(No Model.)

G. F. HAWLEY.

WINDOW SCREEN.

No. 433,343. Patented July 29, 1890.

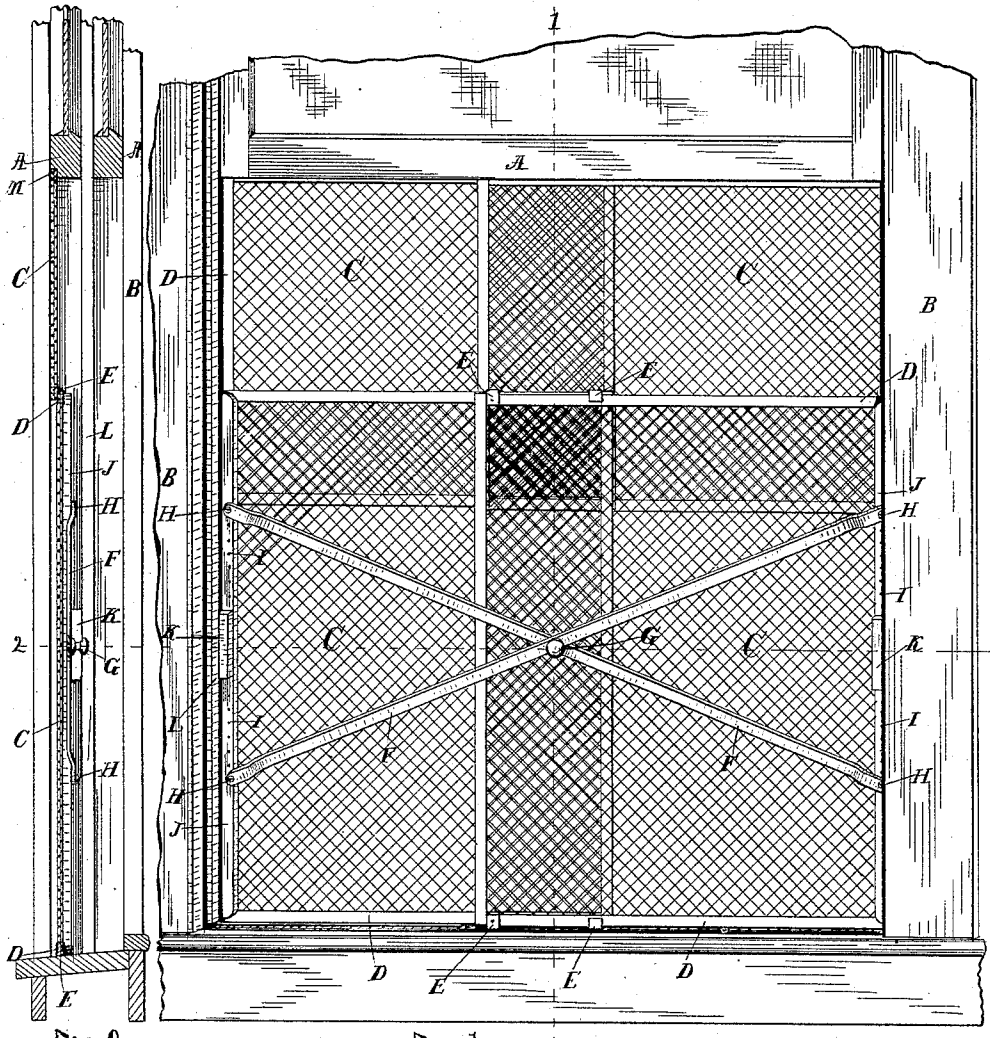

Fig. 2. Fig. 1.

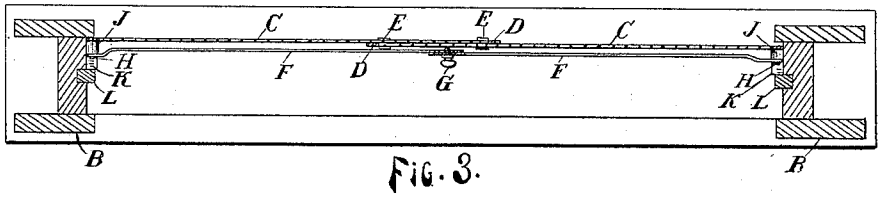

Fig. 3.

Witnesses
Hugh E. Wilson
Harry P. Van Wagner

Inventor
George F. Hawley,
By his Attorney
Edward Taggart

UNITED STATES PATENT OFFICE.

GEORGE F. HAWLEY, OF GRAND RAPIDS, MICHIGAN.

WINDOW-SCREEN.

SPECIFICATION forming part of Letters Patent No. 433,343, dated July 29, 1890.

