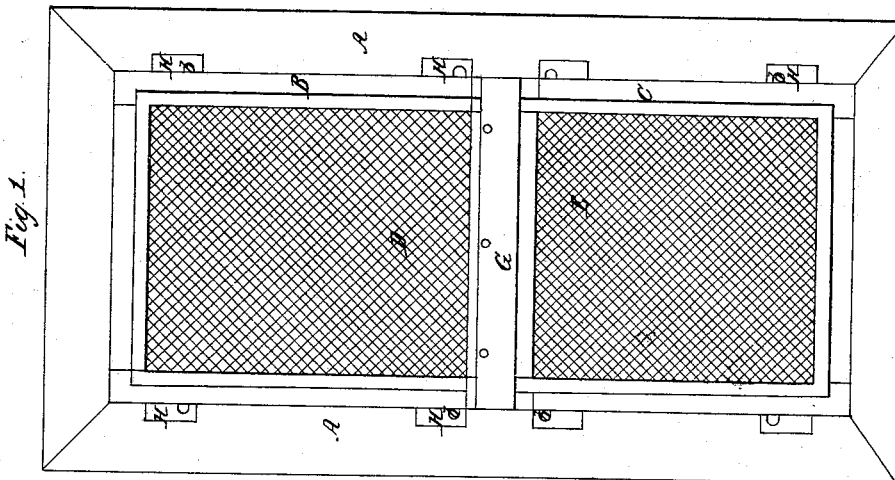
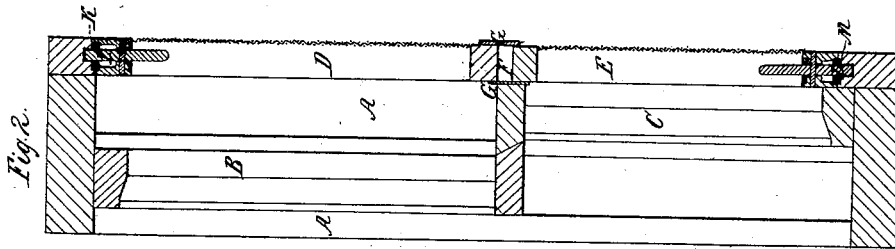
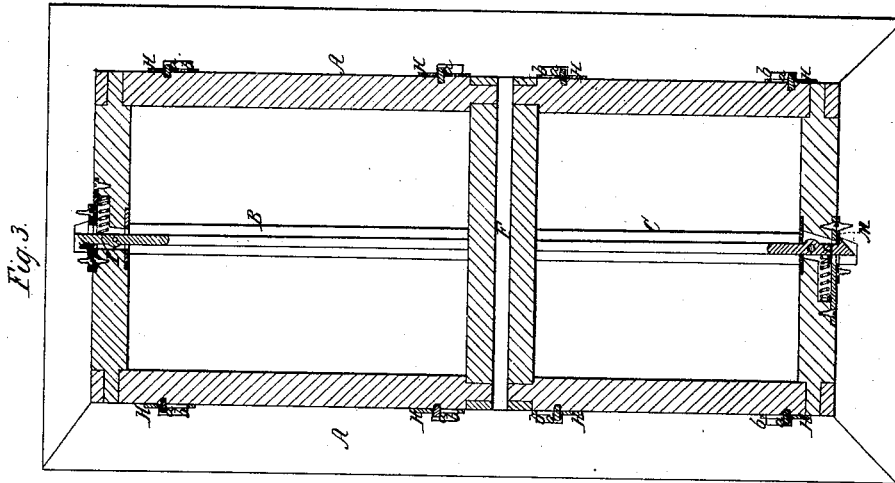
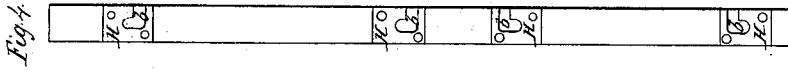


E. F. Beal.

Window Screen.

N^o 53,259.

Patented Mar. 20, 1866.



*Witnesses;
Dr. D. Hale Jr.
Huntis*

*Inventor;
E. F. Beal.
by his attorney
R. H. [Signature]*

UNITED STATES PATENT OFFICE.

EZRA F. BEAL, 2D, OF OXFORD, MAINE.

IMPROVED WINDOW-SCREEN.

Specification forming part of Letters Patent No. 53,259, dated March 20, 1866.

To all whom it may concern:

Be it known that I, EZRA F. BEAL, 2d, of the town and county of Oxford, and State of Maine, have made a new and useful Invention having reference to Window-Screens; and I do hereby declare the same to be fully described in the following specification, and represented in the accompanying drawings, of which—

Figure 1 is a front elevation of a window provided with my invention. Fig. 2 is a transverse and vertical section, and Fig. 3 is a vertical and longitudinal section taken through the screens and their fastenings. Fig. 4 is an inner-side view of one of the side bars of the window-frame.

In the said drawings, A denotes the window-frame as provided with two sashes, B C, which are applied in the usual manner to the said frame. Outside of the said sashes are two screens, D E, whose openings may be covered with gauze or woven wire, or may have panes of glass fixed in them when the screens are to be used in winter as a protection from the cold.

When covered with gauze or netting instead of glass the screens are adapted for summer use—viz., to prevent flies, mosquitoes, or other insects from entering the window when open. Each of the screens in its width corresponds to the width of the window-frame opening to which the screen is to be held, but the joint length of the two screens is less than the length of the window-opening by the depth of the space F which is purposely left between the screens and is covered both in front and in rear by guards or covering-plates G G, one of which is fastened to and extends from each of the screens and laps on the other in manner as represented in Figs. 1 and 2. From each of the two side bars of each screen two studs, *a a*, project, they being to enter right-angular grooves *b b* made in the window-frame or in metallic plates H applied thereto, and arranged as shown in the drawings.

A spring-lever latch, I, is applied to the up-

per bar of the upper screen to operate with a catch-plate, K, fixed to the upper bar of the window-frame. There is also another such latch, L, applied to the lower bar of the lower screen and to operate with a catch-plate, M, fixed to the lower bar of the window-frame, the same being as represented in Fig. 3.

The depth of the space F should be sufficient to allow either of the screens to be moved in a manner to disconnect it from the window-frame, to accomplish which the screen has to be moved vertically a short distance before it can be drawn forward out of the frame, the lower screen having to be moved downward, and the upper one moved upward.

The inner guard, or that fixed to and projecting upward from the lower screen, serves to cover the space between the two screens, and prevent it being seen by a person when inside of the building of which the window-frame may form a part. Besides this, like the outer guard, it will prevent air or rain from passing through the space.

My invention therefore rests in the construction of the screens—viz., so that when arranged in their places in the window-frame there shall be a space, F, between them of the required depth; the application of either or both of the guards G G to such screens so as to cover such space; and, finally, in the application to the screen and window-frame of means, substantially as described, for connecting the screens to the window-frame.

I therefore claim—

The combination and arrangement of one or both the guards G the series of studs and angular grooves, and the spring-latches and catch-plates or their equivalents with the window-frame and the screens, constructed substantially as described.

EZRA F. BEAL, 2D.

Witnesses:

F. P. HALE, Jr.

G. H. WASHBURN.