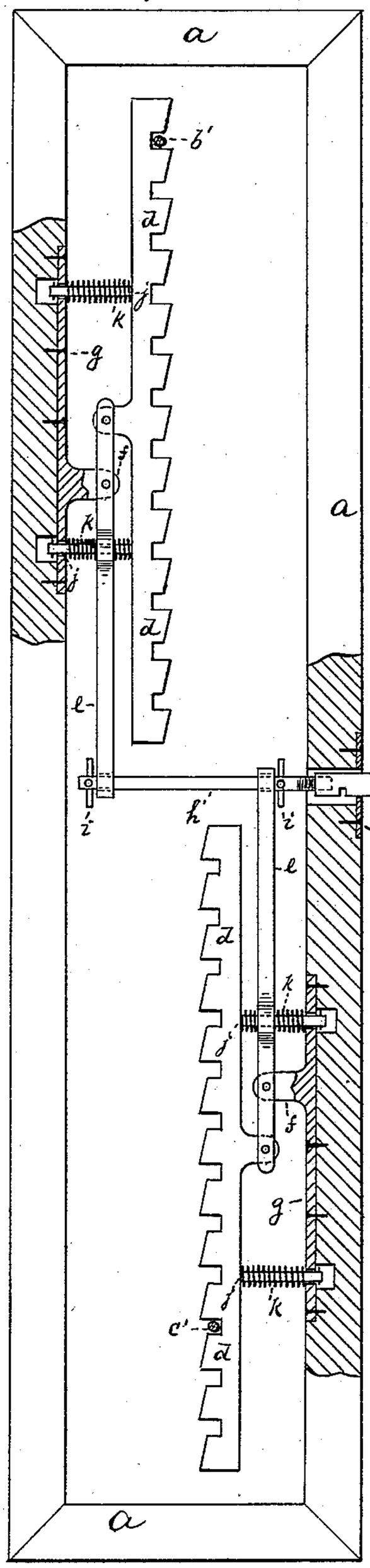
(No Model.)

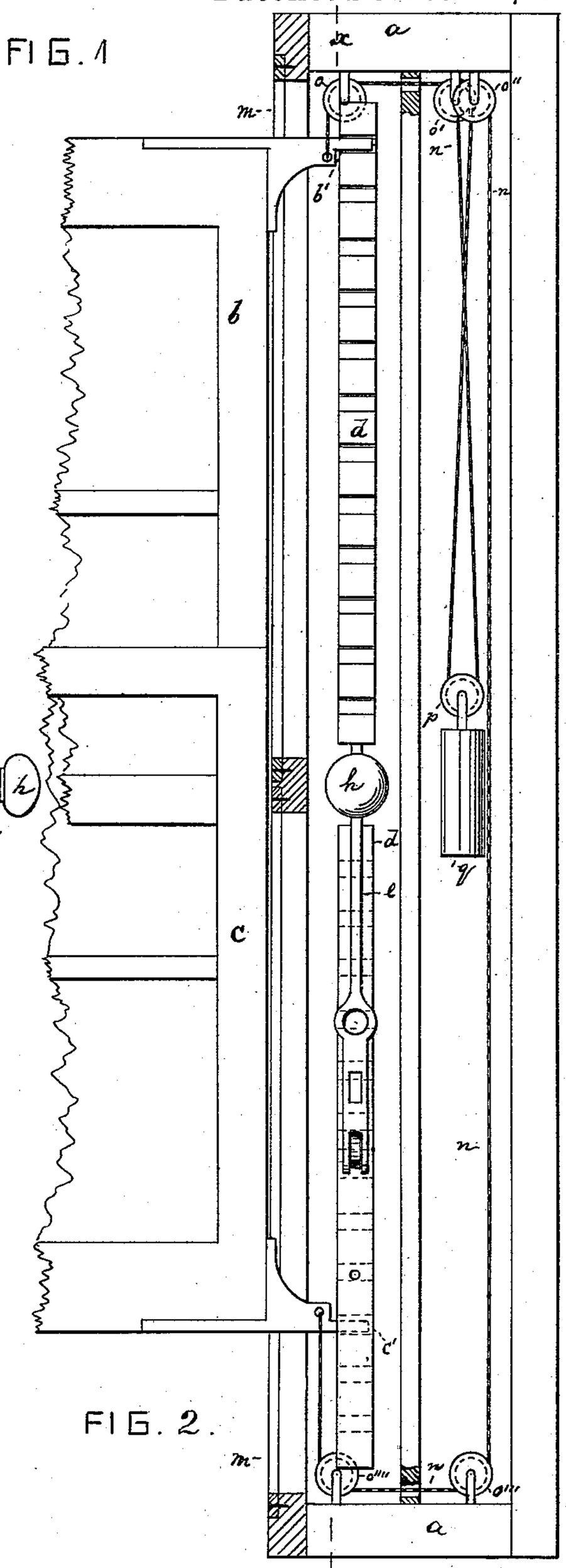
W. LANG.

SASH LOCK.

No. 330,591. Patented Nov. 17, 1885.

