

No. 846,955.

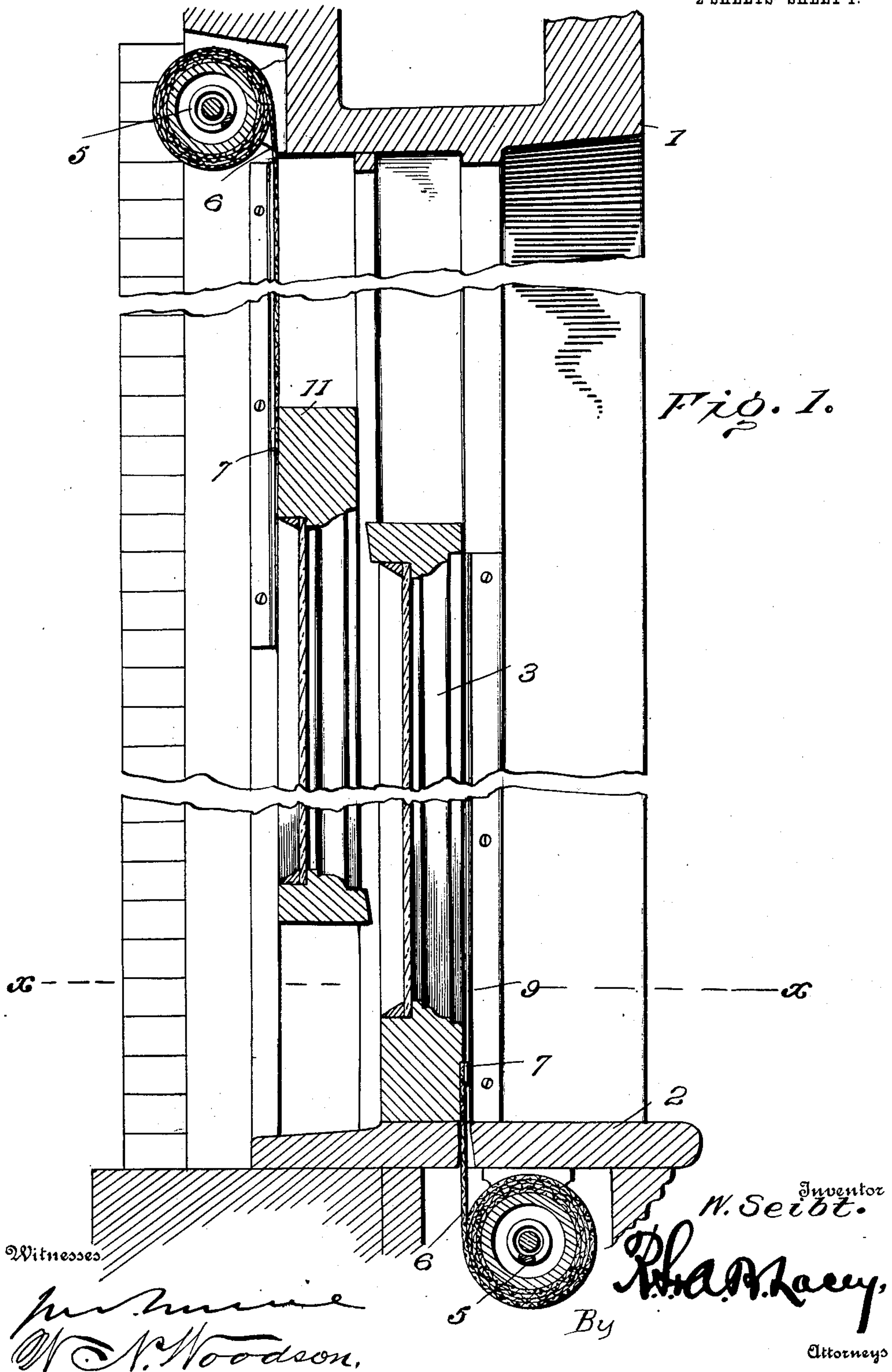
PATENTED MAR. 12, 1907.

W. SEIBT.

SCREEN FOR WINDOWS.

APPLICATION FILED AUG. 22, 1906.

2 SHEETS—SHEET 1.



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2 SHEETS—SHEET 2.

Fig. 2.

