

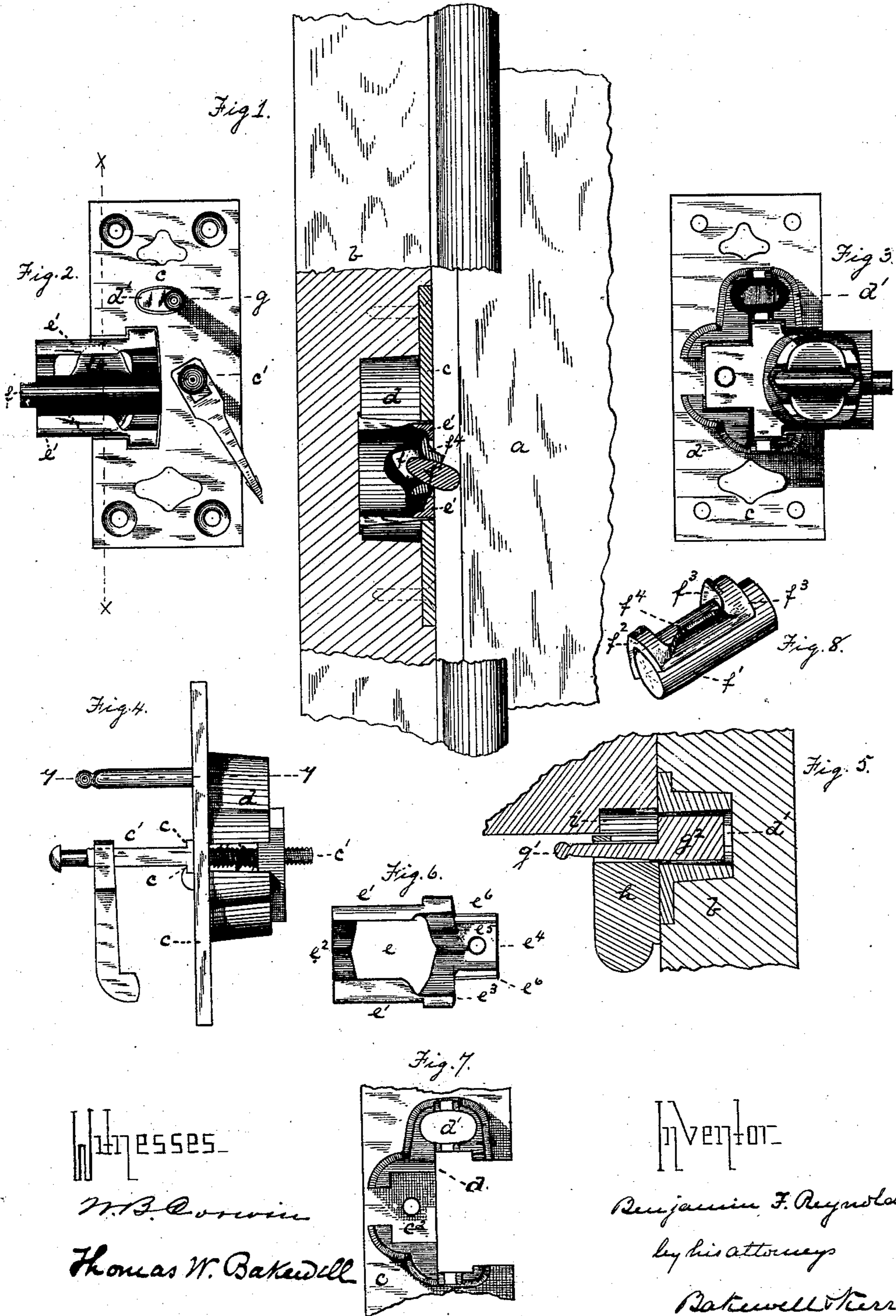
(Model.)

B. F. REYNOLDS.

SASH HOLDER.

No. 291,003.

Patented Dec. 25, 1883.



Witnesses

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BENJAMIN F. REYNOLDS, OF VERONA, PENNSYLVANIA.

SASH-HOLDER.

SPECIFICATION forming part of Letters Patent No. 291,003, dated December 25, 1883.

Application filed August 23, 1883. (Model.)

To all whom it may concern:

Be it known that I, BENJAMIN F. REYNOLDS, of the borough of Verona, in the county of Allegheny and State of Pennsylvania, have
5 invented a new and useful Improvement in Window-Holders; and I do hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to an improvement in
10 window-holders; and it consists in an adjustable cam or rib set in the window-frame and adapted to press against the window-sash when it is at rest, and to be automatically released while the window is being raised or lowered.

15 I will now describe my invention, so that others skilled in the art may manufacture and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

20 Figure 1 is a vertical sectional view through the line *x x*, Fig. 2, of the window-frame and my improved window-holder, showing the cam or rib bearing against the edge of the sash. Fig. 2 is a front elevation of the holder. Fig.
25 3 is a rear elevation of the same. Fig. 4 is a side elevation of the holder. Fig. 5 is a horizontal section through the line *y y*, Fig. 4. Fig. 6 is a detached plan view of the frame which carries the rib or cam. Fig. 7 is a detached
30 plan view of the bracket on the rear face of the face-plate, and Fig. 8 is a detached perspective view of the cam or rib.

