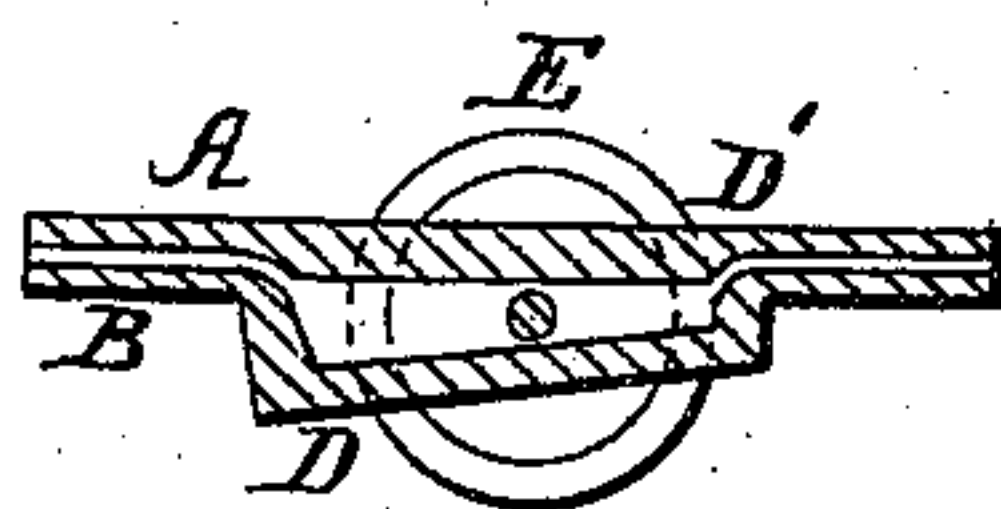
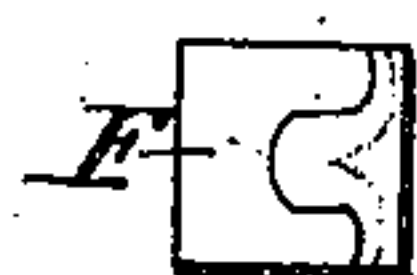
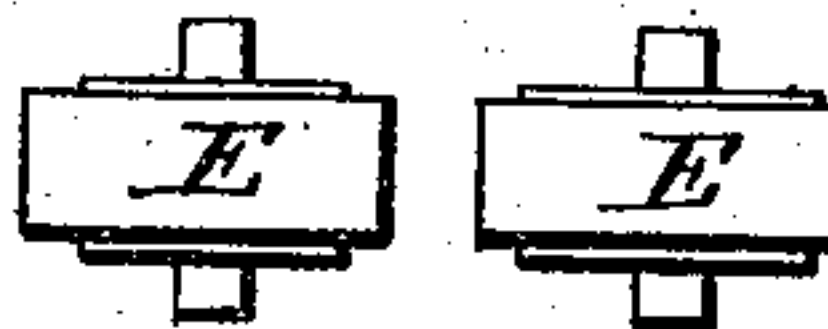
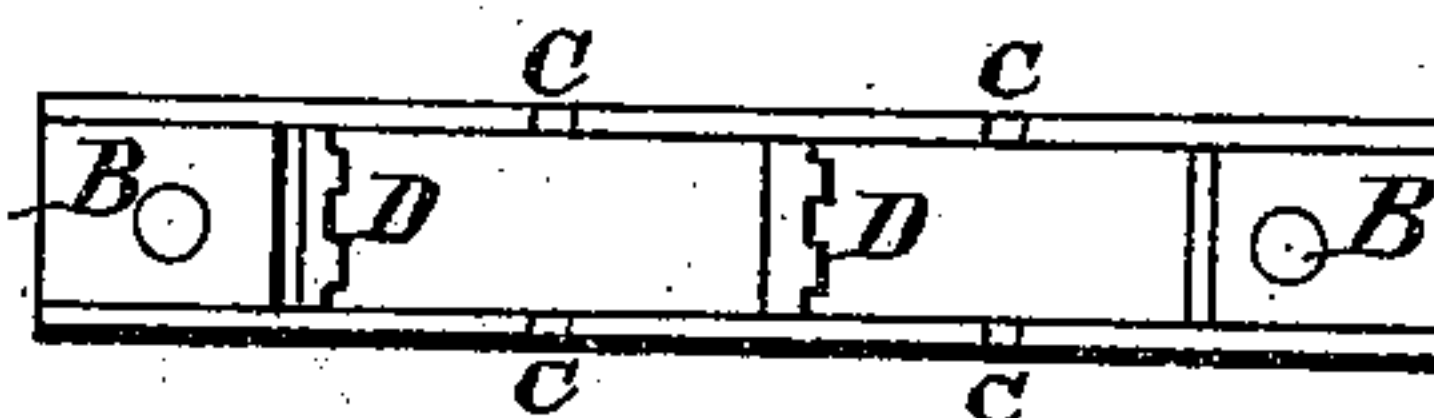
