

(No Model.)

W. B. AVERY.
SHUTTER FASTENER.

No. 371,538.

Patented Oct. 18, 1887.

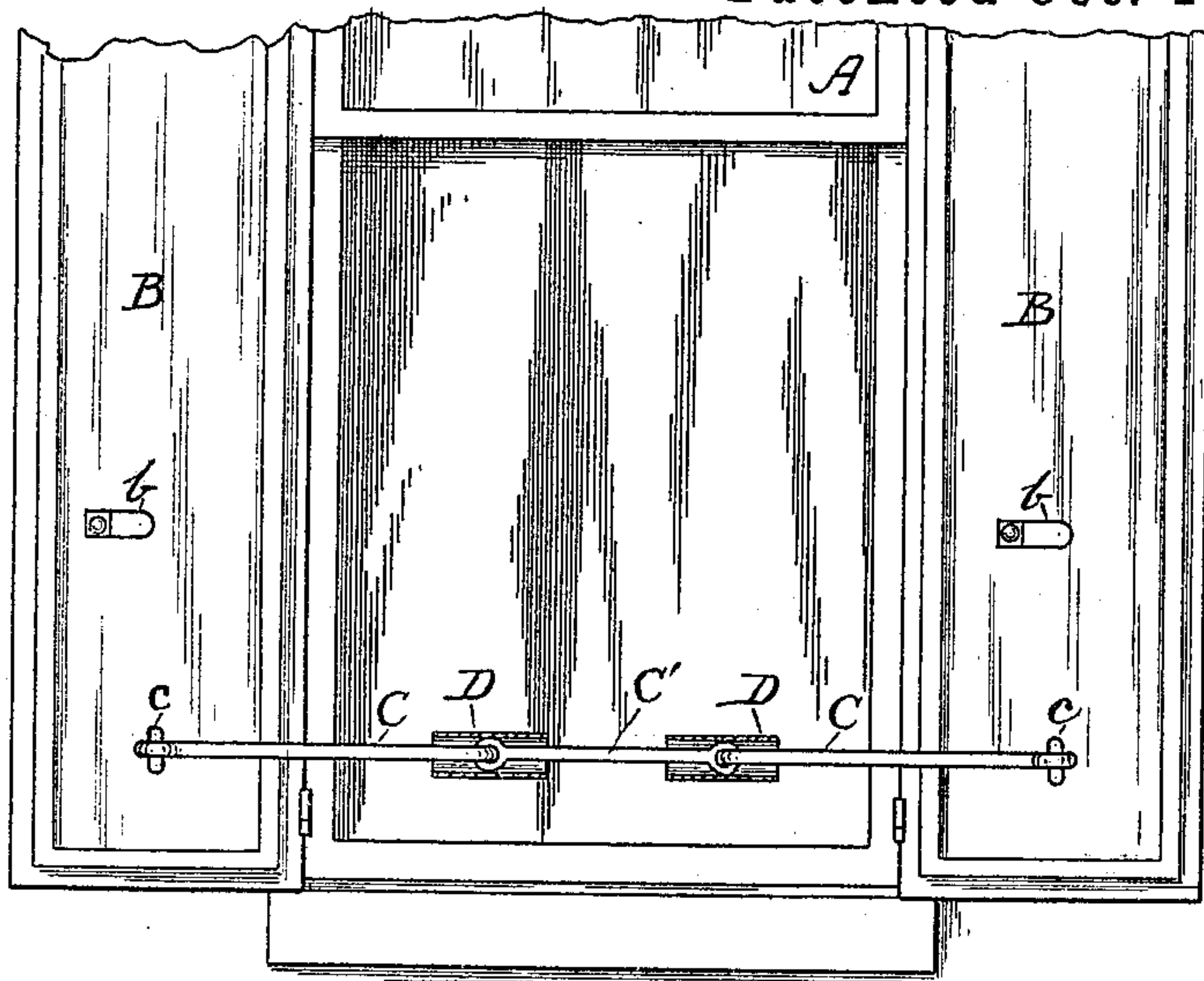


FIG. 1.

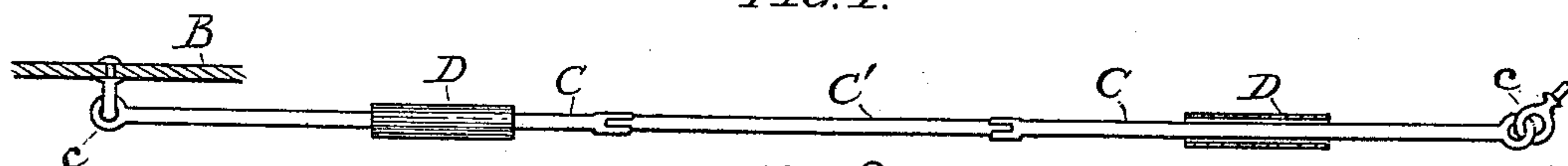


FIG. 2.

