

(No Model.)

2 Sheets—Sheet 1.

C. E. SCOFIELD.
WINDOW SCREEN.

No. 507,848.

Patented Oct. 31, 1893.

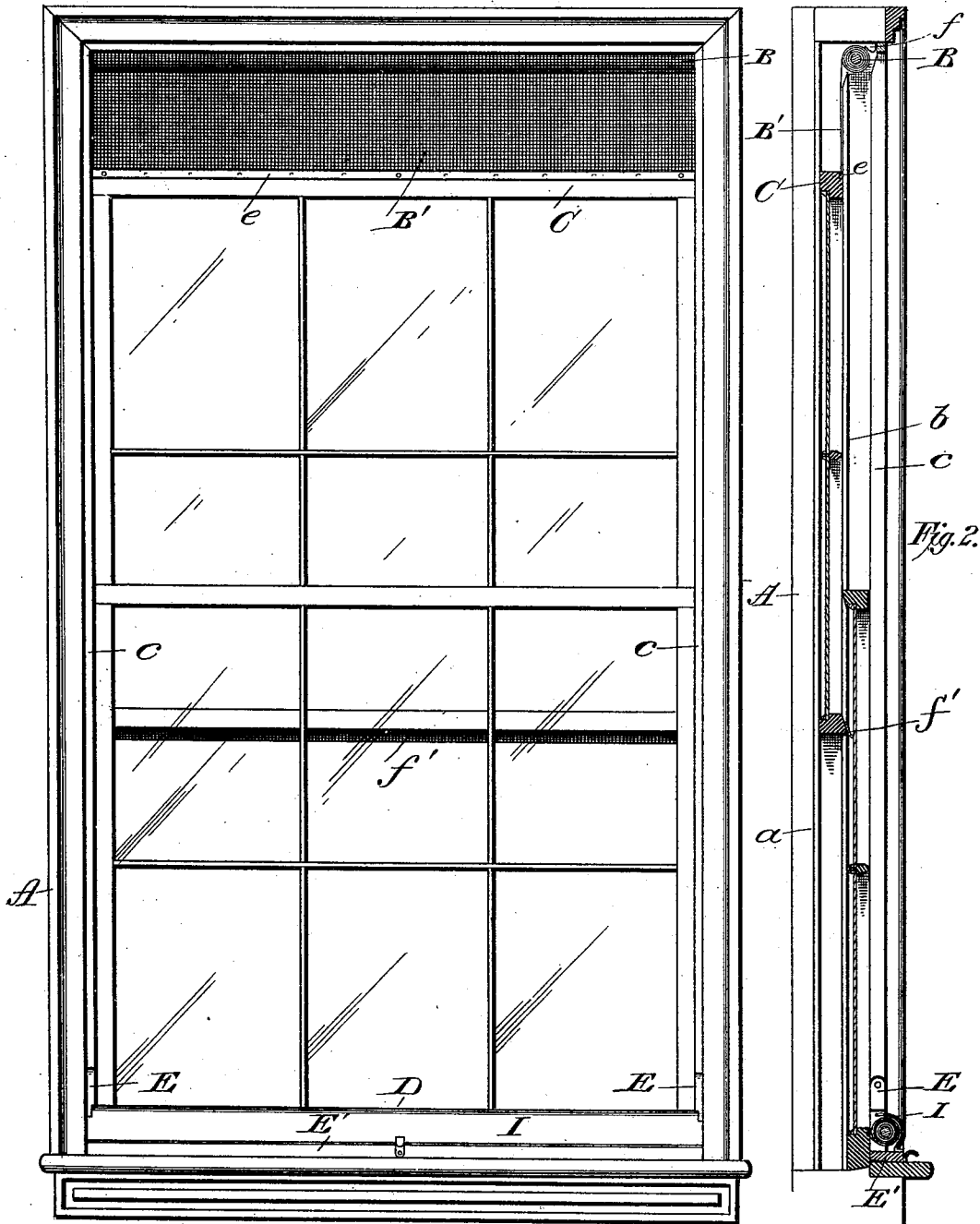


Fig. 1.

