

Oct. 31, 1933.

J. C. MUIR ET AL

1,932,906

SASH CORD FASTENER

Filed Jan. 23, 1931

3 Sheets-Sheet 1

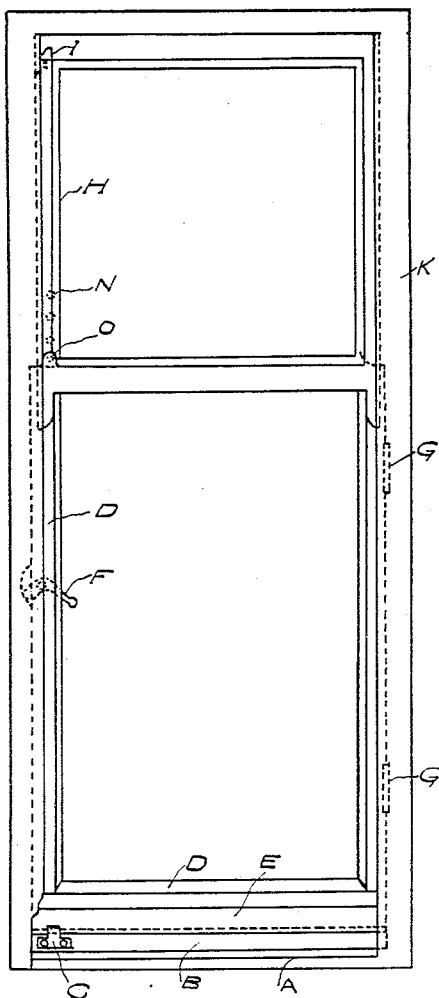


FIG. 1

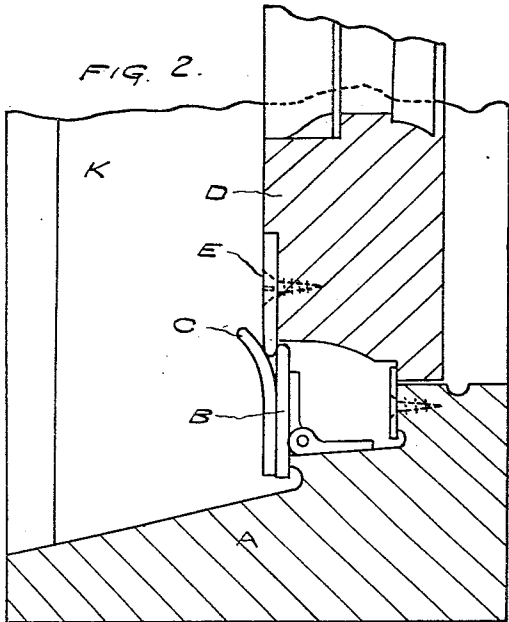


FIG. 2.

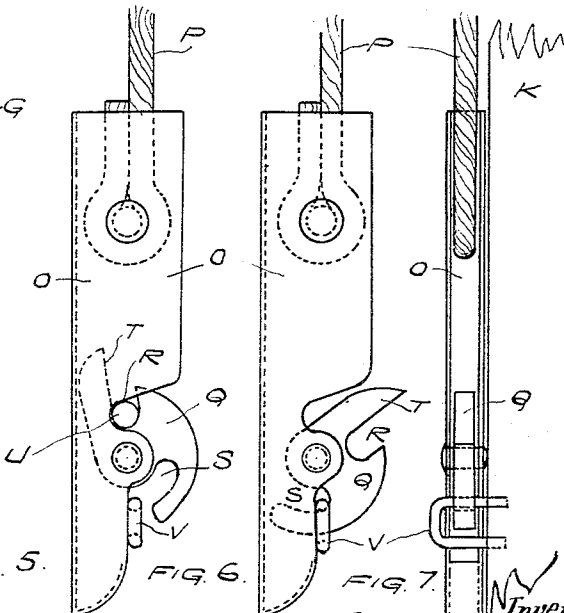


FIG. 5.

FIG. 6.

FIG. 7.

