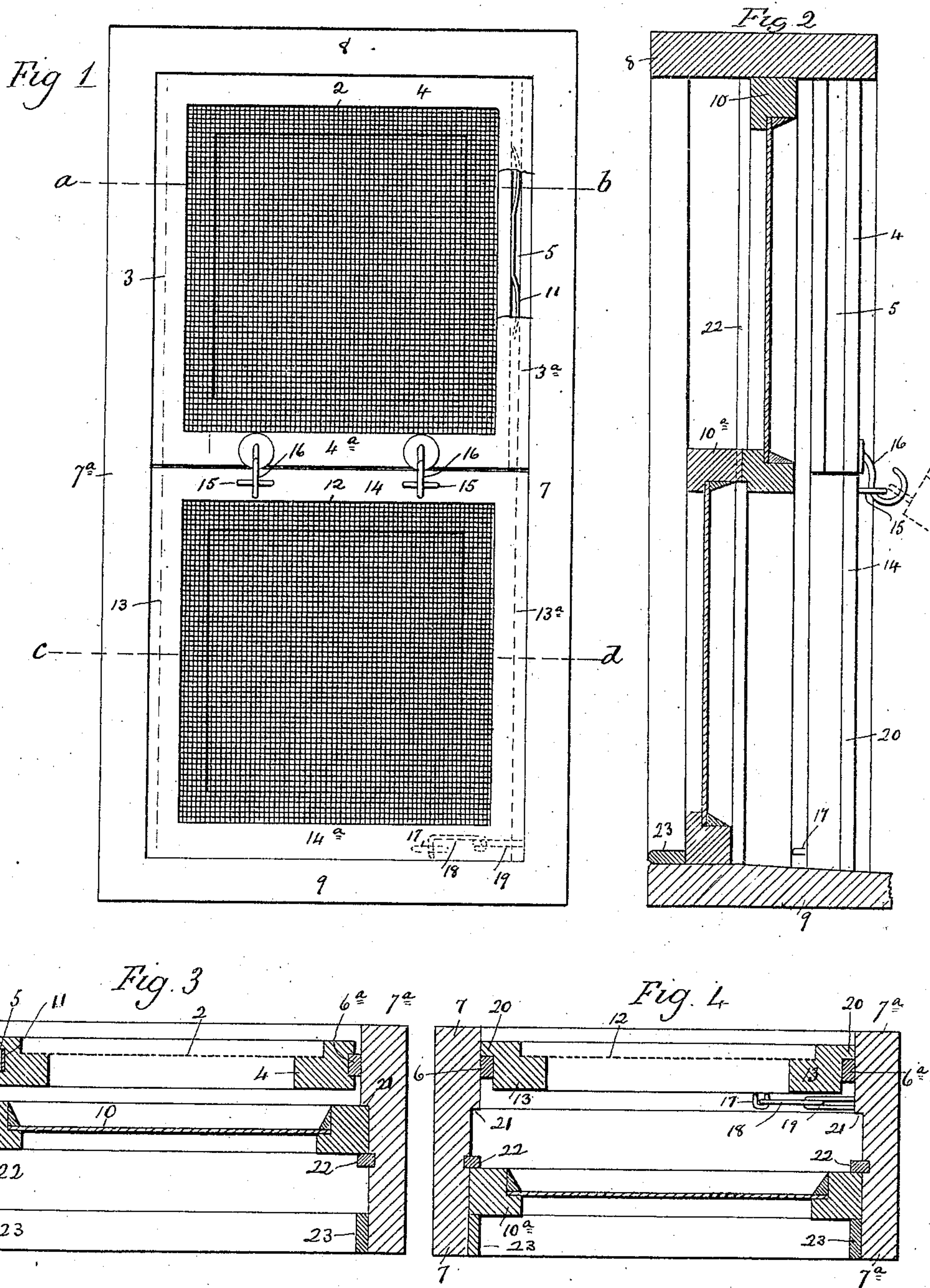


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R. P. WAKEMAN.  
WINDOW SCREEN.

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# UNITED STATES PATENT OFFICE.

ROBERT PEEL WAKEMAN, OF SOUTHPORT, CONNECTICUT.

## WINDOW-SCREEN.

SPECIFICATION forming part of Letters Patent No. 785,530, dated March 21, 1905.

Application filed September 29, 1904. Serial No. 226,420.

*To all whom it may concern:*

Be it known that I, ROBERT PEEL WAKEMAN, a citizen of the United States, residing at Southport, in the county of Fairfield and State of Connecticut, have invented a new and useful Improvement in Window-Screens; and I do hereby declare the following, when taken in connection with the accompanying drawings and the numerals of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a view in outside elevation of a window provided with screens constructed in accordance with my invention, a portion of the window-casing being broken away to show the friction-spring of the upper screen; Fig. 2, a view of the window in vertical transverse section, the lower screen being shown by broken lines as swung outward and upward preparatory to unhooking it from the upper screen; Fig. 3, a view in horizontal section on the line *a b* of Fig. 1 through the window-casing, the upper sash, and the upper screen; Fig. 4, a view in horizontal section on the line *c d* of Fig. 1 through the window-casing, the lower sash, and the lower screen.

My invention relates to an improvement in window-screens, the object being to produce a simple and effective window-screen constructed with particular reference to superior convenience in use.

With these ends in view my invention consists in window-screens having certain details of construction, as will be hereinafter described, and pointed out in the claims.