Charles E. Schofield
Inventor

Witnesses

E. S. Elliott

W. H. Johnson

by

W. H. Johnson

Attorney

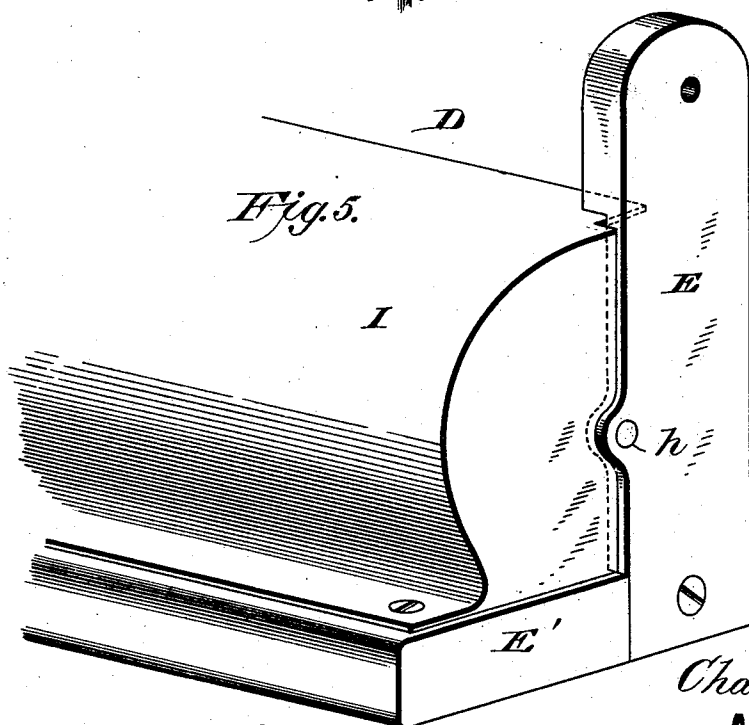
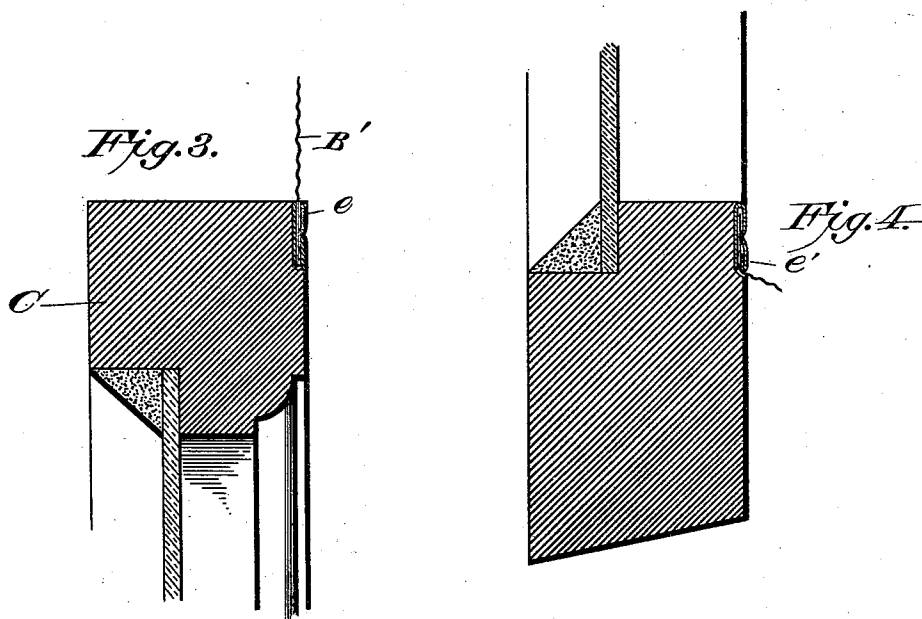
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Witnesses *L. S. Elliott*
A. M. Johnson

Charles E. Schofield
Inventor

— by *[Signature]*
Attorney

UNITED STATES PATENT OFFICE.

CHARLES E. SCHOFIELD, OF GREENUP, ILLINOIS.

WINDOW-SCREEN.