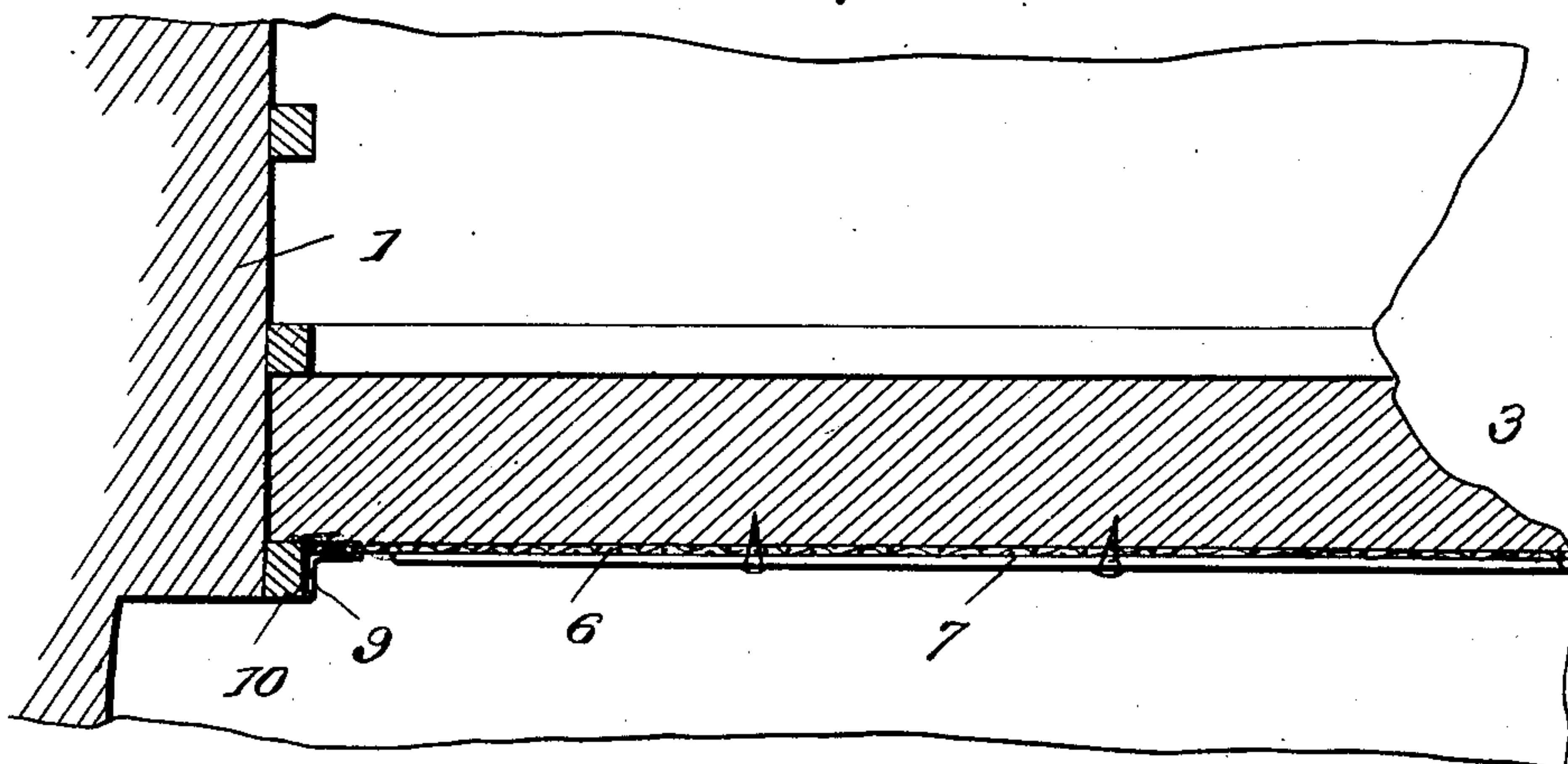


Fig. 4.

