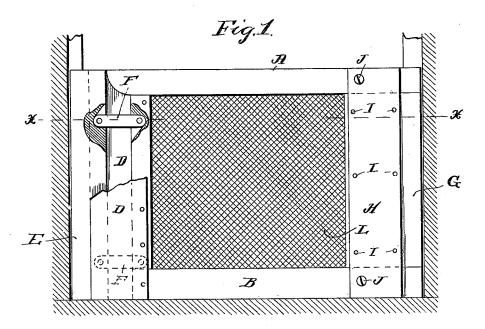
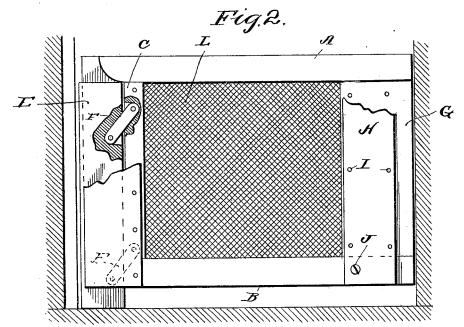
## H. E. GALLAHER. WINDOW SCREEN.

(Application filed July 28, 1899.)

(No Model.)





## UNITED STATES PATENT OFFICE.

HENRY E. GALLAHER, OF CHILDS, MARYLAND, ASSIGNOR OF ONE-HALF TO D. L. McCORKINDALE, OF SAME PLACE.

## WINDOW-SCREEN.

SPECIFICATION forming part of Letters Patent No. 646,120, dated March 27, 1900.

Application filed July 28, 1899. Serial No. 725;380. (No model.)

To all whom it may concern:

Be it known that I, HENRY E. GALLAHER, a citizen of the United States, residing at Childs, county of Cecil, and State of Maryland, have invented a certain new and useful Improvement in Window-Screens, of which the follow-

ing is a specification.

My invention relates to a new and useful improvement in window-screens, and has for to its object to provide an exceedingly simple and effective device of this description which may be fitted to a window-frame without the use of springs and provide for the ready removal thereof, while at the same time formis ing a closed joint with the window, so as to prevent the ingress of insects to the room. A further object of my invention is to provide for adapting the frame to windows of various widths without the removal of the netting or 20 wire screens.

With these ends in view this invention consists in the details of construction and combination of elements hereinafter set forth, and then specifically designated by the claim.

In order that those skilled in the art to which this invention appertains may understand how to make and use the same, the construction and operation will now be described in detail, referring to the accompanying draw-30 ings, forming a part of this specification, in

Figure 1 is an elevation of my improved screen fitted to a window-casing, a portion of one of the side rails being broken away, so as 35 to clearly show the construction of the swinging bar; Fig. 2, a similar view showing the screen raised to the extent that the swinging bar is permitted to move downward and inward, so as to clear the stop-strips of the win-40 dow-frame, thereby permitting the ready removal of the screen or the replacing of the same; and Fig. 3 a section of the two ends of the screen, taken on the line x x.

In carrying out my invention as here em-15 bodied I form the screen-frame with a top rail A and bottom rail B, which are connected together by the stay C at one end, and the side rails D, the latter being secured to the stay-rail by suitable nails or pegs. This, as

projecting portions of the side rails D, in which the swinging bar E is adapted to fit, the latter being connected to the stay C by means of the pivoted links F, as clearly shown. This will give a parallel movement to the swing- 55 ing bar, permitting it to either be swung within the space between the side rails D (shown in Fig. 2) or outward, as shown in Fig. 1, for the purpose hereinafter set forth. A stay G is fitted between the opposite ends 60 of the top and bottom rails, but is not attached directly thereto, but is secured to the side rail H by means of suitable nails or pegs, (indicated at I,) and this side rail in turn is secured to the top and bottom rails by the 65 screws J. A side rail K, corresponding to the rail H, is secured to the opposite side of the top and bottom rails by screws, in the same manner as the rail H.

L represents the wire-netting, which is se- 70 cured only along its top and bottom edges to the top and bottom rails, respectively, by which arrangement the stay G and the side rail H, to which the latter is attached, may be moved to any position along the top and bot- 75 tom rails without affecting the netting, the object of which is to permit the fitting of the frame to windows of varying width, which is accomplished as follows:

When the frame is to be shortened, the 80 screws J are removed, which will permit the sliding inward of the stay G and side rail H, and when at the proper point they are again secured to the top and bottom rail by the reentering of the screws in said rails, and after 85 the rail K has been correspondingly adjusted by the removal and reentering of the screws which hold it in place the projecting ends of the top and bottom rails are sawed off flush with the outer edge of the stay G, thus adapt- 90 ing the screen to the width of window desired.

In practice to place a screen made in accordance with my improvement in position within a window requires only that the window-sash be raised and that the screen be 95 placed between the sides of the window-frame, so as to bring the stationary end between the proper stop-strips, in which position the swinging bar will be then between the rails D, as 50 is obvious, will make a space between the | before described; but the moving downward 100 of the screen will cause the lower end of the swinging bar to abut against the window-sill and thereafter be moved outward by the action of the links F until it is passed between the proper stop-strips of the window-frame, where it will be securely held until the screen is again raised sufficiently to permit the downward and inward swinging of the bar E to clear the stop-strips.

One of the principal advantages of my improvement is that no springs are used in its construction or operation and that it may be placed in any position with but little effort and when so placed will be firmly held and form a perfect joint with the window, thereby precluding the possibility of ingress of insects, it being understood that the windowsash is drawn down upon the upper edge of the screen, and thereby assist in holding it in

20 position. The cost of manufacturing a screen in accordance with my improvement is much less than when springs and complicated parts are

used and is less likely to become disarranged or broken.

Having thus fully described my invention, what I claim as new and useful is—

In a window-screen, the side top and bottom rails, a stay connecting the side, top and bottom rails, a swinging bar, links pivoted to 30 the stay and the swinging bar, a stay fitted between the opposite ends of the top and bottom rails, side rails connecting the top and bottom rails one of said side rails being secured to the stay, a wire-netting attached to 35 the top and bottom rails with its end extending between the stays and side rails, substantially as described.

In testimony whereof I have hereunto affixed my signature in the presence of two sub- 40 scribing witnesses.

HENRY E. GALLAHER.

Witnesses: S. C. PARKER,

EDWIN T. ALEXANDER.