

SASH LOCK.

946,818.

Fig. 1.

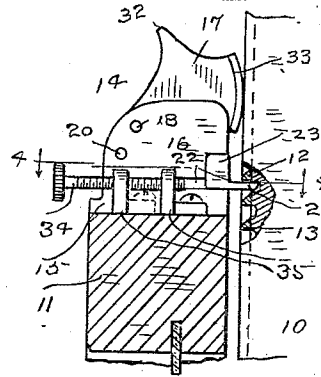
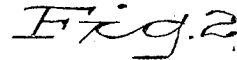


Fig. 3

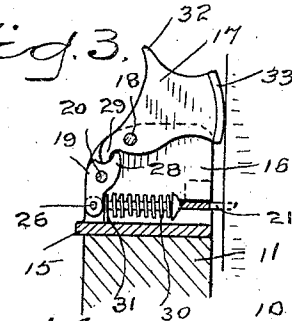


Fig. 4.

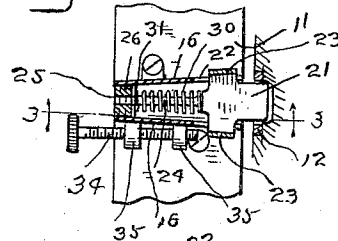
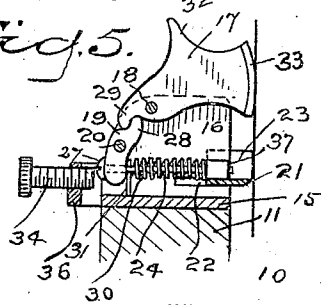


Fig. 5.



H. A. Lamb,
S. W. Atherton.

Joseph Bouniol

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A. M. Webster
ATTORNEY

UNITED STATES PATENT OFFICE.

JOSEPH BOUNIOL, OF BRIDGEPORT, CONNECTICUT.

SASH-LOCK.

946,818.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JOSEPH BOUNIOL, a citizen of the United States, residing at Bridgeport, county of Fairfield, State of Connecticut, have invented an Improvement in Sash-Locks, of which the following is a specification.

This invention has for its object to provide an anti-rattling sash lock adapted to lock both sashes wholly closed or either or both sashes partly open, that is it will lock both sashes against the opening movement but will permit the lower sash to be closed if open, and which shall be provided with means for locking both the locking plate and the dog, thereby securing both sashes against any movement and doing away with the possibility of tampering with the lock from the outer side.

With these and other objects in view I have devised the novel sash lock of which the following description in connection with the accompanying drawing is a specification, reference characters being used to indicate the several parts.

Figure 1 is an elevation illustrating the application of my invention to a window and showing the upper sash slightly lowered and the lower sash slightly raised; Fig. 2 an elevation on an enlarged scale as seen from the right in Fig. 1, the upper rail of the lower sash being in section and the side rail of the upper sash being slightly broken away; Fig. 3 a section on the line 3—3 in Fig. 4 looking in the direction of the arrows; Fig. 4 a section on the line 4—4 in Fig. 2, looking in the direction of the arrows; and Fig. 5 is a view corresponding with Fig. 3, illustrating a slightly variant form of construction.

10 denotes the upper sash, 11 the lower sash and 12 a rack upon the side rail of the upper sash, the teeth 13 of which comprise an abrupt shoulder on the lower side and an incline upon the upper side, as clearly shown in Fig. 3.

14 denotes the frame or casing of my novel lock which comprises essentially a base 15 adapted for attachment to the upper rail of the lower sash and side plates 16.

The essential elements of the device are a dog 17 pivoted between the side plates as at 18, a rocker lever 19 pivoted between the side plates as at 20 and a locking plate 21 which slides in the casing and the forward edge of which is beveled on its underside so

