(No Model.)

M. L. WHITCOMB.

WINDOW SCREEN.

No. 312,685. Patented Feb. 24, 1885.

Fig. 1.

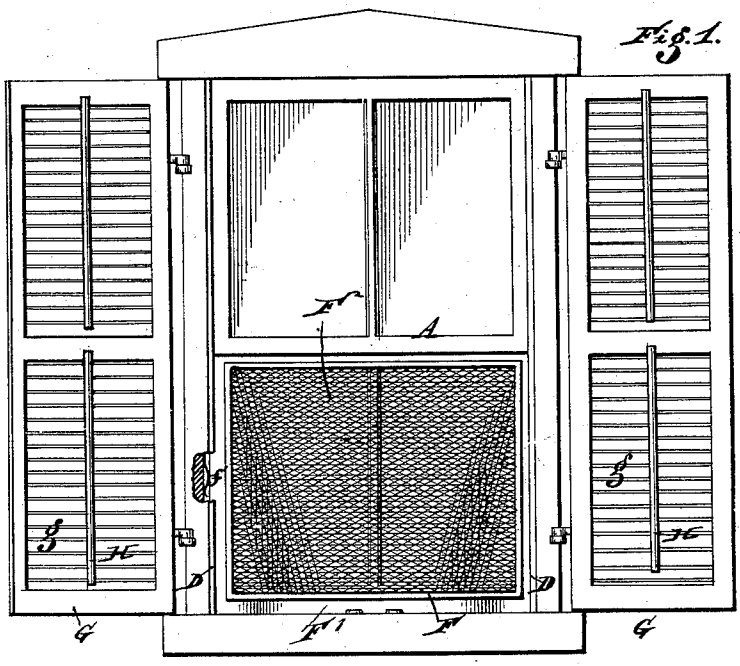


Fig. 2.

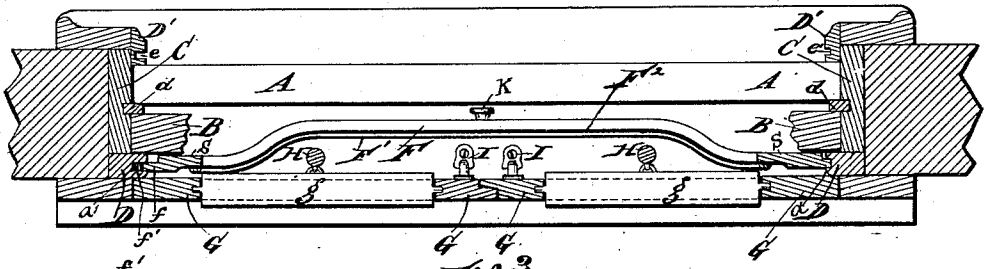


Fig. 3.

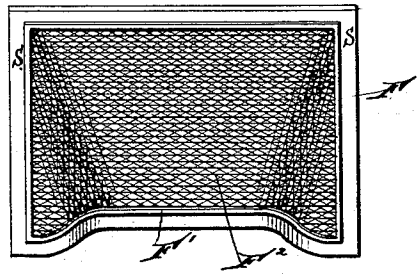
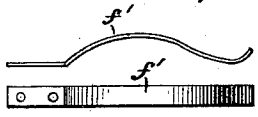


Fig. 4.



WITNESSES

Jno. E. Wiles.

W. H. Doyle

INVENTOR

M. L. Whitcomb

By

Roscoe B. Wheeler Attorney

UNITED STATES PATENT OFFICE.

MARCELLUS L. WHITCOMB, OF MUSKEGON, MICHIGAN.

WINDOW-SCREEN.

SPECIFICATION forming part of Letters Patent No. 312,685, dated February 24, 1885.

Application filed May 17, 1884. (No model.)

To all whom it may concern:

Be it known that I, MARCELLUS L. WHITCOMB, of Muskegon, in the county of Muskegon and State of Michigan, have invented a new and useful Improvement in Window-Screens, of which the following is a specification.

