

C. J. WALLEN.
WINDOW SCREEN.

APPLICATION FILED MAR. 31, 1905.

Fig. 1.

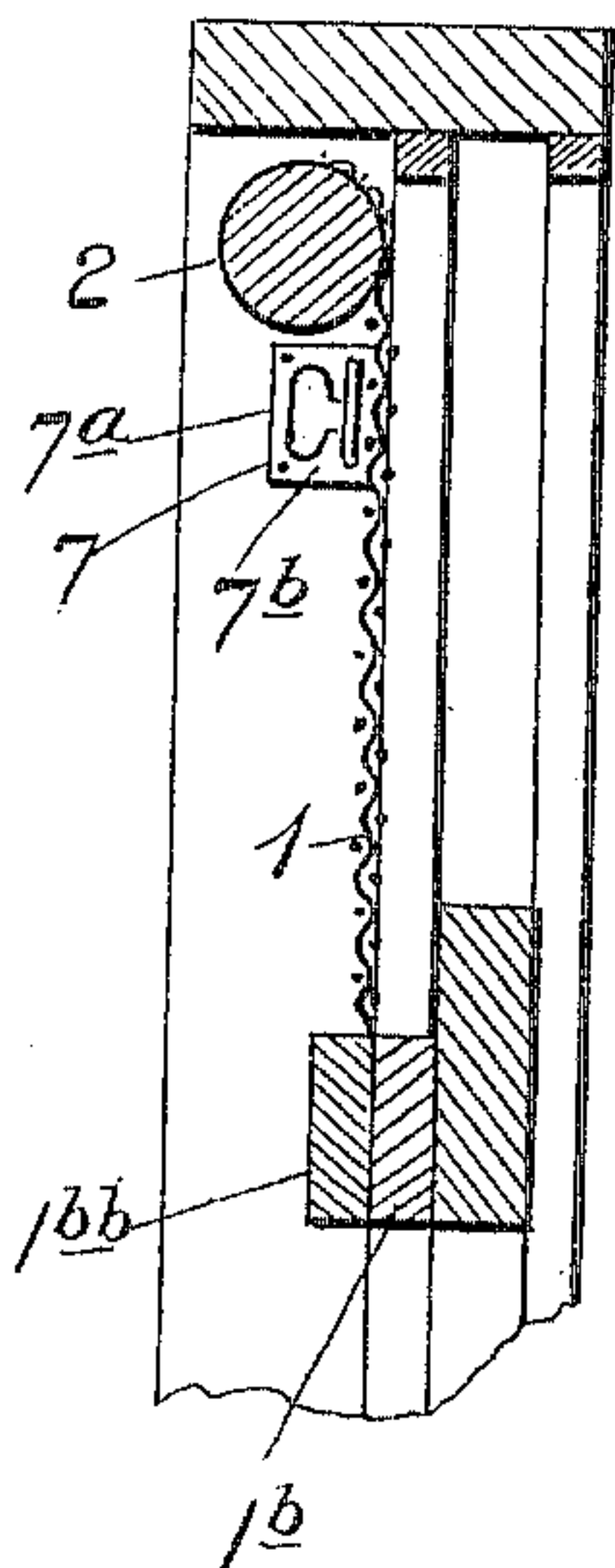


Fig. 2.