as to adapt it to slip over the teeth of the ratchet when the lower sash is moved downward. The locking plate in the present instance is shown as extending through slots 22 at the forward end of the casing and as retained against lateral movement by upwardly-turned lugs 23 on the locking plate which lie on the outer sides of the side plates. The locking plate is provided with a rearwardly extending shank 24 which is connected to the lower end of the rocker lever. In the form illustrated in Figs. 3 and 4, the rear end of the shank is pivoted in a slot 25 in the rocker lever, as at 26. In the form illustrated in Fig. 5 the shank is a screw which passes through a hole or slot in the rocker lever, is provided with a head 27 bearing upon the rear face of the rocker lever and adjustably engages a block 28 on the locking plate. The upper end of the rocker lever is provided with a rounded lug 29 which is adapted to engage a correspondingly rounded lug 30 on the dog, as is clearly shown in Figs. 3 and 5. A spring 31 surrounding the shank acts to retain the locking plate and the dog in the engaging position as shown in the drawing. The shank passes through a cross wall 32 between the side plates of the casing and the spring bears against the cross wall and against the rear end of the locking plate. The dog is provided with a finger piece 33 for convenience in operation and is provided on its engaging face with a pad 34 of rubber or leather which bears against the upper sash to prevent the possibility of rattling.

In use, the spring acts to retain the parts in the locking position, as shown in the drawing. The rack is made long enough to permit the sashes to be locked when the lower sash is raised and the upper sash is lowered, either or both, for the purpose of ventilation. In order to enable the sashes to be placed in any desired position, the operator, by means of the finger piece on the dog, swings the dog backward out of engagement with the upper sash, the effect of which is to swing the upper end of the rocker lever forward and the lower end backward and to withdraw the locking plate from engagement with the rack. The instant the operator relieves the backward pressure upon the dog the spring will throw the locking plate forward into engagement with the teeth of the rack and by means of the rocker lever will throw the dog into engagement with the face of the sash (in

the present instance against the face of the rack). When locked in the partly open position the lower sash may be closed without manipulation of the lock by simply moving it downward, the beveled face of the locking plate slipping freely over the bevels of the rack teeth but the shoulders on said teeth preventing upward movement of the sash.

In order to render the lock absolutely secure against any possible manipulation of the dog from above or below when a sash is partly open, I provide a locking screw 34, which in the form illustrated in Figs. 1 to 4 inclusive is mounted in lugs 35 upon the outer side of the casing and the forward end of which is adapted to bear upon one of the upwardly-turned lugs 23 upon the locking plate to prevent the retraction of the plate. As shown in the drawing, the screw is not in operative position and the locking plate is free to be operated by means of the dog against the power of the spring.

In the form illustrated in Fig. 5, the structure differs in that the locking screw is mounted in a yoke 36 upon the rear of the casing and is adapted to bear against the head 27 of shank 24. The effect is the same in both cases; that is, to lock the locking plate against retraction and to lock the dog against movement.

Having thus described my invention I claim:

1. A sash lock comprising a sliding locking plate, a pivoted anti-rattling dog, a rocker lever engaging the dog and connected to the locking plate and a spring acting to retain the locking plate and dog in the locking position.

2. A sash lock comprising a sliding locking plate, a pivoted anti-rattling dog having a lug, a rocker lever having a lug engaging

the lug on the dog and being connected to the locking plate and a spring acting to retain the locking plate and dog in the locking position.

3. A sash lock comprising a sliding locking plate, a pivoted anti-rattling dog, a rocker lever engaging the dog and connected to the locking plate, a spring acting to retain the locking plate and dog in the locking position and means for locking the locking plate and dog in the locking position.

4. A sash lock comprising a sliding locking plate, a pivoted anti-rattling dog, a rocker lever engaging the dog and connected to the locking plate, a spring acting to retain the locking plate and dog in the locking position and a locking screw engaging the locking plate to retain the parts in the locking position.

5. A sash lock comprising a sliding locking plate having a bevel, a pivoted dog, a rocker lever engaging the dog and connected to the locking plate, a spring acting on the locking plate and a rack adapted to be engaged by the locking plate and having teeth provided with abrupt shoulders and inclines.

6. A sash lock comprising a casing having a cross wall, a sliding locking plate having a shank passing through the cross wall, a pivoted dog, a rocker lever engaging the dog and pivoted to the shank and a spring bearing on the locking plate and the cross wall to retain the locking plate and dog in the locking position.

In testimony whereof I affix my signature in presence of two witnesses.

JOSEPH BOUNIOL.

Witnesses:

A. M. WOOSTER,
S. W. ATHERTON.