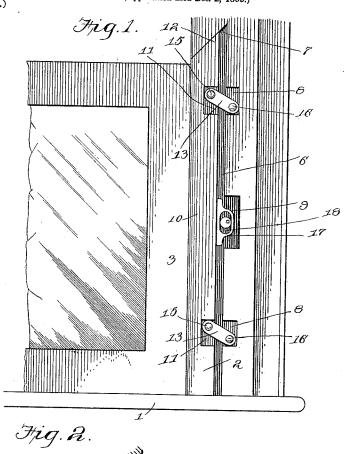
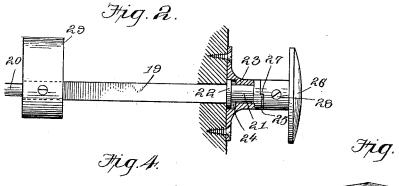
C. F. DAVIS & E. F. PANGBURN.

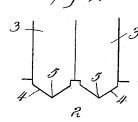
SASH HOLDER.

(No Model.)

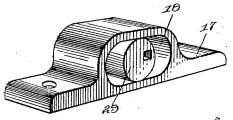
(Application filed Dec. 2, 1899.)











C.F. Davis, E.F. Panghurn,

UNITED STATES PATENT OFFICE.

CHARLES F. DAVIS, OF OLIVET, AND EDWARD F. PANGBURN, OF BATTLE CREEK, MICHIGAN.

SASH-HOLDER.

SPECIFICATION forming part of Letters Patent No. 649,438, dated May 15, 1900.

Application filed December 2, 1899. Serial No. 738,981. (No model.)

To all whom it may concern:

Be it known that we, CHARLES F. DAVIS, residing at Olivet, in the county of Eaton, and EDWARD F. PANGBURN, residing at Battle Creek, in the county of Calhoun, State of Michigan, citizens of the United States, have invented a new and useful Sash-Holder, of which the following is a specification.

Our invention relates to sash-holders of the 10 type shown in Patent No. 594,356; and it consists in certain improvements upon the holder shown in said patent; and the object of our invention is to produce a cheaper, more simple, and effective device; and with this ob-15 ject the invention consists, further, of the parts and combination of parts, as will be fully hereinafter pointed out.

In the drawings forming a part of this specification, Figure 1 is an elevation of a window 20 jamb and sash, partly broken away, with our invention embodied. Fig. 2 is a side view of the operating-cam and handle attached to a support. Fig. 3 is a perspective detail view. Fig. 4 is an outline view of the joint between 25 the window sash and jamb.

Referring to the drawings by numerals, 1 represents a window-sill surmounted by the window-jamb 2. 3 is the sash. The windowjamb is formed with substantially V-shaped 30 grooves 4 in its inner face, while the sash is provided on each side with pointed beads 5, adapted to work snugly in the V-shaped grooves in the jamb. The window-jamb is cut away, as at 6, a distance equal to the 35 height of the sash to be used, and from this point is cut under on an upward slant or angle, as at 7.

8 represents notches cut into the jamb and extending from the cut-away portion 6. 9 is 40 a similar notch cut about midway between the notches 8, but somewhat longer.

10 is a movable member of a length equal to the cut-away portion 6, excepting the extreme depth of the cut-under portion 7 and of 45 a width less than said cut-away portion, as will be readily understood from Fig. 1. This member is provided with notches 11, similar to the notches 8 in the jamb.

12 is an upwardly-extending end of the

stantially the shape of and adapted to work in the cut-under portion 7 in the jamb.

13 represents links pivoted at 15 in the notches 11 of the sliding member and at 16 in the notches 8 in the jamb.

17 is a casting secured to the inner edge of the movable member 10 directly opposite the notch 9 in the window-jamb, provided with an oval opening or cam-seat 18.

19 is a spindle, rectangular in cross-sec- 60 tion, having a rounded reduced end 20, adapted to be seated in a suitable seat or socket formed in the bottom of the cut-away portion 6 of the jamb. 21 is a rounded integral portion extending from the other end of the 65 spindle 19, at the base of which is formed a collar or shoulder 22.

23 is a socket secured to the face of the jamb by suitable screws or nails, as preferred, having a central cylindrical opening 70 in which the portion 21 of the spindle 19 is adapted to work.

24 is a recess formed in the socket around the inner end of the cylindrical opening. 25 is a shoulder formed on the top of the 75

socket 23. 26 is an operating-knob having a shoulder 27, adapted to engage the shoulder 25 on the socket 23, said knob being secured to the

spindle by means of the screw 28. 29 is a cam-like operating member rigidly secured eccentrically to the spindle 19 and adapted, when the parts are assembled, to work in the casting or cam-seat 17.

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The parts being assembled, upon pulling 85 the knob 26 out to disengage its shoulder from that on the socket 23 (the collar 22 limiting the outward movement) the spindle is free to be revolved. The knob is revolved thereby, through the spindle 19 revolving the 90 cam 29 in the cam-seat 18 and forcing the cam against the side of its seat, thereby shoving the casting 17 backward into the slot 9 in the jamb, such movement, by reason of the links 13, raising and pulling the 95 moving member 10 back into the cut-away portions 6 and 7 in the jamb away from the sash, whereupon the sash may be removed or pulled out of the frame very readily for the 50 member 10 and integral therewith, of sub- | purpose of cleaning or glazing, &c. After 100

the sash has been replaced the movements of the several parts are reversed, and as soon as the member 10 has been projected flush with the face of the jamb the knob 26 is 5 pushed down upon the socket and the shoulders 25 and 27 engaged, thereby locking the spindle against rotation.

Having thus fully described our invention, what we claim as new, and desire to secure by 10 Letters Patent of the United States, is-

In a sash-holder, the combination with the jamb, a cut-away and cut-under portion therein, notches in the cut-away portion, a movable member having an upwardly-ex-

tending pointed end, notches in said mem- 15 ber, links pivoted in said notches of a camseat secured to the movable member, a spindle in the jamb, a cam secured to the spindle adapted to work in said seat, a socket through which the spindle passes, a shoulder on said 20 socket and an operating-knob having an interlocking shoulder to engage the shoulder on the socket, substantially as described.

CHARLES F. DAVIS.

EDWARD F. PANGBURN.

Witnesses:

John A. Downer, EARL C. COREY.