J. SWEET. Sash-Holder.

No. 160,554.

Patented March 9, 1875.

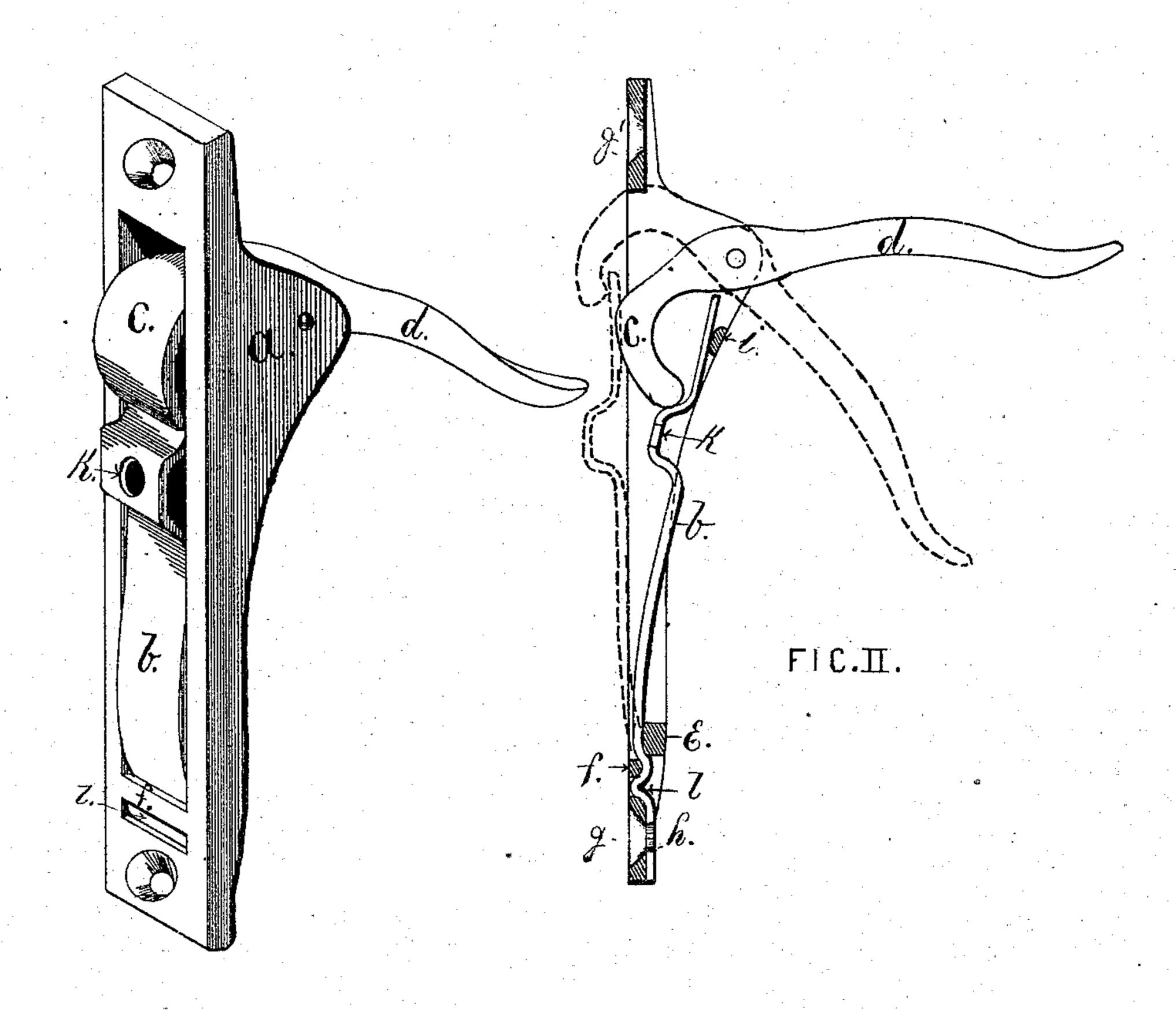


FIG.I.

