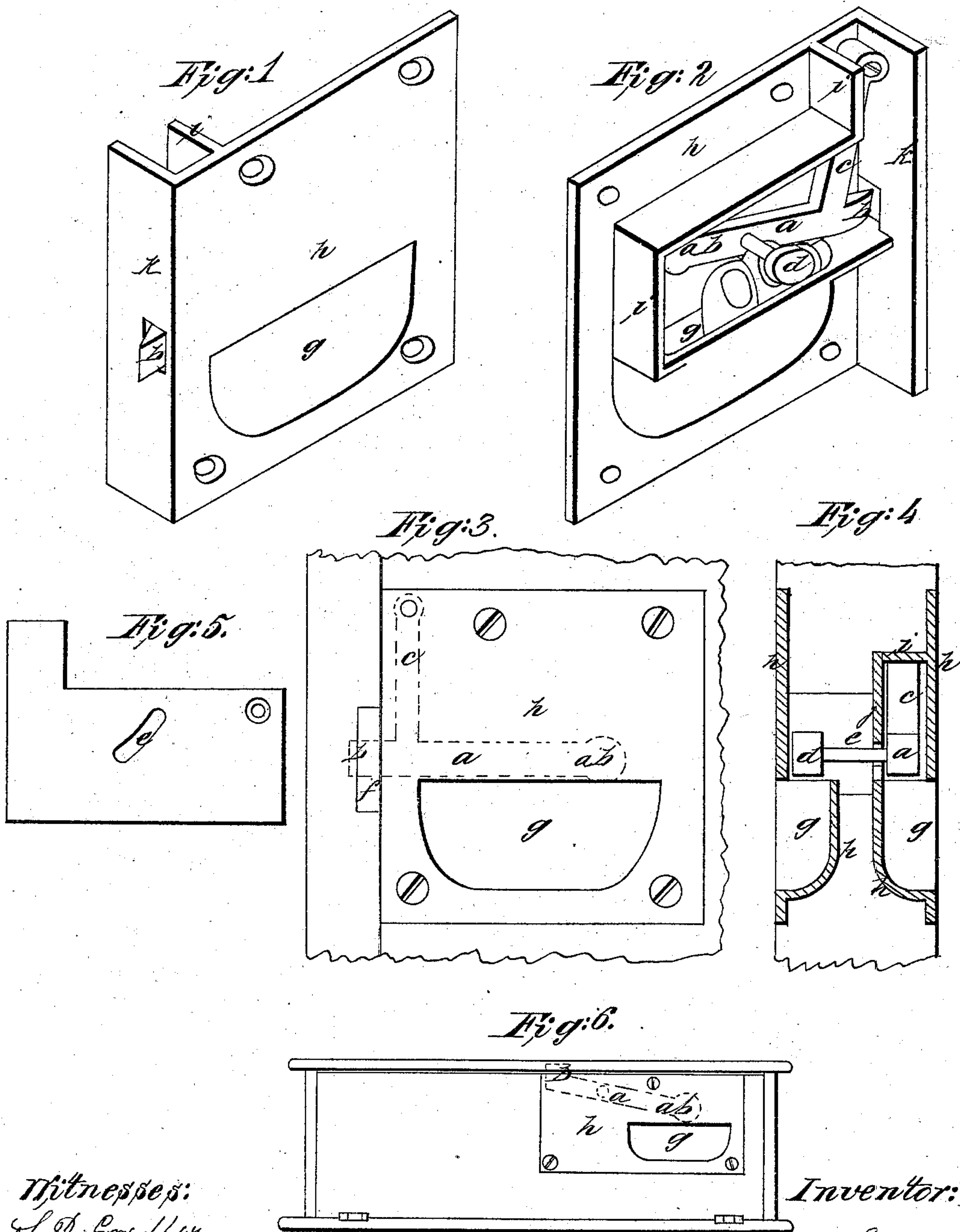


Shepard & Sigourney,
Latch,

No 67,811,

Patented Aug. 13, 1867.



Witnesses:
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JAMES SHEPARD AND JOSEPH SIGOURNEY, OF BRISTOL, CONNECTICUT.

Letters Patent No. 67,811, dated August 13, 1867.

IMPROVEMENT IN LATCHES.

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

TO ALL WHOM IT MAY CONCERN:

Be it known that we, JAMES SHEPARD and JOSEPH SIGOURNEY, of Bristol, in the county of Hartford, and State of Connecticut, have invented a new and improved Latch for doors, cupboards, gates, &c.; and we do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a perspective of the front of our invention.

Figure 2 is an inside view of the same.

Figure 3 is a view of our invention applied to a door, the outside of the plate *h* being the same on either side of the door.

Figure 4 is a section of our invention running lengthwise with the door, exposed from the edge of the door nearest the hinges. The latch in this view is left-handed.

Figure 5 is a view of an inside plate which covers the latch.

Figure 6 is a view of our invention when applied to a door that is hinged on the bottom.

