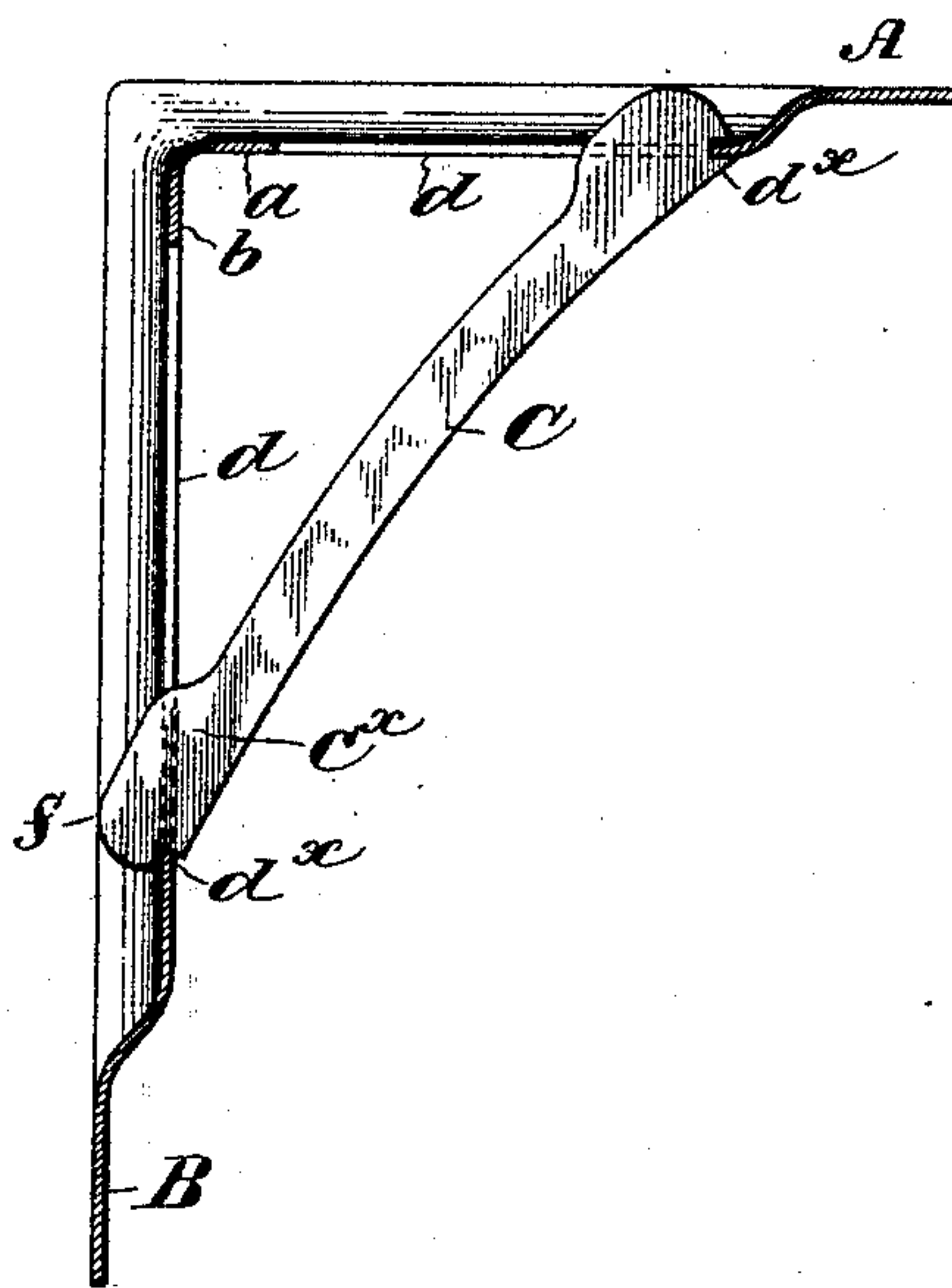


Fig. 8^a



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UNITED STATES PATENT OFFICE.

FREDERICK RECHT, OF BROOKLYN, NEW YORK.

BRACKET.

SPECIFICATION forming part of Letters Patent No. 498,027, dated May 23, 1893.

Application filed August 9, 1892. Serial No. 442,596. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK RECHT, a citizen of the United States, and a resident of Brooklyn, Kings county, New York, have invented certain new and useful Improvements in Brackets, of which the following is a specification.

My invention relates to sheet metal brackets which have each an angular brace connecting the shelf and wall plates of the bracket, and the invention consists, essentially, in constructing the brace so that it is separable from the bracket, or separate therefrom, means being provided whereby the brace may be applied and united to the bracket by the user at the time it is put up. This separable construction of the brace is of material importance in the packing and transportation of the brackets, and economy in packing is a very important item in the manufacture.

The invention will be fully described hereinafter and its novel features carefully defined in the claims.

