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M. I. OSTROWSKI

2,357,608

SASH LOCK

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Fig. 1.

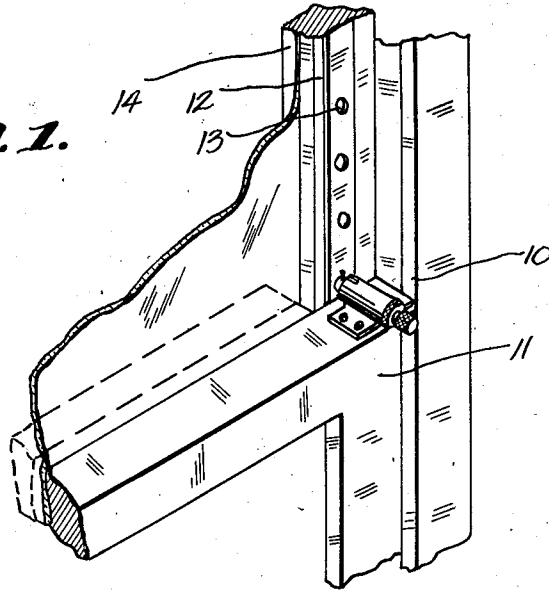


Fig. 2.

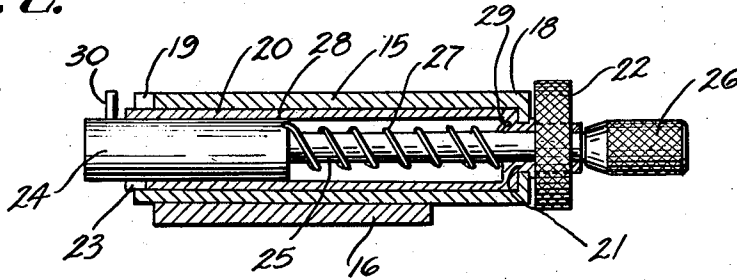


Fig. 3.

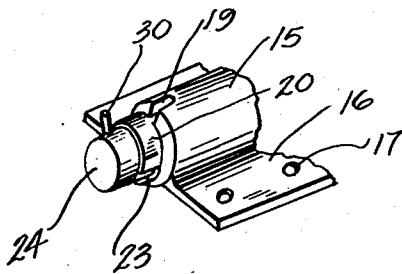
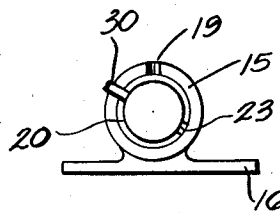


Fig. 4.



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SASH LOCK

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3 Claims. (Cl. 292—60)

The purpose of my invention is to provide a lock by means of which sashes in windows may be secured against being opened or raised by a person standing outside a respective window. More particularly, the purpose of my invention is to provide a lock which cannot be operated with one hand but which requires the use of both hands of the person operating it.

Another purpose of my invention is to provide a lock wherein certain elements must be brought into alinement, before a bolt which is a part of it, may be withdrawn to an unlocking position, this being most difficult to achieve by a person standing outside the window.

Keeping in mind these advantages, my aim is to devise a lock of simple construction, economical to produce and easy to install.

I shall now describe my invention with respect to the accompanying drawing in which,

Fig. 1 is a fragmentary perspective view of two window sashes, showing my lock and the manner of its installation;

Fig. 2 is a longitudinal sectional view of my lock;

Fig. 3 is a perspective view of the operative end of my lock, with some elements partly withdrawn from its casing for better disclosure;

Fig. 4 is the end view of my lock as shown in Fig. 2.

Similar numerals refer to similar parts throughout the several views.

The lock comprises a cylindrical casing 15, resting on a flat base 16, provided with holes 17 for insertion of fastening screws or bolts. At one end, the casing is turned in to form a rim 18. At the opposite, or what may be termed its outer end, the casing contains a radially disposed slot 19. Placed within the casing in close contact with the inner surface thereof, is a sleeve 20, forming at one end a reduced tubular member 21 which passes through an opening skirted by rim 18 of casing 15, and extends outwardly beyond its end. At its opposite end, the sleeve contains a radial slot 23. A knob 22, seated on the tubular member 21, and suitably keyed thereto, serves to rotate the sleeve within the casing.

