July 27, 1937. D. L. CHANDLER 2,087,884

WINDOW LATCH

Original Filed Aug. 7, 1935

Fig. 1

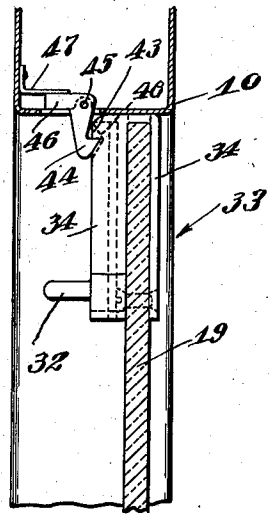
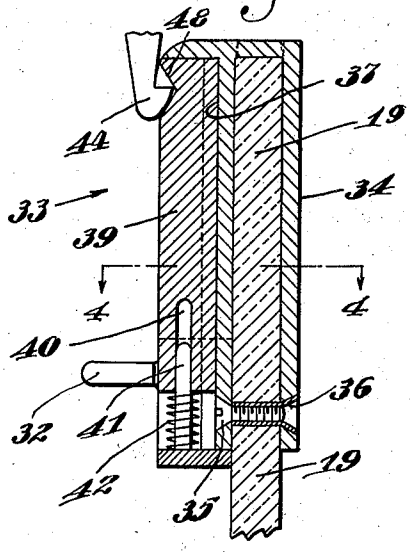


Fig. 3



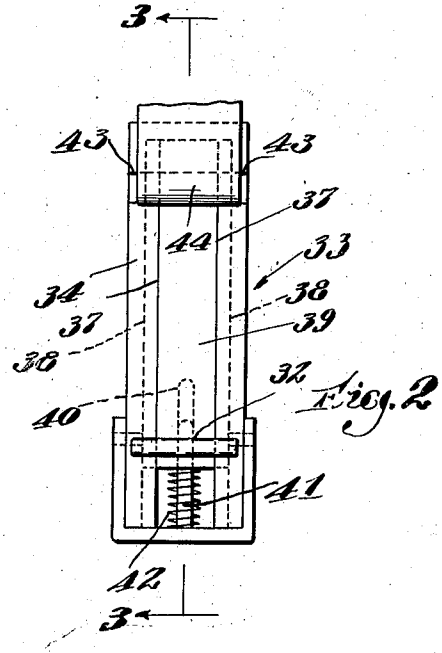


Fig. 2

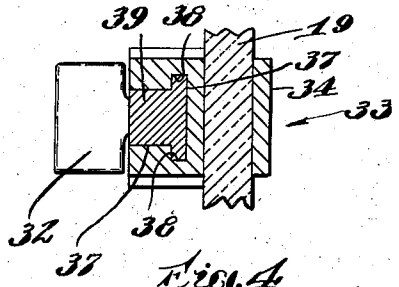


Fig. 4

Inventor
Daniel L. Chandler.
by James C. Hamilton
Attorney

Patented July 27, 1937 2,087,884

UNITED STATES PATENT OFFICE

2,087,884

WINDOW LATCH

Daniel L. Chandler, Somerville, Mass., assignor of ten per cent to Edwin M. Bailey, Swampscott, Mass., five per cent to Thomas H. Richardson, Brookline, Mass., seventy-eight per cent to Fred H. Rowe, Gloucester, Mass., and seven per cent to Harold E. Thurston, Lynn, Mass.

Original application August 7, 1935, Serial No. 35,098. Divided and this application December 6, 1935, Serial No. 53,217

2 Claims. (Cl. 292—254)

My present invention relates to window latches and more particularly to a window latch which is attached to the glass sash of an automobile window being a division of my copending application filed Aug. 7, 1935, Ser. No. 35,098.

The principal object of my invention is an improved window latch;

Another object is a window latch which can be operated by the hand of the operator in one continuous operation;

Still another object is a window latch which locks the window sash in a secure manner from the outside but which can be unlocked by the operator from the inside and the sash pulled down with one continuous movement of the hand of the operator, the locking member being automatically released when the sash is pulled down from the inside, and

Other objects and novel features comprising the construction and operation of my invention will appear as the discription of the same progresses.

In the drawing illustrating the preferred embodiment of my invention;

Fig. 1 shows a typical vertical cross-section of a conventional automobile door frame the lower portion being cut away and the glass sash being also shown in cross-section. My improved window latch is shown in side elevation as attached to the window frame and glass sash, in a closed and locked position;

Fig. 2 is an enlarged front elevation of that portion of the latch casing which is attached to the glass sash, the upper portion of the locking bolt being broken away;

Fig. 3 is a vertical cross-section taken on the line 3—3 of Fig. 2 and showing a fragment of the glass window sash, and

Fig. 4 is a cross-section taken on the line 4—4 of Fig. 3.

Referring more in detail to the drawing, 10 indicates an automobile door frame in which is mounted a slidable glass sash 19. At 34 I have shown a keeper which is fitted over the glass sash 19 and secured thereto by means of the screw 35 and internally threaded hollow rivet 36. The central portion of the keeper 34 is cut away for the purpose of providing a recess 37 with grooves 38 in which is located a slide member 39, the lower portion of which is provided with a finger lever 32. The bottom of the slide 39 is provided with a recess 40 in which I have placed a guide pin 41 around which is positioned a compression spring 42 which is adapted to maintain the slide 39 in a raised position until it is pulled down by the hand of the operator.

Across the upper portion of the face of the keeper 34 I have provided a slot 43 which engages at either side of the said keeper with a wide bolt member which is pivoted at 45 to the upper surface of the inside sheet metal door frame. The bolt 44 is further provided with a lever end 46 normally held down by means of a flat spring fixed to the side of the door frame 10. On the upper portion of the slide 39 adjacent the casing slots 43 I have provided a cam slot 48 which when in a raised position as shown in Figs. 1, 2, and 3 allows the bolt 44 to engage the keeper slot 43 but, when the slide 39 is pulled down the cam 48 pushes the bolt 44 out of engagement with the slot 43 on the keeper 34 and with a continued downward pressure of the operator's hand the sash 19 is pulled down in the window frame 10 thereby opening the window.

It will be seen that it is impossible to open the glass window sash from the outside and that one operation only is required from the inside to unlock and lower the sash.

While I have shown my invention applied to an automobile window sash yet it is to be understood that I may apply such invention to other windows or closures which are not windows wherein such a device may be useful and, I may vary the shape and proportions within wide limits within the spirit of the invention.

Having thus described my invention what I claim as new is:

1. A window sash latch comprising a keeper fixed to said sash, the engaging end portion having a transverse slot extending across its entire face, a spring bolt member pivoted in the window frame in which said sash is mounted, the said bolt being adapted to normally engage the edge of the said transverse slot, a slide located in the central portion of one side of said keeper and having a cam-surfaced slot transversally located across the outer surface adjacent the said transverse slot of said keeper, the cam surface of the slot in the slide being adapted to engage with said bolt, a compression spring lo-

cated below said slide in said keeper and adapted to maintain said slide in a projected position, the cam surface of said slot in said slide being adapted to release said bolt from said transverse keeper slot when said slide is retracted, and means for retracting said slide.

2. A window latch for latching the sash and frame of a window together comprising, a sash-carried keeper, a frame-carried spring projected bolt member, said keeper having a slot therein, a slide located in said keeper, said slide having a cam-surfaced slot therein, a spring adapted to maintain said slide in a projected position, one side of said keeper slot being adapted to engage with said bolt, the cam surface of the slot in the slide being adapted to disengage said bolt from the keeper slot when said slide is retracted against said spring.

DANIEL L. CHANDLER.