(No Model.)

# W. J. SMITH.

## SASH FASTENER.

No. 305,348. Patented Sept. 16, 1884.

Fig. 1.

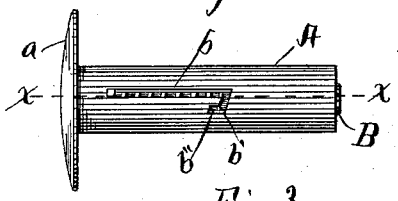



Fig. 2.

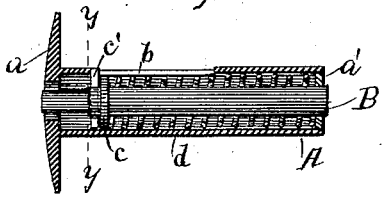



Fig. 3.

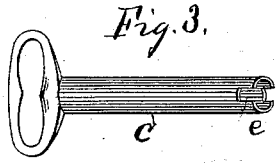



Fig. 4


Fig. 5.

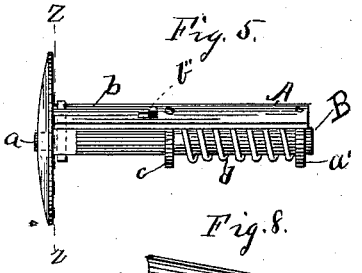



Fig. 6.

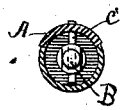



Fig. 7.

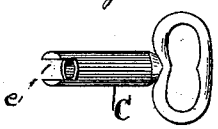



Fig. 8.

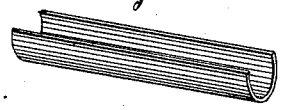
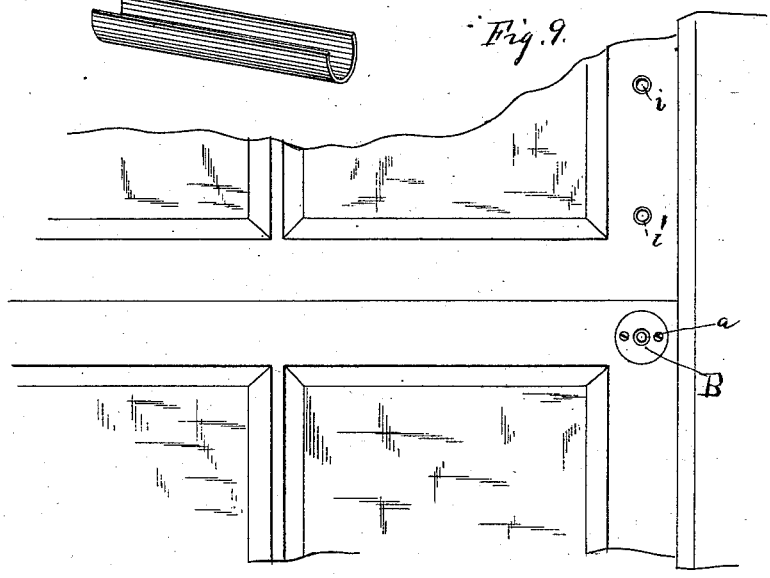


Fig. 9.

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# UNITED STATES PATENT OFFICE.

WILLIAM J. SMITH, OF CHARLOTTESVILLE, VIRGINIA, ASSIGNOR OF ONE-HALF TO J. W. DOLIN, OF SAME PLACE.

## SASH-FASTENER.

SPECIFICATION forming part of Letters Patent No. 305,348, dated September 16, 1884.

Application filed September 27, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM J. SMITH, of Charlottesville, in the county of Albemarle and State of Virginia, have invented certain new and useful Improvements in Lock and Sash Fasteners; and I do hereby 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, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

This invention has for its object to provide improvements in that class of devices known as "locks" which are especially adapted for locking window-sashes.

To this end it consists in the construction and combination of parts, as will be more particularly described hereinafter, and pointed out in the claim.