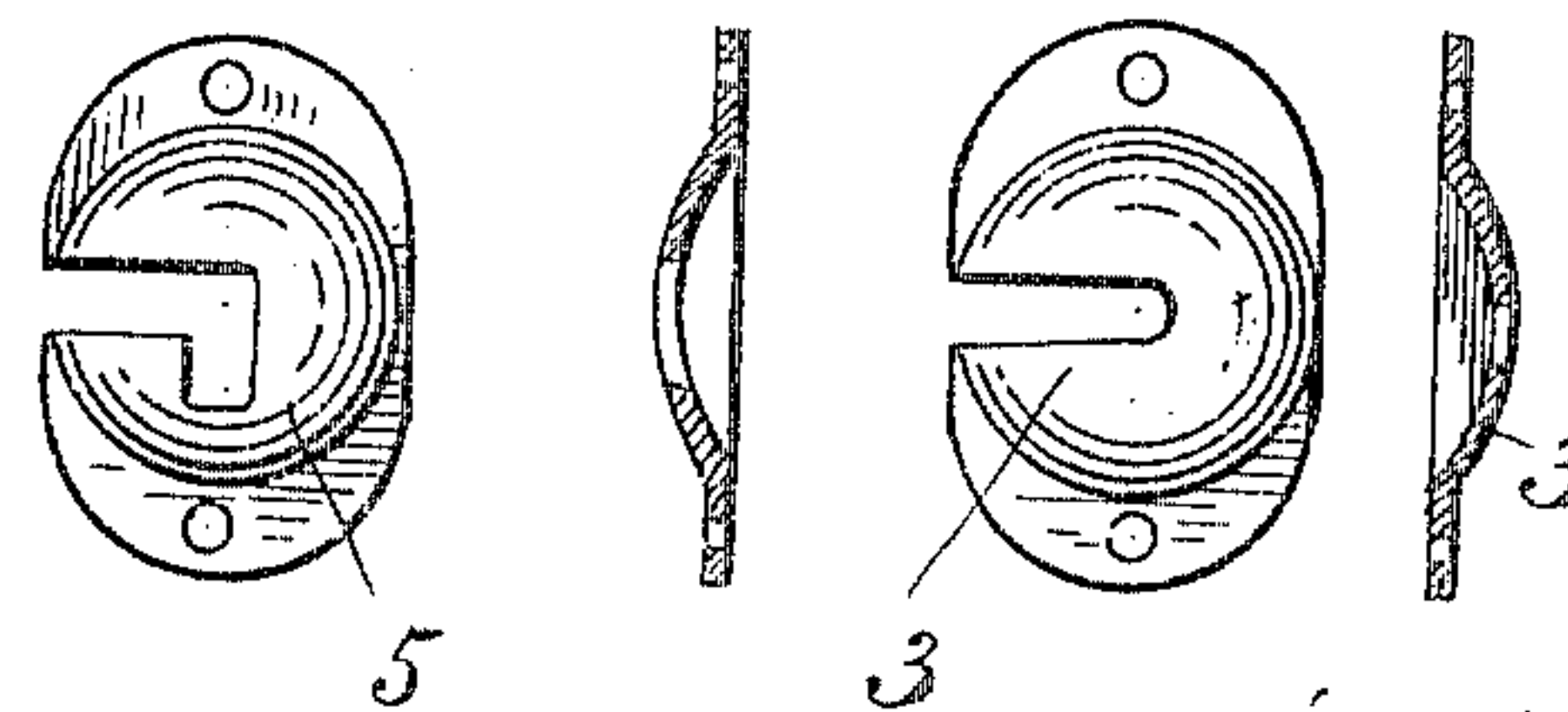
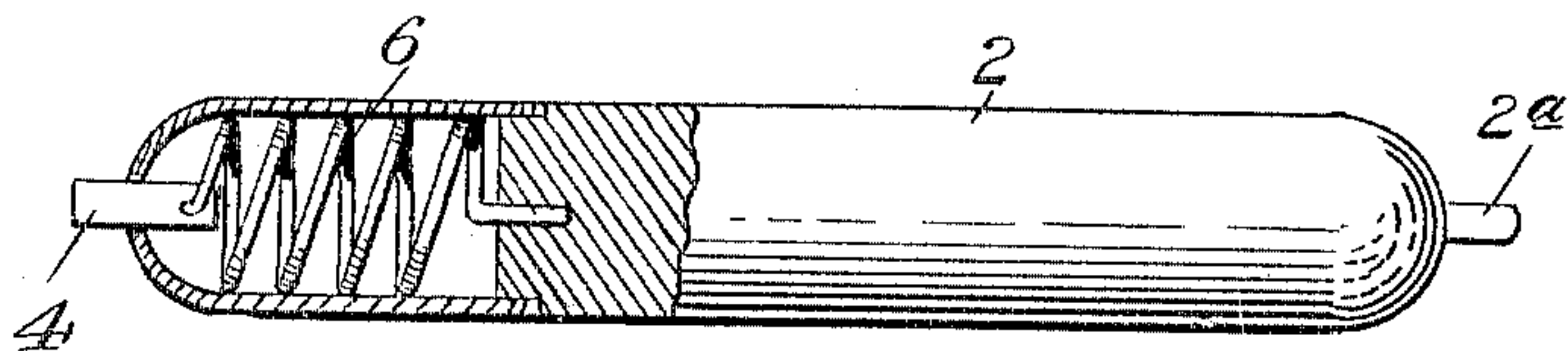


Fig. 3.

Fig. 4.

