(No Model.)

S. HAINKEL.

SASH FASTENER.

No. 546,423. Patented Sept. 17, 1895.

Fig. 1.

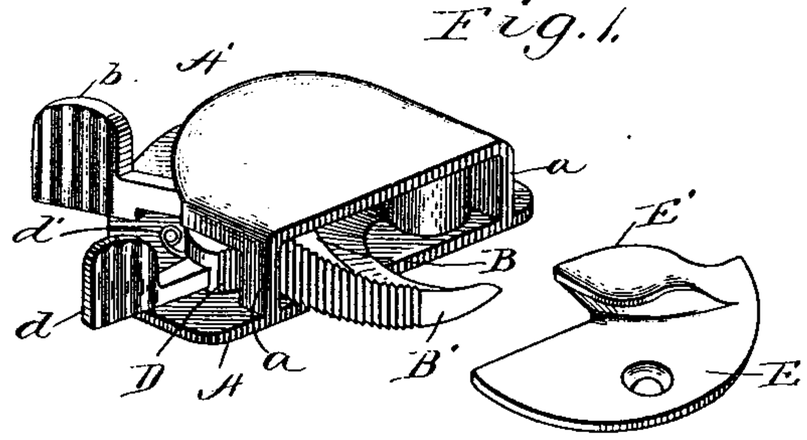


Fig. 2.

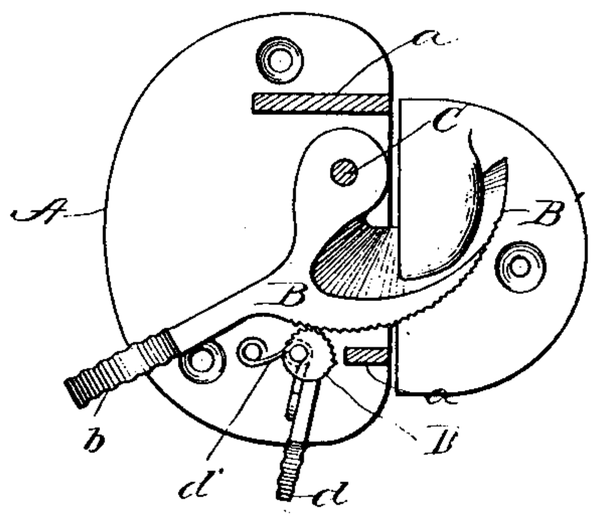


Fig. 3.

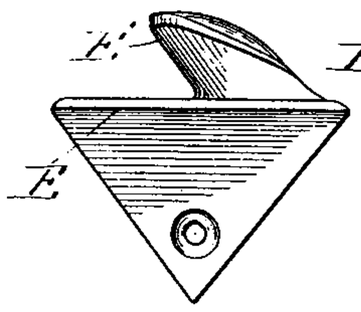


Fig. 4.

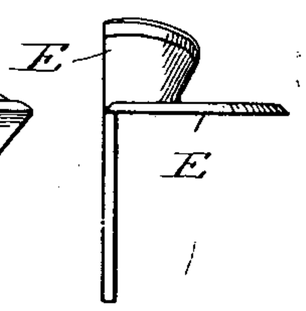


Fig. 5.

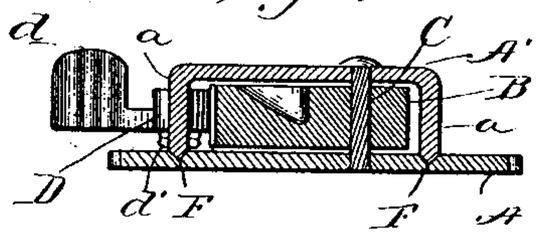
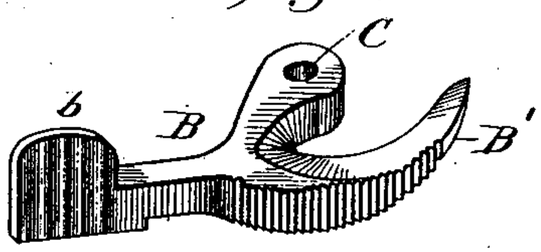


Fig. 6.



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SASH-FASTENER.

SPECIFICATION forming part of Letters Patent No. 546,423, dated September 17, 1895.

Application filed December 13, 1894. Serial No. 531,680. (No model.)

To all whom it may concern:

Be it known that I, SIGEL HAINKEL, of Quincy, in the county of Adams and State of Illinois, have invented certain new and useful Improvements in Antirattler Sash-Locks; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and to the letters of reference marked thereon.

