

H. H. MEYER.  
SASH LOCK.

APPLICATION FILED FEB. 25, 1903.

NO MODEL.

FIG. 1.

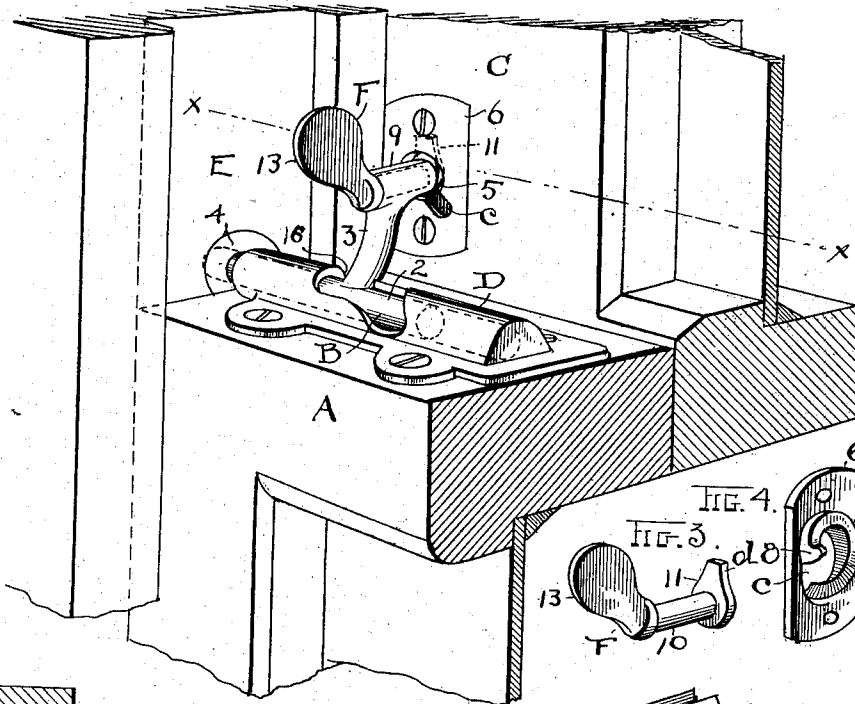
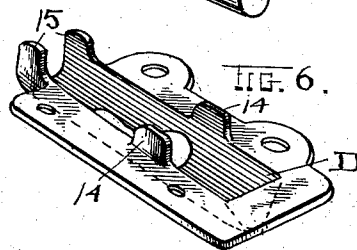
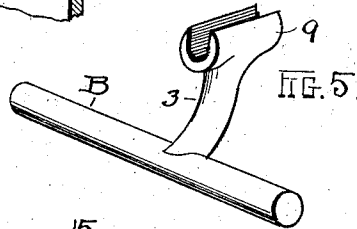
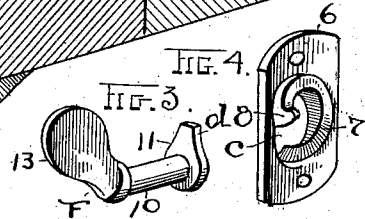
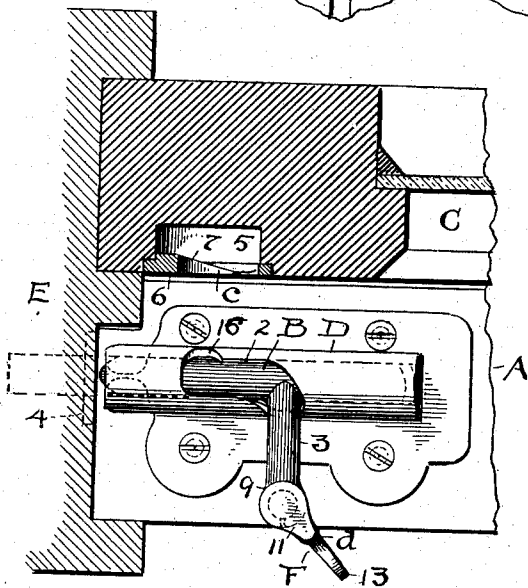


FIG. 2.



ATTEST  
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R. J. J. J. J.

INVENTOR  
Hermann H. Meyer

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# UNITED STATES PATENT OFFICE.

HERMANN H. MEYER, OF CLEVELAND, OHIO.

## SASH-LOCK.

SPECIFICATION forming part of Letters Patent No. 738,465, dated September 8, 1903.

Application filed February 25, 1903. Serial No. 144,974. (No model.)

*To all whom it may concern:*

Be it known that I, HERMANN H. MEYER, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Sash-Locks; and I do declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to sash-locks; and the invention consists in the construction and combination of the parts, substantially as shown and described, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective view of the lock and cross-sections of two sashes with which the lock is engaged. Fig. 2 is a plan view on a line corresponding substantially to *x x*, Fig. 1. Figs. 3 to 6, inclusive, represent details of the lock, as hereinafter fully described.

The plan of this lock is to place a locking-bolt upon the top of the lower sash A to engage the window-casing and to lock the lower sash with upper sash C, so that when such engagement is made neither sash can be moved from that position. In this way I may provide for ventilation at the top of the upper sash by lowering the same as much as may be desired and making engagement therewith in its lowered position relatively as appears in Fig. 1. This is done by providing engaging points for the lock on the upper sash at different elevations.