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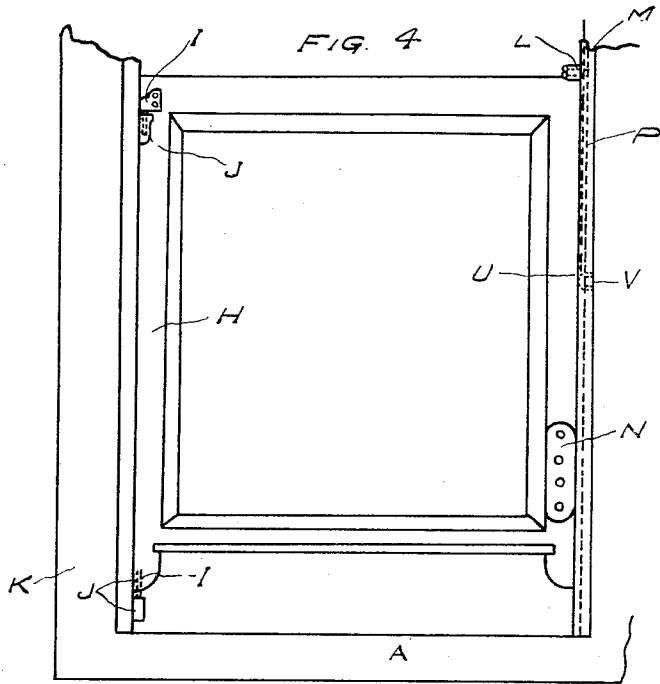
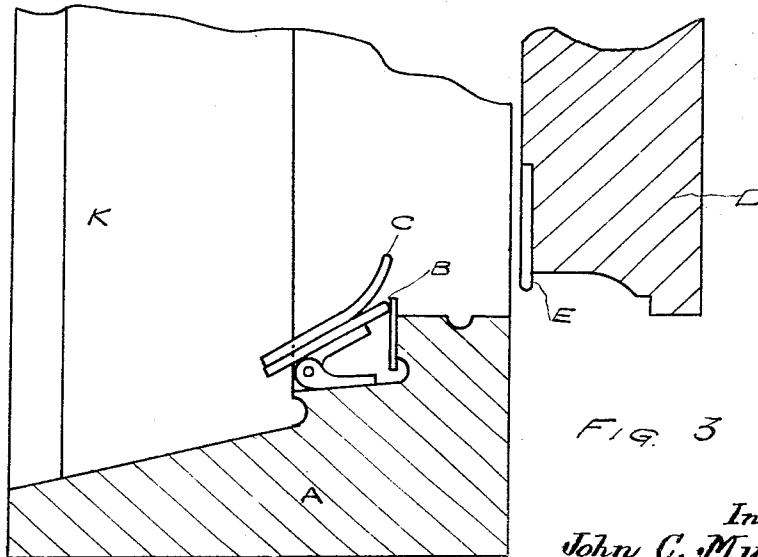
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Fig. 8.

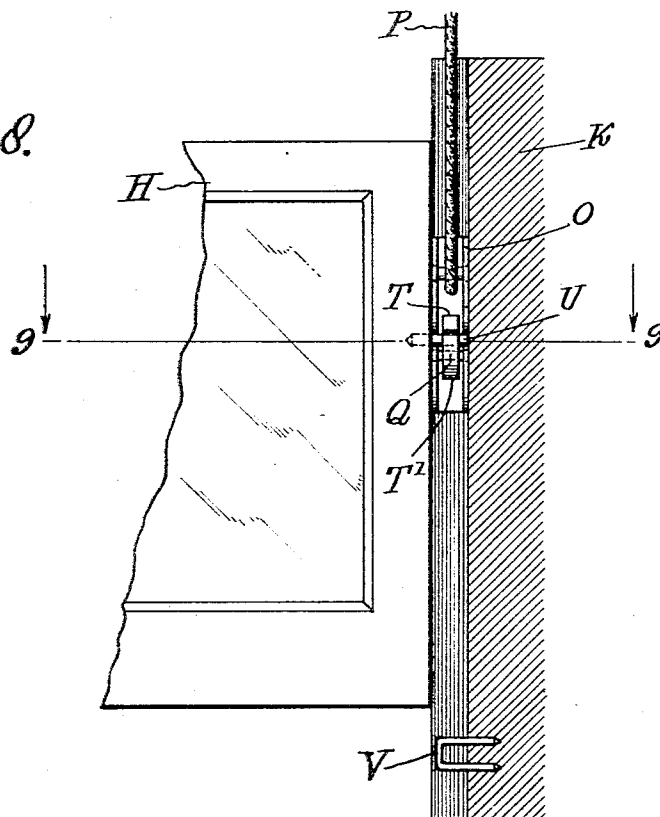
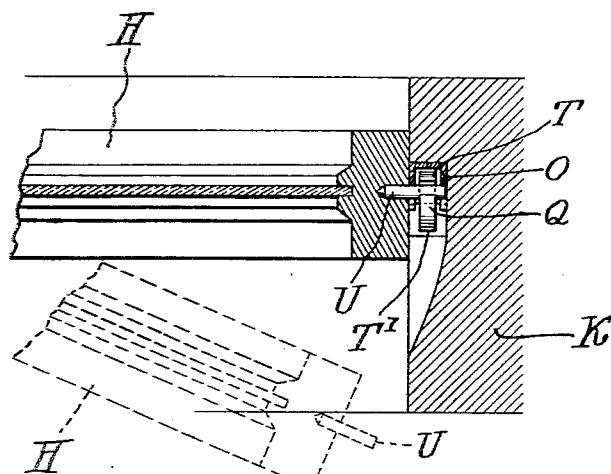


Fig. 9.



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UNITED STATES PATENT OFFICE

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SASH CORD FASTENER

John Caldwell Muir, Carluke, and Robert Loudon,
Cieland, ScotlandApplication January 23, 1931, Serial No. 510,828,
and in Great Britain July 2, 1930

1 Claim. (Cl. 16—202)

Our invention relates to improvements in and connected with windows, the same being also applicable to doors, and has for its object inter alia to so construct the windows and doors as to make them storm-proof, water-proof and dust-proof.