The object of my present invention is to so construct and attach a screen to an ordinary window having the common outside blinds that the screen may be raised or lowered from the inside of the house; that will allow the blinds to be closed, and also allow the shutters to be turned open, or to a horizontal position, and not interfere with the window-screen; that may be readily put in or taken out without the aid of tools.

In order to aid others skilled in the art to which my invention belongs to make and use it, I will proceed to describe its construction and operation with reference to the several drawings, forming a part of this specification, in which—

Figure 1 is an elevation in perspective of my invention. Fig. 2 is a cross-section of the same, having the blinds closed. Fig. 3 is a detached perspective of the screen-frame. Fig. 4 is a top and edge view of the tension-spring *f'*.

In the drawings, Fig. 1, F represents the window-screen; G G, the blinds; D D, blind-stops; H H, blind-rods; F^2, the screen. In Fig. 2, F' is the inward-curved bottom cross-rail of screen-frame, (see also Fig. 3;) C C, jamb-casings; *d d*, check-stops; D' D', window-stops; *e e'*, grooves in said stops; *a a'*, grooves in blind-stops; B B, upper sash broken away; I I, blind-hooks; *g g*, blind-slats turned to a horizontal position, or open; K, screen-frame knob; S S, stiles of the screen-frame.

To operate the screen on the outside of the window next to the blinds, I provide the blind-stops D D with the grooves *a a'*. (See Fig. 2.) The stiles S S of the screen-frame are rabbeted, as shown at *f* of Fig. 2, thus forming a tongue sufficiently thick to fill the channels *a a'* of the blind-stop, bringing the stiles S S of the screen flush with the face of the window-sash. I cut the channel *a'* in the blind-stop about twice the depth of the channel *a* in the opposite stop. The tension-spring *f'*, I locate in the deep channel *a'*, as shown in Fig. 1, where broken away.

To place the screen in position, I insert the long tongue of the screen-stile into the deep channel *a'* of the blind-stop, forcing the frame against the spring *f'* until the opposite stile of the frame meets the channel *a* of the blind-stop, when the spring *f'* will force the tongued portion of the opposite stile into the channel *a*. The frame, being made sufficiently wide, is held in this position by the spring *f'*, which also allows the frame to be raised or lowered by grasping the knob K on the inside of the frame.

It will be observed that when the blinds are closed and the blind-slats *g g* are opened, as shown in Fig. 2, the blind-hooks I I and blind-rods H H project toward the window-sash; and in order to prevent these parts from interfering with the window-screen I curve the bottom cross-rail, F', inward, as shown in Figs. 2 and 3. This frame, when used on the outside of the window, may be made the size of the lower sash, as shown in Fig. 1, and can be taken out by pressing sidewise against the spring *f'* until the stile on the opposite side of the frame draws out of the channel *a;* and when the screen is made shorter than the sash said sash may be lowered to meet it, and the screen may be raised and lowered to open or close the blinds or shutters without removing said frame from the window. One of the stiles of the screen-frame is provided with a deep rabbet, as shown at *f* of Fig. 2, thus forming a long tongue to fit into the deep groove *a'* on the blind-stop D, for the purpose of inserting the frame, as set forth, in raising or lowering the screen, and said spring is made sufficiently stiff to hold the screen up when raised. Ventilation may be obtained at the top and bottom of the window by using two screen-frames, lowering the upper sash, raising the lower one, leaving one screen down and raising the other; or ventilation can be had at the top or bottom of the window with but one screen.

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

1. The combination of the screen-covering, the screen-frame consisting of the tongued stiles S S, the transverse inwardly-curved cross-rail F′, the tension-spring, and the blind-stops, grooved, substantially as and for the purposes specified.

2. As a new article of manufacture, the herein-described window-screen, consisting of the screen-covering, the stiles S S, tongued, as specified, and the inwardly-curved cross-rail F′, substantially as and for the purposes set forth.

MARCELLUS L. WHITCOMB.

Witnesses:
ROBT. E. BUNKER,
JUNIOR PARRISH.