WITNESSES

DD Langworthy R. W. Ealon. INVENTOR

John Sweet by Joseph A Miller his attorney

UNITED STATES PATENT OFFICE.

JOHN SWEET, OF PROVIDENCE, RHODE ISLAND, ASSIGNOR OF ONE-HALF HIS RIGHT TO JOHN A. TILLINGHAST, OF SAME PLACE.

IMPROVEMENT IN SASH-HOLDERS.

Specification forming part of Letters Patent No. 160,554, dated March 9, 1875; application filed December 12, 1874.

To all whom it may concern:

Be it known that I, John Sweet, of the city of Providence, State of Rhode Island, have invented a new and useful Improvement in Sash-Holders; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

Figure I shows my improved sash-holder in perspective view. Fig. II is a sectional view, showing the lever d raised, and the spring b forced back against the stop-bar i, as also the manner of fastening the foot of the spring in the frame. The lever d is also shown, in broken lines, depressed, as also the position of the spring when so depressed.

Similar letters of reference indicate corre-

sponding parts.

The object of this invention is to construct a simple and efficient sash-holder, in which the weight of the sash assists the device, so as to insure a firm support in all positions. Another object of the invention is to so secure the spring to the frame of the sash-holder, that the full strength of the spring is retained at the bolster, while the foot is firmly secured. Another object of the invention is to prevent the breaking of the spring by placing a stop in the frame, and so prevent the spring from being bent more than is required for the purpose for which the same is intended. The invention consists in combining, with a cam and lever, on a sash-holder, a spring, secured and arranged in a peculiar manner between cross-piece and bolster, bent around and fastened, as hereinafter more fully described, and then pointed out in the claim.

In the drawings, A is a metal frame, to which the lever d and cam c are secured by a pin passing through the same, and also through the cheeks in the frame. b is a spring, which, pressing against the lower part of the cam c, forces the same outward and upward, as is shown in broken lines in Fig. II. The spring b is secured to the frame a by passing the same between the bolsters e and f, and under the cam c, and when the frame

a is secured to the sash, the lower screw g passes through the hole h in the spring, and so secures both the frame and the spring.

To prevent the spring being pushed down by the cam before the device is secured to the sash, the short bend at l is made in the spring, which, when in place, fits into the slot between the bolster f and the lower part of the frame.

Springs similar to the spring I use have been heretofore secured to bolsters by pins passing through a hole in the spring. Such holes are very objectionable when placed on the bolster, for at this point the greatest strain comes on the spring, and the hole weakens the same. Such springs, therefore, break easily, and always at the hole, the punching out of which reduces the strength.

The lower end of the spring requires but little strength as this part does not bend. A hole, therefore, at this part, does not injure the same, and if required, in place of fastening the spring by the lower screw and bending the same at l to form a shoulder, a pin may be placed at the back of the frame above the lower, passing through a hole in the spring, and the same thus secured to the frame.

Many springs in sash-holders are broken by forcing the spring back more than is required to raise or lower the sash, and to prevent the bending of the spring too far I place in the rear of the frame A the stop-bar *i*, which prevents the breaking of the spring from this cause.

When this sash-holder is secured to a sash the same may be supported in any position required, as the spring presses the cam into contact with the window-frame, causing frictional contact. When the sash is relieved, the weight of the same pressing on the pin or axis of the cam, the sash is forced against the opposite side of the frame, and the sash is thus firmly supported.

When the sash is closed, the hole k in the spring b passes over a pin secured to the window-frame, and the same is securely locked, and cannot be opened from the outside.

All the parts of my improved sash-holder are simple, cheaply made, and durable, while

the device is very efficient, and not liable to derangement.

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

The frame A, cast with the cross-piece i and the bolsters E and f, and carrying the cambever d c, acted upon directly by the spring b, the latter bent around the bolsters, and se-

cured below them by the lower screw g, passing through a hole in the spring, all substantially as shown and described, for the purpose set forth.

JOHN SWEET.

Witnesses:

JAMES C. RICHARDSON, JOSEPH A. MILLER.