June 9, 1953 W. W. FLUGRATH 2,641,493

WINDOW SCREEN LATCH

Filed April 3, 1950

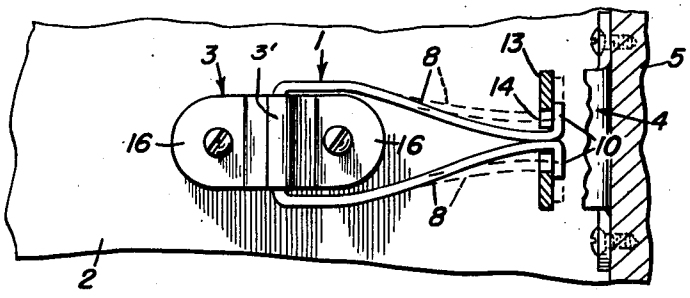


Fig. 2

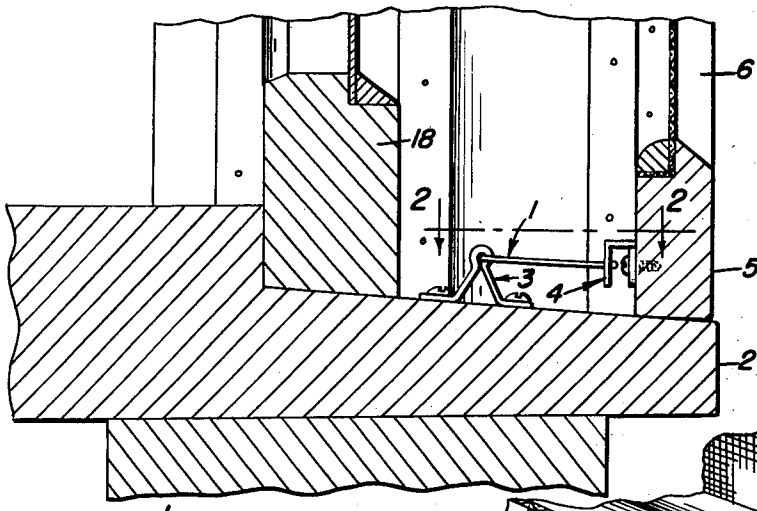


Fig. 1

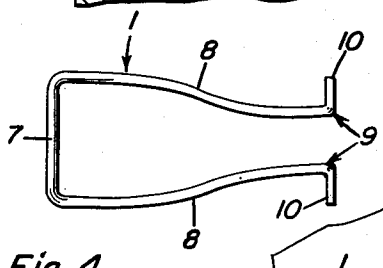


Fig. 4

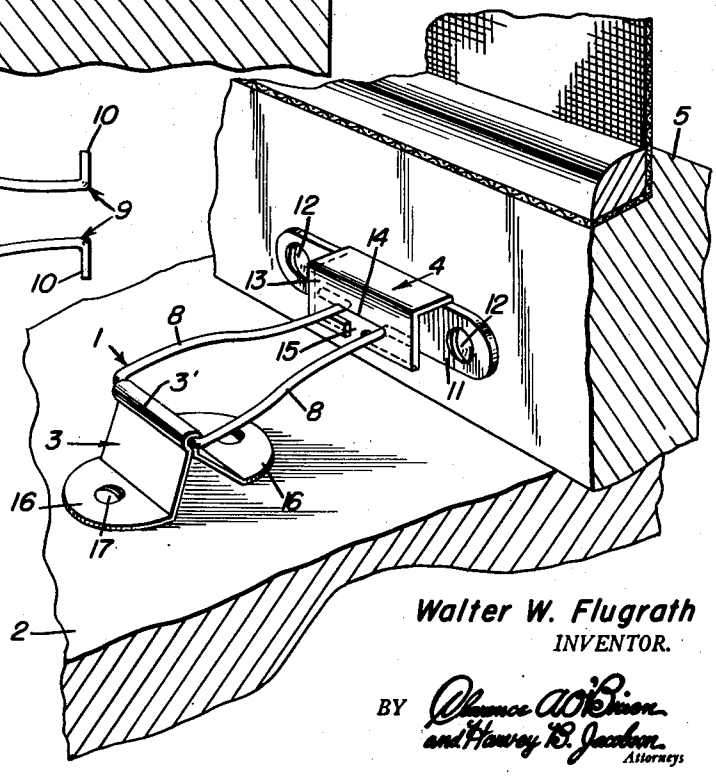


Fig. 3

Walter W. Flugrath
INVENTOR.

BY Clarence A. O'Brien and Harvey B. Jacobson
Attorneys

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WINDOW SCREEN LATCH

Walter W. Flugrath, New Braunfels, Tex.

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1 Claim. (Cl. 292—19)

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My invention relates to improvements in window screen latches for holding closed the type of outside window screen hinged at the top to the window frame to open outwardly.

The primary object of my invention is to provide a latch for such screens to take the place of the conventional hook and eye and which cannot be picked through the screen from the outside the window to unlatch the screen.

Another object is to provide a latch for the purpose above set forth which is simple in construction, can be applied to conventional windows and window screens easily and quickly, and which is foolproof, durable and inexpensive to manufacture.

