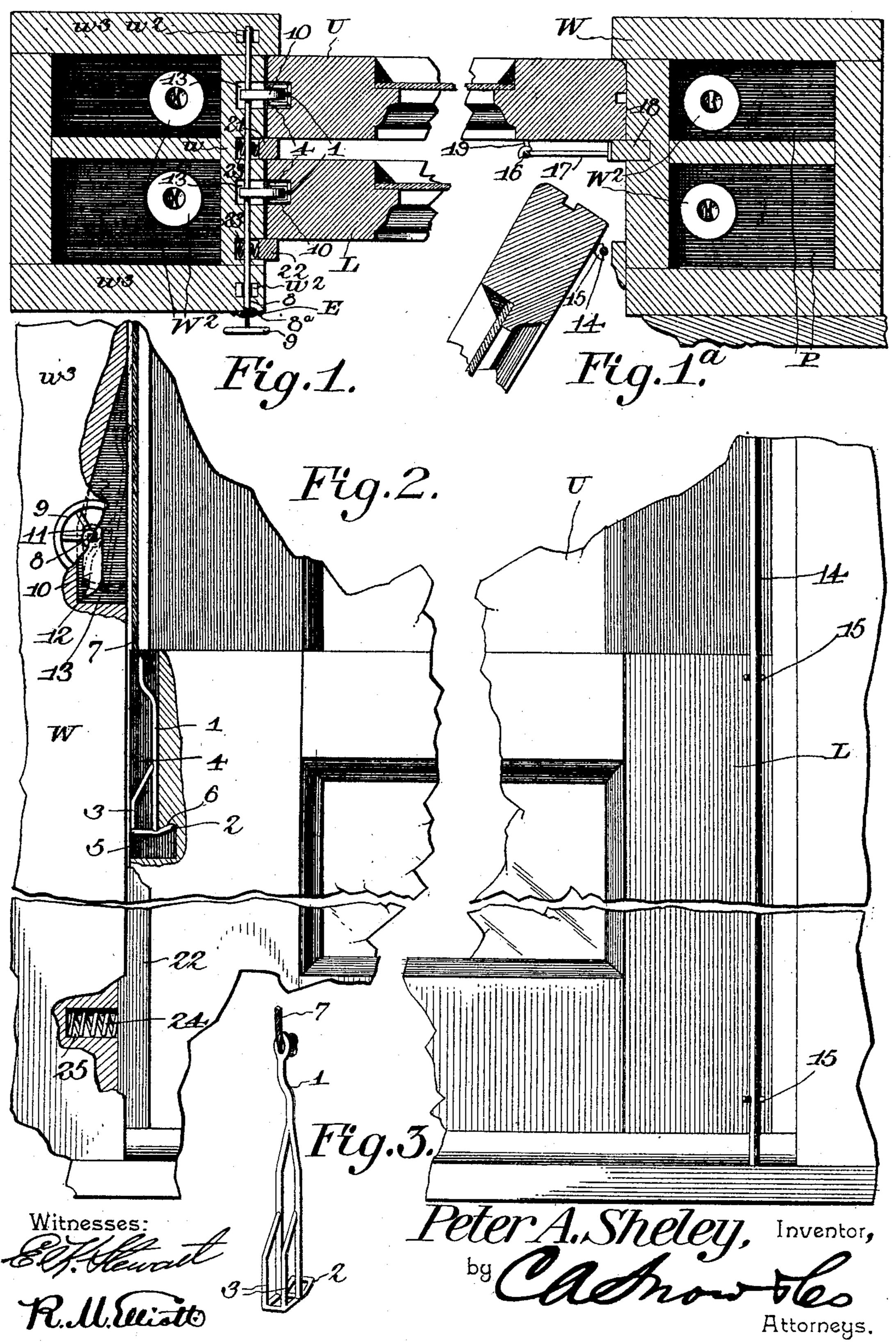
P. A. SHELEY.
WINDOW SASH.
APPLICATION FILED OCT. 7, 1904.



## UNITED STATES PATENT OFFICE.

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WINDOW-SASH.

No. 797,023.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, Peter A. Sheley, a citizen of the United States, residing at Louisville, in the county of Jefferson and State of Kentucky, have invented a new and useful Window-Sash, of which the following is a specification.

This invention relates to window-sashes.

The object of the invention is, in a ready and practical manner and without disturbing any of the parts of the window-casing, to effect disconnection of the sash-cords from the sash-rails, thereby to permit the sashes to be swung inward to facilitate cleaning the outer sides of the window-panes.

With the above and other objects in view, as will appear as the nature of the invention is better understood, the same consist, generally stated, in a novel arrangement of mechanism for disconnecting the sash-cords from the sash-rails and, further, in a novel form of support for permitting the sashes to be swung inward for the purpose above stated.

The invention consists, further, in the various novel details of construction of an attachment for window-sashes, as will be hereinafter fully described and claimed.

In the accompanying drawings, forming a part of this specification, and in which like characters of reference indicate corresponding parts, there is illustrated one form of embodiment of the invention capable of carrying the same into practical operation, it being understood that the elements therein exhibited may be varied or changed as to shape, proportion, and exact manner of assemblage without departing from the spirit thereof, and in the drawings—

Figure 1 is a view in horizontal section exhibiting the mechanism for releasing the sash-cord locks. Fig. 1<sup>a</sup> is a similar view exhibiting the supports or hinges to permit the sashes to be swung inward, the inner sash in this instance being shown in the latter position. Fig. 2 is a view in elevation, partly in section, showing the manner in which the sash-cord is combined with the window. Fig. 3 is a perspective detail view of the sash-cord lock.

