(No Model.) 2 Sheets—Sheet 1

P. AHLBERG.

ADJUSTABLE WINDOW SCREEN.

No. 419,397. Patented Jan. 14, 1890.

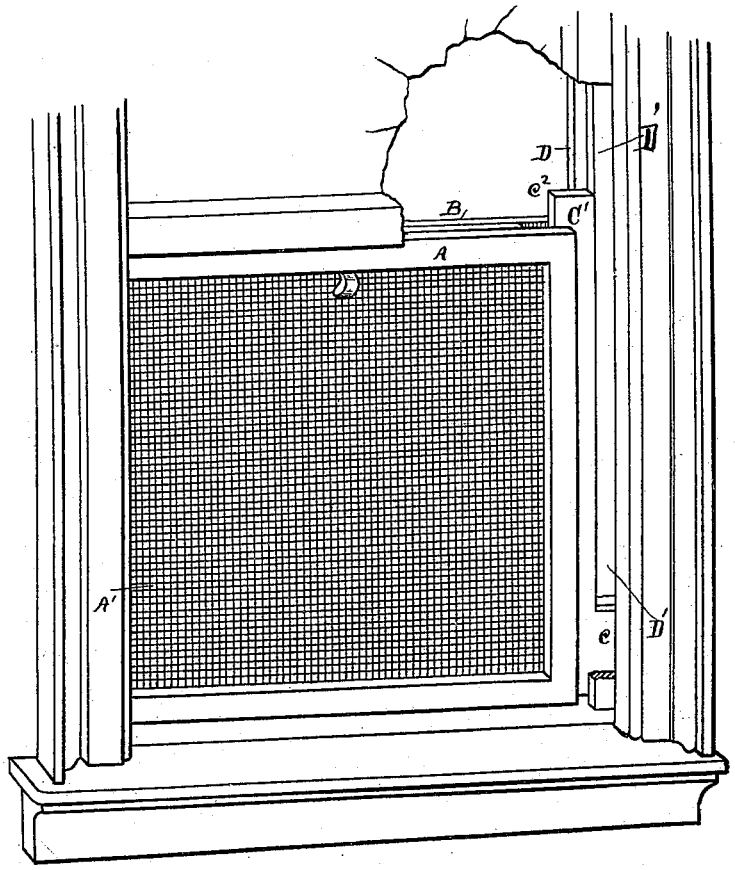

Fig. 1

Witnesses
John Schuman.
Charles F. Salow.

Inventor
Peter Ahlberg
By his Attorney Merrell & Wright

(No Model.) 2 Sheets—Sheet 2.

