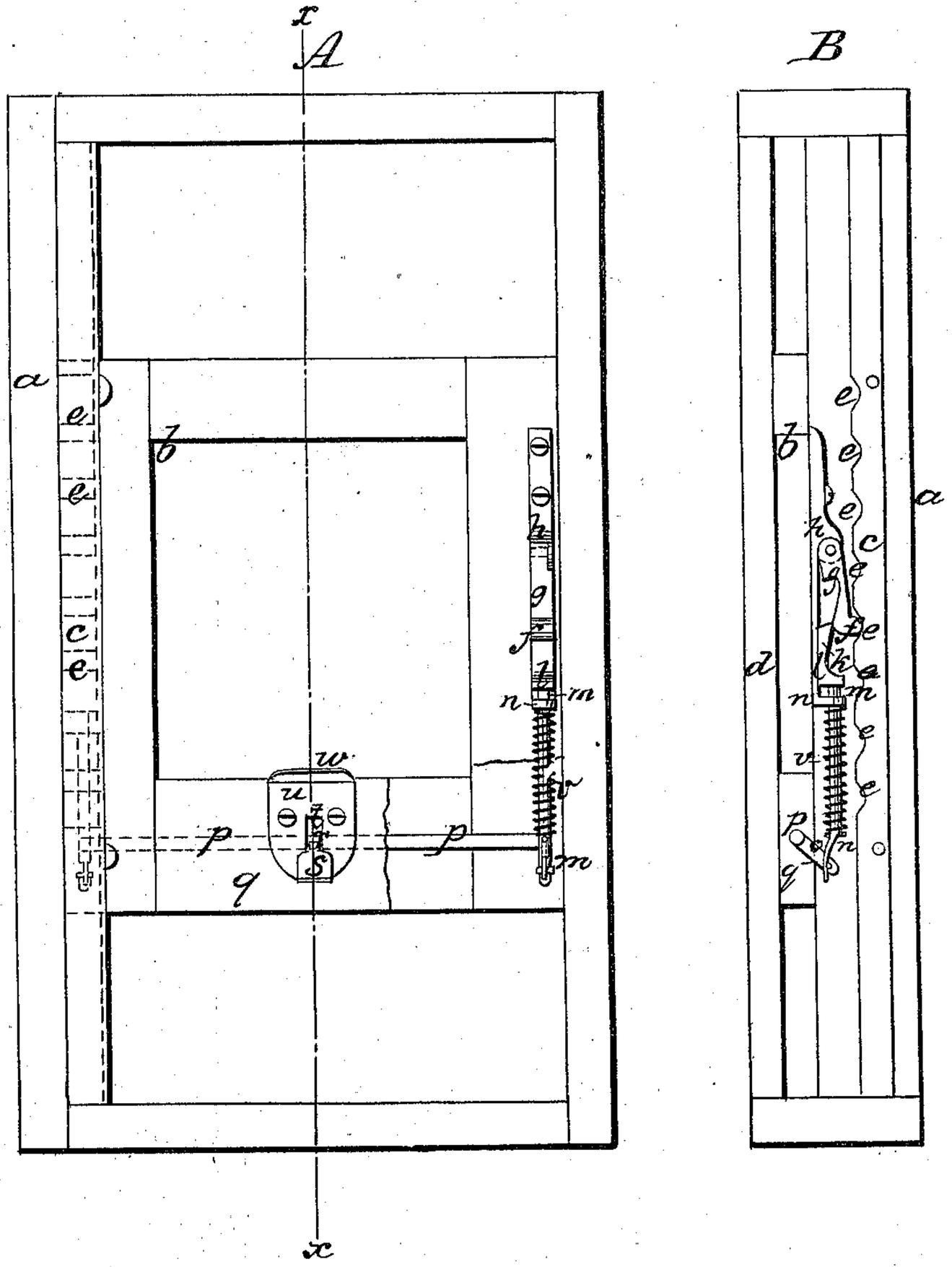
A. Davis,

Sash Holder.

No. 89,741. Patented May 4. 1869.



Witnesses

S. B. Kidder.

M. W. Frothingham.

Inventor.

