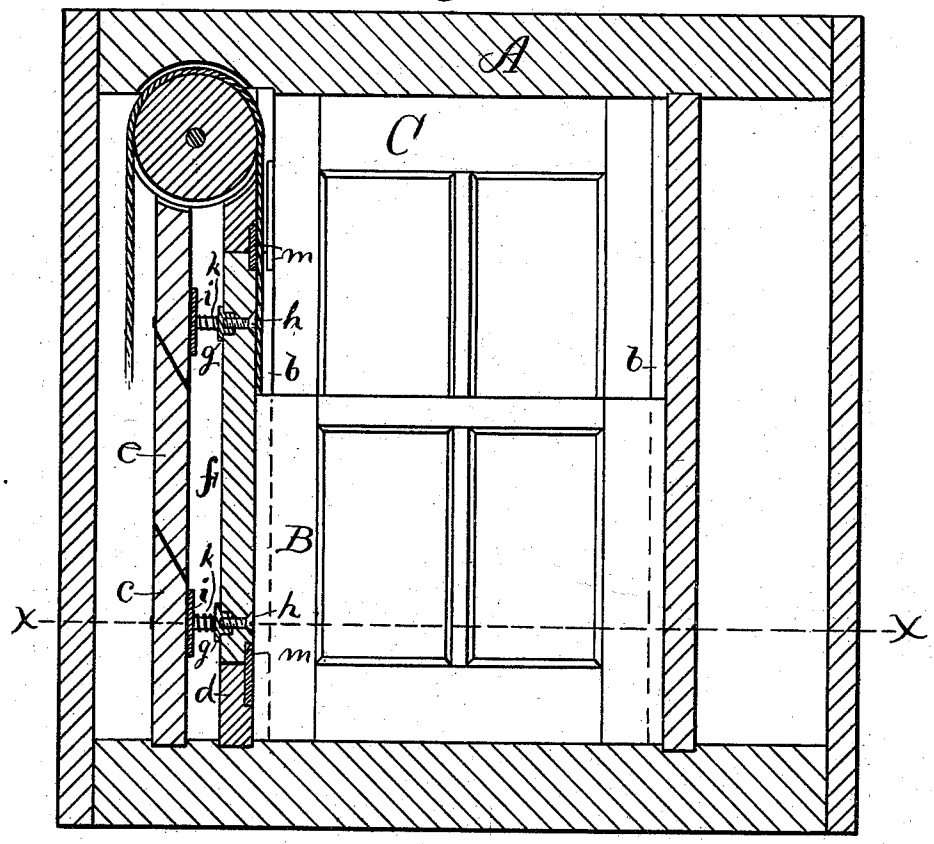
M. CASEY.
Window-Frame.

No. 199,515. Patented Jan. 22, 1878.

Fig. 1.



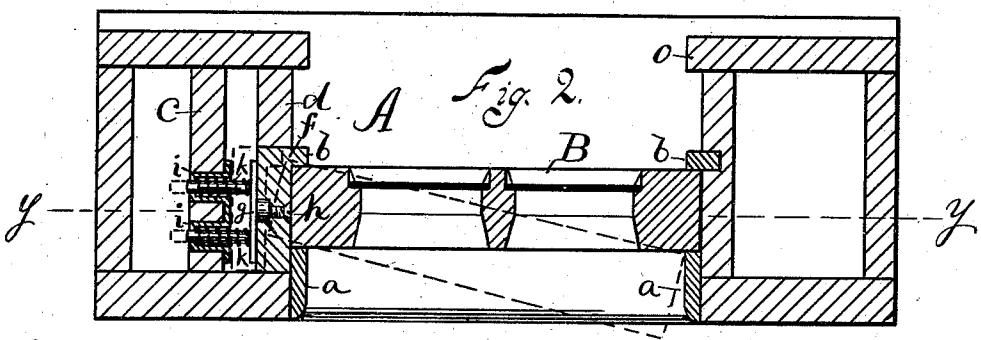


Fig. 2.

Witnesses
H. N. Gale.
L. S. Burr

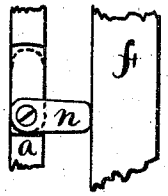


Fig. 3.

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UNITED STATES PATENT OFFICE.