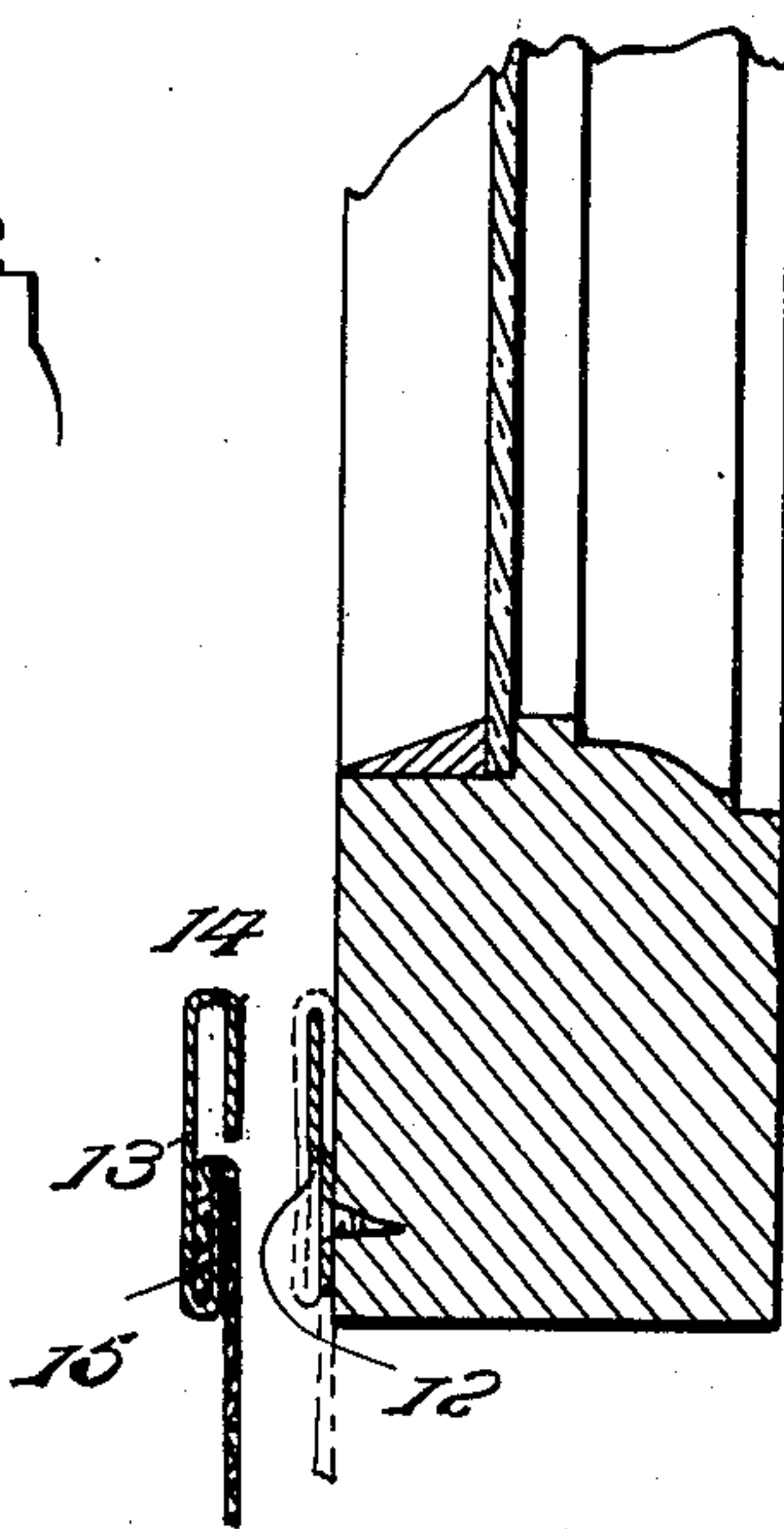


Fig. 5.