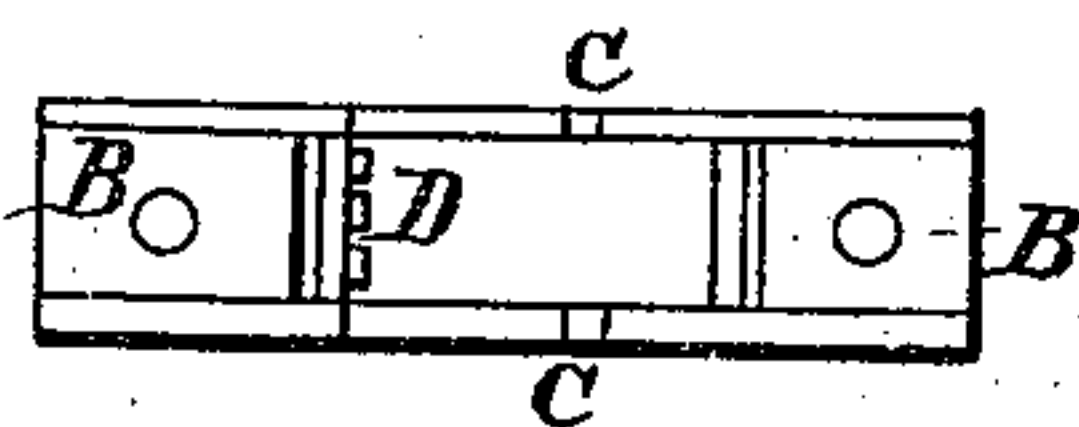
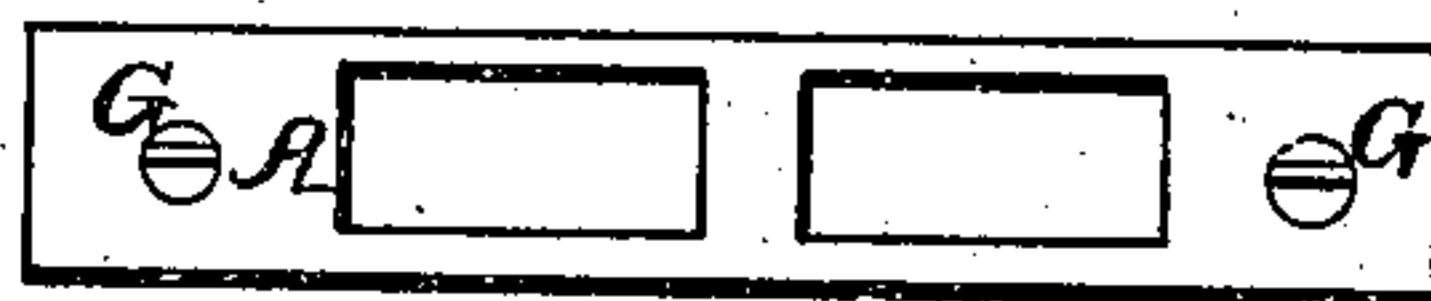
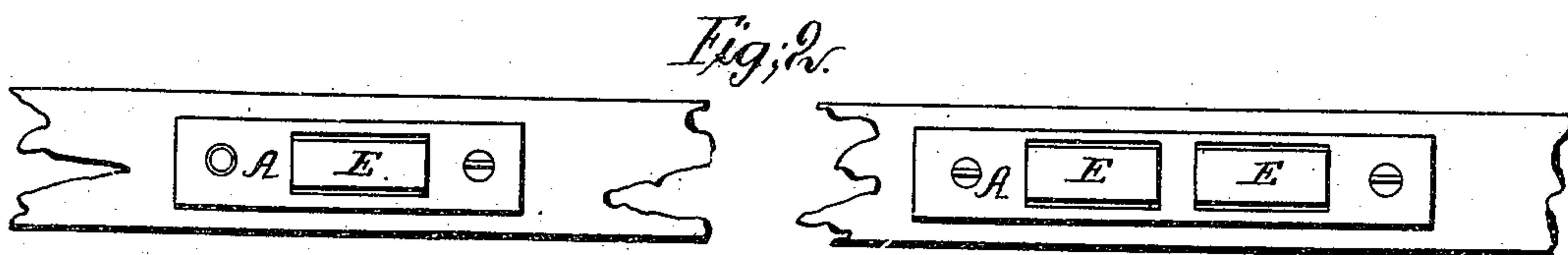


