

A. ALTENBURG.
Window-Screens.

No. 154,538.

Patented Sept. 1, 1874.

Fig. I

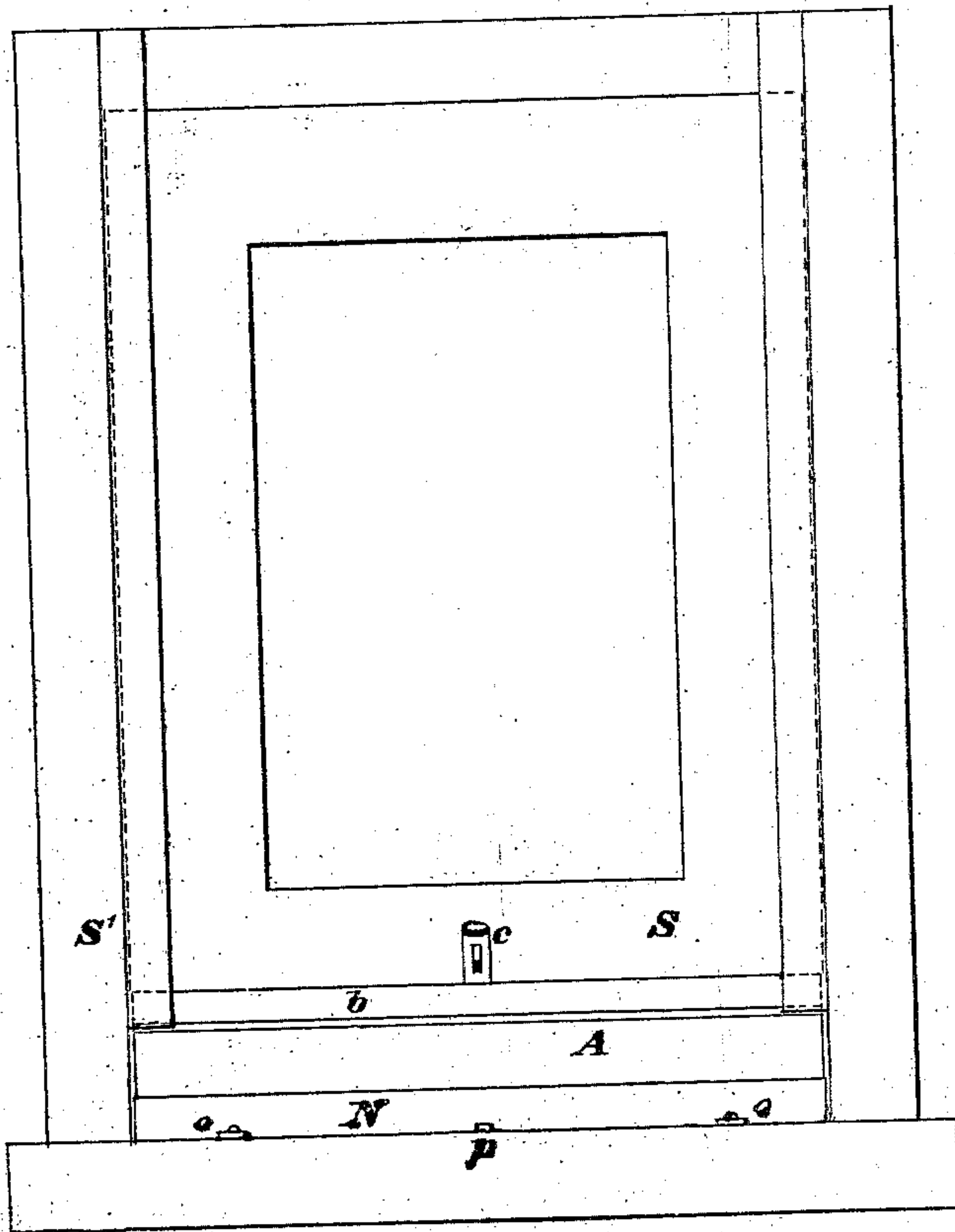
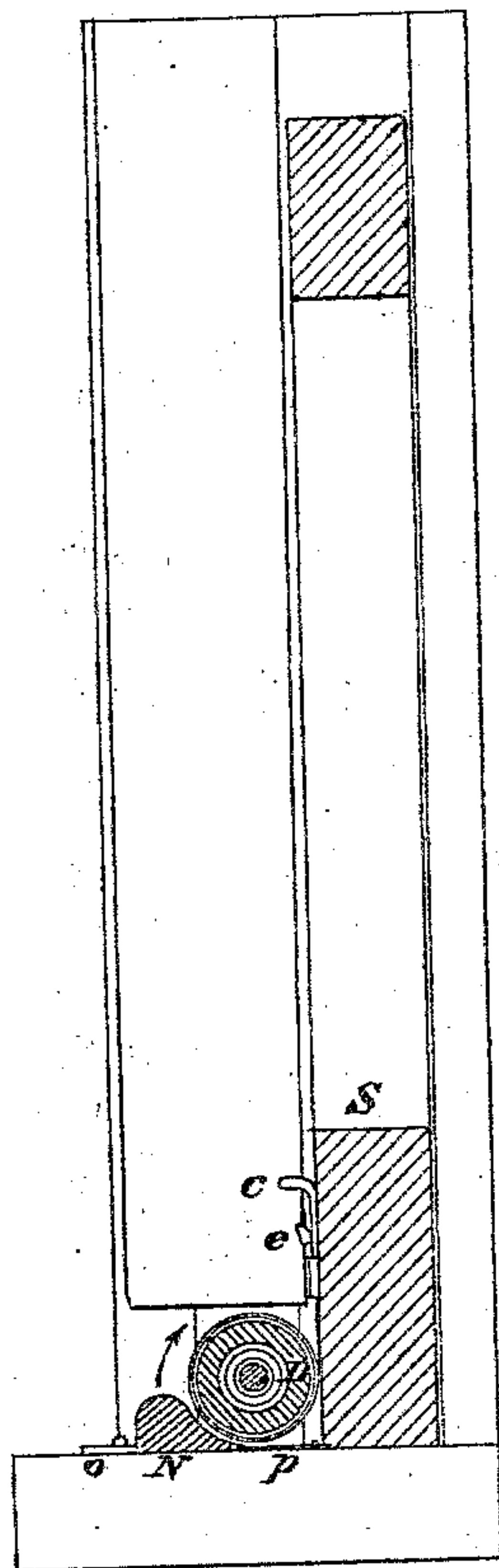