MICHAEL CASEY, OF NEW BRITAIN, CONNECTICUT.

IMPROVEMENT IN WINDOW-FRAMES.

Specification forming part of Letters Patent No. **199,515**, dated January 22, 1878; application filed August 30, 1877.

To all whom it may concern:

Be it known that I, MICHAEL CASEY, of New Britain, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Window-Frames, of which the following is a specification:

The improvement is designed for the more convenient removal of window-sash from their frames without removing the stops or parting-strips; and it consists of making certain combinations, and in the peculiar construction of devices, all as hereinafter described.

In the accompanying drawing, Figure 1 is a vertical section of a window-frame which embodies my invention, the same being taken on the plane *y y* of Fig. 2. Fig. 2 is a horizontal section of the same, taken on line *x x* of Fig. 1; and Fig. 3 is a view of a detached part.

The right-hand side of the frame A is the same as the ordinary window-frame.

When a frame is designed for weighted sashes, I employ the usual stops *a* and parting-strips *b;* but, instead of loosely fitting the latter for removal, I secure them all rigidly and permanently in place. On the left-hand side of the frame I place two longitudinal rails, *c d*, with a space between, and in the rail *c* I form the usual pocket *e*, for removal in adjusting the weights upon the cord, the box for the weight to run in being on the outside of both of the rails *c* and *d*. At the upper ends of the rails *c d* a pulley is placed for the cord to run over, which pulley should be large enough to project beyond both rails, as shown in Fig. 1, in order to carry the weight outside of said rails.

The rail *d*, against which the edges of the sashes B and C work, is provided with a yielding portion, *f*, which is a little longer than the height of the lower sash B, and the bottom of which is a few inches above the lower cross-rail or stool of the frame A. The width of this yielding portion *f* is a little wider than the thickness of the lower sash, against which it is placed, and said portion also embraces a portion of the parting-strip *b*. This yielding portion *f* is supported on metal frames *g g* secured to said portion by means of screws *h*.

Upon the rail *c* sockets *i* are secured, through which sockets the posts of the frames *g* extend, and surrounding said posts are the spiral springs *k k*, which constantly press the yielding portion toward the inside of the frame. At the junction of the ends of the yielding frame *f* and other parts of the rail *d*, stops *m* are secured to said rail, to prevent the springs from throwing the yielding portion inward beyond that point. Upon the inner edge of the stop *a*, at about the middle of the length of the yielding portion *f*, there is a button, *n*, to hold the yielding portion in a depressed condition, when desired, as shown in Fig. 3, which represents a detached portion of the frame as viewed from the outside of the window. By turning the button *n* into the position indicated by broken lines in said figure, the portion *f* will be forced out even with the rest of the rail *d* and parting-strip, as before described, in which position the sashes may be raised and lowered in the ordinary manner precisely the same as if there were no yielding portion present.

When the lower sash B is fully lowered a portion of it is opposite the solid part of the rail *d*, so that the sash cannot then be crowded against the yielding portion to depress it; but, by raising the lower sash B until it is directly opposite the yielding portion *f* and between the stops *m m*, it can be easily pushed sidewise to the left to depress the springs and yielding portion *f* until its right-hand edge will pass the stop *a*, as indicated by broken lines in Fig. 2, when the sash can be removed. The yielding portion *f* can then be depressed and held in that position by the button *n*, when the upper sash C can be lowered to a point corresponding to the position of the yielding portion *f*, its left-hand edge brought into the groove for the lower sash, and against said yielding portion, when its right-hand edge can be slipped outward by the stop *o*, Fig. 2, and the sash removed.

Thus it will be seen that both the upper and lower sash may be removed without loosening any screw, stop, or parting-strip.

The yielding portion may also be used for the ready insertion of screen-frames, whereby frames the full width of the space between the rails may be readily inserted and removed.

I claim as my invention—

1. In a window-frame, the rails *c d*, with

space between, and with the box for the weight to run in outside of both of said rails, in combination with the yielding portion *f* and the spring *k*, placed between the rails *c d* and directly opposite the lower sash, substantially as described, and for the purpose specified.

2. In a window-frame, the yielding portion *f*, in combination with the button *n*, substantially as described, and for the purpose specified.

MICHAEL CASEY.

Witnesses:

JAMES SHEPARD,

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