April 7, 1931. C. E. McGUIRE 1,799,523

LATCH FOR WINDOWS

Filed Nov. 16, 1927

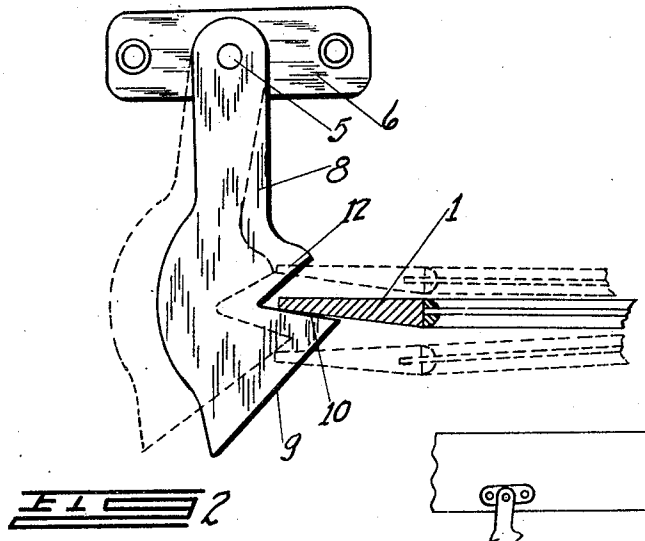


FIG 2

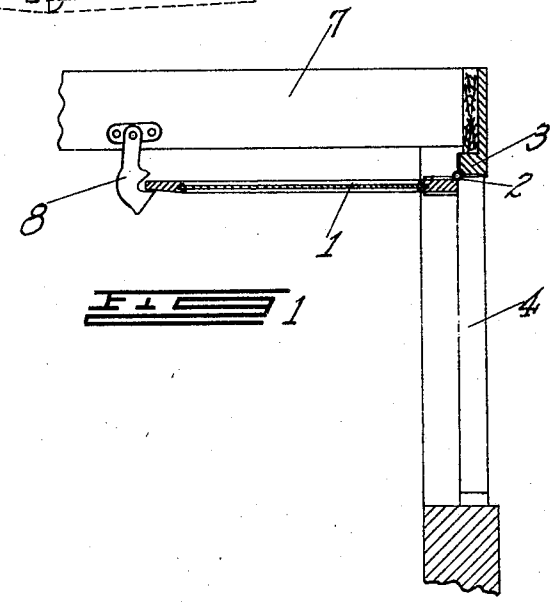


FIG 1

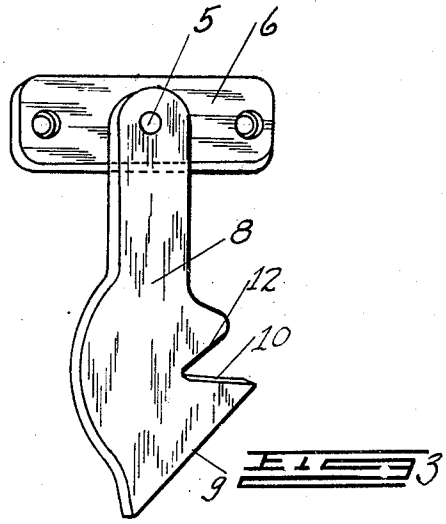


FIG 3

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UNITED STATES PATENT OFFICE

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LATCH FOR WINDOWS

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My improvements relate particularly to latches for basement windows which are usually hinged to the upper portion of the window frame and are designed to swing inwardly, and the object of the invention is to construct a latch or hook which will automatically catch the window to hold it open and which can be automatically released by merely lifting the window.

The invention consists of that certain novel construction of latch which, when pivoted to hang vertically, will present a horizontal holding surface for the window sash, with an upper and a lower cam surface which upon raising the window will swing the latch to allow the edge of the sash to be engaged by the horizontal surface, and upon a still further upper movement will again swing the latch to release the window.

In the drawings:—

Figure 1 is a sectional side elevation illustrating the latch in use.

Figure 2 is a similar view showing by dotted lines the action of the latch in releasing the window.

Figure 3 is a perspective view of the latch.

The basement window is shown at 1 hinged at 2 to the upper cross bar 3 of the window frame 4, so as to swing inwardly. Pivoted on a stud 5 on the plate 6 fastened to the stringer 7 is the latch 8. This latch, of any suitable material, is stamped or cut with a diagonal lower cam surface 9, terminating at the edge of a V-shaped notch of sufficient depth to receive the edge of the window sash. The lower edge 10 of this notch is cut so as to lie horizontally when the latch is suspended so as to hang virtually by its own weight, and the upper edge 12 of the notch forms a diagonal cam surface to correspond with the lower cam surface 9.

The result of this construction is that when the latch is suspended in the pathway of the sash frame, upon lifting the sash, the edge of the frame strikes the cam surface 9 and swings the latch into the position indicated by dotted lines in Figure 2, when the latch at once swings back by gravity and the window is caught and rests upon the horizontal surface 10 of the notched portion. To release the sash the frame is lifted slightly, bringing the frame into contact with the upper cam surface 12 which swings the latch as indicated in Figure 2, thus releasing the sash.

It will be understood that the construction I have shown for suspending the latch is only the preferred construction, and that the latch may be suspended in the proper position for engagement with the edge of the sash in any convenient way. If the latch is used with a wooden sash, I may attach a metal plate to the sash which will compensate for the difference in thickness between a wooden and a metal sash. The latch must be pivoted to swing readily when in operative position, and must be of sufficient weight to hang in vertical position.

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

1. A sash latch for horizontally hinged windows, comprising an integrally formed horizontally pivoted gravity holder with a horizontally disposed surface and slanted cam surfaces above and below the horizontal surface to engage and disengage an edge of a window.

2. A sash holder for horizontally hinged windows comprising an integrally formed horizontally pivoted gravity holder with a horizontally disposed surface and slanted cam surfaces above and below the horizontal surface to engage and disengage an edge of a window.

CORNELIUS E. McGUIRE.