

(No Model.)

L. W. MERRIAM.
WINDOW SCREEN.

No. 516,608.

Patented Mar. 13, 1894.

FIG. 1.

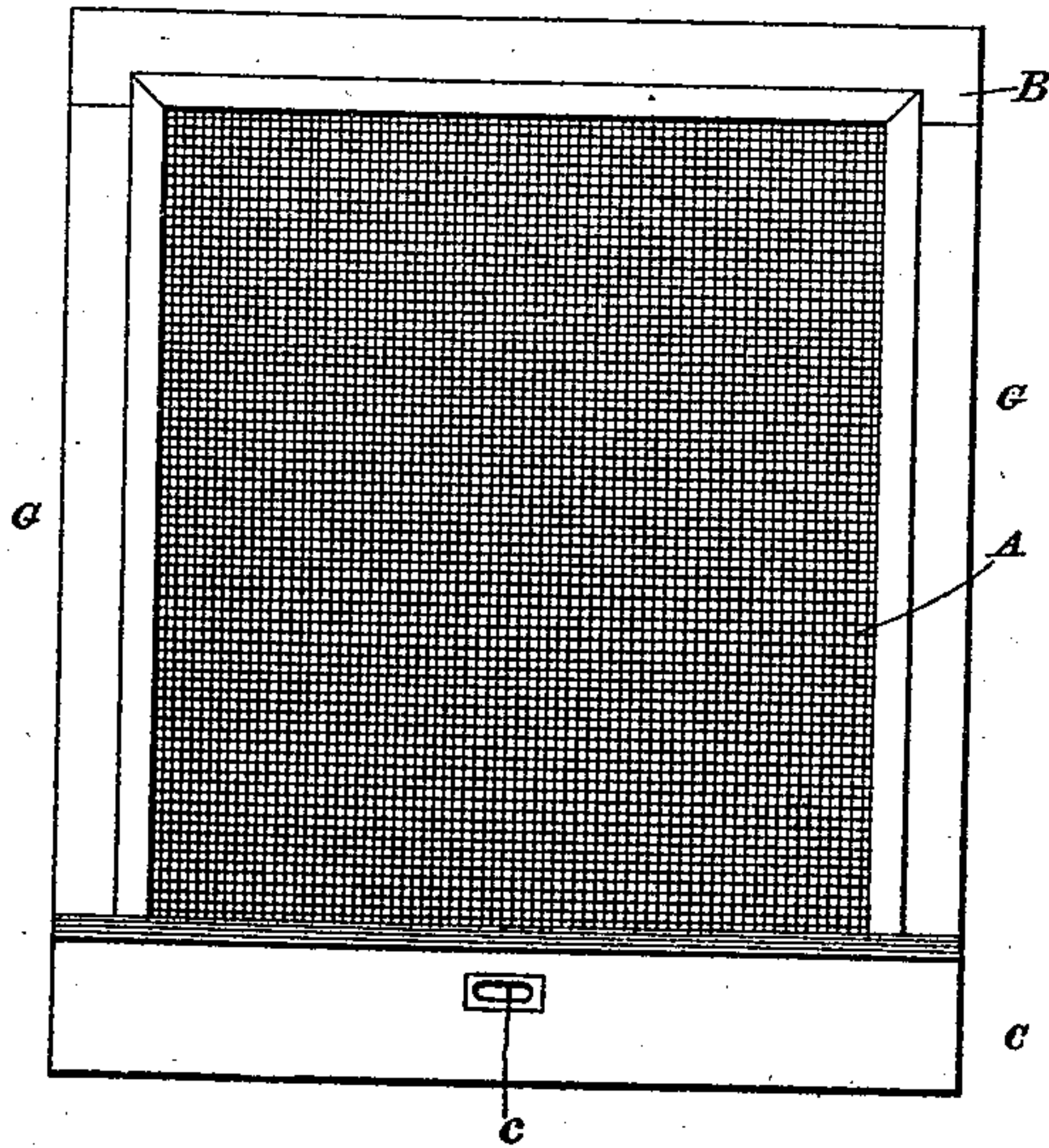


FIG. 2.