This invention relates more particularly to that class of sash-locks which are adapted for application to the meeting-rails of windows; and it has for its object to provide a lock which will not only prevent the opening of the sashes, but at the same time draw them together and give them a lateral movement in opposite directions, so as to cause them to bind in their guideways and prevent rattling.

The invention consists in certain novel details of construction and combinations and arrangements of parts, all as will be now described, and pointed out particularly in the appended claims.

In the accompanying drawings, Figure 1 is a perspective view of a sash-lock embodying my present invention. Fig. 2 is a top plan view of the same with the top of the casing or housing removed to show the hook and its locking-cam. Figs. 3 and 4 are elevations of the fixed member which is usually applied to the upper sash. Fig. 5 is a sectional view showing a modified construction of housing for a hook. Fig. 6 is a perspective view of the hook itself removed from the housing.

Like letters of reference in the several figures indicate the same parts.

The housing for the hook or movable member is preferably formed by a casting of bronze or other suitable metal and has a flange or base-plate A and covering-plate A′ above the same and connected therewith by side pieces *a*. This construction leaves a clear space between the base-plate and covering-plate adapted for the reception of a hooked member B, usually held by a pivot passing up through the base-plate through bearings in the hook and into the covering, but not entirely through the same, thus leaving the covering-plate smooth and adapting it for a perfect and ornamental finish. The tapered hook itself is provided with a handle portion *b* and a hook portion B′, gradually increasing in thickness from its point to its base, as shown, the outer circumference of which is struck on a curve, with the pivot C as a center, although it is not essential that it should be absolutely segmental, and it is furthermore corrugated or toothed, as shown, while the inner portion of the hook is cam-shaped and provided with an inclined upper surface, the function of which will presently appear.

To hold the hook in adjusted position and permit it to be turned so as to lock the windows while preventing its retrograde movement, except from the inside and by a deliberate intent, a locking-cam D is provided in the housing at one side in position to co-operate with the corrugated circular face of the hook. The cam-surface of the cam is also corrugated, and it is provided with a releasing-handle *d* and a spring *d′* for holding it in operative position.

The fixed member for co-operating with the hook consists, essentially, of a base-plate E preferably made angular, as shown, to embrace and be secured to both faces of the meeting-rail, and an upwardly and laterally projecting portion E′, the under-cut face of which is cam-shaped, as will be readily understood by reference to Figs. 3 and 4, the contour of this portion of the projection being such as to fit with a reasonable degree of accuracy the inner inclined cam-face of the hook when the two parts of the device are turned into locked position, as shown in Fig. 2. In this position, it will be noted, the hook extends around the cam projection on the fixed member, tending to draw the two meeting-rails of the sash together, and at the same time it exerts a lateral pressure which forces the rear sash in one direction and the forward sash in the opposite direction, causing them to bind in their ways in addition to being locked together and thereby effectually preventing all tendency to rattle. Owing to the inclination of the cam-shaped face of the projection and the inclination of the cam-face hook when the two are turned into locked position, an upward pressure will be exerted on the upper sash and a downward one on the lower, thereby still further preventing tendency to rattle.

Where it is desired to cheapen the cost of the devices, I preferably make the covering-plate and base-plate A and A′ separate, as shown in Fig. 5, and form a groove F in the base-plate for the reception of the side pieces *a*, the parts being held rigidly in this position by means of the pivot-rivet C, which in this instance passes way through both the covering-plate and base-plate and is headed up on the outside.

The construction, it will be observed, is very simple and the locking mechanism effective and easily released, there being no parts to be knocked or jolted out of place should the attempt be made to release the lock from the outside of the window, and at the same time the device is composed of few parts, each in itself a casting of the simplest character, and in assembling the parts there is no difficult fitting, such as would require the employment of highly-skilled labor to insure a perfect operation and co-operation of the parts

Having thus described my invention, what I claim as new is—

1. In a sash lock, the combination with the housing, of the hook pivoted therein gradually increasing in thickness toward its base, and having a cam shaped inner face, corrugated outer face and inclined upper surface, the spring pressed corrugated locking cam pivotally mounted in the casing and cooperating with the corrugated face of the hook, independent handles for said cam and hook, and a cooperating member having an undercut cam like projection thereon, with which the hook engages, substantially as and for the purpose set forth.

2. In a sash lock, the combination with the base plate, the independent covering plate having the downwardly extending sides fitting into grooves in the base plate, a cam hook pivoted in the housing formed by the base and covering plates, a pivot passing through the base and covering plates and through the hook for uniting said parts and a cooperating member having a hook-like projection with which the pivot hook engages; substantially as described.

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