

D. C. KELLAM.
Window-Screens.

No. 139,794.

Patented June 10, 1873.

Fig. 1.

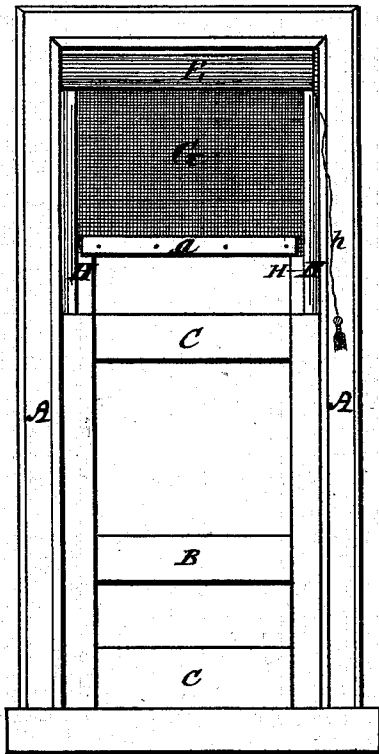


Fig. 2.

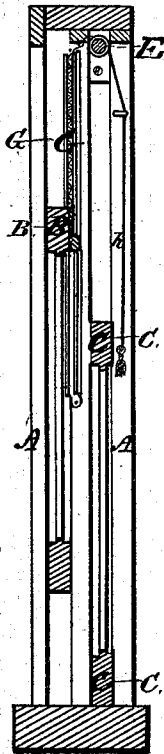
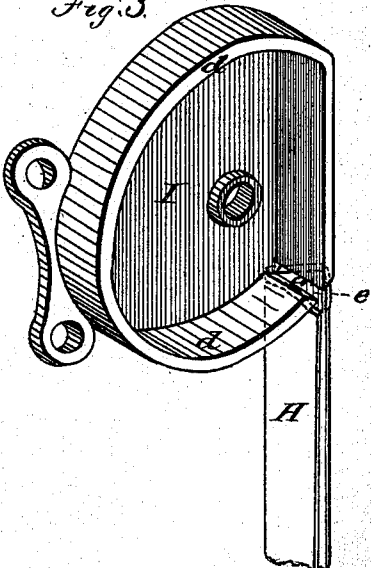


Fig. 3.



Witnesses:
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UNITED STATES PATENT OFFICE.

DANIEL C. KELLAM, OF DETROIT, MICHIGAN.

IMPROVEMENT IN WINDOW-SCREENS.

Specification forming part of Letters Patent No. **139,794**, dated June 10, 1873; application filed May 16, 1873.

To all whom it may concern:

Be it known that I, DANIEL C. KELLAM, of Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Window-Screens; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon.

My invention relates to that class of metallic or wire cloth window-screens which are mounted on a roller and attached to the window-sash in such a manner that as the sash is opened the screen will unwind to cover the opening; and my invention consists in the combination, with the roller screen and metallic strips of a window-frame, of the plates forming the ends of the roller, with inwardly-projecting flanges constructed as will be hereinafter described, for the purpose of utilizing the expansion of the screen to balance the window-sash at any desired height.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, which forms a part of this specification, and in which—

Figure 1 is a front view of the window-frame, &c. Fig. 2 is a transverse vertical section of the same. Fig. 3 is a perspective view of the plate forming the end of the roller, to show more particularly its construction.

A represents a window-frame; B, the upper, and C the lower, sash. In the upper end of the window-frame is hung a roller, E, to which is attached a metallic or wire cloth screen, G, wound on said roller, and its lower or outer end attached, by means of a cleat, a, to the upper end of the upper sash B. Upon the edge of each parting-strip is attached a metallic strip, H, constructed in triangular section, the front side being made concave. This metallic strip is made hollow, or has an enlarged chamber, b, running its entire length

along the outer side, and from said chamber a groove, i, is made along the outer edge. The edge of the metal screen G passes through this groove i, so that the hemmed or thicker edge of the screen will be within the chamber b. The metal strips H H thus act as guides for the edges of the screen, and at the same time protect the same and present a neater and more finished appearance. At each end of the roller E, on the inside of the window-frame, is attached a plate, I, having a circumferential flange, d, extending inward over the roller and screen to cover the edge of the same. In the center of this plate is formed a bearing for the journal of the roller. The rear side of the plate I or casing thus formed is cut off straight, and has a slot, e, into which the upper end of the metal strip H is fitted to allow the edge of the screen to pass down. The casing I d is made larger in circumference than the roller with the screen wound on the same, which allows that part of the screen which is on the roller to expand or unwind until the metal bears against the inner side of the flange d. The friction of the metal against this flange is sufficient to balance the sash B and hold it at any height desired, thus dispensing with weights or other devices for holding the sash. A cord, h, is used at one end of the roller E to wind up the screen and raise the sash.

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

In combination with a roller and screen of a window-frame, the plates I I with inward-projecting flanges d d, constructed and arranged as described, for the purpose of utilizing the expansion of the screen to balance the window-sash, as set forth.

In testimony whereof I have hereunto signed my name.

DANIEL C. KELLAM.

Witnesses:

HIRAM KELLAM,
PARK ATWOOD.