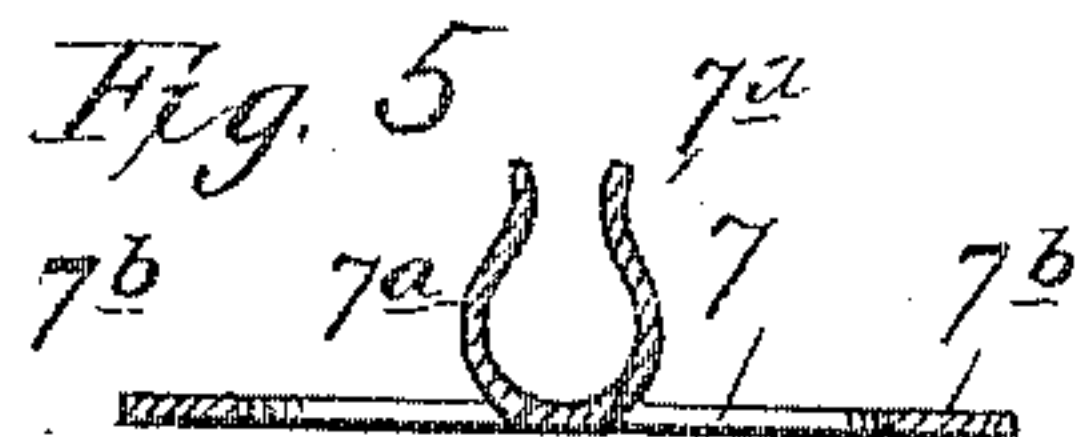
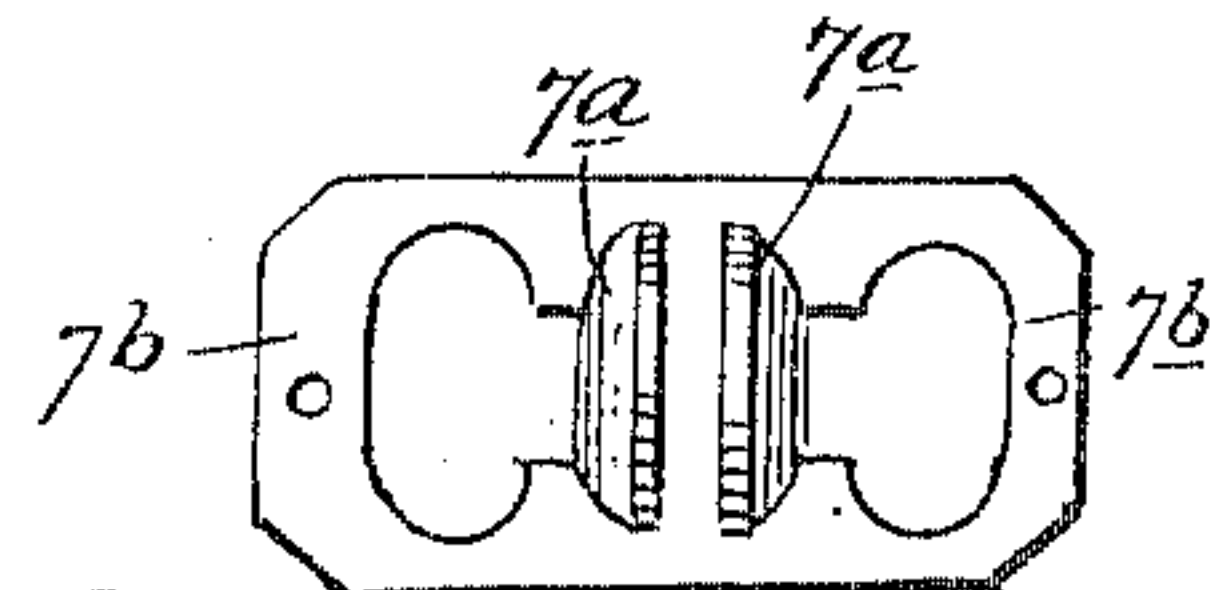
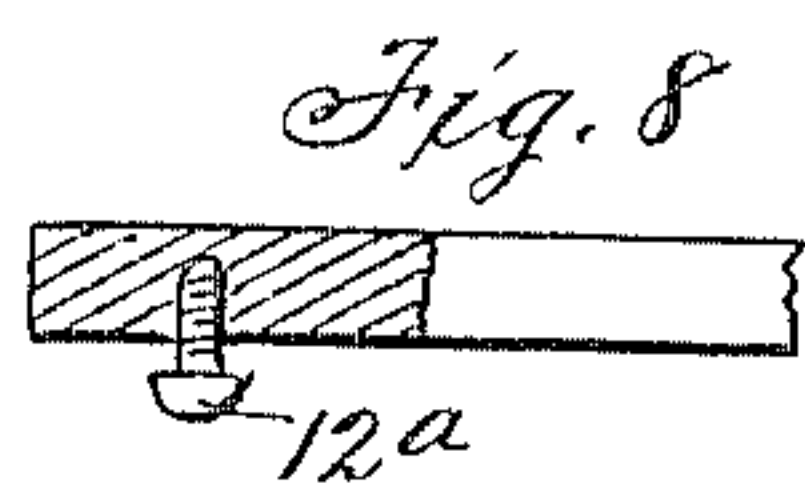


