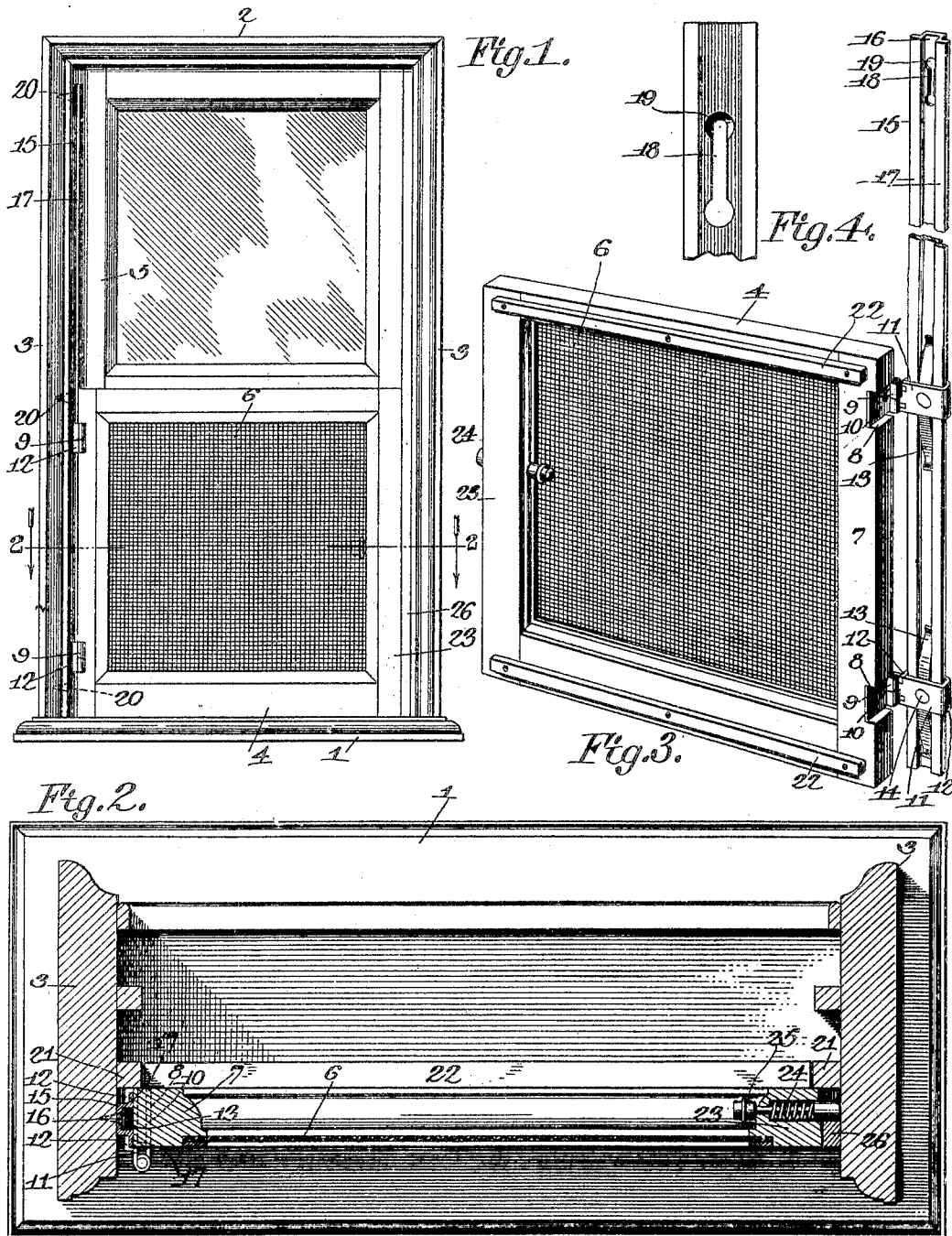


No. 802,603.

PATENTED OCT. 24, 1905.

D. Z. SHAW.
WINDOW SCREEN.
APPLICATION FILED MAY 2, 1905.



Witnesses
E. J. Stewart
Wm. Baggett

Daniel Z. Shaw, Inventor.
by *C. A. Snow & Co.*
Attorneys

UNITED STATES PATENT OFFICE.

DANIEL Z. SHAW, OF PITTSBURG, PENNSYLVANIA, ASSIGNOR OF ONE-EIGHTH TO AARON B. SHAW AND ONE-EIGHTH TO DELFEY B. SMITH, OF PITTSBURG, PENNSYLVANIA.

WINDOW-SCREEN.

No. 802,603.

Specification of Letters Patent.

Patented Oct. 24, 1905.

Application filed May 2, 1905. Serial No. 258,535.

To all whom it may concern:

Be it known that I, DANIEL Z. SHAW, a citizen of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Window-Screen, of which the following is a specification.

This invention relates to window-screens, and it has particular reference to that class of screens which may be slid or moved vertically in the window frame or casing and which may also be swung, as upon hinges, for the purpose of affording access to the windows for the purpose of cleaning and the like without necessity of entirely removing the screen from the frame or casing.