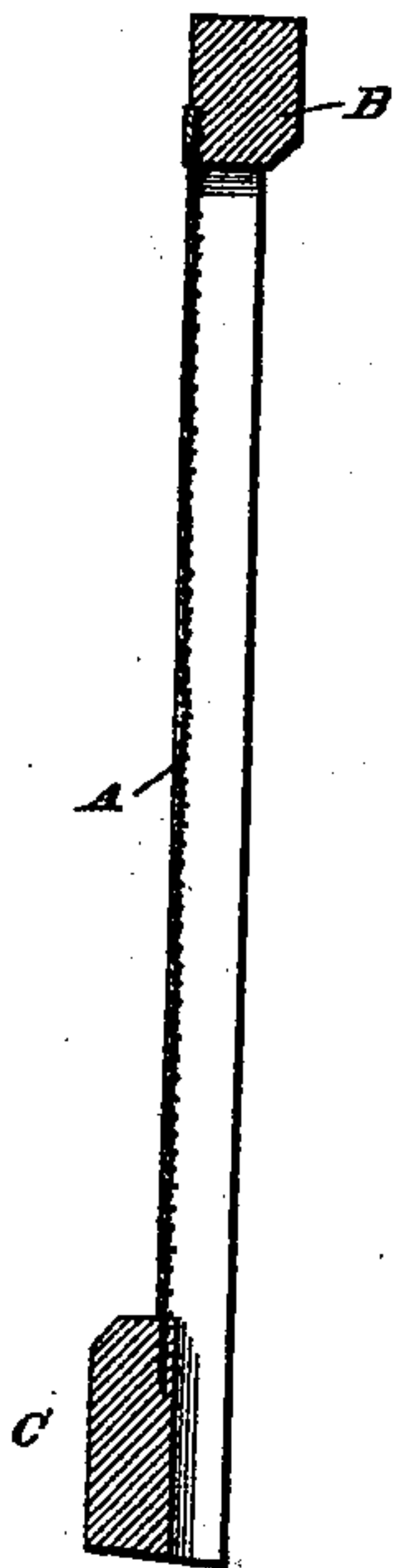
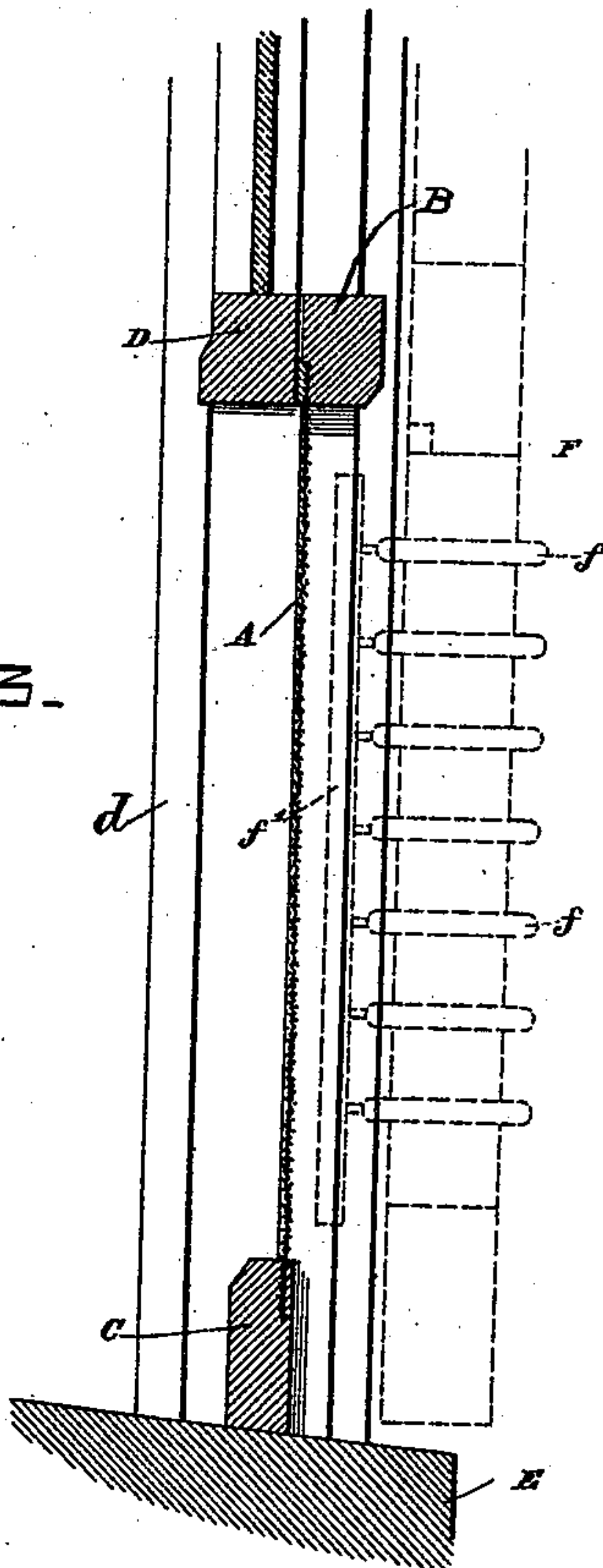


FIG. 3.



Witnesses

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WINDOW-SCREEN.

SPECIFICATION forming part of Letters Patent No. 516,608, dated March 13, 1894.

Application filed April 10, 1893. Serial No. 469,780. (No model.)