A bolt 24, slidably placed within the sleeve 20, is connected to a rod 25, which passes axially through the tubular member 21, and terminates in a knob 26, mounted on the outer end of said rod. A spring 27, coiled around rod 25, is anchored at one end to a shoulder 29, formed at the point where the diameter of the sleeve 20 is reduced to form member 21. At the other end, indicated by numeral 28, said spring 27 is affixed

to bolt 24. The bolt extends beyond the end of the casing 15, and carries a pin 30, radially projecting therefrom and placed at some distance from its end. Normally the pin is disposed at a point diametrically opposite slot 23 in sleeve 20, although the angle of the diversion between the pin and the slot may be less.

The arrangement described above, makes it possible to rotate the sleeve with the bolt by means of knob 22, and to rotate the bolt within sleeve 20, and against the tension of spring 27, by means of knob 26.

The lock is intended to be secured to the sash of a window as shown in Fig. 1, in which the lock, as a whole, is indicated by numeral 10, one sash is indicated by numeral 11 and another sash is marked by numeral 14. A metal plate 12 is attached to the frame of sash 14 and is provided with spaced holes 13. The lock is mounted on sash 11 in such a way that the operative end of bolt 24, may be projected into one of said holes 13.

I shall now describe the operation of the lock. It will be assumed for the purpose, that sashes 11 and 14 are locked in place by having bolt 24, project into the lowest hole 13, as shown in Fig. 1. In order to raise the lower sash or to lower the upper, the bolt must be withdrawn from said hole. To do this, sleeve 20 with bolt 24 therein, is rotated by means of knob 22 until slot 23 in said sleeve, is directly in alignment with slot 19 in casing 15, whereupon the sleeve is held in that position by means of said knob 22, while bolt 24 is rotated against the tension of spring 27, by means of knob 26, until pin 30 is opposite the two slots. At this point the bolt is partly withdrawn into the sleeve by means of knob 26, so as to bring the pin into said slots 19 and 23. As the slot 23 and the pin are normally radially opposed to each other, and it is only against the tension of spring 27 that they are brought into alinement, it will be seen that the tendency of the sleeve to rotate back to its normal position with respect to the pin held in slot 19, will help to retain the pin in said slot and prevent an accidental release of the pin therefrom. It requires a push on knob 26 in the direction of the casing to disengage the pin from slots 19 and 23.

It will be seen that some changes may be made in the construction of the lock described by me without departing from the inventive principle disclosed herein. What I, therefore, wish to claim, is the following:

1. A sash lock of the kind described, comprising, a cylindrical casing provided with a radial

slot in its wall, at one end thereof, a cylindrical sleeve within the casing, having a similar radial slot at its corresponding end, and forming at its other end a tubular member of reduced diameter and extending beyond the end of the casing, a knob seated on said tubular member, a retractable bolt within the sleeve, projecting therefrom and affixed to a rod, axially extending from said sleeve through said tubular member and terminating in a knob, a spring coiled around said rod, one end of said spring being affixed to the bolt and the other to the sleeve, a pin set radially on the part of the bolt projecting from the sleeve, at an angle to the slot in the sleeve up to 180 degrees, and a base to mount said lock for use.

2. A lock of the kind described, comprising, a cylindrical casing with a radial slot in one end, a cylindrical sleeve inside the casing with a similar slot, a retractable bolt inside the sleeve with a radial pin on the end thereof partly projecting from said sleeve, a coiled spring inside the sleeve connecting it to the bolt and keeping the slot in said sleeve out of alinement with said pin, knob means attached to the sleeve to aline the slots,

and knob means affixed to the bolt to aline the pin, against the tension of the spring, with the slot in the sleeve, and to withdraw the bolt into the sleeve until the pin enters the alined slots.

3. A sash lock of the kind described, comprising, a cylindrical casing having a radial slot in its wall at one end, and an inwardly turned rim at the other, a sleeve within the casing having a similar slot in its wall at the corresponding end thereof, a tubular member extending axially from the sleeve beyond the rim of the casing, a knob seated on said member, a slidably retractable bolt within the sleeve, partly projecting therefrom, an axially disposed rod, connected to the bolt, said rod passing through the tubular member and terminating in a knob, a spring coiled around the rod, inside the sleeve, and connecting it to the bolt, a pin extending radially from the part of the bolt which projects from the sleeve, said pin being normally held by the spring at an angle with relation to the slot in the sleeve, and means for mounting the lock for operative use.

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