

UNITED STATES PATENT OFFICE.

HIRAM S. DOTTS, OF MOUNDSVILLE, WEST VIRGINIA, ASSIGNOR OF ONE-HALF TO W. H. GIESEY, OF WHEELING, WEST VIRGINIA.

SASH-FASTENER.

No. 839,370.

Specification of Letters Patent.

Patented Dec. 25, 1906.

Application filed May 22, 1906. Serial No. 318,212.

To all whom it may concern:

Be it known that I, HIRAM S. DOTTS, a citizen of the United States, residing at Moundsville, in the county of Marshall, State of West Virginia, have invented certain new and useful Improvements in Sash-Fasteners, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to a sash-fastener, and particularly to a structure mounted upon one sash and adapted to engage the other sash, and also a locking device carried by the window-frame.

The invention has for an object to provide a novel and efficient construction and arrangement of dogs by which the sashes may be connected together for either raising or lowering the upper sash, said dogs being constructed for adjustment so that either thereof may be used in operative position or both may be entirely disengaged from the other sash.

A further object of the invention is to provide improved means by which the sashes may be drawn together to prevent rattling or movement thereof when closed.

Another object of the invention is to provide a novel and improved construction and arrangement of locking-plate carried by the frame and adapted to automatically engage and hold the fastening device carried by the sash in its adjusted position.

Other and further objects and advantages of the invention will be hereinafter set forth, and the novel features thereof defined by the appended claims.

In the drawings, Figure 1 is an elevation of a window having the invention applied thereto. Fig. 2 is a horizontal section on the line 2 2 of Fig. 1. Fig. 3 is a detail elevation of the post carrying the raising and lowering dogs and also the antirattling hook and locking-arm. Fig. 4 is a detail elevation of the raising and lowering dogs with the former in operating position. Fig. 5 is an edge view of the parts shown in Fig. 3. Fig. 6 is a section on the line 6 6 of Fig. 5. Fig. 7 is a perspective of one of the staples used upon the upper sash. Fig. 8 is a similar view of a modified form of this staple used in connection with the antirattling hook. Fig. 9 is a plan of the blank from which the locking-plate is formed. Fig. 10 is a perspective of

this locking-plate. Fig. 11 is a plan of the base-plate, and Fig. 12 is a section on the line 12 12 of Fig. 11.

Like numerals of reference indicate like parts throughout the several views of the drawings.

The numeral 1 designates a window-frame of any desired construction or size which is provided with the lower sash 2 and the upper sash 3, slidingly mounted in the usual manner, the former being provided with frictional rollers 34, mounted thereon at one side and traveling upon the parting-strip to prevent side friction or jamming of the sash. Disposed upon the top rail 4 of the lower sash is the post 5, which is provided upon its upper surface with the pivoting-lugs 6, in which the lowering-dog 7 is mounted, said dog being provided with a shoulder 8 at its lower portion to engage the face of the post 5, as shown in Fig. 4. The lowering-dog 7 is provided upon its under face with the pin 9, upon which the raising-dog 10 is mounted for sliding movement by means of the slot 11 therein. This raising-dog is adapted to swing into the position shown in Fig. 4 and be retained therein by means of the U-shaped slot 12, forming at its opposite end portions recesses 13 and 14, in either of which the pin 15, carried by the dog 7, is adapted to seat. When seated in the recess 14, as shown in Fig. 3, the lifting-dog is then out of operative position, and when seated in the recess 13, as shown in Fig. 4, this dog is thrown into the field of action, engaging the staple 16, carried upon the face of the upper sash.

The staple 16 may be of any desired character. A preferable form thereof is, however, shown in Fig. 7, where a securing-screw 17 is mounted at one end thereof and the opposite end provided with apertured lug 18, through which a removable screw 19 is applied and secured in position, as shown in Fig. 1. One or more of these staples, which may be adapted to cooperate with the antirattling means hereinafter described, is provided with a depending hook 20 therefrom, as shown in Fig. 8. For the purpose of throwing the raising and lowering dogs entirely out of the path of these staples the post 5 is rotatably mounted by means of the base-plate 21, as shown in Figs. 11 and 12, which also secures the parts to the sash. This plate is formed with the opening 22 at one

side, so as to permit the close fitting of the same around the base 23 of the post, and when thus secured the proper tension is obtained to govern the rotation of the post and parts carried thereby. This rotation may be effected by means of the handle 24 of any desired character.

For the purpose of cooperating with the depending hook 20 of the lower staple 16 a hooked lever 25 is mounted in a transverse opening in the post and is adapted to have the hook 26 thereof thrown behind the portion 20 in the rotation of the post, while extending in the opposite direction from the post is the locking-lever 27, the outer end of which is formed with the shoulder 28. These cooperating locking-levers are adapted to be adjusted toward and from the center of the post and to be secured in such adjusted position by means of the screw 29, extending downward from the top of the post into contact with these levers. With the antirattling lever adjusted to the proper length it will be seen that when the post is swung to bring the end of this lever beneath the staple-hook the sashes will be drawn firmly together and held against any rattling or other movement, so that an effectual locking function is thus secured, as the top of the hook 20 prevents any movement of the sashes to raise or lower the same.