To all whom it may concern:

Be it known that I, LYMAN W. MERRIAM, a citizen of the United States, residing at Fitchburg, in the county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in Screens; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to an improvement in window screens, the object thereof being to construct the frame of the screen in such a manner as to permit of its easy operation without interference with the blinds which may belong to the same window. In houses furnished with blinds composed of a series of roller slats which are operated by a vertical rod, great disadvantages are experienced in the use of window screens in the windows that have these blinds, because the operating rod of the roller slats is so situated that the screen as ordinarily constructed cannot be raised and lowered when required without striking and being much interfered with by the blinds. Many attempts have been made to obviate this disadvantage. Sometimes it has been sought to accomplish the desired end by reconstructing the window frames and placing a strip of suitable width between the sash and the outside casing by which means the end is accomplished to a certain extent, but the method is very expensive and it can only be employed in new houses, since the reconstruction of the casing cannot be had in houses already completed. Other means have also been devised to overcome the objection stated above, but so far none of them have been successful to any appreciable extent and the disadvantage still remains and in practical experience attempts are being made in many places to devise some construction for the window screen which will permit it to be manipulated in any desired manner, either lifted or lowered without any interference with the arrangement of the blinds.

By the construction embodied in my present invention, I have attempted to avoid the difficulty mentioned by providing a construction for the frame of the screen which can

be used in connection with the windows above described without any interference with the blinds or any other part of the window equipment, and my improved screen can be used very successfully on houses where the blinds are provided with fasteners set in the window sills, which fasteners usually have numerous projecting parts that interfere with the easy operation of a window screen.

My invention therefore consists in the construction, arrangement and combination of parts substantially as will be hereinafter described and claimed.

In the accompanying drawings illustrating my invention: Figure 1 is a front elevation of my improved window screen. Fig. 2 is a vertical sectional edge view of the same. Fig. 3 is a vertical cross section, the roller slat blind being shown in dotted lines and the screen being represented as operatively applied in connection with the window frame, the sash and the blind.

Similar letters of reference designate corresponding parts throughout the several figures of the drawings.

A designates the wire cloth of the window screen, which cloth is attached to a rectangular frame, consisting of the vertical uprights G G, the upper horizontal rail B and the bottom horizontal rail C. The rail C is provided with a handle *c* by means of which the screen may be easily raised and lowered.

d denotes the parting strip between the two window sashes.

Referring now to Fig. 3, D represents the lower rail of the top sash of the window and E denotes the window sill. In this figure I have represented in dotted lines a blind of the roller slat pattern, said blind being designated by the reference letter F, while the roller slats are designated by *f*, and *f'* denotes the vertical operating rod which is loosely connected to the several slats *f* and by the manipulation of which said slats are opened or closed as may be desired, for the purpose of causing a circulation of the air, letting in or shutting out the light, &c. In Fig. 3, I have also represented in connection with the window sash and the blind, one of my improved screens showing how the dis-

advantage which belongs to the ordinary screen is obviated by my improved construction.

In the ordinary screen the frame is rectangular and when the screen is in its vertical or normal position, the lower or bottom rail will be vertically beneath the upper rail. In my improved screen however, I place the upper rail B and lower rail C, out of line with each other. The upper rail B is situated on one side of the wire cloth A, while the lower rail C is situated on the other side thereof, that is to say, the upper rail B is on the outer side of the wire cloth A, while the lower rail C is on the inner side of said wire. The upper rail B may be tenoned or otherwise connected to the upper ends of the uprights G G between the latter. The lower rail C however is preferably secured to the inside faces of said uprights G G at their lower ends, as shown in Fig. 3.

When my improved screen is in its normal position, the upper rail B is located contiguous to the lower rail D of the top sash of the window outside of the latter, while the lower rail C of the screen frame is located directly in a vertical line beneath the sash rail D. Now the blind F is so situated that when its slats f are open, as shown in dotted lines in Fig. 3, the vertical operating rail f' will be directly below the upper rail B of the screen. If now, the lower rail C was situated directly below the upper rail B as is the case with the ordinary screen frame, then any attempt to lift the screen while the blind slats are open, would result in throwing the rail C into contact with the rod f' and thereby closing the slats or interfering greatly with the operation of the screen, but with the lower rail C placed out of line with the upper rail B as in my improved screen and instead of being situated directly below rail B being situated in a direct vertical line below rail D, the

screen can be easily lifted without throwing the rail C into contact with the rod f' and consequently the screen can be moved up between the outside casings of the window frame from the stool to the lower rail of the top sash without interfering in any manner with the blind and allowing the latter to be opened or closed just as may be preferred.

By this construction of my improved screen frame, I therefore obviate the disadvantages which I have described at the beginning of this specification. I therefore conceive that I have made a valuable advance in the construction of window screen frames. So many houses are built with the window blinds arranged closely to the window sash and situated in such a manner that a screen cannot be placed between them in such a way as to have an easy operation, that some new method of constructing the screen frame is not only desirable, but is compulsory.

Slight changes may obviously be made in the screen as here presented and I reserve the liberty to make such variations as practice may suggest.

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

The herein-described frame for screens, consisting of the uprights G G, the upper rail B and the lower rail C, said lower rail being out of a vertical line with the upper rail and the upper and lower rails being situated on opposite sides of the wire cloth A which is secured to all the rails, substantially as described.

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

LYMAN W. MERRIAM.

Witnesses:

STILLMAN HAYNES,
LUCY A. HAYWARD.