(No Model.)

J. G. WILLIAMS. WINDOW CURTAIN.

No. 553,375.

Patented Jan. 21, 1896.

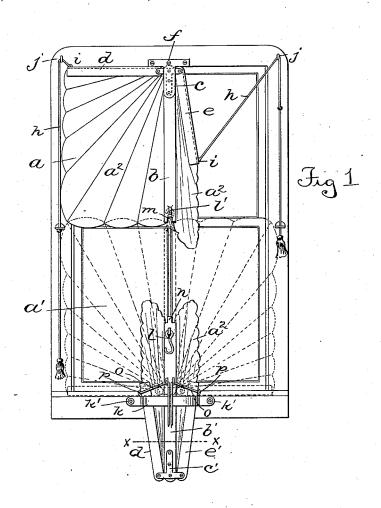


Fig Ju 3

d' b' e

Arthux Jandale

MBillay

J. G. Filliams Minterpressley,

UNITED STATES PATENT OFFICE.

JAMES G. WILLIAMS, OF HAVERHILL, MASSACHUSETTS.

WINDOW-CURTAIN.

SPECIFICATION forming part of Letters Patent No. 553,375, dated January 21, 1896.

Application filed February 13, 1895. Serial No. 538,311. (No model.)

To all whom it may concern:

Be it known that I, James G. Williams, a resident of Haverhill, in the county of Essex and State of Massachusetts, have invented a new and useful Improvement in Window-Curtains, of which the following, taken in connection with the accompanying drawings, is a specification.

This invention has relation to window curtains and shades; and it has for its object the
provision of a contrivance of the kind mentioned which shall serve completely all the
purposes and functions of a window-shade
and shall at the same time be to all intents
and purposes an upper and a lower sash-curtain

It is also the object of the invention to provide a shade or curtain which may be readily controlled and operated in sections, so as to screen or obscure or cover any part of a window to which the invention is applied.

To these ends the invention consists of the improvements which I will now proceed to describe and claim.

Reference is to be had to the annexed drawings, and to the letters marked thereon, forming a part of this specification, the same letters designating the same parts or features, as the case may be, wherever they occur.

as the case may be, wherever they occur.

In the drawings, Figure 1 illustrates my invention as applied to a window, the parts of the curtain being so arranged that but a portion of the window is covered. Fig. 2 is a cross-section on the line x x of the curtain-holder for the lower sash. Fig. 3 is a detail view of the brace to which the upper curtain-holder is pivoted or otherwise secured.

In carrying out my invention I employ two independent curtains a a', which are fan40 shaped—that is, each is composed of foldable material or of blades a^2 of any desirable material arranged between two holders and all secured at one end so that the other ends may be spread apart, as illustrated in the drawings—and the curtains are so constructed as to cover, when open, the upper and the lower sashes, respectively, of the window.

The upper curtain a is provided with a central holder b, which is **I**-shaped, or provided with deep grooves in its edges, and which has secured to its upper end by screws or rivets a **T**-shaped hinge-plate c. To the laterally-

extending arms of said plates I hinge the upper ends of the side bars or holders d and e, each of which is grooved in its inner edge so 55 as to receive the outer edges of the foldable material of the fan or curtain, the inner edges thereof being secured in the grooves of the central bar or holder b.

化氯甲磺基酚 医阿斯特氏病

The curtain is rigidly secured in place by 60 means of a bracket f, it having a depending arm g, to which the central bar or holder b is rigidly secured in any suitable way, as by rivets or otherwise.

The two halves of the upper curtain may 65 be opened and shut independently of each other by means of cords h, secured to eyelets i in the ends of the outer bars or holders d and e, respectively, and passing through eyelets j in the window-frame. When open, each 70 half of the curtain covers one-half of the sash, and when closed the foldable material or blades lie in the grooves in the holders.

The lower curtain is similar to the upper curtain in that it is provided with a central 75 grooved bar or holder b' and grooved side bars or holders d' e' hinged to a hinge-plate c' screwed or riveted to the central holder.

Instead of rigidly securing the lower curtain to the window-frame I loosely mount it 80 in a bracket k detachably secured to the sill by thumb-screws k', and arranged for its being secured in position to be opened by a fastener l mounted on the bar b', and adapted to be hooked over a pin or projection l' on 85 bar b of the upper curtain.

In order to assist in securing the lower curtain in its position, I provide the lower end of the bar b with a groove m, into which a tongue n on the bar b' may fit.

When the lower curtain is raised from the closed position shown in full lines on the drawings to the dotted lines and the fastener l is hooked over the pin l', the holder or side bars c' d' are allowed to fall, the blades of the curtain completely covering the lower portion of the window.

In order to adjust the two halves of the lower curtain independently of each other, I employ the two cords o o, which are respectively secured to eyelets p p on the ends of the side bars and pass through eyelets on the central holder b'.

By the means above described I can raise

and lower the lower curtain independently of the upper one, and each half of both curtains can be adjusted or spread out or shut independently of the other half.

The entire lower curtain can be detached from the windows by removing the strap or bracket k, the thumb-screws k' being detach-

able for this purpose.

Having thus explained the nature of the in-10 vention and described a way of constructing and using the same, though without attempting to set forth all of the forms in which it may be made or all of the modes of its use, it is declared that what is claimed is-

1. The herein described curtain, comprising in its construction a central bar or holder secured to the frame, and two side bars or holders pivoted to said central bar, and foldable material or blades secured between said 20 side bars and said central bar and adapted to be spread out when said side bars are separated from said central bar, so as to cover the window, as set forth.

2. The herein described curtain, compris-25 ing in its construction a central grooved bar or holder, two grooved side bars or holders pivoted at their upper ends and foldable material or slats connecting all of said bars or holders and adapted to lie in the grooves in 30 said holders when said holders are drawn together, and cords or equivalent devices for drawing said side holders away from said central holder and adjusting them in position.

3. The herein described curtain for a window, comprising in its construction two opposing independent fan-like parts, one being rigidly secured to the upper portion of the

window frame and depending therefrom, and the other part extending up from the sill of the frame, means for detachably securing the 40 two parts together, and means for opening and shutting each fan-like part, independently of the other part, substantially as set forth.

4. The herein described curtain for a win- 45 dow comprising in its construction, a fan shaped part adapted to cover the upper half of the window and depending from the upper portion of the window frame, and an opposing fan shaped part extending up from the 50 window sill and formed of foldable material or blades and means for allowing last said part to drop bodily after said material or blades have been folded, substantially as set forth.

5. The herein described curtain for a window, it comprising in its construction, a bracket or strap secured to the lower portion of the window frame, two holders or side bars having foldable material or slats between 60 them and adapted to be supported by said bracket or strap, means for securing said cur-

tain in a raised or lowered position, and means for adjusting said holders relatively to each other.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 12th day of December, A. D. 1894.

JAMES G. WILLIAMS.

Witnesses: EDWARD T. GRAY, JR., W. Dunham.