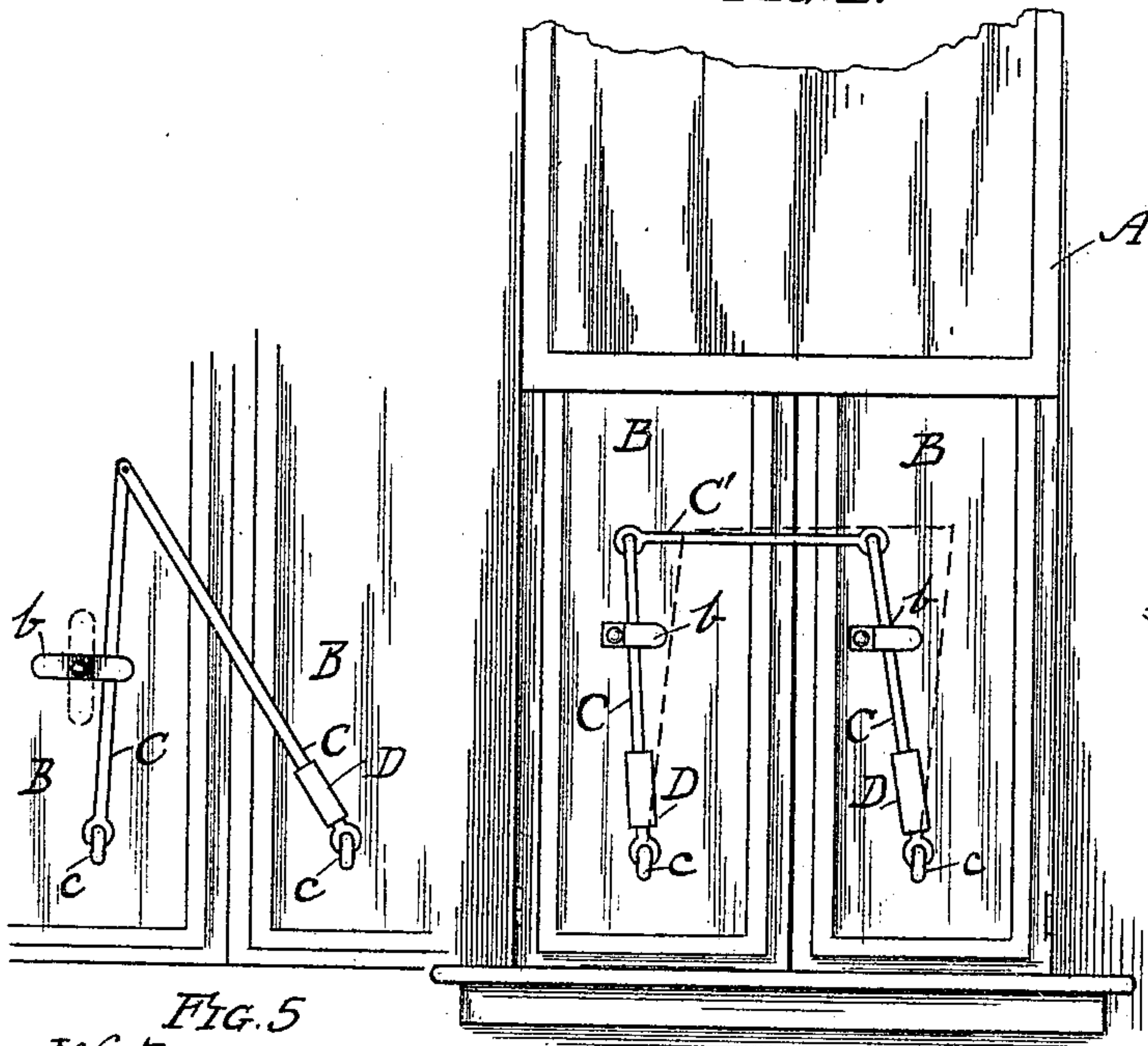


FIG. 3.

Witnesses:

J. B. Halpenny.
W. H. Gridley.

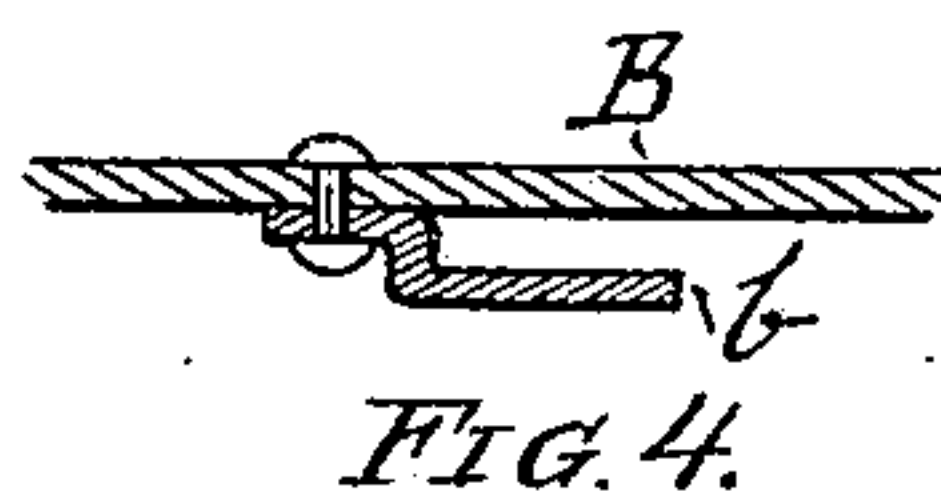


FIG. 4.

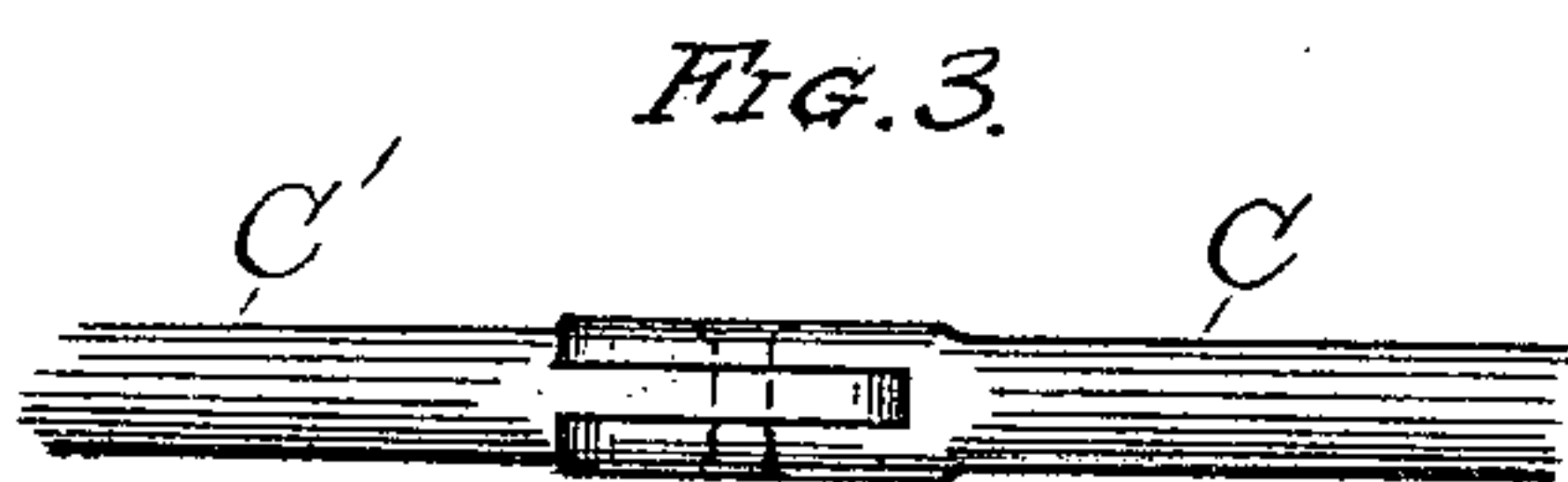


FIG. 5.

FIG. 6.

Inventor:
William B. Avery
By Gridley & Halpenny
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UNITED STATES PATENT OFFICE.

WILLIAM B. AVERY, OF CHICAGO, ILLINOIS, ASSIGNOR TO H. A. STREETER,
OF SAME PLACE.

SHUTTER-FASTENER.

SPECIFICATION forming part of Letters Patent No. 371,538, dated October 18, 1887.

Application filed October 29, 1886. Serial No. 217,509. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM B. AVERY, of Chicago, in the county of Cook and State of Illinois, have invented a certain new, useful,
5 and Improved Device for Operating and Locking Window-Shutters, of which the following is a description, reference being had to the accompanying drawings, forming a part of this specification, in which—

10 Figure 1 is front view of a pair of window-shutters as they appear when open, the same being viewed from the outside. Fig. 2 is a detail view of the link-connection for operating said shutters. Fig. 3 represents a pair of shut-
15 ters, when closed and viewed from the inside, with my improved fastening attached thereto. Fig. 4 is a horizontal sectional view of a portion of a shutter having a hook attached thereto, the same being viewed from above. Fig.
20 5 is a detail view showing a modification of said construction, and Fig. 6 is an enlarged detail view of one of the joints.

Like letters of reference indicate like parts in the different figures.

