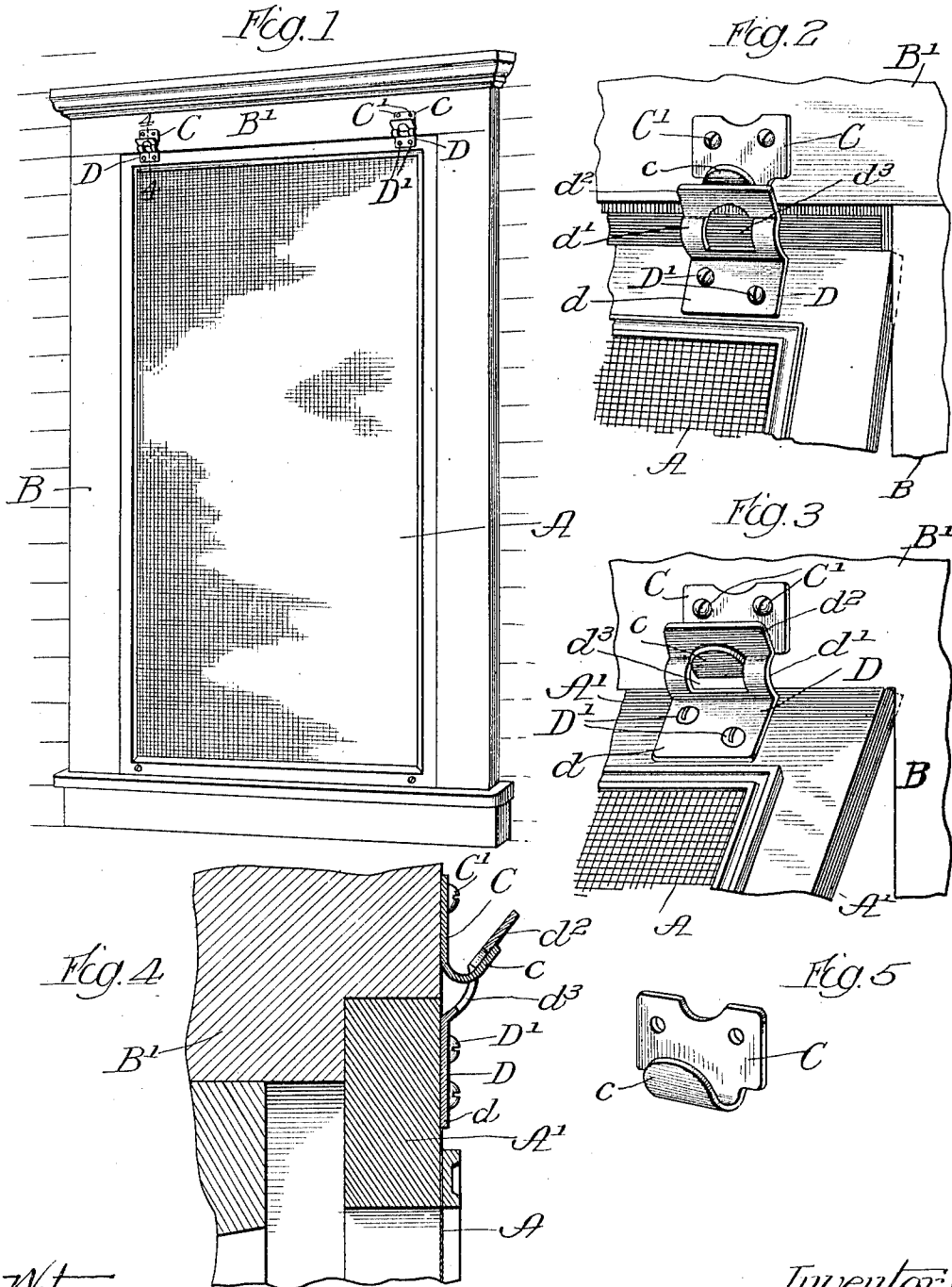


L. A. BITTORF.
 WINDOW SCREEN HANGER.
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Patented Feb. 27, 1912.



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UNITED STATES PATENT OFFICE.

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WINDOW-SCREEN HANGER.

1,018,603.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, LOUIS A. BITTORF, a citizen of the United States, residing at Sterling, Whiteside county, Illinois, have
5 invented certain new and useful Improvements in Window-Screen Hangers, of which the following is a specification.

My invention relates to hangers or fasteners for window screens and the like and the
10 object thereof is to provide a simple and efficient device of this character possessing advantages not only in actual use but also in the operation of applying or installing the window screen and the like in place, as
15 will be apparent from the description hereinafter given.

In the drawing, Figure 1 is a perspective of a window casing and a screen held suspended and in place by means of the fasteners or hangers of my invention. Fig. 2 a
20 perspective on a larger scale illustrating one of the fasteners or hangers in the act of attaching one member thereof to the other; Fig. 3 a view similar to Fig. 2 but showing an advanced stage of the engagement of
25 the two members of the fastener or hanger; Fig. 4 a section on the line 4—4 of Fig. 1 but on a much larger scale; and Fig. 5 a perspective of the upper member of the hanger or fastener.