The object of the invention is to simplify and improve the construction and operation of this class of devices; and with this and other ends in view, which will readily appear as the nature of the invention is better understood, the same consists in the improved construction and novel arrangement and combination of parts, which will be hereinafter fully described, and particularly pointed out in the claims.

In the accompanying drawings has been illustrated a simple and preferred form of embodiment of the invention, it being, however, understood that no limitation is necessarily made to the precise structural details therein exhibited, but that the right is reserved to any changes, alterations, and modifications to which recourse may be had within the scope of the invention and without departing from the spirit or sacrificing the efficiency of the same.

In said drawings, Figure 1 is an elevation showing the outer side of a window frame or casing to which the invention has been exteriorly applied. Fig. 2 is a horizontal sectional view, enlarged, taken on the plane indicated by the line 2 2 in Fig. 1. Fig. 3 is a perspective view showing the screen detached, together with its supporting and guiding bar. Fig. 4 is a detail side view of one end of the supporting-bar.

Corresponding parts in the several figures are indicated throughout by similar characters of reference.

A window-casing has been shown comprising a sill 1, a cap 2, and posts 3 3. The improved screen attachment may be applied interiorly or exteriorly to the window-casing;

but it has been shown and will be described as being exteriorly applied, so that the screen may be opened outwardly.

The screen comprises a frame 4, adapted to the width of the window-casing and of a height preferably corresponding with that of the sashes 5, although I do not limit myself as to the dimensions of the screen. The latter is provided with a filling of wire-netting 6, or equivalent foraminous material. One side member or stile 7 of the screen-frame is provided with gains or recesses 8 for the accommodation of hinges 9, the inner leaves of which, 10, are secured to the stile by means of screws or other suitable fastening devices. The outer leaves 11, which when folded upon the leaves 10 are accommodated within the gains or recesses 8, are provided at their inner and outer edges with hook-shaped flanges 12. Said outer leaves are also provided upon their outer faces between the flanges 12 with leaf-springs 13, secured in position by means of rivets or other suitable fastening devices.

A supporting bar 15, preferably formed of metal, is provided with a longitudinal groove or channel 16 and with laterally-extending flanges 17. Said supporting-bar is also provided with suitably-disposed keyhole-slots 18, having countersinks 19 at the ends thereof, said keyhole-slots being for the reception of headed studs or screws 20, which are attached to and suitably located upon one of the posts of the window-casing. By means of the keyhole-slots the supporting-bar may be readily placed in engagement with the headed studs or screws, which may then be tightened until the heads thereof engage the countersinks at the upper ends of the slots, so as to lie flush with the bottom of the groove or channel. The flanges 17 of the supporting-bar are engaged by the hook-shaped flanges 12 of the hinge-leaves 11, thus permitting the hinges and the screen to slide freely with relation to the supporting-bar. When the parts are thus connected, as will be clearly seen in Fig. 3 of the drawings, the springs 13 will ride in the channel of the supporting-bar and by frictionally engaging the latter will retain the screen-frame in any position to which it may be adjusted.

The screen-supporting bar has been shown as attached exteriorly to the window-casing at a short distance from the outer top sash-

engaging beads 21. The screen-frame is provided near its upper and lower edges with cleats 22, fitting between the beads and against the outer sash, so as to prevent insects from entering between the screen and the sash-frame.

The stile 23 of the screen-frame opposite to the hingedly-supported stile of said frame is provided with a spring-actuated locking-bolt 24, having a handle 25. Said locking-bolt is adapted to engage between one of the beads 21 and an auxiliary bead 26, which is secured upon one of the posts of the window-casing and which constitutes not only a locking-bolt-engaging member which is effective to prevent the screen-frame from swinging open in any position occupied by said frame, but also a guide for the screen-frame when the latter is moved up or down in the window-casing.

This improved device, as will be seen, is of simple and inexpensive construction and admits of the convenient adjustment or detachment of a window-screen frame which when applied in operative position may not only be moved vertically to any desired position, but may also be swung horizontally to afford convenient access to the sashes.

Having thus described the invention, what is claimed is—

1. A supporting member, a screen-frame, hinge-leaves connected with said screen-frame and having support-engaging flanges, and support-engaging springs connected with said hinge-leaves.

2. A channeled supporting member, a screen-frame, hinge-leaves connected with said frame and having support-engaging flanges, and channel-engaging springs connected with said hinge-leaves.

3. A channeled supporting member having lateral flanges, a screen-frame, hinge-leaves connected with said screen-frame and having hook members engaging the flanges of the supporting member, and springs connected with said hinge-leaves and operating in the channel of the supporting member.

4. A window-casing, sashes movable therein, a supporting-bar upon one of the posts of the casing, a screen-frame provided at one edge with hinge members slidably engaging said bar, a spring-actuated bolt at the opposite side of said frame, and a bolt-engaging bead upon the window-casing.

5. A window-casing, sashes movable therein, a supporting-bar upon one of the posts of the casing, a screen-frame provided at one edge with hinge members slidably engaging said bar, a spring-actuated bolt at the opposite side of said frame, a bolt-engaging bead upon the window-casing, and sash-engaging cleats upon the screen-frame.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

DANIEL Z. SHAW.

Witnesses:

T. W. WALTENBAUGH,
CHARLES L. TOTTEN.