Fig. 6.

Fig. 9.

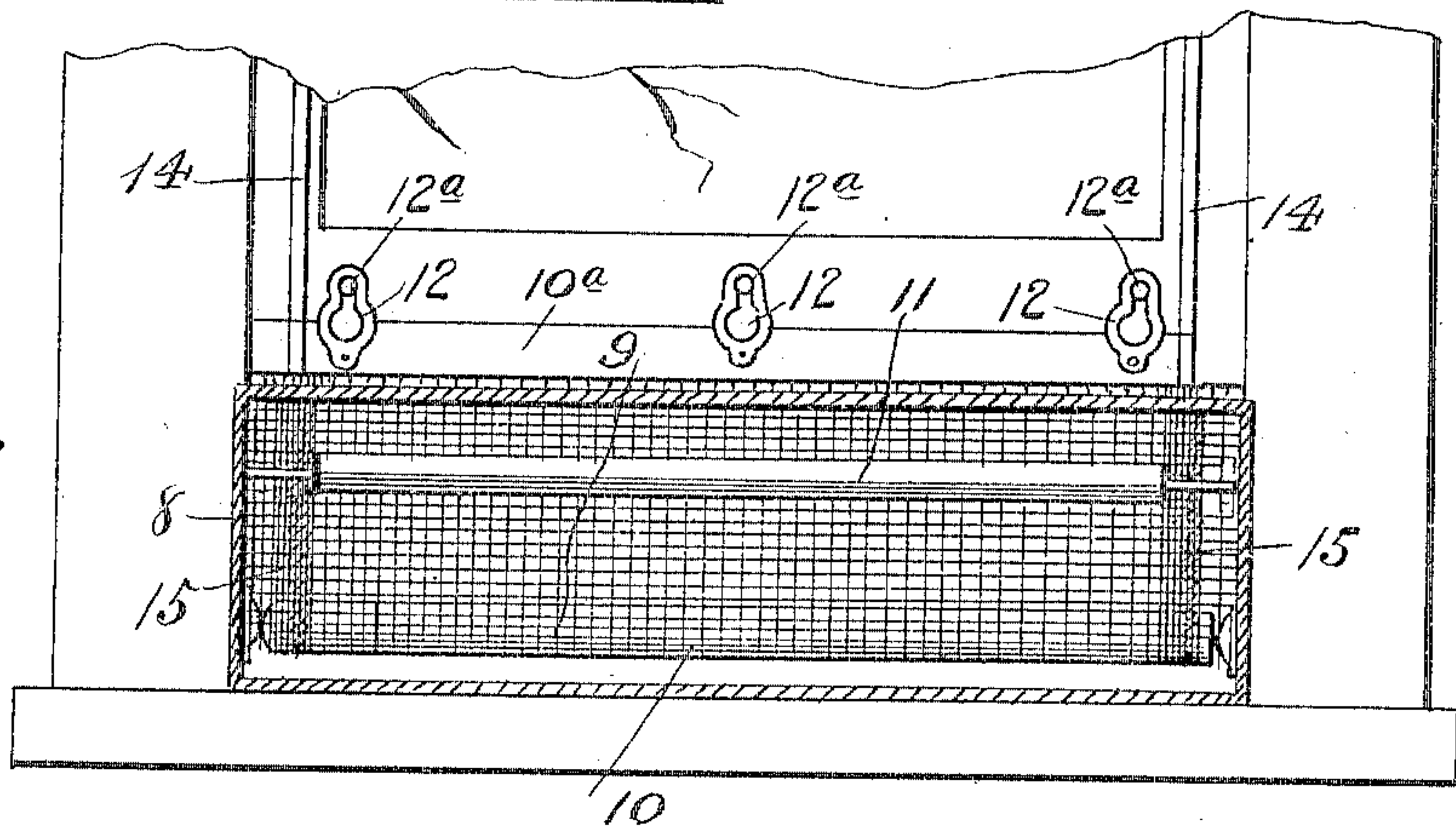
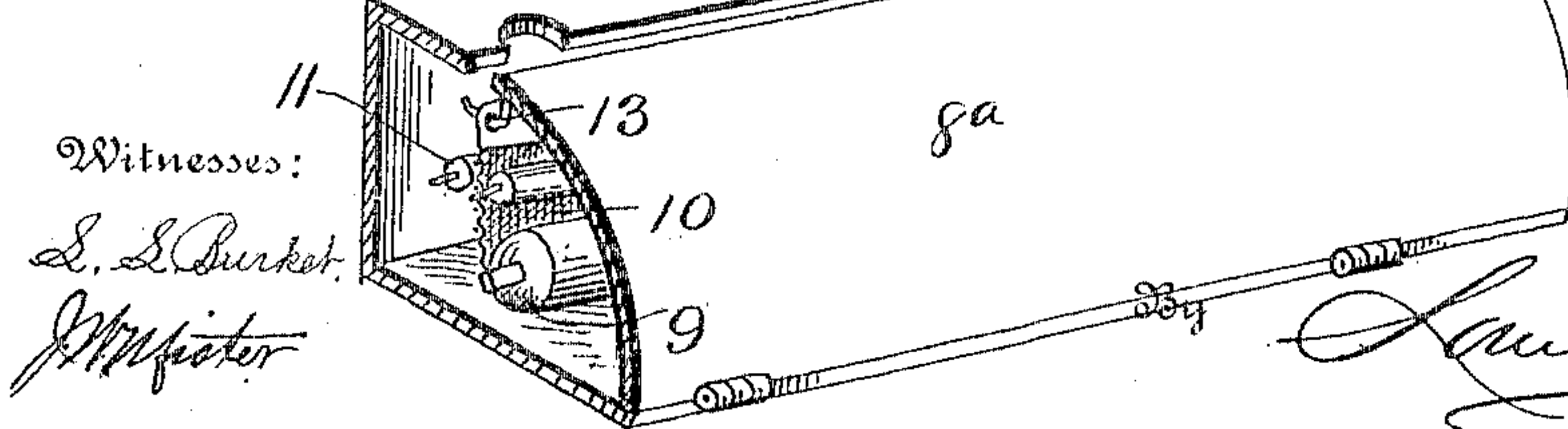


