

(No Model.)

G. E. TAYLOR.
SASH BALANCE.

No. 424,940.

Patented Apr. 1, 1890.

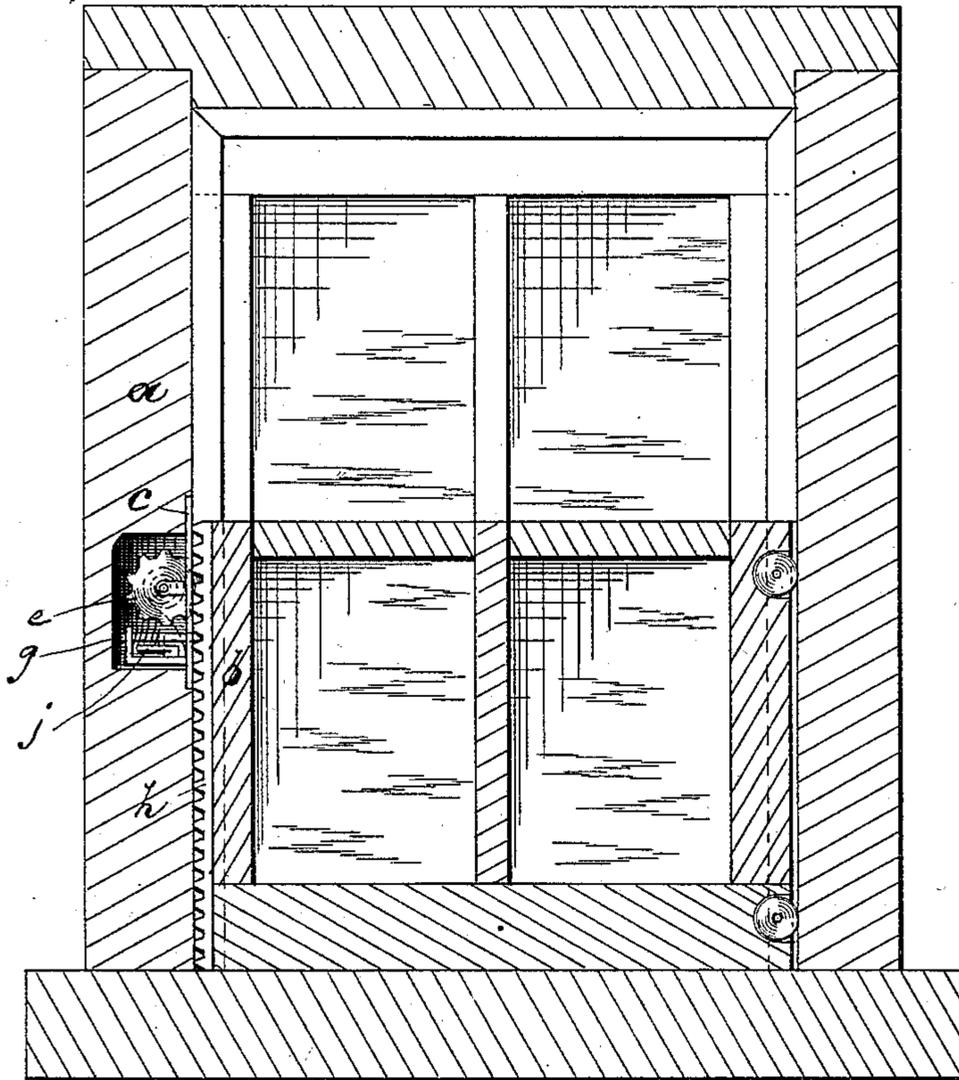


Fig. 1.

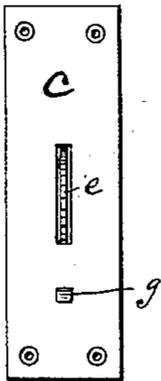


Fig. 4.