Similar letters of reference indicate like parts.

Our invention consists in the use or employment of a bolt having one end bevelled or slanted, which bolt is provided with an arm, by which it is pivoted or hung to the back side of a plate, with an opening or aperture in it through which to insert the fingers to operate the bolt, and at the same time obtain a hold to pull upon the plate.

a designates the bolt; *b* designates the bevelled or slanted end of the bolt *a*; *a b* designates the end of the bolt *a* that is opposite the bevelled or slanted end *b*, which we will term the long or weighted end; *c* designates the arm of the bolt *a*; *d* designates a headed pin which is secured or fastened to the bolt *a*; *e* designates an opening or slot in the inside plate, fig. 5; *f* designates the guard or catch secured to the casing of the door; *g* designates the opening or aperture in the plate; *h* designates the pull-plate; *i* designates the sides of a box around the latch; *j*, in fig. 4, designates the edge of the inside plate, fig. 5; *k* designates a flange provided with an opening through which the bevelled end *b* of the bolt *a* passes out and in. The broken lines in figs. 3 and 6 designate the position of the latch when the door is closed. Immediately back of the opening or aperture *g* the plate *h* is made to swell or extend inwards to cover the wood, while it remains open sufficiently for the fingers' ends to be admitted, as shown in fig. 4. After the castings are obtained the bolt *a* should be hung by its arm *c* to the plate *h*, as shown in fig. 2. The arm *c* of the bolt *a* should be made near the bevelled or slanted end *b*, in order that the opposite end of the bolt *a* shall be the longest, and heavy enough to force the bolt *a* back into its place after it has been raised. If, for want of space or other reason, the bolt *a* is desired to be made shorter, it can be enlarged or weighted on the long or weighted end *a b*, which will answer the same purpose. The inside plate, fig. 5, should then be placed in position to cover the latch, and then secured or fastened in any proper manner. The headed pin *d* is then passed through the slot *e* in the inside plate, fig. 5, and screwed into the bolt *a* or fastened in any proper manner. The headed pin *d* can be made longer or shorter to accommodate doors of different thickness. The slot *e* is left long enough and of such shape as to allow the headed pin *d* to rise and lower with the bolt *a*. A hole is next made through the door large enough to allow the headed pin *d* to work freely, while the door is cut partly through, sufficiently to admit the box around the latch and the part of the plate *h* that extends inwards. The plate *h* can then be fastened to the door, and another plate *h* without the latch, &c., should be placed on the opposite side, and the latch is ready for use.

To operate the latch it is merely necessary to insert the fingers with the ends upwards, through the opening or aperture *g*, until a good hold is obtained on the pull-plate *h*. By this time the fingers will press the long or weighted end *a b* of the bolt *a*; or if operated from the opposite side the fingers will press the headed pin *d* and raise the bolt *a*, while the bevelled or slanted end *b* is drawn into the door and the door is ready to open, as shown in fig. 2. To close the door, simply push or pull the door to, and the bevelled or slanted end *b* will strike the guard or catch *f*, which will force the bolt *a* into the door, while the long or weighted end *a b* will, of its own weight, force the bolt *a* back into the casing as soon as it has passed the guard or catch *f*.

The plate *h* can be made as ornamental as desired, and letters can be put on the plate *h*, making it answer

for a door-plate. If it is desired to attach a lock, it can be made so as to hold the bolt *a* in its place without making the plate any larger for the addition of another bolt. For an inside fastening, a slide in the plate *h* might be made to slide over the long or weighted end *a b* and hold it so that it could not be raised from the opposite side. For a cupboard-latch, the plate *h*, the flange *k*, the bolt *a*, with its bevelled or slanted end *b*, and its long or weighted end *a b* and its arm *c*, are all that are necessary, as the latch is operated only from one side. When it is designed for show-cases or doors that are hinged at the bottom, as in fig. 6, the latch is necessarily of a little different shape, but when it is combined to the pull-plate *h* it is operated precisely the same, and thus combined will be considered as the same invention. For gates, &c., where the gate swings both ways, the bevelled or slanted end *b* can be bevelled both ways. Knobs may be fastened to the long or weighted end *a b*, and the plate *h* dispensed with if desired.

By our invention we produce an article for door-latches, &c., that is very simple in construction, and consequently sold at a very low price. It is not liable to get out of repair, and will be greatly prized by all house-keepers, as it presents a smooth surface, and thereby cannot catch or tear anything that may come in contact with it.

What we claim as new, and desire to secure by Letters Patent, is—

1. The bolt *a*, with its bevelled or slanted end *b* and its long or weighted end *a b*, pivoted or hung by its arm *c*, and operating substantially as set forth.
2. And in combination with the foregoing, or its equivalent, we claim the pull-plate *h*, the whole constructed and operated substantially as set forth.

JAMES SHEPARD,
JOSEPH SIGOURNEY.

Witnesses:

S. D. GRIDLEY,
H. BECKWITH.