Fig. 7.



Witnesses:
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UNITED STATES PATENT OFFICE.

CARL J. WALLEN, OF JAMESTOWN, NEW YORK.

WINDOW-SCREEN.

No. 804,641.

Specification of Letters Patent.

Patented Nov. 14, 1905.

Application filed March 31, 1905. Serial No. 253,074.

To all whom it may concern:

Be it known that I, CARL J. WALLEN, a citizen of the United States, residing at Jamestown, in the county of Chautauqua and State of New York, have invented new and useful Improvements in Window-Screens, of which the following is a specification.

My invention relates to improvements in window-screens.

The objects of said improvements are principally to facilitate the application thereof for use, to inclose or house the same against moisture, &c., and to remove the screen when necessary, as well as to effect the aforesaid ends quickly and with the minimum trouble.

Said invention consists of certain structural features, substantially as hereinafter fully disclosed, and particularly pointed out by the claims.

In the accompanying drawings, Figure 1 is an enlarged cross-section produced through the upper part of Fig. 1. Fig. 2 is a detached view of the upper screen-roll. Fig. 3 shows a face view and a sectional view of one end bracket or bearing of said roll. Fig. 4 shows corresponding views of the other end bracket or bearing of said roll. Fig. 5 is a cross or vertical section produced through one of the upper screen-guides. Fig. 6 is a front view showing more particularly the lower screen and adjunctive parts. Fig. 7 is a fractional enlarged perspective view of the same. Fig. 8 is a like horizontal section produced through said lower sash. Fig. 9 is a front view of one of the upper screen-guides.