Addison Davis

by his Atty

Crosby, Gaitted & Gould

United States Patent Office.

ADDISON DAVIS, OF BOSTON, MASSACHUSETTS.

Letters Patent No. 89,741, *dated May* 4, 1869.

IMPROVED SASH-HOLDER.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, ADDISON DAVIS, of Boston, in the county of Suffolk, and State of Massachusetts, have invented an Improvement in Sash-Supporters; and I do hereby declare that the following, taken in connection with the drawings which accompany and form part of this specification, is a description of my invention sufficient to enable those skilled in the art to practise it.

United States Letters Patent, No. 83,697, were granted to me November 3, 1868, for an improvement in sash-supporting mechanism, the invention shown in such patent being designed particularly for use in connection with the windows of railway-carriages, and consisting of a lever-operated stop, which acts both as a bolt to arrest the sash, or hold, or confine it either in closed position, or at any desirable position as to height, and as a wedge, to pack the sash against the sash-beads, for expulsion of dust, and for preventing rattling-movement of it.

My present invention relates to a modification of my said patented mechanism, the improvement consisting in combining a pendent stop, with an incline, at the end of a vertical rod, worked in one direction by the finger-lever, and in the other direction, by the spring, the stop being normally pressed outward, into some one of the notches of the bead, by the action of the spring upon the incline, and falling back out of engagement with the notch, (by gravity, or by the action of the risers of the notches,) when the incline is raised, by lifting the lever.

The drawings represent a window-frame and sash embodying the improvement.

A shows the sash and frame in elevation, one of the beads being removed.

B is a vertical section through the stop, on the line *x x*.

a denotes the sash-frame.

b, the sash.

c, the stop-bead.

d, the outer, or frame-bead.

As in my aforesaid patent, "the sash is made somewhat thinner than the running-space between the beads *c d*, so that it may rise and fall very easily."

Each or either bead *c*, on its inner surface, is provided with a series of notches, *e*, with which engages the sliding stop, *f*.

This stop *f* is, at the end of an arm, *g*, hung pendent from a plate, *h*, fixed upon the inner surface of the stile, the stop swinging freely upon the pin *i*, such pin being preferably so disposed as to cause the stop to swing towards the sash by gravity, when free to do so.

The arm *g* is recessed on its inner side, and into this recess projects the point, or end *k*, of an incline, or sliding dog, *l*, fixed to, or forming the upper end of a vertical rod, *m*, which slides through a guide, *n*, projecting from the plate *h*.

The lower end of the slide-rod is connected to the outer end of an arm, *o*, on one end of a horizontal rocker-shaft, *p*, (preferably journalled within, or running through the lower sash-rail, *q*,) the shank *r*, of a thumb, or finger-piece, *s*, projecting from the rocker-shaft, at the centre of the sash-rail, this shank working in a vertical slot, *t*, made through a plate, *u*, and into the sash-bar.

Around the rod *m* is a coiled spring, *v*, the stress of which presses the rod down, one end of the spring bearing against the guide *n*, and the opposite end against a pin, projecting through the rod.

The operation of the stop will be readily understood. When the thumb-piece *s* is pressed up, the rod *m* is thereby raised, and the point of the incline, or dog *l*, is pushed up, allowing the stop to fall back into the hollow part of the dog.

The sash may now be readily raised or lowered, so long as the thumb-piece is kept pressed up towards a projection, *w*, at the top of the sash-rail. But as soon as the thumb-piece is released, the spring throws down the incline, and the incline presses the stop out into the notch opposite to which it happens to be, and the sash is thereby fixed in position, the pressure of the stop against the back of the notch (caused by the stress of the spring) packing the sash against the outer or frame-bead *d*.

The sash may have such a stop upon each side, or upon only one side, and the incline may be operated by a thumb, or finger-piece, at the side of the sash, but I prefer the arrangement as shown.

I claim the combination of the pendent stop *f*, engaging with the bead-notches *e*, with the incline, or dog *l*, slide-rod *m*, and spring *v*, arranged to operate together, substantially as described.

ADDISON DAVIS.

Witnesses:

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