In the accompanying drawings which serve to illustrate my invention—Figures 1 and 2, are respectively a side elevation and front elevation of a bracket embodying my improvement, and Fig. 3, is a sectional elevation of the same. Fig. 4 is a view illustrating the mode of inserting and securing the separable brace in the bracket seen in Figs. 1, 2 and 3. Fig. 5, illustrates a slightly modified construction which will be hereinafter described. Fig. 6, illustrates another modified construction wherein a brace having a U-shaped cross-section is employed. Figs. 7, 7^a and 7^b illustrate another modified construction wherein the brace is seated in pockets between parallel embossments or ribs. Figs. 8 and 8^a, illustrate a construction of the bracket wherein the separable brace is or may be placed in position without springing the plates.

Referring primarily to Figs. 1 to 4, A and B, are, respectively the shelf and wall plates of the sheet metal bracket, which are integral or in one piece and *a* and *b*, are, respectively, ribs formed on the inside faces of said plates in the manner of embossing. As here shown, the bracket is supposed to be bent up from sheet metal, but this feature of construction the forming up from sheet metal, does not

pertain to my present invention. In each rib or embossment is punched or otherwise produced an aperture, *x*, to receive the respective ends of the separable brace C. This brace may be of any form, straight or curved, and at each end it has a notch or recess to engage the metal of the rib, as clearly indicated at, *y*, in Fig. 3. The brace is separable from the bracket, and is sprung into place as indicated in Fig. 4; that is to say, the foot of the brace is made to engage the wall of aperture *x* in the rib *b* on the wall plate, as seen in Fig. 3, and the upper end of the brace is made to engage the aperture in the rib *a* on the shelf plate by springing the plates apart a little in such a manner as to increase the angle which normally exists between them. When the upper end of the brace is placed and the tension is removed, the plates will spring back again to their normal positions and hold and lock the brace firmly in position. It is not necessary that the plates shall spring apart to any great extent, as the notch or recess in the upper end of the brace need only be very slight; that in the foot of the brace may be deeper, if desired.

The bracket may have short embossments, as at *a'* in Fig. 5, in lieu of the longer embossments or ribs.

In the preceding constructions the bracket plate is the female and the brace the male member, but this arrangement may be reversed; for example as seen in Fig. 6, a short prong, *x'*, may be formed on the rib, and the brace may have a hollow or U-shaped cross-section and receive said prong. Where two parallel ribs are formed on the inner faces of the plates, these may be tied together by cross-ribs and pockets thus formed to receive and hold secure the respective ends of the brace. This construction is illustrated in the fragmentary views Figs. 7, 7^a and 7^b, the first of which is a sectional elevation, the second an under side plan view, and the last a cross-section of one of the ribbed plates.

In all of the preceding constructions the brace is designed to be placed by springing open the plates, but in the construction illustrated in Figs. 8 and 8^a this is not necessary. The first of these views shows the brace detached but in position in slots *d*, in the ribs on the plates through which slots it must be

passed as a preparatory step; and Fig. 8^a shows the brace in place. The brace is passed through the slots and then pushed laterally into place, the shoulders, *e*, on the brace engaging the metal, *d*^x, at the outer ends of the slots.

In order to prevent the brace from being displaced after the bracket is in place, by pushing backward its lower end, *C*^x, this extremity of the brace, at *f*, extends back until it is flush with the rear face of the wall plate B, and consequently in contact, or nearly so with the wall when the bracket is fixed thereon.

The characteristic of my bracket, in whatever form it may be made, and whether it be made of cast or wrought metal, is the separable brace, the shelf and wall plates of the bracket and said brace having reciprocal engaging devices whereby the brace is secured to the bracket when in place. It will be understood, however, that the brace is designed to be readily separable from the bracket only when the latter is detached; after the bracket has been fixed in place on the wall and supports a shelf or the like, the brace becomes a securely fixed part of the bracket.

I do not wish to limit myself to the precise constructions of the bracket shown in the several views, as I am aware that these may be varied to some extent without departing from my invention.

Having thus described my invention, I claim—

1. A sheet metal bracket comprising shelf and wall plates provided with embossments on their inner faces, and a separable brace engaging at each end recesses formed in the said embossments and held in engagement by the spring of the shelf and wall plates, as set forth.

2. A sheet metal bracket comprising shelf and wall plates provided with embossments on their inner faces, and a separable brace, the ends of which are adapted to engage at each end recesses formed in the respective embossments by the springing apart of the said plates which are integral, substantially as set forth.

3. A sheet metal bracket having integral shelf and wall plates provided with embossments on their inner faces to receive the brace, and a separable brace, said plates and brace having reciprocal interlocking devices adapted to be engaged by the springing apart of the plates of the bracket, substantially as set forth.

4. A sheet metal bracket comprising shelf and wall plates, provided with embossments on their inner faces, and apertures in the respective crowns of the said embossments, and a separable brace having a recess or notch in each end adapted to engage the metal at the margins of the respective apertures when the plates of the bracket are sprung apart, substantially as set forth.

5. A sheet metal bracket comprising shelf and wall plates provided with embossments on their inner faces and apertures in the said embossments, and a separable brace having a notch and shoulder at each end adapted to engage the metal at the margins of the respective apertures and support the shelf plate, substantially as set forth.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

FREDERICK RECHT.

Witnesses:

HENRY CONNETT,
JAMES KING DUFFY.