Fig. II



George E. Sell
B. H. Muehle

Augustus Altenburg
INVENTOR.

UNITED STATES PATENT OFFICE.

AUGUSTUS ALTENBURG, OF BUFFALO, NEW YORK, ASSIGNOR OF ONE-HALF
HIS RIGHT TO CHARLES DAY, OF SAME PLACE.

IMPROVEMENT IN WINDOW-SCREENS.

Specification forming part of Letters Patent No. 154,538, dated September 1, 1874; application filed
January 26, 1874.

To all whom it may concern:

Be it known that I, AUGUSTUS ALTENBURG, of the city of Buffalo, in the county of Erie and State of New York, have invented a Self-Adjusting Fly and Mosquito Bar, of which the following is a specification:

My invention relates to that class of window-screens which consist of a piece of fly-netting or screen-cloth, one end of which is attached to the window-sash, and the other to a spring-roller revolving in bearings upon the window-jamb; and consists of a simple and cheap device for closing the aperture which is produced between the roller and window-sill by the unrolling of the screen from the roller, in a manner to diminish the diameter of the rolled-up screen.

In the accompanying drawing, Figure I is a front elevation of part of a window with my improved bar attached. Fig. II is a transverse vertical section of same.

The object of my invention is to improve the construction of the simplest and cheapest screen of the class above described, so that at very small additional expense any aperture occurring between the roller and window-sill may be effectually closed.

The screen or netting A is represented in Figs. I and II as rolled up on the roller D.

The end of the screen is connected to a metal or wooden slat, *b*, which is fastened, by means of the loop *c*, to the staple *e* in the window-sash S. By unhooking this loop from the staple, the fly-bar may readily be disconnected from the sash whenever it is desired to open the window without drawing up the fly-bar.

The roller D, to which the other end of the piece of netting is attached, is supported in bearings connected to the jamb of the window. The roller revolves as the sash is raised, and the screen is unrolled from the roller.

The mechanism devised for automatically rolling up the screen, during the reverse motion or closing of the window, consists in a spiral spring, *g*, one end of which is connected to the pin *h*, around which it is coiled, and the other end to a square peg or pin, *i*. All these parts are contained within the roller D,

one end of it being bored out a few inches for that purpose. The pin or peg *i* is driven into the solid part of the roller, upon the inner end of the hollow portion thereof, and revolves with the roller. The end of the pin *h*, which projects beyond the end of the roller, is made square, and fits into a corresponding socket, *j*, formed in the plate *k*, which is firmly screwed to the side of the window-jamb S'. The other and solid end of the roller D is provided with a central pin, *l*, having its bearing and revolving within a circular opening in the plate *m*, attached to the opposite side of the window-jamb. Before the roller is adjusted within its bearings the square pin *h* is revolved in the direction of the arrow in Fig. II, so as to give the spring *g* the necessary power to revolve the roller D in the opposite direction when the window is closed.

All the parts hereinabove described are old devices, having been in use with various modifications.

Now, in addition thereto I provide a wedge-shaped rail or slat, as shown at N, which extends the entire width of the screen and roller, and, by means of the slotted guide-plates O O, may be moved back and forth in the direction of the roller, in such manner that the edge of the rail N may enter, and the body thereof fill, the space produced by the unrolling or raising of the screen between the roller and the window-sill. The rail may either be moved by hand, or an automatic movement may be produced by the application of a small rubber or other spring, such as shown at *p*, Figs. I and II.

The advantages of my improvement are obvious.

When fly-netting or screen material is attached to the sash, and its edges are in close contact with and behind the window-stops, then the entire area below the raised sash is completely covered by the screen, with the exception of the space below the roller, which aperture grows larger as the screen is raised and unrolled from the roller. In order to close that opening, I have devised the wedge-bar herein described, and by means of it, whether it is moved by hand or supplied with springs for its automatic adjustment, the

covering with a screen of the entire area below a raised sash is accomplished in a much cheaper and simpler manner than has ever heretofore been done.

I do not claim the construction and operation of a fly-screen upon a spring-roller, or its attachment to the sash of a window, as I am aware that these devices are old; but

I claim as my invention—

The movable wedge-shaped slat N with the spring p' , in combination with the roller D and fly-screen X, for the purpose herein set forth.

AUGUSTUS ALTENBURG.

Witnesses:

GEORGE E. FELL,
B. H. MUEHLE.