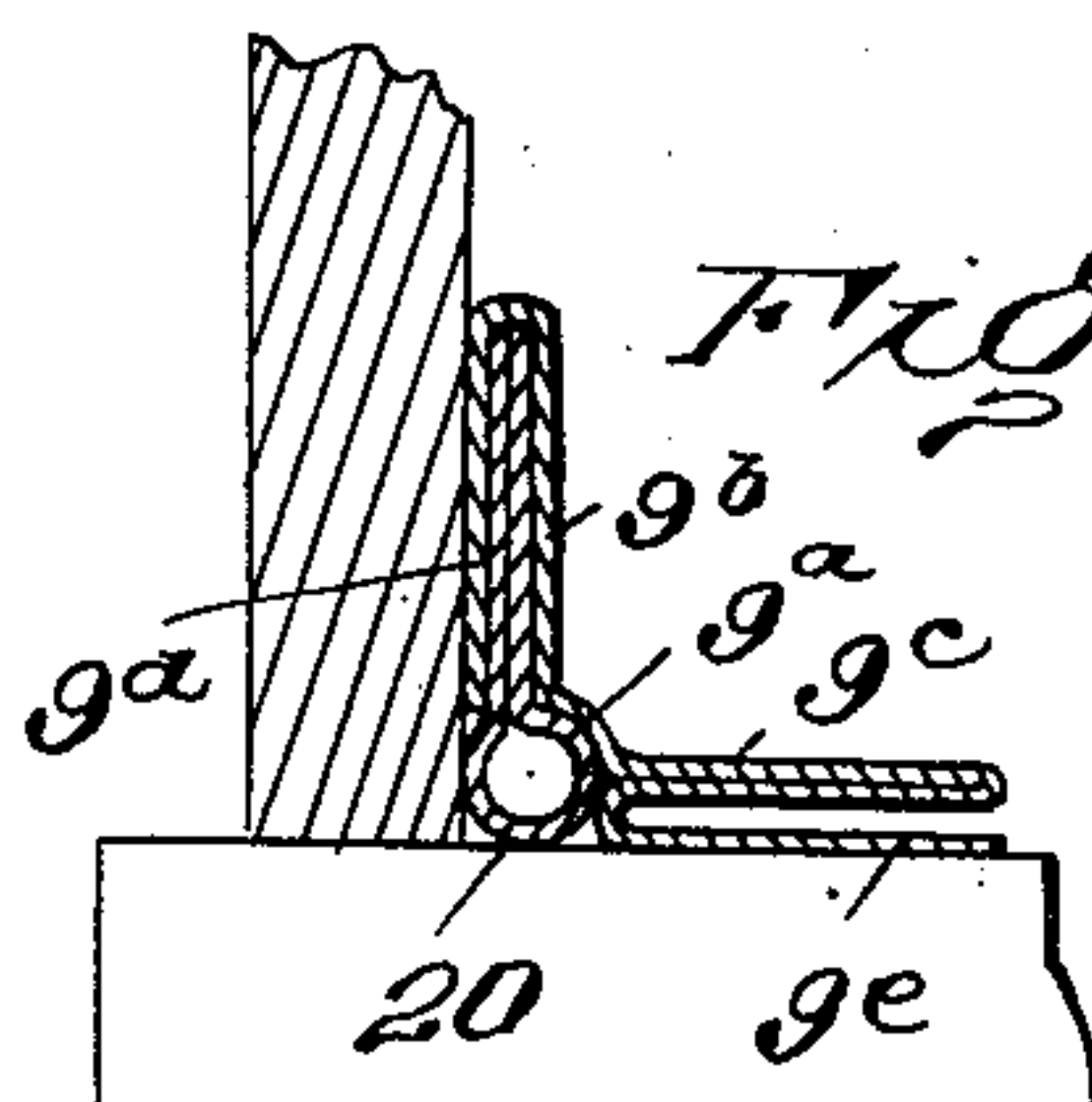


Fig. 3.

Witnesses

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SCREEN FOR WINDOWS.

No. 846,955.

Specification of Letters Patent.

Patented March 12, 1907.

Application filed August 22, 1906. Serial No. 331,675.

To all whom it may concern:

Be it known that I, WILLIAM SEIBT, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Screens for Windows, of which the following is a specification.

The object of this invention is to provide a novel form of screen for windows as an effective and advantageous substitute for the ordinary types of screens most commonly in use and adjustable to fit larger and smaller windows.

The disadvantages of the adjustable screens which are now used to a great extent arise from the fact that said screens are not easily adjusted, by reason of the binding of the sections thereof cannot be conveniently removed and replaced and interfere with the operation or movement of the sashes of the window, and are liable to injury or damage when subjected to severe weather conditions.

The main idea embodied in the present invention is to provide a screen adapted to roll upon a roller and fastened at an end thereof to the sash or sashes of the window, so that as the sash is opened the screen will unroll therefrom and be arranged in the open portion of the window to perform its proper function.

The construction and advantages of the present invention will be apparent from the following description.

For a full understanding of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result reference is to be had to the following description and accompanying drawings, in which—

Figure 1 is a vertical sectional view of a window, showing the invention applied to both the upper and lower sashes thereof. Fig. 2 is a horizontal sectional view taken about on the line X X of Fig. 1. Fig. 3 is an enlarged detail sectional view bringing out more clearly the connection between the screen and lower sash of the window. Fig. 4 is a sectional view showing a modified means for attaching the screen to the sash. Fig. 5 is a sectional view showing a modified form of guide-strip for guiding the screen in its movement and including a weather-strip applied thereto.

Corresponding and like parts are referred to in the following description and indicated

in all the views of the drawings by the same reference characters.