Cooperating with the locking-lever 27 is a locking-plate 29, adapted to be mounted upon the window-frame by means of the angle-plate 30 at one side thereof. This plate 29 is formed with a tongue 31, pivotally mounted at its inner end at 32 in any desired manner and is formed with the lugs 33 to bear on the plate 29. Any means may be used to hold this plate in proper position—for instance, a spring 34, mounted on the plate 30, as shown at 35. This locking-lever is adapted to be formed from a blank, as shown in Fig. 9, the cut-away portion being used to form the tongue, the pivot 32 of which is partially formed from the body of the blank, thus permitting the plate to be formed by a stamping and bending operation, so as to greatly economize the construction thereof and render the same accurate.

The operation of the several parts of this invention will be obvious from the foregoing description, and it is only necessary to state that when the lowering-dog is engaged with one of the staples upon the upper sash this sash may be moved downward in the travel of the lower sash, and likewise when the lifting-dog is shifted into the position shown in Fig. 4 the upper sash will be raised in the movement of the lower sash, and after such raising the lower sash is free to return to its closed position. It will be seen that by a proper adjustment of these dogs either the lower or upper sash may be retained open to any desired extent for any purpose and held

or fastened in such position, while by a proper rotation of the post these dogs may be entirely removed from the path of the staples and the antirattling hook brought into engagement with the cooperating staple therefor, so as to draw the sashes together and effectually lock them in position, while the post itself is also locked against any tampering by means of its lever contacting in its oscillation with the tongue of the locking-plate, which is pushed to one side until after the lever passes the same, when it is immediately returned and the lever locked between the tongue and the edge of the locking-plate, as shown in Fig. 10. While this device is adapted in its different parts to accomplish the several functions before described, it will be obvious that one or more of these parts may be omitted or thrown out of operative position and the remaining part used.

Having now described my invention and set forth its merits, what I claim, and desire to secure by Letters Patent, is—

1. In a sash-fastener, a post having raising and lowering dogs pivotally mounted thereon one of said dogs being adjustable upon the other.

2. In a sash-fastener, a post having raising and lowering dogs pivotally mounted thereon one of said dogs being adjustable upon the other and having means for securing it in adjusted position.

3. In a sash-fastener, a post having raising and lowering dogs pivotally mounted thereon one of said dogs being adjustable upon the other, an antirattling hook carried by said post and adapted to engage a cooperating hook, and means for pivotally mounting said post.

4. In a sash-fastener, a post having raising and lowering dogs pivotally mounted thereon one of said dogs being adjustable upon the other, an antirattling hook carried by said post and adapted to engage a cooperating hook, means for pivotally mounting said post, a locking-lever carried by said post, and a plate cooperating with said lever.

5. In a sash-fastener, a post having raising and lowering dogs pivotally mounted thereon one of said dogs being adjustable upon the other, an antirattling hook carried by said post and adapted to engage a cooperating hook, means for pivotally mounting said post, a locking-lever carried by said post, a plate cooperating with said lever, and means for adjustably mounting said antirattling hook and locking-lever in said post.

6. In a sash-fastener, a post having raising and lowering dogs pivotally mounted thereon one of said dogs being adjustable upon the other, a locking-lever extending radially from said post, means for pivotally mounting said post, and a locking-plate provided with a tongue to engage said lever.

7. In a sash-fastener, a post provided with pivoting-lugs, a toothed lowering-dog mounted in said lugs, and a toothed raising-dog mounted upon the lowering-dog for reciprocatory and oscillatory movement relative thereto.

8. In a sash-fastener, a post provided with pivoting-lugs, a toothed lowering-dog mounted in said lugs, a toothed raising-dog having a slot to receive a pin from the lowering-dog and provided with retaining-recesses adapted to embrace a pin upon the lowering-dog as the raising-dog is adjusted.

9. In a sash-fastener, a pivotally-mounted apertured post, and a lever adjustably secured in the aperture through said post and provided with an antirattling hook at one end.

10. In a sash-fastener, a post, a split securing-plate adapted to surround the base of said post to permit pivotal movement thereof, a lever adjustably mounted in said post and provided with an antirattling hook at one end adapted to engage a fixed member, and a locking-lever adjustably mounted in said post to extend in an opposite direction to the antirattling lever.

11. In a sash-fastener, a post provided with raising and lowering dogs, and a staple adapted to be engaged by said dogs and provided with an attached screw at one end and a securing-lug at its opposite end.

12. In a sash-fastener, a post provided with an antirattling hook, means for rotating said hook, and a cooperating staple provided with a depending portion disposed in a plane parallel with the body thereof and to be engaged by said hook.

13. In a sash-fastener, a post, means for rotating the same, a locking-lever carried by said post, a locking-plate disposed in the path of said lever, and a pivotally-mounted tongue carried by said plate and adapted to engage said lever when the latter is in locked position.

14. In a sash-fastener, a pivotally-mounted post, raising and lowering dogs mounted upon the upper portion of said post, a lever provided with an antirattling hook and extending radially from said post, and a locking-lever extending from the post in an opposite direction from said antirattling lever, and means for rotating said post.

15. In a sash-fastener, a pivotally-mounted post, raising and lowering dogs mounted upon the upper portion of said post, a lever provided with an antirattling hook and extending radially from said post, a locking-lever extending from the post in an opposite direction from said antirattling lever, means for rotating said post, a staple adapted to cooperate with either of said dogs, a relatively fixed hook adapted to cooperate with the antirattling hook, and a locking-plate adapted to cooperate with the locking-lever.

16. In a sash-fastener, a pivotally-mounted post, a locking-lever extending laterally therefrom, and a locking-plate provided with a tongue to engage said lever.

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

HIRAM S. DOTTS.

Witnesses:

S. C. CARNEY,
L. F. MEIGHEN.