Reference being had to the accompanying drawings, Figure 1 represents a side elevation of the device, and Fig. 2 a longitudinal section thereof on the line *x x*. Fig. 3 is a perspective view of a key for operating the same. Fig. 4 is a cross-section through *y y* of Fig. 2. Fig. 5 is a side elevation, with a separable part removed, of the device slightly modified. Fig. 6 is a cross-section thereof on the line *z z*. Fig. 7 is a perspective view of the key, also slightly modified. Fig. 8 is a perspective view of the separable portion of Fig. 5. Fig. 9 illustrates the device as a window-sash fastener.

Referring to the parts by the letters marked thereon, A represents a hollow shell or casing, having to one end an escutcheon or head, *a*, which serves for fastening the device in a sash-stile, it being provided with holes for that purpose. At the opposite end of the shell A is a cap or head, *a''*, having an opening in the center for an end of the bolt, as has also the escutcheon *a*. In the side of said shell is a longitudinal slot, *b*, which terminates in a right-angle branch, *b'*; or, instead of the right-angle branch, it may be a branch describing an arc of a circle, but in either case to end with the recess *b''*. (Shown clearly in Fig. 1.)

B' is the bolt which extends through the shell A, and is held at the ends in the central openings of the heads *a a'*, and adapted to slide therein. Integral with the bolt or not, as desired, and near the key end thereof, is a collar, *c*, and inserted through the said bolt before this collar is a pin, *c'*, which pin works in the slot *b* in the shell as the device is locked and unlocked. Surrounding and held on the bolt B, between the head *a'* of the shell and the collar *c* of the bolt, is a helical spring, *d*, which is compressed between said head and collar when the device is locked, and again relaxed when unlocked.

C is a key for operating the device, and which is hollow at its smaller end for a short distance, and provided at diametrically-opposite sides thereof with slots or recesses *e*. By placing this key on the end of the bolt through head *a* of the shell, (or, in other words, the key end,) with the sides of recesses *e* embracing pin *c'* and pushing the said bolt inward until the pin *c'* reaches the branch slot *b'*, and then turning it to the right the pin is brought into the recess *b''*, and the bolt, thus kept from returning, is maintained in a locked position.

In Fig. 5 I have shown a preferred form of construction, the shell in this instance being made in two semi-cylindrical portions, one portion being formed with the heads *a a'* and the collar *c*. The other portion of the shell (which is shown separately in Fig. 8) is adapted to be fitted to the one first mentioned in such manner that, when joined, to resemble a perfect hollow casing, as shown in Fig. 1. By having the shell thus formed one part can be readily slipped off the other to replace or repair the spring when necessary. The bolt, in this instance near the end to which the key is fitted, is made square in cross-section, so that the slightly-modified key shown in Fig. 7 will embrace the square sides and enable the pin *c'* to be turned into the recess *b''* when pushed forward, as stated. The key shown in Fig. 7 only differs from that shown in Fig. 3 in that the sides of the slots *e* are made flat instead of concave, each key to conform to the particular shape of bolt employed.

In Fig. 9 my device is represented as a sash-fastener. In the upper sash, mortises *i* are made one above the other, at any suitable distance apart. The locking device is fitted in the top of the lower sash, on a line with said

mortises. By raising the bottom sash until the bolt registers with any one of the mortises and pushing the bolt inward and locking it by the use of the key the sash can be maintained at any desired elevation. It will be apparent that when the sash is down and locked it will be impossible to raise the same either from without or within, unless the key is used. This key is never to be left in the lock, but either carried in the pocket or hung up on the wall, beyond reach from without.

I am aware that it is not new in this line of inventions to employ a slotted cylinder provided with a spring-actuated bolt that moves therein to lock the sashes; and I am further aware that it is not new in some kinds of lock to form the casing in two parts; but I am not aware of the specific form of device herein claimed ever having been used.

What I claim is—

A sash-fastener consisting of the shell made in two semi-cylindrical parts, one part thereof formed with the slots *b b'*, and having the heads *a a'* and collar *c*, and the other part adapted to fit said first part, forming thereby a complete cylinder, the bolt having pin *c'*, and moving through head *a* and collar *c*, and spring *d*, held on the bolt between said head and collar, the whole adapted to be operated by a removable key, substantially as and for the purpose described.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

WILLIAM J. SMITH.

Witnesses:

EDWARD E. ELLIS,

O. E. DUFFY.