Like letters of reference indicate like parts wherever they occur.

35 In the drawings, *a* represents the window-sash, and *b* the frame or casing within which the sash slides up and down. Set in a cavity formed in the face of one side of the window-frame is a face-plate, *c*, on the rear face of
40 which is a bracket, *d*, adapted to receive the open case *e*, in which the cam or rib *f* is pivoted. This case or frame *e* is of the shape of the two horizontal parallel bars *e' e'*, united at their ends by V-shaped portions *e² e³*. From
45 the V-shaped portions *e³* there extends a horizontal lug, *e⁴*, in and through which is a threaded screw-hole, *e⁵*. This case *e* is preferably made of metal and cast in one piece. Extending at right angles from the bar portions *e' e'* along the lug *e⁴* are ribs *e⁶ e⁶*. The
50 bracket *d*, which is cast on the back of the

face-plate *c* and integral therewith, partially incloses the ribs *e⁶ e⁶* and the lug *e⁴*, while a set-screw, *c'*, passes through a hole, *c²*, in the face of the plate *c* into the hole *e⁵* in the lug
55 *e⁴*, by means of which the frame *e*, sliding in the bracket *d*, may be moved back from or toward the face-plate *c*. Pivoted in the adjustable frame *e* is the cam or rib *f*, which has a rib, *f'*, preferably formed of metal or wood,
60 held by the metal V-shaped clamp *f² f³*, from the upper and lower sides of which extend the wings or flanges *f⁴ f⁴*. This clamp and rib fit in the frame *e*, the flanges *f⁴* extending back of the bars *e' e'*, while the V-shaped portions
65 *f²* and *f³* rest in the V-shaped portions *e²* and *e³*, thereby securing the clamp in such a manner that the rib *f'* shall have a limited movement on its axis or pivotal points formed by the points or angles of the V-shaped portions
70 *b²* and *b³*. In the upper portion of the face-plate *c* and bracket *d* is a cavity, *d'*, in which is an L-shaped locking-plate, *g*, the long arm *g'* of which extends out through a hole in the slat or bead *h*, which secures the sash
75 in the window-frame, so that the bolt may be drawn out until the short arm *g²* of the bolt engages in the slot *i* in the sash *a*. On the portion of the screw-bolt *e'* which extends beyond the face-plate *c* at one side of the bead *h*
80 is a collar, *c⁴*, which forms a bearing or fulcrum for the screw. At this end of the bolt is a head, lever, or other suitable device for turning the screw. The face-plate *c* may be secured to the frame *b* by screws.
85

The operation is as follows: The rib or cam *f'*, extending from the face-plate *c* laterally across and against the edge of the sash, supports the sash at any point in any position in which it may be placed, as shown in Fig. 1.
90 When the window-sash is raised, the face of the cam is lifted above the level of the horizontal plane through its axis, and the sash slides easily, bearing but slightly against the cam. When, however, the sash is again al-
95 lowed to remain at rest in a raised position, the weight of the sash causes it to drop slightly and bring the cam *f* with it to or nearly to a central position, the rib or cam extending nearly horizontally from its pivotal point. In
100 this position the friction between the cam and the sash is greatest, and the sash is thereby

held stationary. When the sash is lowered, the cam or rib is thrown down off its center, reducing the friction thereby and allowing the sash to slide easily in the frame. To secure the sash, then, in any desired position, it is only necessary to give it a slight upward push, which carries the cam *f* again onto its center. By means of the screw-bolt *c'* the frame *e*, carrying the cam *f*, may be moved backward or forward, so as to regulate the friction between the cam and the sash. When the window-sash is lowered, it may be locked by drawing out the bolt *i*. If desired, suitable springs may be placed between the cam *f* and frame *e*. The wings *f'* should be so formed that the cam *f* shall have a greater movement upward than downward, so that there will be a less amount of resistance in raising the sash than in lowering it.

Although I have described my devices as formed of certain materials, I do not desire to limit myself thereto.

The advantages of my invention are, that expensive weights and other devices for balancing window-sashes may be dispensed with, and a cheap, simple, and effective automatic holder substituted therefor.

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

1. In a sash-holder, the combination of a pivoted cam or rib mounted in an adjustable frame or carriage and projecting from the sash or frame, so as to be thrown on or off its center by the movement of the sash, and a set-screw or bolt arranged to engage with the carriage, substantially as and for the purpose specified.

2. A sash-holder consisting of a cam or rib pivotally secured in an adjustable frame, a slotted face-plate having a bracket formed on the rear face thereof for the reception of the adjustable frame, and a set-screw or bolt arranged to engage with the adjustable frame, substantially as and for the purpose specified.

In testimony whereof, I have hereunto set my hand this 18th day of August, A. D. 1883.

BENJAMIN F. REYNOLDS.

Witnesses:

W. B. CORWIN,

THOMAS W. BAKEWELL.