In carrying out my invention as herein shown I employ an upper screen comprising a sheet 2 of wire-cloth mounted in a rectangular frame consisting of side pieces 3 3<sup>a</sup> and upper and lower cross-pieces 4 4<sup>a</sup>. The said side pieces 3 3<sup>a</sup> are formed with vertical grooves 5, receiving screen-runners 6 6<sup>a</sup>, consisting of vertical strips applied to the inner faces of the uprights 7 and 7<sup>a</sup> of the window-casing, which also comprises a head-piece 8 and a sill 9. These screen-runners are located between the upper window-sash 10 and the window-blinds (not shown) when the lat-

ter are closed and extend down to the bottom of the window-casing, so that they provide for pulling the upper screen down into the lower portion thereof. A friction-spring 11, located in the bottom of the groove 5 of the left-hand side piece 3<sup>a</sup>, engages with the face of the left-hand screen-runner 6 and frictionally holds the screen against rattling or shaking, as well as in place, and permits the screen to be removed by crowding it from left to right, so as to compress the spring, whereby the left-hand side piece 3 of the screen is disengaged from the left-hand screen-runner 6, after which the screen may be removed from the window.

The lower screen consists of a sheet 12 of wire-cloth mounted in a rectangular frame consisting of side pieces 13 13<sup>a</sup> and upper and lower cross-pieces 14 and 14<sup>a</sup>. This lower screen is hinged to and suspended from the lower cross-piece 4<sup>a</sup> of the upper screen by means of two suspension-eyes 15 15, located in the outer face of its upper cross-piece 14 and respectively receiving two open suspension-hooks 16 16, mounted in the outer face of the said lower cross-bar 4<sup>a</sup> of the upper screen, the hooks opening upward, as shown in Fig. 2. The lower screen is held in its closed position, as herein shown, by means of an eye 17, located near the left-hand end of its lower cross-piece 14<sup>a</sup> and receiving a hook 18, carried by a staple 19, located near the lower end of the upright 7 of the window-casing. By reference to Fig. 4 it will be seen that the side pieces 13 and 13<sup>a</sup> of the lower screen are not grooved to correspond to the side pieces 3 and 3<sup>a</sup> of the upper screen, but are formed with vertical flanges 20, which engage with the outer edges of the screen-runners 6 and 6<sup>a</sup> and come to a bearing upon the said runners when the lower screen is closed and fastened. These flanges being on the outside of the said runners do not interfere with swinging the lower screen open when unhooked at its lower end. Under this construction by simply unhooking the lower screen at its lower end it may be swung open to let the air in more freely or to throw anything out of the window and hooked into its closed position again with as



much convenience as the lower sash 10<sup>a</sup> of the window can be raised and lowered for the same purpose. By unhooking the screen at its lower end and swinging it into or about  
5 the position in which it is shown by broken lines in Fig. 2 its suspension-eyes may be lifted over the ends of the suspension-hooks 15 and the lower screen entirely disconnected from the upper screen and taken in through  
10 the window into the room in which the window is located. The lower screen being out of the way, the upper screen is then drawn down into the place formerly occupied by the lower screen, thus giving access to the  
15 upper window-sash for cleaning the same. When the upper screen is drawn down into the place of the lower screen, it is brought into convenient position for being crowded from left to right for the compression of its  
20 spring 11, as described, and its removal. By applying the upper screen to the said screen-runners and by arranging the lower screen to bear upon the outer edges of the said runners the upper and lower window-sashes 10  
25 and 10<sup>a</sup> and the blinds (not shown) are as free to be used in the usual way as though the screens were not in the window.

If desired, I may in screening long windows use more than two screens. In that  
30 case the construction of the lower screen would be duplicated for all of the screens except the upper screen, which would follow the construction set forth. This modified construction is an extension, so to speak, of  
35 what I have described and shown and is too obvious to need special illustration.

The upper sash 10 is confined between and guided by vertical shoulders 21, formed in the uprights 7 and 7<sup>a</sup>, and by the usual part-  
40 ing-strips 22, while the lower sash 10<sup>a</sup> is confined between and guided by the said strips 22 and the usual stops 23, all well known and requiring no description.

In view of the changes suggested and of  
45 others which may obviously be made, it is apparent that in carrying out my invention some modifications may be made in the construction herein shown and described. I would therefore have it understood that I  
50 do not limit myself thereto, but hold myself at liberty to make such departures therefrom as fairly fall within the spirit and scope of my invention.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination with a window-casing, of an upper window-sash and a lower window-sash, screen-runners located upon the uprights of the said casing and situated outside of the said upper and lower sash, a vertically-movable upper screen applied to the said runners, an outwardly-swinging lower screen located outside of the said upper and lower sash and the said runners and suspended by its upper end from the lower end of the said upper screen and adapted to be removed at pleasure from the said upper screen to permit the same to be slid downward upon the said runners into the place of the lower screen.

2. The combination with a window-casing, of an upper window-sash and a lower window-sash, screen-runners consisting of strips located upon the uprights of the said casing and situated outside of the said upper and lower sash, a vertically-movable upper screen applied to the said runners, a lower screen located outside of the said upper and lower sash and the said runners, and suspension eyes and hooks applied to the lower end of the upper screen and to the upper end of the lower screen, whereby the latter is suspended from the former and adapted to be swung outward and free to be removed at pleasure from the upper screen to permit the same to be moved down upon the said runners into the place of the lower screen.

3. The combination with a window-casing, of screen-runners applied to the uprights of the said casing, an upper screen confined by and sliding upon the said runners from which it is removable, and an outwardly-swinging lower screen suspended by its upper end from the lower end of the upper screen so as to be removed therefrom at pleasure, and when closed bearing upon the outer edges of the said screen-runners.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

ROBERT PEEL WAKEMAN.

Witnesses:

MARY T. WAKEMAN,  
ALICE E. SCHRAGE.