As shown, B represents the locking-bolt supported in barrel D, which is firmly affixed upon the top of lower sash A at its corner, and the said barrel is provided with a curved slot 2, and B has an arm 3, adapted to run in said slot and to be thrown into vertical position, as in Fig. 1, for locking or to be rotated downward and outward in the lower near end of said slot, so as to swing it back out of locking position, as in Fig. 2. When the bolt is in locking position, as in Fig. 3, it projects into a socket 4 in window-casing E, and there may be one or more such sockets or holes in the said casing at different elevations as may be desired, which enables ventilation to be provided at the bottom of the lower sash by raising the same and bolting it into a socket

4 higher up. When bolt B is in locking position in casing E, arm 3 stands upright and in position to be used in locking the upper sash, and the said sash is shown here as having a recess 5 in its face, covered by plate 6, provided with a hole *c*, somewhat resembling a keyhole, on the inner edge of which is a cam 7, which gradually rises from its entrance-point to stop projection 8 at the end of said cam.

The arm 3 itself has a barrel 9 transversely across its top, which comes into a horizontal position with its inner extremity opposite hole *c* in plate 6, and confined within this barrel is the locking device F, Fig. 3. This device comprises a short shaft 10, engaged in barrel 9, a catch 11, fixed on the inner end of said shaft, and a short lever 13 upon its outer end and by which the said shaft and its catch are rotated to effect locking engagement. When the catch is brought to position to be entered into the opening *c* in plate 6, it can only enter by carrying its point *d* into the corresponding point of said opening *c*, where cam-surface 7 begins. Then as the shaft 10 is rotated catch 11 rises gradually over the said cam-surface 7 more or less to draw the sashes together; but it cannot pass stop 8. This effectually binds the sashes together and prevents rattling between them, as well as excluding air, and makes the window air-tight in this respect. The dotted lines, Fig. 1, show a common position of the catch when the window is closed.

In operation, therefore, bolt B is first brought into locking engagement with the window-casing, and this brings the locking mechanism for the upper sash into position to be engaged. Then by pressing catch 11 forward into opening *c* and behind cam 7 the shaft 10 can be rotated by its handle 13 and the catch will ride up on cam 7, and thus effectually lock the upper sash, too. When thus locked together, the parts are absolutely safe against opening from the outside except by such force as will break the window, for it is impossible to open either the lower or the upper sash by picking or otherwise and without breaking the window unless the lock be purposely opened from the inside.

In Fig. 5 I show bolt B and its arm and barrel as they appear before shaft 10 is in-

serted. After said shaft is placed in position in barrel 9 the lips of the barrel are forced together and the barrel completed. In Fig. 6 the barrel D is shown as having lips 14 and 5 15, which are closed over the bolt when the same has been put in position and the parts assembled. It will thus be seen also that there are two rocking movements in the operation of these parts. The first is that of 10 bolt B, which when it is moved to locking position is rotated, and then the locking device for the upper sash is rotated in the barrel of the arm integral with said bolt to lock said sash.

15 Modifications of this invention might evidently be made and not depart from the spirit thereof. For example, I might provide a cam about shaft 10 at the base of handle 13 instead of placing the cam on the inside of 20 plate 6. Then, again, I might avoid the endwise movement of bolt B and the engagement with the window-casing and simply have the bolt rotate so as to swing arm 3 back and forth, and thus lock the two sashes together. How- 25 ever, I prefer the present construction all around.

When arm 3 is pressed inward to make locking engagement, it drops into a small recess 16 at the end of slot 2, and this forms a 30 shoulder which confines said arm and prevents the bolt from being moved lengthwise without first disengaging the lock or catch 11.

What I claim is—

35 1. As a new article of manufacture, a sash lock comprising a rotatable bolt and means to confine the same on a sash, said bolt having a fixed arm and a rotatable lock in the

upper portion of said arm at right angles to said bolt and constructed at its inner end to make locking engagement with the upper sash, 40 substantially as described.

2. The bolt and the barrel in which the same is rotatably supported, said bolt provided with an upright arm and a barrel transversely 45 thereon, and a rotatable locking member for the upper sash engaged in said barrel and provided with a catch at one end and a handle at the other end, substantially as described.

3. The bolt and the barrel in which the same is rotatable, said bolt having an integral arm 50 with a barrel transversely at its top, a rotatable lock for the upper sash in said barrel, and a plate having an opening through which said catch is engaged, in combination with 55 the lower sash supporting said bolt and its barrel, and the upper sash supporting said plate and having a recess behind the opening therein, substantially as described.

4. The window-casing provided with a bolt-hole and the window-sashes therein, in com- 60 bination with a bolt on the lower sash engaged in said hole in the window-casing and provided with an arm having a rotatable lock at its upper end, a cavity in the upper sash 65 and a plate covering the same provided with a hole and a cam on its inside adapted to be engaged by the aforesaid lock, substantially as described.

Witness my hand to the foregoing specification this 12th day of February, 1903.

HERMANN H. MEYER.

Witnesses:

R. B. MOSER,  
V. KEYS.