Referring to the drawings, U designates the upper sash, L the lower sash, and W the window-casing, and as these parts may be of the usual or any preferred construction detailed illustration thereof is deemed unnecessary. The window-casing is provided with the usual sash-weight pockets P, containing

sash-weights W<sup>2</sup> of the common or any preferred construction and connected by sash ropes or chains with the window-sash on one side in the usual manner and on the opposite side by a novel form of sash-cord lock or attacher presently to be described.

One part of the present invention resides in the sash-cord lock above referred to and in the means for releasing the said lock from engagement with the sash-stiles.

The sash-cord lock (shown in detail in Fig. 3) comprises a shank 1, having an angularly-disposed toe 2 projecting from one terminal thereof and a loop 3 extending from the opposite side of the same terminal. This lock may be made of any suitable material, either

cast or stamped metal.

One edge of each of the sash-stiles is provided with a recess 4, in which the lock is disposed, and with a lateral orifice 5, communicating with the recess to receive the toe 2, the orifice being provided with an upwardly-projecting extension 6, with which the toe interlocks, as clearly shown in Fig. 2, and is thus held combined with the sash, the draw on the sash cord or chain 7 from the sash-weight serving positively to prevent any accidental disconnection between the lock and the casing.

In order to release the sash-cord lock when it is desired to swing the window-sashes inward, as shown in Fig. 1a, there is a shaft 8 provided, which extends transversely through the inner member w of the window-casing and is journaled in bearings w<sup>2</sup> in the inner and outer members  $w^3$  of said casing. This shaft projects outward beyond the inner member of the window-casing, and its projecting end is reduced, presenting thereby a shoulder 8a, and is held from being withdrawn from the casing by an escutcheon E, which engages the shoulder, the free end of the shaft having connected with it a hand-wheel 9, by which it may be turned. Mounted upon the shaft are two releasing-dogs 10, one for coaction with each of the sash-cord locks, each of the dogs being provided with a rectangular opening 11 to engage the shaft 8, which is also preferably rectangular, and with a bill or hook 12 to interlock with the loop 3 to throw the toe out of engagement with the locking-recess 6 in the sash-rail.

The manner in which release of the sash-cord lock is effected is as follows: Suppose it be desired to release the sash-cord of the lower sash to permit it to be swung to the position shown in Fig. 1<sup>a</sup>. To accomplish this, the lower sash will be moved to the proper posi-

tion to bring the orifice 5 of the window-sash into alinement with the pocket 13 in the window-casing in which the releasing-dog is housed, as shown in Fig. 4. This will bring the loop 3 to position to be engaged by the dog, and upon turning the hand-wheel the sashcord lock will be drawn down, moving its toe out of engagement with the extension 6 of the recess 5 and moving it laterally, thus leaving the sash free to be moved downward until its upper or meeting rail is below the releasingdog, and when this has been effected the sash may be then moved at right angles to its normal position. It is to be understood that the locking-dog still remains in engagement with the sash-cord lock, so that when it is again to be locked into engagement with the sash the latter has only to be moved to its normal position and the hand-wheel 9 turned in the opposite direction to cause the toe of the lock again to engage with the recess in the sash-rail. The same operation also holds good with relation to the upper sash, and therefore any description of this is omitted.

As above stated, means is provided to permit the sash to be swung inward, it being understood, of course, that it will not be necessary to provide any sash-releasing mechanism on this side of the sash, as when the sash is swung inward the sash-rope will follow the movement of the window and be drawn from

the casing.

The means for supporting the window-sashes for inward swinging is the same for both, except a difference in size, that for the upper sash being larger than that for the lower

sash.

The supporting device for the lower sash embodies a rod 14, which extends from the window-sill to the top of the window-frame and is engaged by the yokes 15 of a pair of brackets secured to the inner side of the lower sash. The supporting device for the upper sash embodies a rod 16, which extends from the upper rail of the lower sash to the top of the window-frame and is provided with laterally-extending arms 17, which are seated in the parting-rail 18. This rod is engaged by the yokes 19 of a pair of brackets secured to the inner side of the upper sash.

To hold the sashes against rattling on the side at which they open, there is provided a

spring-pressed parting-rail 21 and a spring-pressed sash-stop 22, these being designed to be seated within the recesses or channels 23 in the inner side of the window-frame, the springs 24, which actuate the bottom rail and sash-sticks, being ordinary coiled springs disposed within sockets 25 in the window-sash. The brackets and rods above described are small in size and will therefore not be unsightly, and, if preferred, they may be detachably combined with the parts with which they coact, so that after the cleaning of the windows is completed they may be removed.

It will be seen from the foregoing description that while the improvements of this invention are simple in character they will be thoroughly effective for the purposes designed and may be readily applied to ordinary window-casings and window-sashes without any pronounced change in their struc-

tural arrangement.

Having fully described the invention, what

is clamied is—

1. In a window-sash, the combination with a sash-cord, of an attaching device embodying a locking-toe and a loop, and a shaft carrying a releasing-dog to engage the loop.

2. A window-sash having one of its stiles provided with a recess and a lateral orifice, in combination with a sash-cord carrying an attaching device arranged within the recess and embodying a locking-toe to project into the orifice and a loop, and a shaft carrying a re-

leasing-dog to engage the loop.

3. The combination with a window-casing, of a pair of vertical rods, one of which extends from the window-sill to the top of the window-frame, and the other of which extends from the upper rail of the lower sash to the top of the window-frame and is provided with laterally-extended arms secured in the casing, and brackets carried by the upper and lower sash and having yokes to engage the respective rods.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in

the presence of two witnesses.

PETER A. SHELEY.

Witnesses:

J. H. Jochum, Jr.,
ARCHIBALD BULLOCH.