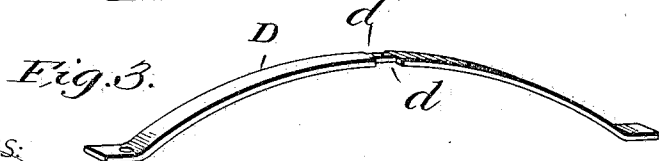
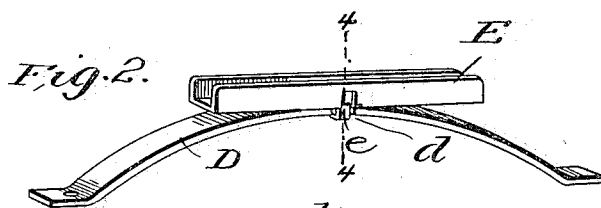
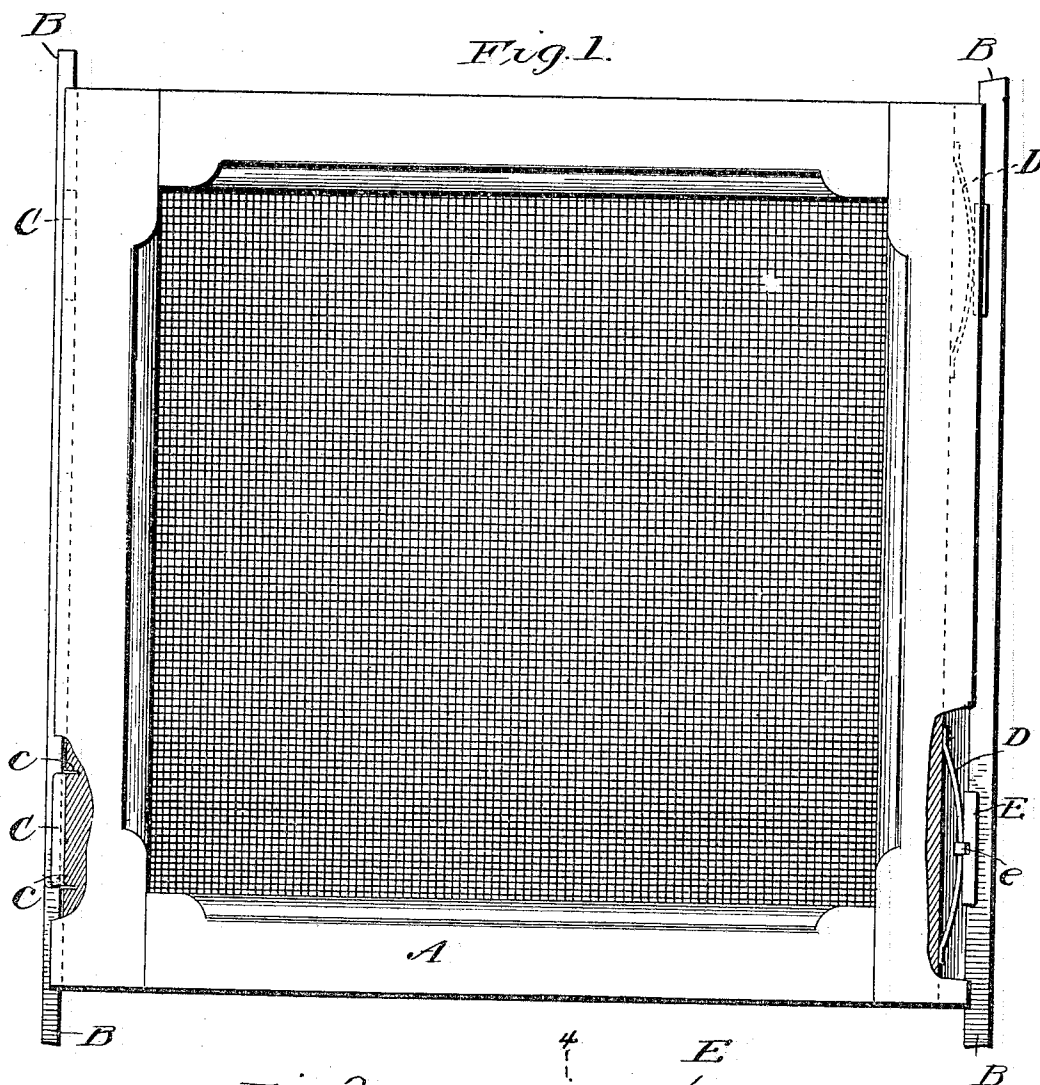


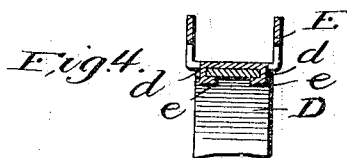
No. 809,753.

PATENTED JAN. 9, 1906.