SPECIFICATION forming part of Letters Patent No. 507,848, dated October 31, 1893.

Application filed June 1, 1893. Serial No. 476,209. (No model.)

To all whom it may concern:

Be it known that I, CHARLES E. SCHOFIELD, a citizen of the United States of America, residing at Greenup, in the county of Cumberland and State of Illinois, have invented certain new and useful Improvements in Window-Screens; and I do hereby 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, and to the letters of reference marked thereon, which form a part of this specification.

The object of the invention is to provide a simple, cheap and effective screen attachment for windows, which is so constructed that when the lower sash is raised or the upper sash lowered the opening, or openings, will be provided with a screen, or screens, to exclude insects, the screens being attached to the sashes and to spring-actuated rollers supported by the sash-frame, the lower roller being supported in a frame pivoted to the sash-frame so that it can be swung to present an opening, as will be hereinafter fully set forth.

In the accompanying drawings, forming part of this specification, Figure 1 is a front elevation of a window with screens and fixtures attached, the upper sash being partly lowered. Fig. 2 is a vertical sectional view. Figs. 3 and 4 are sectional views showing the manner of attaching the screen to the rails of the sashes; and Fig. 5 is a detail perspective view of one end of the roller carrying frame.

A designates the sash-frame, which is provided with the usual beads between which the sashes slide, the parting-beads being cut away at their upper ends to provide for the attachment of the roller upon which is wound the screen-fabric connected to the upper sash. The inside beads, *c*, are cut away at their lower ends so that the side pieces of the frame carrying the roller upon which is wound the screen-fabric connected to the lower sash may bear directly against the sides of the sash-frame.

B designates the upper roller, which is spring-actuated, and is journaled in fixtures attached to the side pieces of the sash-frame, said roller and fixtures being of the construc-

tion employed in the ordinary curtain-roller. Upon this roller is wound the screen-fabric, *B'*, the end of which is attached to the upper sash, *C*, by means of a metallic strip *e* which is bent upon itself to embrace the edges of the fabric. This metallic strip is let into the upper rail of the sash and secured therein by suitable fastening devices. A narrow strip of fabric, *f*, is attached to the head of the sash-frame so that the free edge thereof may bear upon the upper roll of screen-fabric and cover the opening which would otherwise be formed at this point. The lower rail of the upper sash has attached thereto a similar strip, *f'*, which bears against the glass in the lower sash and closes the opening between the sashes.

To the lower rail of the lower sash is attached the end of the screen-fabric which is wound upon the roller journaled in the swinging frame *D*, the fabric being attached to the rail by means of a metallic strip, *e'*, which is similar to the metallic strip on the upper sash. The frame carrying the lower roller consists of side pieces *E E*, a connecting strip *E'* and a curved shield or covering plate *I*. This frame is pivoted to the sash-frame by means of pins which pass through apertures near the upper ends of the side-pieces, said side pieces also having apertures, *h*, in which the ends of the roller bear. The strip *E'* of the pivoted frame is provided with a hook by means of which the frame can be swung upon its pivots to provide an opening below the lower sash for the purpose of operating the shutters.

If desired the metallic strips *e* and *e'* may be secured removably to the rails of the sashes, so that the screens can be removed during the winter season.

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

1. In a sash-frame constructed substantially as shown and having the inside beads cut away at their lower ends, a frame pivoted at the lower ends of the inside beads and provided with bearings for a spring-actuated roller upon which is wound a screen-fabric, a shield carried by the pivoted frame and adapted to lie over the roll of fabric, the fabric being attached to the lower rail of the

lower sash, substantially as shown, and for the purpose set forth.

2. As an improved article of manufacture,
a roller support for window-screens, comprising
5 side pieces E E, having apertures to form
bearings for the pivot pins and ends of the
roller, a connecting-strip E', having a hook
and a shield or cover attached to the connecting
strip and to the side pieces, substan-

tially as shown whereby the roller support can be swung upon its pivots to provide an opening for the purpose set forth.

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

CHARLES E. SCHOFIELD.

Witnesses:

WILLIAM S. RYAN,
W. H. McDONALD.