According to this invention, we provide in the case-sill a hinged-plate, having at the opening side thereof, a snug or striker suitably fixed thereto or integral therewith. On the bottom of outside of window-sash there is suitably attached a storm-plate. A suitable casement fastener having a knob or handle is also provided.

With regard to the top window-sash, we provide suitable hinges which are suitably fixed to the window-sash and case, the same engaging when the top window-sash is pulled down allowing it to be pulled inwards, a check being formed on the pulley-stile and so dispensing with the usual parting-bead. We also provide a plate with a series of holes or openings at different heights attached to top-sash in which a pin in bottom sash engages to fix the window at any open position desired.

In order that our invention may be properly understood and readily carried into effect, we have hereunto appended three sheets of drawings, of which

Figure 1 is a front elevation of a complete window looking from the outside.

Figure 2 is a part view in section of bottom sill and sash.

Figure 3 is a similar view to Figure 2, but with sash shown in open position.

Figure 4 is front elevation looking from inside of top window-sash pulled down ready for hinging inwards.

Figure 5 is view showing how the pulley-rope is attached to the top-sash.

Figure 6 shows the pulley rope detached from top-sash and attached to the window-frame when the window is open.

Figure 7 is end view of Figure 6.

Figure 8 is a fragmentary rear elevation of the top window-sash and with the window-frame cut vertically through the groove to show the hollow or channeled fitting in sliding position, and

Figure 9 is a horizontal section along the line 9—9 in Figure 8 with the top window-sash in the lower sliding position and ready for hinging inwards.

Referring to the drawings, A is the case-sill, and B the hinged-plate with snug or striker C. E is the storm-plate which is suitably attached to the window-sash D, and F is the fastener.

The method of operating the bottom-sash is as follows:—

Assume the window D is closed, and it is desired to open same, the window is unlocked by undoing the fastener F, and the window is pulled inwards on the hinges G, whereby the hinged-plate B turns down or over, see Figure 3. When the window D is being closed, this hinged-plate B lying in the turned down or over position, the storm-plate E knocks against the snug or striker C, raising the hinged-plate B to its upright or normal position, when the storm-plate E, automatically overlaps the hinged-plate B, thus making the window D at the bottom storm-proof, water-proof and dust-proof, see Figure 2.

Referring to the top window-sash, Figures 4 to 9, when it is desired to open same, this is done from the inside without detaching any fittings. It is simply pulled down when the eyelets I, which are fixed to the window-sash H engage with the pins J fixed to the window-frame K and the window then becomes hinged and capable of being opened inwards. A check L is formed on the pulley-stile M and dispenses with the usual parting-bead. N is the plate with the series of holes or openings at different heights which is attached to top-sash H in which the pin Z in bottom-sash D engages to fix the window at any desired open position.

We also provide a suitable device which is connected to one of the cords of the balance-weight for top-sash, which is automatically attached and detached from the top-sash when this sash is in the window-frame or hinged open. The device consists of a hollow fitting O to which the balance-weight cord P is suitably attached, and which carries a pivoted-plate Q with two notches R and S cut therein to provide the straight finger T and the arcuate finger T'. A pin U is fixed to one side of the top-sash H to rest in the notch R and contact with the straight finger T whereby the hollow or channeled fitting O is held in position to slide with the sash. The staple V is attached to the window-frame and placed to contact with the lower end of the fitting O when the top-sash H reaches its lower sliding position and is hinged to the window-frame to swing inwardly. This swinging movement of the sash rotates the pivoted member Q with its fingers T and T' whereby the channeled fitting O is released from the sash and held to the window-frame by the staple V.

In operation this hollow fitting O lies in a recess in the window-frame K and, when the top window-sash H has been pulled down and hinged

as above explained, it is then pulled inwards, and, in so doing, the pin U is released from the notch R, and pivots the piece Q so that the notch S engages with the staple V, and the cord P is held in this position. In closing the sash H, the pin U engages with the straight finger T and pivots the plate Q so that the pin U enters the notch R, and the notch S is, at the same time, withdrawn from the staple V, and thus the top sash H is ready for sliding upwards to its normal position.

It will be obvious from the above, that the opening and closing of windows can be more expeditiously accomplished, and, as previously stated, without any interference with the window fittings.

The fittings as described with reference to the bottom sash can also, with a slight modification, be applied to doors.

What is claimed is:

A weight cord release device adapted for use with a window frame provided with a groove, and

a window sash mounted to slide and swing therein comprising a U-shaped channeled fitting for attaching the weight cord, a plate pivotally mounted in the channeled fitting, said plate having notches cut therein to provide a straight finger and a curved finger, a pin carried by the sash to engage the notch adjacent the straight finger and the channeled fitting for holding the parts together and permit movement of the weight cord with the sliding of the sash, and a U-shaped staple attached to the window frame for engaging the curved finger when the sash is swung inwardly to release the channeled fitting and weight cord from the sash whereby the sash is attached to swing in the window frame when pulled inwardly, and also attached to automatically return the parts to initial position upon closing the sash to allow sliding the same.

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