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FIG. 2

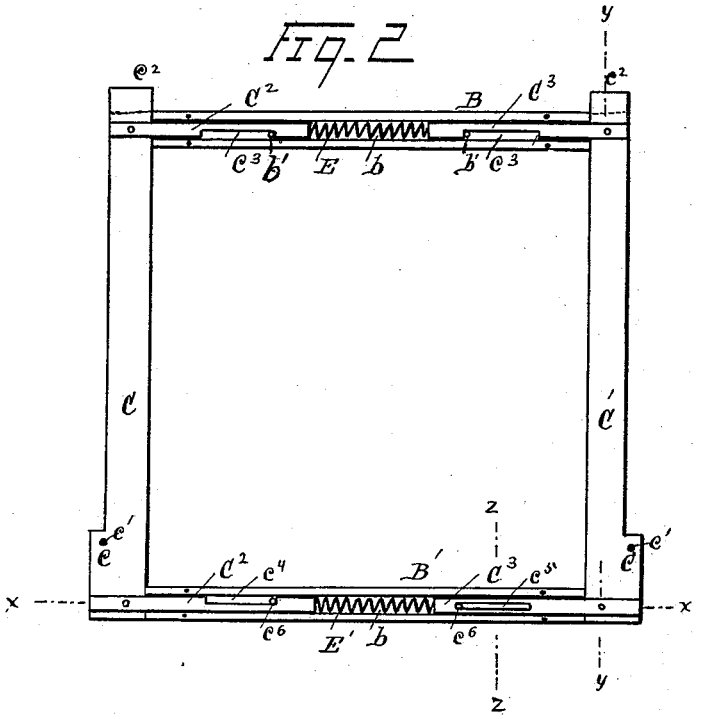


FIG. 3

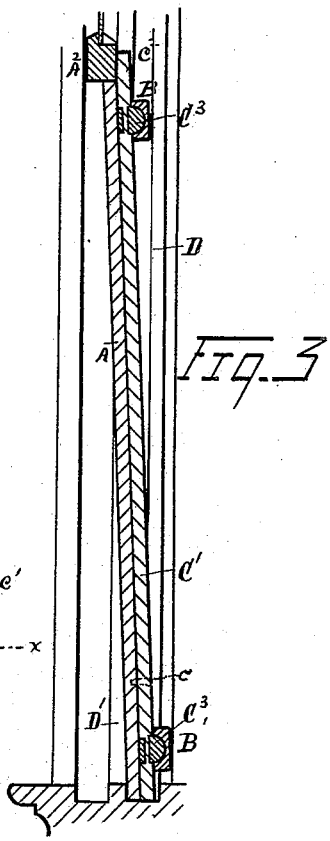


FIG. 4

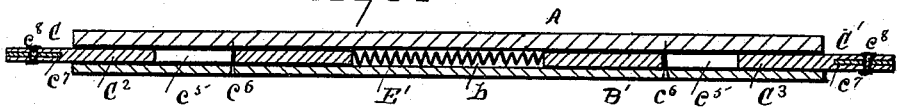
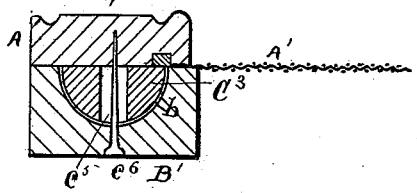


FIG. 5



Witnesses
John Schuman.
Charles F. Salow.

Inventor
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By his Attorney Newell & Wright

UNITED STATES PATENT OFFICE.

PETER AHLBERG, OF DETROIT, MICHIGAN.

ADJUSTABLE WINDOW-SCREEN.

SPECIFICATION forming part of Letters Patent No. 419,397, dated January 14, 1890.

Application filed January 28, 1889. Serial No. 297,774. (No model.)

To all whom it may concern:

Be it known that I, PETER AHLBERG, a citizen of the United States, residing at Detroit, county of Wayne, State of Michigan, have invented a certain new and useful Improvement in an Adjustable Window-Screen; and I declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention contemplates certain new and useful improvements in window-screens, and more particularly in adjustable window-screens, as more fully hereinafter described, and pointed out in the claims, and illustrated in the accompanying drawings, in which—

Figure 1 is a view in perspective disclosing features of my invention. Fig. 2 is a side elevation, the fixed portion of the frame being removed. Fig. 3 is a vertical section on the line *y y*, showing also the screen in position. Fig. 4 is a horizontal section on the line *x x*, and Fig. 5 is a cross-section on the line *z z*.

The object of my invention is to provide a window-screen which may be readily adjusted to various widths, on which the lower rail of the lower sash may be made to rest, when desired, and which need not be removed from the window-frame in order to close the window, although certain features of my invention are calculated also for screens to be removed to close the window.

My invention also has reference to the construction for adjusting the wings of the screen.

I carry out my invention as follows:

A represents a fixed screen-frame made in any desired manner and provided with a screen fabric A′. Upon the exterior of said frame I engage, on the top and bottom thereof, caps B B′, grooved, respectively, as shown at *b*. These grooves, for convenience and economy of construction, preferably extend from end to end of the caps, for the reason that as so made the grooves may be made by an ordinary sticker-machine.

