

Ballard & Killin,

Sash Lock.

No. 36,124.

Patented Jan. 26, 1869.

Fig. 1.

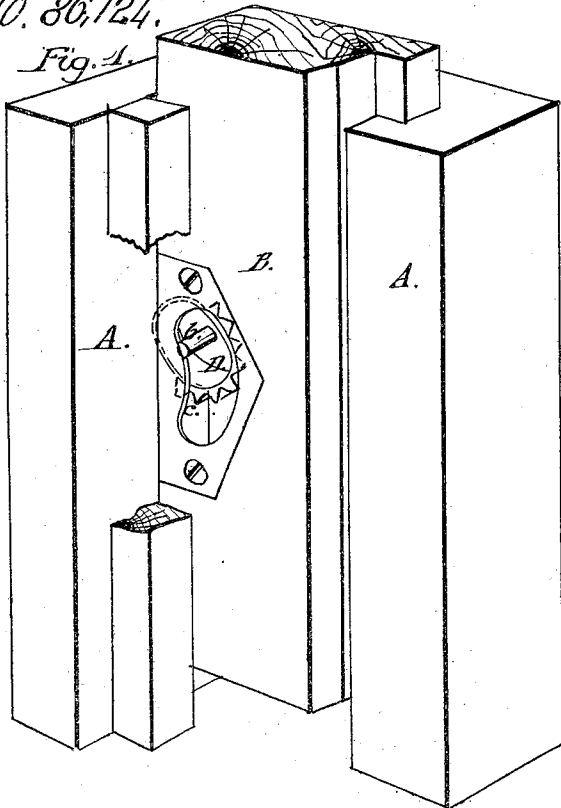


Fig. 2.

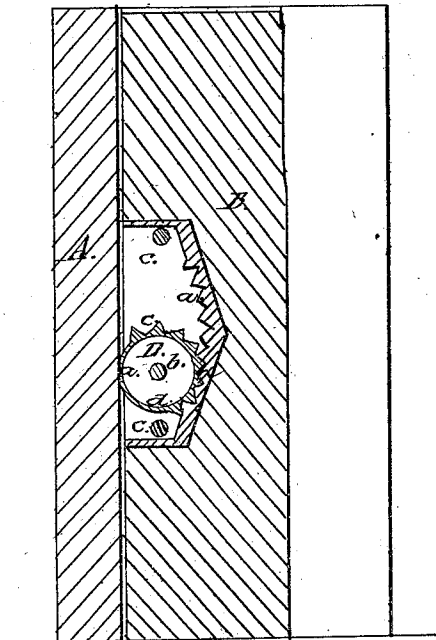
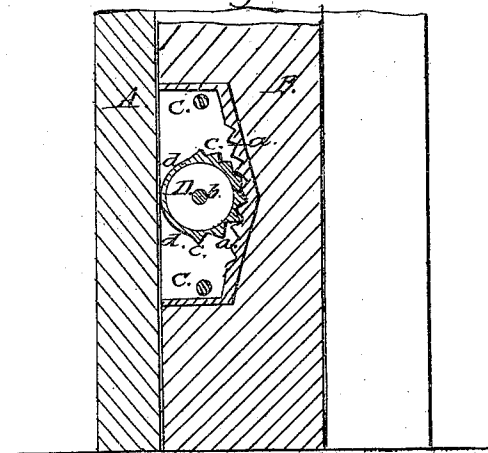


Fig. 3.



Witnesses:

Jno. D. Patten
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Inventors:

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By their Atty. A. B. Bloughton

United States Patent Office.

M. L. BALLARD AND R. B. KILLIN, OF CANTON, OHIO, ASSIGNORS TO R. B. KILLIN AND BALLARD, FAST, AND COMPANY, OF SAME PLACE.

Letters Patent No. 86,124, dated January 26, 1869.

IMPROVEMENT IN SASH-LOCK

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, M. L. BALLARD and R. B. KILLIN, of Canton, in the county of Stark, and State of Ohio, have invented certain new and useful Improvements in Sash-Locks, or Fasteners; and we do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 represents a perspective view of a portion of a sash and its frame, with the lock, or fastener, applied thereto, and in position for holding the sash from being moved up.

Figure 2 represents a vertical section through the sash-frame and fastener, the latter being in position for holding the sash from being moved down.

Figure 3 represents a similar section, but showing the fastener in the position in which it is inactive, and allows the sash to be run up or down, as may be desired.

Similar letters of reference, where they occur in the separate figures, denote like parts of the contrivance in all of the drawings.

Many devices have been devised for locking or fastening window-sash, and, among them, a wheel with cogged teeth has been used, on a single-cogged plane inclined to the edge of the sash. This, however, can only lock the sash in one direction, and not in both or either of its movements, as ours will do.

So, too, two eccentric-rollers have been used, one to hold the sash in one direction, and the other, in the other direction.

Neither of these inventions, though more closely approximating it than any others of which we have knowledge, anticipates or clashes with the lock or fastener which we have devised.

Our invention consists in a sash-lock composed of a loose-rolling wheel or hub, having a portion of its perimeter furnished with teeth or cogs, and a portion of it plain, or without such teeth or cogs, and two inclined racks or cogged planes, into or with either of which the wheel or hub can act, as may be desired, to hold the sash up or down, or to remain inactive in contact therewith, if so desired.

To enable others skilled in the art to make and use our invention, we will proceed to describe the same with reference to the drawings.

A may represent a sash-frame of any kind, and B, a sash running or moving therein.

The lock or fastener is composed of a box, C, with one side open, viz, that next the sash-frame, and at the edge of the sash.

The rear of the box has in it two inclined cogged planes, *a a*.

Within this box there is placed a wheel or hub, D, with a central pin, *b*, through it, which pin may project through a slot in the cap or plate that covers the box, as seen in fig. 1, and by which pin, or any device connected with it, the hub or wheel D can be moved up or down in the box C.

A portion of the perimeter of the wheel or hub D is furnished with teeth or cogs, *c*, which mesh with or run in the teeth or cogs of the cogged planes *a a*.

The remaining portion of the perimeter of said wheel or hub is plain, as at *d*, and this portion presses against the edge of the sash-frame, to hold the sash locked up or down, as the case may be.

When the wheel or hub D is in the position shown in fig. 3, it is inactive entirely, as it is so far within the box that its perimeter will not touch the sash-frame, and in this position the sash may be run up or down.

When, however, the wheel or hub D is rolled up, with its teeth gearing or meshing with the upper cogged plane *a*, the smooth part of the perimeter of the wheel is forced out against the frame until the wheel can roll no further, and in this position it firmly locks the sash against any upward movement.

When, however, in this locked position, it is necessary to move the sash, the wheel is rolled down, the teeth of course meshing into each other, until the wheel lies in the angle formed by the two inclined cogged or toothed racks, as seen in fig. 3, and then the sash will run free.

When the sash is to be locked against a downward movement, the wheel is rolled down, as shown in fig. 2, and any further descent is impossible, as the tendency would be to force or jam the wheel against the frame so tight as to prevent the sash from moving any further.

Thus, a rolling wheel, with teeth on a portion of its perimeter only, and two cogged planes meeting at a point, and inclining thence toward the edge of the sash, admit of locking the sash against a movement either up or down, or allows it, in another position, to run free.

Having thus fully described our invention,

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

A sash-lock, composed of a wheel or hub, whose teeth gear into and work with two inclined toothed planes, so as to lock a sash in either direction, by rolling from one plane to the other, or to allow it to move free, substantially as described.

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Witnesses:

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