E. D. SEGAR.
WINDOW SCREEN.
APPLICATION FILED APR. 21, 1905.



WITNESSES:
W. F. Kagle.
W. L. Helms.



INVENTOR
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UNITED STATES PATENT OFFICE.

EUGENE D. SEGAR, OF RANDOLPH, VERMONT, ASSIGNOR TO PORTER
SCREEN MANUFACTURING COMPANY, OF BURLINGTON, VERMONT.

WINDOW-SCREEN.

No. 809,753.

Specification of Letters Patent.

Patented Jan. 9, 1906.

Application filed April 21, 1905. Serial No. 256,770.


To all whom it may concern:

Be it known that I, EUGENE D. SEGAR, of Randolph, county of Orange, and State of Vermont, have invented a new and useful Improvement in Window-Screens, of which the following is a specification.


This improvement has reference to window-screens adapted to slide up and down like window-sashes in the frame to which they are applied; and it is designed to secure a snug fit and easy sliding movement of the screen without danger of cramping and to provide for this purpose a simple, cheap, and efficient device. To this end I make use of an attachment consisting of a bowed metallic spring, on the summit of which is secured a shoe adapted to fit and run on the adjoining rail, said shoe preferably being capable of a slight tilting fore-and-aft movement upon its supporting-spring, so that it may measurably adapt itself to inequalities in the rail on which it runs. The screen has its vertical side edges grooved, and the groove in one side is fitted with one or more of these attachments, or the grooves in both side edges of the screen may be provided with them, if preferred. A simple and effective form of device for attaching the shoe to its spring consists of side prongs integral with the shoe, which are bent over the side edges and inturned onto the bottom of the bowed spring and are seated in nicks in said side edges, so as to substantially prevent bodily lengthwise movement of the shoe upon its support.

In the accompanying drawings, Figure 1 represents a screen provided with my improvement and fitted between rails on which it may slide up and down, portions of the vertical side bars of the screen-frame being broken away to expose the parts in which my improvement is comprised. Fig. 2 is a perspective view of one of the attachments. Fig. 3 is a view of the spring. Fig. 4 is a cross-section on line 4 4, Fig. 2.

A is a screen of any ordinary or approved construction. The edges of its vertical side bars are grooved, and said grooves are entered by rails B on the window or other frame to which the screen is applied. In the present instance the attachments in which my improvement is comprised are applied to one only of the grooved side bars of the screen. The groove in this side bar is therefore made of a depth to accommodate the attachment.

The groove in the other side is shallower and of a depth only to comfortably receive its rail B and one or more fixed sheet-metal shoes C, which are seated on the bottom of the groove and there held by end prongs *c*, which enter the screen-bar. In the deeper groove on the opposite edge of the screen there are two of the spring attachments. Each consists of a bowed sheet-metal spring D, the ends of which bear against the bottom of the screen and are so arranged that one or both of the ends of the spring may move to permit the compression of the bow of the spring. For this purpose one of the ends of the spring-strip D is fixed to the bottom of the groove, while the other end is free to move on and lengthwise of the bottom of the groove. Upon the summit of the bowed spring-strip D is mounted a sheet-metal shoe E of  cross-section, which has integral narrow side prongs *e*, formed by cutting them from the metal of the shoe, these prongs being preferably located centrally of the shoe and opposite one another. In the side edges of the bowed spring-strip opposite the point on the shoe where the prongs *e* are located are shallow nicks *d* of a width to receive the prongs. To secure the shoe to the bowed spring-strip, all that is needed is to bend the prongs *e* down so that they shall enter and seat themselves in the nicks *d* and then to inturn the ends of the prongs onto the bottom or under side of the spring-strip, as seen more plainly in Fig. 4. In this way bodily movement of the shoe lengthwise of its spring-support is prevented, while it still may have capacity for slight tilting fore-and-aft motion which will permit it to adapt itself to inequalities in the rail as the screen is moved up or down thereon. The connections between the shoe and its bowed spring-support are simple, cheap, and effective, and the shoe itself may be made of different quality or kind of metal from its support.

What I claim herein, and desire to secure by Letters Patent, is—

1. A screen having grooved side bars adapted to run upon rails, a metallic bowed spring-strip arranged in one of the grooves, and a shoe of  cross-section, mounted upon and secured to the summit of the bowed spring-strip, in such manner as to be capable of slight fore-and-aft tilting movement thereon, as and for the purposes hereinbefore set forth.

2. A screen having grooved side bars adapted to run upon rails, a metallic bowed spring-strip having nicks in its side edges arranged in one of the grooves and a bearing-shoe of
5 ☐ cross-section mounted on the summit of the bowed spring-strip having integral side prongs bent over the side edges, and intumed onto the under side of the spring-strip, and

seated in said nicks, substantially as hereinbefore set forth. 10

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

EUGENE D. SEGAR.

Witnesses:

F. E. ROBINSON,

H. I. STANHOPE.