C C′ represent wings located upon the two sides of the frame A, and having an adjustable engagement therewith, so as to be moved inward or outward, as required, to fill the window-frame, so as to make the screen insect-proof. These wings I design to construct with a projecting shoulder at their bases, respectively, as shown at *c*, said shoulder designed to be engaged between the usual outside strip D and the ordinary parting-strip D′, and still allow the external edges of the wings to abut against the external edge of the parting-strip upward from said shoulders. One or more screws, as at *c′*, pass through said shoulders and may slightly engage said shoulders to the parting-strip, but not so firmly as to prevent the upper side of the screen being canted inward sufficiently to allow the lower rail of the lower sash when opened to rest upon the upper rail of the fixed screen-frame, as shown in Fig. 3 at A^2. I desire, also, in some cases to project the upper ends of said wings above the fixed frame, so as to form a contact with the exterior surface of the lower sash-rail to prevent the screen from being moved too far inward, the projecting ends of the wings forming a stop, as shown at c^2. The wings may, however, be constructed without thus projecting the ends, if preferred, said wings terminating at the dotted lines, Fig. 2. I prefer to make the wings adjustable in the following manner: At the top and bottom the wings are provided with arms C^2 C^3, located within the grooves of the adjacent caps and having a movement to and fro therein.

To limit the movement of the wings the arms may be recessed on one side, as shown at c^3, the adjacent portion of the cap being provided with a stop or shoulder *b′*. The recess c^3, being suitably elongated, permits thus the desired amount of lateral movement of the wings. While I do not limit myself to any particular method of stopping the movement of the wings, I prefer the construction shown at the bottom of Fig. 2. Where the arm is constructed with an elongated recess c^4 or slot c^5, a pin, nail, or screw c^6, passed through the cap into the fixed frame, serves not only to unite the cap and frame, but also at the same time affording a strong and efficient stop. Having an engagement both in the cap and frame, it is evident that the stop is very firm, as a stop having a bearing only at one end cannot be. Whether the arm is

provided with an elongated slot intermediate of its sides, or whether the slot is open at one side, is of course immaterial.

I prefer that the arm should be constructed with a kerf, as at c^7, to receive the wing. I prefer also to make the grooves in the caps half-round, as such a groove leaves the greatest strength of the wood, there being no sharp corners tending to make the wood split and weaken it.

E E′ represent coiled springs located within the grooves between the inner ends of the arms to keep the wings out against the window-frame.

Should it be preferred to remove the screen from the window-frame whenever the window is to be closed, the shoulders *c* may be dispensed with and a straight-faced wing be employed. The caps may be engaged upon the frame A by nails or screws.

It is evident that a screen so made is economical and efficient.

In uniting the wings to their respective arms I prefer to employ a rivet c^8, passing loosely through the wings, so that in case the window-frame is out of straight the wings can be readily tilted to conform to the desired shape and more effectually close the aperture. Such a union permits the free play or movement of the wings at the points of their engagement with the arms, and an important result is obtainable thereby.

I do not broadly claim a screen provided with grooved caps and wings adjustably engaged therewith.

What I claim as my invention is—

1. The combination, with the frame A, provided with a screen fabric, of adjustable side wings, said wings provided with laterally-projected shoulders to permit the engagement of the screen upon the outside of the parting-strip of the window-sash, the construction being such that the upper portion of the screen may be canted forward between the edges of the parting-strip and support the window-sash, substantially as set forth.

2. The combination, with the frame A, provided with a screen fabric, of grooved caps engaged with the upper and lower rails of said frame and adjustable side wings provided with arms engaged by said caps, said wings constructed with laterally-extended shoulders and the upper ends of said wings projected above the frame A, substantially as and for the purpose described.

In testimony whereof I sign this specification in the presence of two witnesses.

PETER AHLBERG.

Witnesses:
N. S. WRIGHT,
CHAS. F. SALOW.