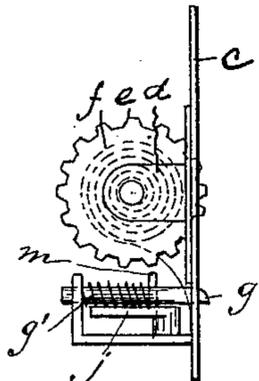


Fig. 2.

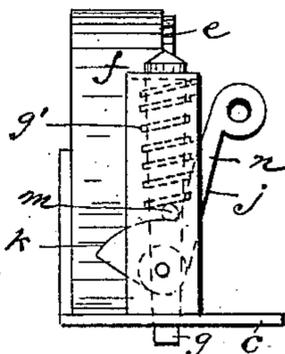


Fig. 3.

WITNESSES:

INVENTOR

Oscar A. Michel.
E. L. Sherman

George E. Taylor,

BY *Drake & Co.* ATTY'S.

UNITED STATES PATENT OFFICE.

GEORGE E. TAYLOR, OF NEWARK, NEW JERSEY, ASSIGNOR OF THREE-FOURTHS TO DAVID C. CLARKE, OF SAME PLACE, AND STEPHEN M. LONG, OF EAST ORANGE, NEW JERSEY.

SASH-BALANCE.

SPECIFICATION forming part of Letters Patent No. 424,940, dated April 1, 1890.

Application filed December 16, 1889. Serial No. 333,876. (No model.)

To all whom it may concern:

Be it known that I, GEORGE E. TAYLOR, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Sash Balances and Fasteners; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form part of this specification.

One of the objects of this invention is to reduce the cost of furnishing windows having such attachments as are deemed necessary for locking or fastening the sash and rendering the operation of balancing the sash and raising the same more easy.

The invention consists in the improved sash fastener and balance combined and in the arrangements and combinations of parts, substantially as will be hereinafter set forth, and finally embraced in the clauses of the claim.

Referring to the accompanying drawings, in which like letters indicate corresponding parts in each of the several figures, Figure 1 is an elevation of a window having my improved devices attached, the lower sash being shown in vertical section. Fig. 2 is a front elevation of the attachment in detail. Fig. 3 is a view of the inner edge, and Fig. 4 a view of the outer edge, the working parts being concealed by the face-plate.

In said drawings, *a* indicates the window-frame, *b* the sash, and *c* a plate secured to said frame and providing bearings *d* for a cog-wheel *e*, a spring *f* for balancing the sash, and a catch or lock *g*. The catch is held into locking or catching relation to the rack by means of a spring *g'* in any suitable manner. On said sash is a rack *h*, having teeth to mesh

with those of the cog-wheel, so that as said cog-wheel is turned by the power exerted by the spring it will tend to raise said sash or co-operate with the hand in raising said sash, as will be understood.

In connection with the balancing-spring, cog-wheel, and rack, I have arranged on the plate *c* the spring-actuated catch *g*, which at one end projects through the face-plate and engages the rack, and thus when in such engagement prevents the raising of the sash. Downward movement of the sash is preferably allowed by beveling the end of the catch, so that it will slide over the teeth. The catch may be pressed back from engagement with the rack-teeth by means of a hand-piece *j*. This has preferably an eccentric *k*, which engages a pin or projection *m* on the catch. Said hand-piece is preferably provided with a handle *n*, which extends outside of the window-frame, so as to be grasped by the hand.

The invention may readily be applied to folding or sliding doors and other similar structures.

Having thus described the invention, what I claim as new is—

1. The combination, with the window-sash provided with a rack, of a frame having a spring-actuated cog-wheel and an automatic catch to engage said rack, substantially as and for the purposes set forth.

2. In combination with the plate *c*, having suitable bearings thereon, a cog-wheel *e*, spring *f*, a catch *g*, provided with a projection *m*, and a spring *g'*, and a handle provided with an eccentric *k* for disengaging the said catch or lock, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 7th day of December, 1889.

GEORGE E. TAYLOR.

Witnesses:

CHARLES H. PELL,
OSCAR A. MICHEL.