25 The object of my invention is to provide a cheap and simple means for opening and closing window-shutters, for securely bracing the same in position when open, and locking them when closed, all of which is hereinafter more
30 particularly described, and definitely pointed out in the claims.

A in the drawings represents a window-frame, to which is hinged shutters B B in any well-known way. Attached to each of said
35 shutters, preferably near the bottom thereof and at or near the middle of the same, respectively, are eye-bolts *c c*, to which, in turn, are loosely attached links or bars C C. These are preferably loosely connected to each other by
40 a third link, C', the joints forming the connection being made, by preference, as shown in Fig. 2 of the drawings; or they may be made in any equivalent form. Said links should be of such length that when the shutters are fully
45 open, as shown in Fig. 1, the links may be in a straight line, or substantially so. In order to prevent the same from sagging, and thus tending to close the shutters when it is desirable to have them open, I prefer to place loose
50 tubes or ferrules D D, of gas-pipe, upon the

links C C, said tubes being sufficiently large to pass loosely over the joints of the connecting-links. By this or well-known equivalent means the joints may be stiffened and thus made to form a rigid bar by sliding said tubes 55 over the joints, as shown in Fig. 1, thereby bracing the shutters and holding them open.

At a distance above the eyes *c c*, of nearly the length of the arms C C, I cause to be rigidly attached to the shutters hooks *b b*, which 60 project somewhat from the shutters and lie substantially parallel therewith in a horizontal plane, the projection being sufficient to permit the rods C C to be engaged thereby when the shutters are closed. 65

It is obvious that a varying number of links may be used, and I do not confine myself to the precise construction shown in this respect. A greater or less number may be used. In Fig. 5 two links, one long and one short, are 70 shown, the longer one serving as the lock; but I prefer the construction heretofore described.

The eyes *c* may be either attached rigidly to the shutter or swiveled thereon so as to permit them to turn; but this will depend somewhat upon the manner of constructing the joints in the links, which may be made in any known form to permit the movement desired. 75

The operation of said device is as follows: Assuming the shutters to be open, the operator first slides the tubes D D off from the joints. He then grasps the link C' and pulls inwardly. The bars C C are fulcrumed, respectively, upon the inner edges of the shutter and cause the same to swing sufficiently, so that a 85 further pull closes them entirely. The links C C are then raised to a nearly vertical position, as indicated in dotted lines in Fig. 3, when, by moving the same laterally in an opposite direction, they engage with the hooks 90 *b b*, the link C' forming a horizontal cross-bar, which locks the shutter in its closed position. By a reversal of the movement the shutters are unlocked.

One great advantage of said device, aside 95 from its cheapness, is that it avoids the danger incident to closing of heavy iron shutters, where it becomes necessary for the attendant to lean out of the window in order to disconnect the usual fastenings and turn the shutter 100

upon its hinges, which is often very difficult, especially when clogged by ice or snow or during a strong wind.

I am aware that heretofore two hinged or
5 folding shutter-fastener bars or links have been pivoted to the blinds at their outer ends and hinged together at their adjoining ends, such middle joint being provided with means (consisting in the form of the joint itself) for rendering the same rigid when the two bars are
10 extended straight, as shown and described, for example, in the prior patent to G. Lightfoot, No. 70,726, of November 12, 1867; and I do not herein claim such device. In my invention three folding fastener bars or links are
15 employed, the joints at the end of the middle bar or link being furnished with any suitable means for rendering the same rigid when the bars are extended straight, and the middle bar
20 serving as a handle to operate the blinds by and to prevent the two outer bars from shutting together and thus interfering with the handling or operating of the same.

Having thus described my invention, what I
25 claim, and desire to secure by Letters Patent, is—

1. The window-shutter fastener consisting of the three folding bars or links C C C', the outer bars, C C, being pivotally connected or
30 hinged to the shutters and the middle bar or link, C', being hinged or pivotally connected to said outer bars, C C, and provided with

means for rendering its hinges or joints rigid when the three bars are extended for holding the blinds open, substantially as specified. 35

2. The combination, with window-shutters, of folding links connecting the same from points at or near the middle of said shutters and upon the inside thereof, and hooks or their equivalent secured to the inside of the
40 shutters for engaging said links when the shutters are closed, said folding links being provided with means for rendering their hinges or joints rigid when the same are extended for holding the blinds open, substantially as and
45 for the purposes specified.

3. The window-shutter fastener consisting of the three folding bars or links C C C', the outer bars, C C, being pivotally connected or
50 hinged to the shutters and the middle bar or link, C', being hinged or pivotally connected to said outer bars, C C, and provided with means for rendering its hinges or joints rigid when the three bars are extended for holding the blinds open, and a hook or equivalent device secured to the inside of the shutters for
55 engaging said links when the shutters are closed and thus locking the same closed, substantially as specified.

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Witnesses:

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