J. A. BROWN.

SASH LOCK.

APPLICATION FILED JULY 22, 1920.

1,403,144. Patented Jan. 10, 1922.

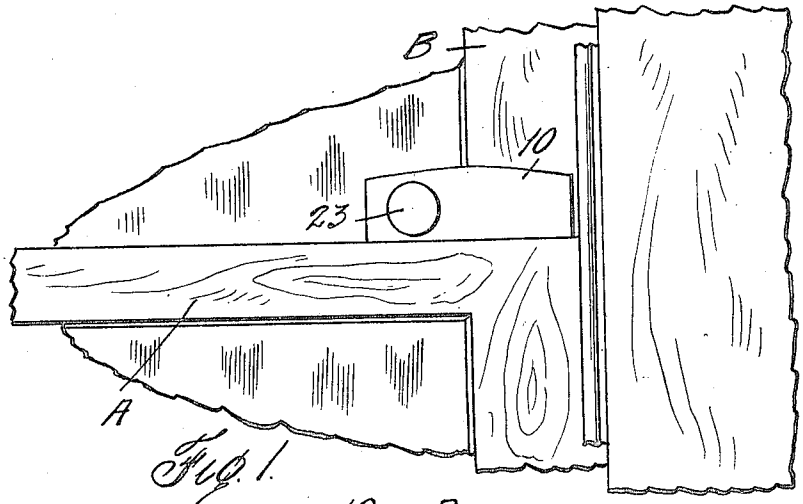


Fig. 1.

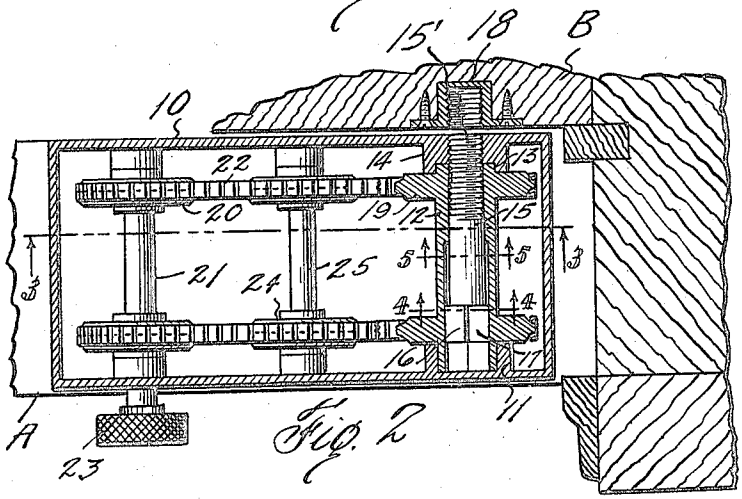


Fig. 2.

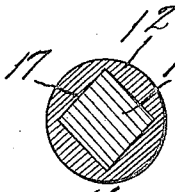


Fig. 4.

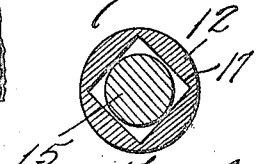


Fig. 5.

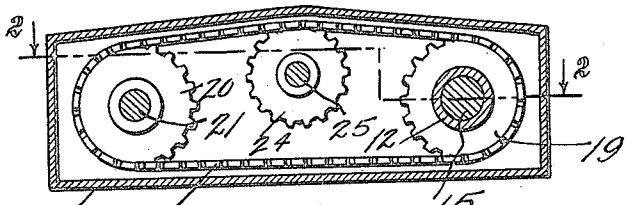


Fig. 3.

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UNITED STATES PATENT OFFICE.

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SASH LOCK.

1,403,144. Specification of Letters Patent. Patented Jan. 10, 1922.

Application filed July 22, 1920. Serial No. 398,269.

To all whom it may concern:

Be it known that I, JOHN A. BROWN, a citizen of the United States, residing at Dallas, in the county of Dallas and State of Texas, have invented certain new and useful Improvements in Sash Locks, of which the following is a specification.

This invention relates to new and useful improvements in sash locks.

The object of the invention is to provide a sash lock carried by the lower window sash in position to engage the side rail of the upper sash and equipped with an operating element at a point removed from the casing, sufficiently for convenient operation. Another aim is to produce a sash lock as well as means for preventing rattling of the sashes.