Other and subordinate objects, within the purview of my invention, together with the precise nature of my improvements will be readily understood when the succeeding description and claim are read with reference to the drawings accompanying and forming part of this specification.

In the drawings:

Figure 1 is a fragmentary view in vertical section of my improved window screen latch applied, in the preferred embodiment thereof, to the window sill and the window screen;

Figure 2 is a fragmentary view partly in plan and partly in horizontal section drawn to a larger scale;

Figure 3 is a fragmentary view in perspective, partly in section;

Figure 4 is a view in perspective of the hasp.

Referring to the drawings by numerals, my improved window screen latch comprises a hasp 1 for attachment on top of the window sill 2, an attaching bracket 3 for the hasp 1, and a keeper 4 for attachment to the bottom rail 5 of the window screen 6 and with which the hasp is adapted to interlock with a snap action, in a manner presently clear.

The hasp 1 is U-shaped and formed of rod-like material with a straight closed, rear end 7, and a pair of spaced apart resilient side members 8 terminating at the open end of the hasp in a pair of normally spaced apart hooks 9 forming in the plane of the hasp a pair of outturned straight, free ends 10 on said side members 8.

The keeper 4 is of channel bar form with a front attaching flange 11 by means of which and screws 12 in the ends thereof, said keeper is attached on the inside of the bottom rail 5 in horizontal position with its channel side facing downwardly and spaced above the window sill 2 sufficiently for the hooks 9 to be positioned

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under said keeper. A rear flange 13 of the keeper, relatively shorter than the front flange 11, is provided with a horizontal slot 14 and a vertical slot 15 in its lower edge opening into the center of the horizontal slot 14. The slots 14 and 15 form a composite T-slot with the vertical slot 15 providing a restricted entrance thereto.

The attaching bracket 3 for the hasp 1 is of inverted V-shape with a top barrel 3' in which the rear end 7 of the hasp 1 is journaled, and lateral bottom ears 16 by means of which and the screws 17, said bracket 3 is attached on the window sill 2 opposite the keeper 4 between said keeper and the lower sash 18 of the window. The bracket 3 is attached so that the hasp 1 is vertically swingable about a horizontal axis parallel with said keeper 4 to swing the free ends 10 of the side members 8 upwardly between the flanges 11 and 12 of said keeper to engage the inner face of the rear flange 13 when the window screen 6 is closed, as shown in Figures 1 and 2. The vertical slot 15, or restricted end, is of a width to pass the side members 8 at the hooks 9 through the same, with a slight clearance, when said members 8 are flexed to engage said hooks 9 side by side, and the slot 14 above said vertical slot, or entrance 15, is shorter than the combined length of the free ends 10, when said hooks are engaged, all for a purpose presently seen.

Referring now to the use and operation of the invention, when the window screen 6 is swung closed, the keeper 4 is in position to overlie the hooks 10 of the side members 8 with the hasp 1 inclined downwardly toward said screen 6 with said hooks 9 resting on the window sill 2. To latch the screen, the side members 8 are flexed, with the fingers, to engage the hooks 9, and the hasp 1 is then swung upwardly to pass said side members at the hooks 9, upwardly through the vertical slot, or entrance 15, into the slot 14, at which point said side members 8 are released. When released, said side members 8 will spring apart to the ends of the horizontal slot 14 to position the free ends 10 in front of the rear flange 13 of the keeper 4, whereby said hasp 1 and keeper 4 are interlocked to latch the screen 6 in closed position. The horizontal slot 14 being shorter than the overall length of the free ends 10, said ends cannot be withdrawn out of said slot 14 without flexing the side members 8 to bring the hooks 9 into the described engagement, and that is impossible to accomplish by fishing with a wire or the like through the window screen 6. However, by

flexing said side members 8 from the inside of the window screen 6, in the manner already described, the same may be readily swung downwardly through the vertical slot, or entrance, 15 to unlatch the window screen, in a manner which will now be clear.

The foregoing will, it is believed, suffice to impart a clear understanding of my invention, without further explanation.

Manifestly, the invention, as described, is susceptible of modification, without departing from the inventive concept, and right is herein reserved to such modifications as fall within the scope of the appended claim.

Having described the invention, what is claimed as new is:

A latch for securing a window screen to a window sill comprising a channel member with a front flange having ends attachable to said screen and a relatively shorter rear depending flange having a downwardly opening T-shaped slot therein forming a restricted entrance to the wider portion of the slot, and a pivotal member attachable to said sill and including resilient

sides flexible toward each other into engagement to enable the same to pass upwardly through said entrance into the wider portion of said slot for reaction apart to engage opposite ends of the wider portion of the slot, said sides terminating in lateral end portions hooking behind said depending flange when said sides are engaged with the ends of the wider portion of the slot, said lateral end portions being of an overall length when said sides are engaged greater than the length of the wider portion of the slot to prevent said lateral end portions from pulling out of said wider portion if said sides are engaged while in the wider portion of the slot.

WALTER W. FLUGRATH.

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