FIG. 1





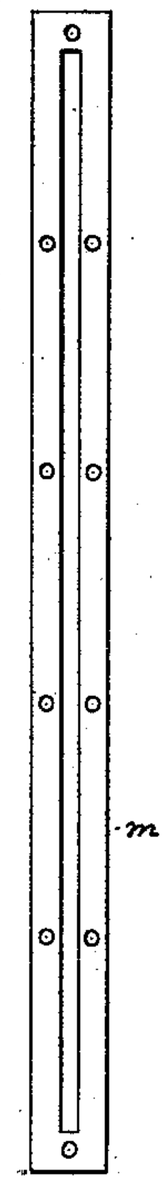


FIG. 3.

FIG. 2.

WITNESSES

Wm. A. Lowe

James. Layou.

INVENTOR

William Lang

by his attorneys

Roeder & Briesen

UNITED STATES PATENT OFFICE.

WILLIAM LANG, OF NEW YORK, N. Y.

SASH-LOCK.

SPECIFICATION forming part of Letters Patent No. 330,591, dated November 17, 1885.

Application filed August 7, 1885. Serial No. 173,838. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM LANG, of the city of New York, in the county and State of New York, have invented a new and Improved Sash-Lock, of which the following specification is a full, clear, and exact description.

This invention relates to a new sash-lock, which permits either sash to be locked to the window-frame. The invention consists in the various elements of improvement hereinafter more fully pointed out.

In the accompanying drawings, Figure 1 is a transverse section of a window-frame on the line *x x*, Fig. 2. Fig. 2 is a front view of the right-hand side of the window-frame with the face-plate and plate *g* removed. Fig. 3 is a detail front view of the plate *m*.

The letter *a* represents one of the upright sides or jambs of a window-frame. *b* is the upper, and *c* the lower, sash. Within the frame *a* there are located two racks, *d d*, opposite, respectively, the upper and the lower sash. Each of the racks *d* is pivotally connected to a lever, *e*, such levers turning on fulcrums formed by lugs *f*, projecting from plates *g*, rigidly fixed within frame *a*. The free ends of levers *e* are perforated for the admission of a sliding hand-rod, *h*, projecting out of frame *a* into the room. Small stops *i* on rod *h* cause the upper lever *e* to be oscillated when rod *h* is drawn into the room, and the lower lever *e* to be oscillated when such rod is pushed outward. The plates *g* are perforated for the admission of pins *j*, bearing with one end against racks *d* and encircled by a spiral spring, *k*, between rack *d* and plate *g*. To the lower end of the lower sash, *c*, there is affixed a pin, *c'*, that engages lower rack *d* when it is in its normal position. A similar pin, *b'*, on the upper end of the upper sash, engages the upper rack, *d*.

The operation of the parts thus far described is as follows: The pins *c' b'* engaging racks *d d*, the sashes *c b* are locked to the frame *a*. When it is desired to unlock the upper sash, the hand-rod *h* is drawn into the room to oscillate upper lever *e* and to draw upper rack *d* backward against the action of springs *k*. The pin *b'* will now be free of rack *d*, and the sash *b* may be moved down or up. The parts work in a similar way in relation to the lower sash, with the exception that the rod *h* must be pushed outward in order to disengage the pin *c'* from rack *d*.

In order to unlock permanently either the upper or lower sash, the rod *h* is provided with two notches made to engage a small face-plate, *l*. When the outer notch of rod *h* engages such plate, the upper sash will be permanently unlocked, while when the inner notch engages such plate the lower sash will be permanently unlocked.

The plate *m* (shown in Fig. 3) is the parting-bead of the sash-frame—viz., one of the parts through which the pins *b' c'* project into frame *a*.

In order to properly operate the sashes in connection with my improved fastening, I have devised the following pulley-and-weight arrangement: To upper pin, *b'*, is attached one end of a rope, *n*, passing over two upper pulleys, *o o'*, and then forming a loop, upon which is hung a loose pulley, *p*, to which the weight *q* is secured. The rope *n* then passes over a third upper pulley, *o''*, and over two lower pulleys, *o''' o''''*, and is finally attached to the pin *c'* of the lower sash, *c*. It will be perceived that when the upper sash is lowered the weight *q* is drawn up, while when the lower sash is raised the weight is lowered. Thus only one weight is used at each side of the sash-frame. If desired, the knob of hand-rod *h* may be removable, so that when taken off the sashes cannot be opened by unauthorized persons.

The improvement herein described may be applied to one sash only, if desired.

I claim as my invention—

1. The combination of frame *a* and sash *b*, having pin *b'*, with rack *d*, pivotally connected to lever *e*, and with rod *h* for operating such lever, substantially as specified.

2. The combination of frame *a* and sashes *b c*, having pins *b' c'*, with rope *n*, running over upper fast pulleys and secured to pins *b' c'*, and with the loose pulley *p* and weight *q*, suspended from rope *n*, substantially as specified.

WILLIAM LANG.

Witnesses:
F. V. BRIESEN,
ROBT. H. ROY.