Application filed August 16, 1888. Serial No. 282,850. (No model.)

To all whom it may concern:

Be it known that I, GEORGE F. HAWLEY, a citizen of the United States, residing at the city of Grand Rapids, in the county of Kent and State of Michigan, have invented certain new and useful Improvements in Window-Screens, of which the following is a specification.

This invention relates to that type of window-screens in which four movable sections are connected in such manner as to be adjustable to windows of different sizes. In these screens as heretofore constructed the two upper and the two lower screen-sections comprise projecting cross-bars, which prevent the two lower sections from being properly elevated past the bottom ends of the upper screen-sections, in consequence of which the required access to the outer blinds and the window-sill is interfered with, and to conveniently and properly clean window-sills it is necessary to remove the screen from the window.

The object of my invention is to avoid this objection and to provide a novel and useful window-screen comprising four adjustable screen-sections which are so constructed that while the two upper sections stand stationary against the upper sash the two lower sections can be elevated so that their top portions move past the lower ends of the upper sections to a position just beneath the upper or top sash, whereby ample space is provided for cleaning the window-sill and manipulating the outside blinds. To accomplish this object of my invention involves the features of construction, the combination or arrangement of parts, and the mode of operation hereinafter described and claimed, reference being made to the accompanying drawings, in which—

Figure 1 is a side elevation of the lower part of the window-frame having my screen in place. Fig. 2 is a vertical section of the same on line 1 1 of Fig. 1, and Fig. 3 is a horizontal section of the same on line 2 2 of Fig. 1.

Similar letters refer to similar parts in the different figures.

A indicates the lower rail of the upper sash of the window.

B B are the sides of the window-frame.

C C C C are the four sections of the screen. This is constructed with the ordinary wire-cloth or any suitable material, and each of the sections is bound around its outer edge with a flat tin binding. (Shown in the drawings by D D.) This binding is sufficiently stiff and strong to hold the wire-cloth stretched and in the position shown in the drawings.

E E are clips holding together the adjacent overlapping sections at their corners, and form also ways or guides for the tin binding when the sections are sliding together or apart. These clips are provided at the upper and lower inside corners of the two upper sections.

F F are crossed braces on the lower two sections intersecting and pivoted to each other at G, and at their outer ends have suitable openings for the reception of the pins or screws H H.

J J are the side bars of the lower portion of the screen, and the pins or screws H are fitted into holes I I in these side bars. When thus fitted into place the braces F F hold the side bars firmly in position, and the clips E E hold the two lower sections together, so that these two lower sections form one screen, which can be raised and lowered, while the upper screen-sections C C retain their respective positions. The top ends of the upper screen-sections are free from the lateral front projection of a cross-bar, and the construction is such that the two lower screen-sections can be quickly elevated, so that their top end portions move past the lower ends of the upper screen-sections to a position just below the upper window-sash, whereby ample space is provided for access to the outside blinds and to the window-sill for cleaning the latter. The lower screen-sections are conveniently raised through the medium of the handle G.

K K are blocks attached to the bars J J to make these bars fit and slide smoothly in the grooves below the upper sash.

L represents the side of the window-frame.

When it is desired to place my screen in a window, it is done as follows: The two upper sections C C are nailed or otherwise fastened to the lower rail of the upper sash. The inside ends of these sections will lap over each other to a greater or less distance, according to the width of the window, and the clips E will hold the corners together so as to make the two sections substantially a continuous

one. The two lower sections are then placed in the window with the side bars J J of the screen against the window-frame. The braces F F are then applied so as to hold the bars firmly the required distance apart, and it is evident that the vertical adjustment of the ends of the braces by means of the holes I I will regulate the width of the lower part of the screen. The two sections will lap over each other, as do the two sections of the upper part, and will be held together in the same manner. The upper portion and the lower portion of the screen will also overlap each other a distance which will vary with the height of the window; but these screens can be made of such a size that by the method of adjustment above described they can be made to fit any ordinary window. The two lower sections C C form together substantially a single screen, which can be raised when desired, the side bars sliding along the ways formed by the block K. This arrangement obviates the necessity of removing the screen entirely when it is desired to reach the outside of the building for operating outside blinds or any other purpose.

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

A window-screen consisting of a pair of laterally-adjustable screen-sections adapted to be secured in a stationary position, a pair of lower laterally-adjustable screen-sections adapted to slide vertically, and a pair of swinging braces crossing each other, pivoted together at the point of crossing, and having their extremities vertically adjustable on the said lower screen-sections for sliding the same laterally one upon the other, substantially as described.

In witness whereof I have hereunto set my hand and seal in the presence of two witnesses.

GEORGE F. HAWLEY. [L. S.]

Witnesses:
ARTHUR C. DENISON,
HUGH E. WILSON.