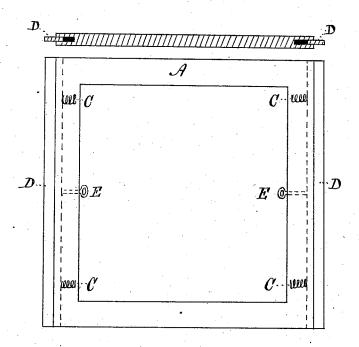
## B. F. CUNNINGHAM. WINDOW-SCREENS.

No. 183,253.

Patented Oct. 17, 1876.



Witnesses. A. Eugan Milliams Henry Milliams

Benj D. Denningham Inventor:

## UNITED STATES PATENT OFFICE.

BENJAMIN F. CUNNINGHAM, OF TAUNTON, MASSACHUSETTS.

## IMPROVEMENT IN WINDOW-SCREENS.

Specification forming part of Letters Patent No. 183.253, dated October 17, 1876; application filed March 11, 1876.

To all whom it may concern:

Be it known that I, BENJAMIN F. CUNNING-HAM, of Taunton, in the county of Bristol and State of Massachusetts, have invented an Improvement in Screens for Doors or Windows, of which the following is a specification:

My invention relates to window-screens of that class which are expansible, and may be made to fit closely in place in the window, and at the same time are easily removable; and it consists of certain details of construction hereinafter more fully described and particularly claimed.

The accompanying drawing, making a part of this specification, will more fully show the invention.

A is the frame, to which the wire or other netting is secured in the usual manner; C, spiral spring, to force outward the adjustable strips or tongues D; E, small knobs or rings, by which the tongues are drawn in when it is desired to remove the screen.

Screens are used in such cases to prevent the ingress of flies or other insects, and to properly accomplish this object it is imperative that they should fit close to the jamb of the window frame. In movable screens heretofore used it has been necessary to make them of such a width that they may readily pass over the sash-stops or other protruding parts of the finish, and thus almost invariably leave a space between the edge of the screen and the window-frame. This objection or difficulty is obviated in the frame herein described, as the tongues D are pressed into the frame of the screen when passing over the window-stops or other obstructions, and, having passed, are immediately thrown outward by the springs C, forcing the tongue against the window-frame, and completely closing any space between the two.

Window-sashes (even when the same sized glass and number of panes are used) vary in width according to the width of the stiles or upright sides of the sash; but it will be readily seen that this frame or screen will adapt itself to this variation.

The frames for these screens may be made of any desired wood, and in the outer edge of the sides a groove is cut of the proper width and depth. In the bottom of these grooves holes of the proper size are bored, to receive the springs C. The tongues D, after being loosely fitted to the grooves, are placed therein until they strike the springs. Midway in the length of these tongues, and secured to them, is the wire or rod E, which passes through the frame, and, terminating in a knob or ring on the inside thereof, is the means by which the tongues are drawn into the groove when it is desired to place or remove the screen. These wires also prevent the tongues from becoming detached from the frame when not in use.

A semi-elliptical spring may be used in place of the spiral spring C and the same result be obtained.

What I claim as my invention, and desire to secure by Letters Patent, is—

A window-screen composed of the frame A, for holding the wire or cloth, the two sides of which frame are grooved, in combination with the strips D, springs C C, rods E, having knobs or rings on their inner ends, to keep the strips in place and allow removal, all constructed and arranged as set forth.

BENJ. F. CUNNINGHAM.

Witnesses:

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