Referring to the present embodiment of my invention, I prefer to use the fastener or hanger in connection with window
30 screens and in the present instance I have shown the same applied to a window screen A running the full length of the window casing or frame B, although of course my invention is not to be limited to such particular construction or to window screens
40 alone. As shown in Fig. 1, the window screen is suspended from and held fastened at its upper end by means of the two fasteners or hangers each of which consists of two separate members C and D having the
45 peculiar construction and interlocking connection now to be described.

The member C is secured in suitable manner, as by means of screws C', to the upper cross rail B' of the window frame and is
50 provided with a hook or tongue *c* extending from its lower edge and projecting upwardly and outwardly, the curvature or inclination of such tongue being such, as hereinafter explained, as to properly cooperate
55 with the other member D.

The member D consists of a flat portion *d*, the outwardly curved intermediate portion *d'* and an outer straight flange portion *d*², said flat portion *d* being secured to the cross rail A' of the window screen in suitable
60 manner, as by means of the screws D'. The curved or intermediate portion D' is provided with an aperture or opening *d*³ which is of a size to admit the tongue *c* of the fastener or hanger member C, as clearly indicated in Figs. 2 and 3. Moreover, the
65 flange portion *d*² has the same inclination as the outer end of the tongue *c*, so that when the two members of the fastener or hanger are in engagement their adjacent
70 meeting faces are complementary, as shown in Fig. 4. As shown in Fig. 2, the opening *d*³ at its upper portion is rounded to correspond with the rounded free end of the tongue *c*, which represents the preferred
75 construction because it enables the opening to be made of a minimum size to thereby preserve the strength of the member or plate D. The flange portion *d*² extends a
80 considerable distance beyond the slot and in a direction at a slight angle to the attaching portion *d* of the member D. As a result of this construction and the outwardly curved portion in which the slot is located
85 by inclining or swinging the screen outwardly a sufficient distance the flange can be brought to bear upon the stationary member of the hanger and the slot thereby removed a sufficient distance from the stationary member to facilitate extrication of
90 the hook from the slot, and by somewhat further tilting the screen as it is drawn backward the flange so spaces the slot from the hook that the latter may be readily
95 passed thereover.

In practice, the window screen is held outwardly at its lower end in the manner indicated in Fig. 2 and the same is slid upwardly between the opposite vertical sides
100 of the window casing, whereupon the inner face of the flange portion *d*² will contact the outer face or surface of the tongue *c* in respect to each hanger or fastener, with the result that upon further upward movement
105 the window screen will be automatically forced outwardly to a slight extent but not sufficient to cause the upper end of the window screen to clear the space between the opposite vertical sides of the window casing.
110 In this operation the flange portion *d*² of

each fastener or hanger slides upwardly and outwardly upon the tongue *c* of each fixed member C and after a sufficient movement, that is when the opening *d*³ is presented, the member *d* will hook over the tongue so that when the window screen is now brought to a vertical position the complementary faces of the flange portion *d*² and the tongue *c* will fit and cooperate with each other in the manner shown in Fig. 4. It results from this construction and arrangement that engagement between the hanger or fastener members is conveniently and automatically brought about and that after engagement the upper end of the window screen is firmly held inwardly in place within the window casing, said complementary surface causing a tendency of the window screen to press inwardly rather than outwardly, as will be readily understood from an examination of Fig. 4 of the drawing. My invention relates solely to said fasteners or hangers and does not concern the means, if any are desired, for holding the lower end of the window screen in place, the same being either held permanently as by means of screws or in such manner as to be swung open if desired, the fastener permitting either method to be adopted.

I claim:

1. In a device of the class described, a hanger having a hook member C having an attaching plate, a slot member D having a lip or flange extending a substantial distance beyond the slot to contact with the attaching plate for the hook member and thereby hold the slot away from the same when the screen or sash is swung outward beyond the normal to remove it from the hooks.

2. In a device of the class described, a hook member C having an attaching plate

and an inclined portion *c*, a slotted member D having a lip or flange extending a substantial distance beyond the slot to contact with the attaching plate for the hook member and thereby hold the slot away from the same when the screen or sash is swung outward beyond the normal to remove it from the hooks.

3. In a device of the class described, a member C having an inclined hook portion *c*, a slotted member D having a correspondingly inclined flange portion *d*² adapted to engage with the inclined portion *c* whereby the screen is normally pressed inwardly against the window frame.

4. In a device of the class described, a hook member C having an inclined hook portion *c* and a securing plate, a slotted member having a securing plate and a correspondingly inclined flange member *d*² together with an outwardly curved intermediate slotted portion *d*¹.

5. A device of the class described comprising two engaging plates, one of which is adapted to be secured to a window frame or the like and which is provided with an upwardly and outwardly inclined hook with a substantially straight under surface, and the other of which is adapted to be secured to a screen or sash and which is provided with an upwardly and outwardly inclined portion having a slot to receive the hook and also having at its free end and beyond the slot a flange adapted to bear against and slide freely upwardly along said surface of the hook until the latter engages said slot.

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