In carrying out the invention a longitudinally movable locking bolt is mounted in a rotatable element. A rotatable operating element is displaced laterally from the bolt and is connected with the rotatable element for operating the same. By this arrangement the bolt may operate close to the window casing, while the operating element may be located at a point convenient to operate.

The invention will be more readily understood from a reading of the following specification and by reference to the accompanying drawings, in which an example of the invention is shown, and wherein:

Fig. 1 is a partial elevation of a window showing a lock constructed in accordance with my invention in position thereon.

Fig. 2 is a horizontal sectional view on the line 2—2 of Fig. 3,

Fig. 3 is a longitudinal sectional view on the line 3—3 of Fig. 2,

Fig. 4 is a cross-sectional detail on the line 4—4 of Fig. 2, and

Fig. 5 is a cross-sectional detail on the line 5—5 of Fig. 2.

In the drawings the numeral 10 designates a rectangular casing having provision whereby it may be fastened on top of the lower sash A of a window. Near one end the casing is provided with a bearing ring 11 receiving one end of a sleeve or cylinder 12 disposed transversely of the casing. The other end of the cylinder is supported in a bearing seat 13 formed in a collar 14 formed integral with the side of the casing. A locking bolt 15 is disposed in the cylinder and is provided with a square end 16, the cylinder having an elongated guide way 17 receiving the end 16. By this arrangement the bolt may slide axially but cannot rotate in the cylinder, thus the bolt is revolved by the cylinder.

The outer end of the bolt is screw threaded at 15′ and engages in the collar 14 which is screw threaded to receive the bolt. By revolving the cylinder, it will be seen that the bolt will be screwed through the collar and moved longitudinally. A screw threaded keeper 18 is counter-sunk in the side rail B of the upper sash and is positioned to receive the end 15′ of the bolt.

For revolving the cylinder I mount a pair of sprockets 19 on the same. These sprockets are driven by endless chains 22 from sprockets 20 mounted on a transverse shaft 21. The shaft projects from the casing and has a thumb button 23 fastened on its end, whereby the shaft may be revolved. For taking up the slack in the chains idler sprockets 24 are engaged with the same intermediate their lengths. The sprockets 24 are mounted on a counter shaft 25 supported in the casing.

It will be seen that the casing 10 may be mounted so that the bolt 15 will engage the keeper 18 in the rail B of the upper sash at a point closer to the window frame; while the thumb button 23 may be located a sufficient distance from the window frame to enable it to be readily grasped and turned. It will be seen that if the thumb button was fastened directly on the bolt, it would be so close to the window frame as to prevent a proper operation and one could not get a sufficient hold on it, to tighten the lock. When the bolt enters the keeper 18 the sashes will be drawn together and thus the sashes will not only be locked against up and down movement, but will be fastened together and held tightly in their guide ways, whereby rattling will be prevented.

What I claim, is:

1. In a sash lock, a casing, a locking bolt disposed transversely of the casing, said bolt having a screw threaded end, an internally screw threaded keeper, and means off set laterally from the bolt having operative connection with the same for screwing the threaded end of the bolt into the keeper.

2. In a sash lock, a casing, a locking bolt movable transversely of the casing, a keeper receiving the end of the bolt, a cylinder surrounding the bolt, an operating member offset laterally from the cylinder, and means

operated by the member for revolving the cylinder.

3. In a sash lock, a casing having a screw threaded opening, a locking bolt having a screw threaded end engaging in the opening of the casing, a screw threaded keeper receiving the bolt, a cylinder surrounding the bolt, said bolt being free to slide longitudinally in the cylinder but confined against rotation therein, a sprocket mounted on the cylinder, a shaft mounted in the casing, a sprocket mounted on the shaft, a chain connecting the sprockets, and a thumb member on the shaft outside of the casing.

4. In a sash lock, a casing, a locking bolt movable transversely of the casing, a keeper receiving the end of the bolt exteriorly of the casing, revoluble means surrounding the bolt for moving the latter transversely into the keeper, and a laterally off set operating member having connection with the revoluble means for operating the latter.

In testimony whereof I affix my signature.

JOHN A. BROWN.