In the carrying out of my invention I provide an upper screen having lateral thickened edges 1^a for a purpose presently seen, said screen being secured to a tubular roll 2 with a fixed axial stud or gudgeon 2^a at one end bearing in a bracket or bearing 3, secured to the sash-frame for the support of that end of said roll. The other end of said roll is supported in position by an axial stud 4, loosely let into said end of roll and entering and held in position in the angular slot of a bearing or bracket 5, secured to the opposite side of the window-frame. Said latter axial stud or spindle has secured to its housed end one end of a helical or coiled spring 6, arranged within the roll 2 and having its opposite end secured to said roll, the purpose of which is obvious. Said roll is tapered or contracted toward its ends, as shown, to provide for the rolling of the screen 1 thereon, so as to compensate for

its thickened lateral edges 1^a, as will be readily appreciated. Said screen has its lower end interposed and clamped between a cross-piece 1^b, applied to the upper cross-rail of the upper sash, and a batten or strip 1^{bb}, screwed or otherwise secured to the aforesaid cross-piece, or it may be otherwise secured to said upper sash. In order to hold the screen close to the sides of the window-frame, spring clasps or guides 7 are suitably applied or secured to the latter with their guiding lips or members 7^a stamped or punched up from their base portions 7^b and effective to receive therebetween the thickened or enlarged lateral edges 1^a of the screen. It is obvious that with the lowering of the sash the screen will be unrolled from its roll and guard or screen the opening thus produced against insects, flies, &c., entering the room of the house and that upon returning the sash to its closed position the screen will be automatically re-wound upon its roll out of the way again, ready for use when needed.

A casing or housing 8 is suitably secured to the window-sill comprising integral bottom, back, and lateral or end portions and a preferably convexed or arcuate hinged closure member or cover 8^a, the back portion of said casing being presented toward the lower sash. Within this housing or casing is suitably hung a like spring-actuated screen-roll 9 as that above described with the attached initially-rolled-up screen 10. Also within said housing or casing are arranged or hung in a plane above that of said screen-roll opposed or parallel smaller rolls 11, slightly spaced apart and effective to receive and guide therebetween said screen, with its upper end or edge equipped with a suitable binding-strip 10^a. Said strip is provided with metallic loops or fastenings 12, having upper-end contracted slots and adapted to be caught over or engage headed studs or buttons 12^a, fixed to the bottom sash-rail, when it may be desired to screen or guard the opening produced in raising the lower sash. For the suspension and holding of the screen 10 in projected position as against the tension or action of the spring of its roll a number of hooks 13 are provided upon the inner side of the closure member or cover 8^a, effective for engagement with suitable openings in the binding-strip 10^a of said screen, as seen particularly in Fig. 8.

Guide-rods 14 are suitably secured at their upper ends to and offset from the window-

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frame, permitting them to stand outward sufficiently to enter or be received within tubular members or sockets 15 upon the inner surface of the screen 10. Said guide-rods 5 depend into said tubular members or sockets through openings or recesses 8^b in the upper or inner edge of the cover 8^a of the casing or box 8, as seen in Figs. 7 and 8, for the guidance of the screen as the sash is raised and 10 lowered, while they are effective for the retention of the lateral edges of the screen suitably in contact with the window-frame.

It will be noted that the screen when out of use may be stowed away within the box or 15 casing 8, attached to the window-sill, obviating its removal to some distant point, as would otherwise be required, and that it is thus always certain of location and conveniently at hand when needed. Further, the 20 screen by being housed within the casing thus provided is removed from the possibility of water or dampness reaching the same, as when washing or cleaning the window or sill, which would of course have the effect to 25 damage the screen and in freezing weather subject the same to the action of ice, &c.

Latitude is allowed as to details herein, as they may be changed as circumstances suggest without departing from the spirit of my 30 invention.

I claim—

1. A device of the character described, comprising a screen having thickened lateral

edges, means for suspending said screen in position, and clips applied laterally to the 35 window-frame for guiding said lateral edges of the screen, each clip or guide having a base-plate and stirrups or guides proper struck up with said base-plate and said plate thus assuming skeleton form where applied 40 to the window-frame as set forth.

2. A device of the character described, embracing a screen, with its automatically-actuated roll suitably supported in position, and a casing or housing for the aforesaid 45 parts, having a cover to which are attached hooks for engagement with and suspending the upper projecting end portion of said screen.

3. A device of the character described, embracing a screen, with its attached automatically-actuated roll, suitably supported in position, and a housing or casing secured upon the window-sill, having a cover provided with pendent hook-like lugs or projec- 55 tions for engagement with, and the suspending of the projected end of the screen, and said cover having openings in its closing edge for the passage of the screen.

In testimony whereof I affix my signature 60 in presence of two subscribing witnesses.

CARL J. WALLEN.

Witnesses:

J. EDGAR RUDGE,
KATHERINE CANNON