Specifically describing the invention, the numeral 1 designates the window-frame, the numeral 2 the sill at the lower portion of said frame, and the numeral 3 the lower sash. Secured to the under side of the sill 2 at the lower end of the frame 1 are brackets 4, which are adapted to support a roller 5, journaled therein, the screen 6 being adapted to roll upon the roller 5. The roller 5 is of the spring-actuated type and is somewhat similar to the ordinary form of curtain-shade roller, so that the normal tendency of the same is to exert a tension on the window-screen 6 to cause the latter to roll about said support. The screen 6 passes from the roller 5 through the sill 2, the latter being formed with a transverse slot or opening to admit of the above arrangement, and the construction of the sill as above mentioned is especially advantageous by reason of the fact that the effectiveness of the screen as a means for excluding insects of all descriptions is greatly conserved. The one end of the screen 6 is secured to the lower outer edge portion of the sash 3 by means of a transverse plate 7, secured to the sash by suitable fastenings, such as 8. Thus when the sash 3 is raised in order to open the window it will be apparent that the screen 6 will be unrolled from the roller 5 and will extend across the open portion of the window in an obvious manner. Suitable light metal guides 9 are preferably attached to opposite sides of the window-frame and consist of angle-plates, preferably secured to the vertical guide-strips 10, which hold the sash 3 in position and direct said sash in its movement. Lateral flanges of the plates or members 9 extend over the edge portions of the screen 6 and hold said screen taut, at the same time preventing the same from bagging outwardly. It is preferred that the upper sash of the window shall also be supplied with a screen similar to that connected with the lower sash, and in this instance said screen 6 has one end attached to the upper sash 11 at the upper outer edge portion of the latter. The upper screen 6 is adapted to roll about the roller 5, mounted in the brackets 4, which in this instance are attached to the upper portion of the window-frame just above the upper end of the sash 11. Thus when the upper sash is lowered it will be evident that the screen 6 will close the

opening established by opening said sash, and this is particularly advantageous, as it facilitates a thorough ventilation of a compartment for which the window may be provided. Ordinarily the screens most commonly in use cannot be practically employed at the top of the windows, and thus the upper sash is seldom lowered.

A modified adaptation of the invention is illustrated in Fig. 4 of the drawing, in which the end of the screen connected with the lower sash is detachably secured thereto. The purpose of this structure is to admit of readily cleaning the window-sash or perform operations exterior thereto when the said window is inaccessible from the outside. A transverse strip or plate 12 in this construction is secured to the lower edge portion of the sash 3, and the upper portion of said strip or plate 12 is bent outwardly to space the same from the sash 3. The screen 6 in this construction has an end thereof connected with a plate 13, the upper and lower edge portions of which are bent upon themselves, as shown at 14 and 15, respectively, to form flanges. In this instance the edge portion of the screen at the end to be secured to the window-sash is folded or bent upon itself and inserted in the space between the flange 15 and the body of the plate 13. The flange 15 is then tamped against the body of the plate 13, and the edge portion of the screen is firmly attached to the plate and permanently connected therewith. However, the upper flange 14 is free and is readily adapted to engage over the upper edge portion of the plate 12 to detachably connect the plates 13 and 12 together or, in other words, to detachably connect the screen 6 with the lower sash 3. Thus should it be necessary to clean the sashes of the window from the outside it will be obvious that the screen 6 may be detached from the lower sash by detaching the plates 12 and 13, and thus accomplish the desired purpose.

Fig. 5 embodies a modification in the form of the guides 9, which cooperate with the screen 6 in the movement of the latter. In this instance the guide 9^a is made of a metal blank folded to form right-angularly-arranged members 9^b and 9^c. The member 9^b of the guide 9^a is refolded upon itself longitu-

dinally to provide a flange 9^d, between which and the body of the member 9^b is received a weather-strip 20. Preferably the weather-strip 20 consists of sheet-rubber folded upon itself and having edge portions thereof received between the member 9^b and its flange 9^d and secured to the latter by compression or otherwise. The intermediate folded portion of the strip 20 is preferably tubular, forming a flexible, resilient, and tubular contact portion which directly engages with the sash and effectively performs the desired function of the weather-strip. If desired, the weather-strip 20 may consist merely of a single piece of sheet-rubber or similar material having an integral solid bead instead of the hollow or resilient bead which is provided in the construction illustrated in Fig. 5. The member 9^c of the guide 9^a is also of peculiar formation, being bent upon itself and thence extended outwardly in spaced relation to form a spaced guide element 9^e, between which and the body of the member 9^c the edge portion of the screen is received.

Having thus described the invention, what is claimed as new is—

1. In means of the class described, the combination of a window embodying a frame, a sash mounted therein, a roller, a screen rolled about said roller and connected at one end with the sash, guides at opposite sides of the frame cooperating with the edge portions of the screen as specified, and weather-strips applied to the guides and bearing against the sash substantially as specified.

2. In means of the class described, the combination of a window embodying a frame, a sash mounted therein, a roller, a screen rolled about said roller and connected at one end with the sash, guides at opposite sides of the frame cooperating with the edge portions of the screen as specified, each guide embodying a refolded portion, and a weather-strip attached to the guide in the refolded portion thereof and bearing against the sash.

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

WILLIAM SEIBT. [L. S.]

Witnesses:

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JOHN H. HEINZE.