R. B. Huganin.

Sash Holder.

Nº 98,380.

Patented Dec. 28, 1869.



Witnesses;
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J. D. Patten

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Letters Patent No. 98,380, dated December 28, 1869.

IMPROVEMENT IN SASH-HOLDERS.

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

I, R. B. HUGUNIN, of Cleveland, Ohio, have invented certain Improvements in "Sash-Holders," of which the following is a specification.

Nature of Invention.

My invention relates to the use of a roller or rollers, suspended in a plate, with a grooved end, the grooves running the direction the roller turns, the object being to furnish sufficient resistance to prevent the roller from turning by the weight of the sash, and, at the same time, allow it to turn when the sash is being pressed down by hand. The amount of holding-power is regulated by the number and width of the grooves, or extent of friction-surface. The projections furnish the friction, and the indented surface, while affording no resistance, allows the coming of the roller to relieve itself from any tendency to bank up or clamp.

And also to the use, in combination with the above, of V-shaped springs, constructed with slots on their upper sides, and holes in their lower sides, and used for efficiently forcing the "sash-holder" outward, with sufficient power to prevent the rollers from sliding on the casing from the weight of the sash.

Description of Drawings Accompanying this Specification.

Figure 1, side elevation, illustrating roller-plates, projections, grooved ends, rollers, V-shaped slotted springs, embracing the features of my invention.

Figure 2, plan view of the same.

Figure 3, detailed drawing, showing the various parts of my sash-holder.

Figure 4 illustrates my sash-holder, with projections left off, and a grooved, anti-friction surface on the upper part of plate, substituted, to keep the roller in contact or position during the upward movement of the sash.

General Description.

A, upper part of roller-plate.

B, lower part of roller-plate. This plate is cast in halves, because more easily made.

C and C', projections extending up from lower half of plate A B, for the purpose of holding the roller up against the grooved surface, and preventing its moving downward during the upward movement of the sash.

The roller fits between these projections and the grooves, so as to avoid any dropping back of the sash after it is let go of by the hand, while the roller is coming in contact with the grooves, to support it, &c.

The angle of the grooves, in reference to the surface of the roller, is such, being almost a tangent,

that it can roll freely when the sash is raised, though in close contact when the motion is reversed, owing to the different angles of pressure.

Close contact, all the time, is the proper position of my roller with reference to the grooves, but, after a while, wear will occur, and the diameter be diminished; thus a space will disadvantageously occur, &c.

A substitute for this projection is illustrated in fig. 4. When the projections are not used, a grooved surface, D', anti-friction from the angle of pressure during the upward motion of the sash, is substituted on the upper inside end of plate A, being on the opposite end from the grooved friction-surface in plate B. This grooved surface will confine the roller in position on the surface D, during the upward motion of the sash, &c.

D, grooved surface in plate A B. These grooves run in the direction the rollers turn, and may be of any suitable width, depth, or angle, &c. They afford ample holding-friction, and, at the same time, allow the roller to turn when the sash is being pressed down by hand without clamping it, so as to tear off the covering, &c. The projections furnish the friction, and the indented surface, while offering no friction, allows the covering to relieve itself from any tendency to bank up and clamp. With the grooves, the desired friction can be regulated and obtained for sash-holder purposes.

E, a yielding or semi-elastic covered roller. The covering should consist of a rigid, durable substance. Alternate layers of rubber and cloth, or rubber and felt, vulcanized comparatively hard, are, perhaps, as good as any. Cloth, calendered, with sufficient rubber to cover it, and then rolled up in the form of tubing, and vulcanized, then cut to the right lengths to slip over the body of the roller, and cemented there, I use and prefer.

F and F', steel springs, with slots cut in their upper sides, and holes punched in their lower, the hole to hold the spring in position, and the slot to allow it to spring independently of any fastenings, &c.

One of these springs is put in each end of the mortise in the sash for the "sash-holder," and secured there by means of the screws passing down through the holes in the lower halves, &c.

When the sash is new, little space occurs between it and the casing; but in time, by shrinkage, half an inch frequently occurs. It is necessary to overcome this to make a sash-holder of any lasting value. I accomplish this result by means of these springs. I screw the holder down in the mortise, so that its outer face will be on a line with the edge of the sash, then compress the rollers back into the mortise, so as to allow

the sash to enter the casing. When shrinkage occurs, if the springs are good, the holder is forced outward, and fills the space, &c.

G and G', common wood-screws for securing the "holder" to the sash, &c.

Claims.

I claim—

1. The longitudinally-grooved surface D, substantially as and for the purposes herein described.

2. The longitudinally-grooved surface D, roller M, projection C, in plate A B, substantially as and for the purposes herein described.

3. In combination with the elements of the second claim, the slotted springs F and F', for the purposes herein specified.

R. B. HUGUNIN.

Witnesses:

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