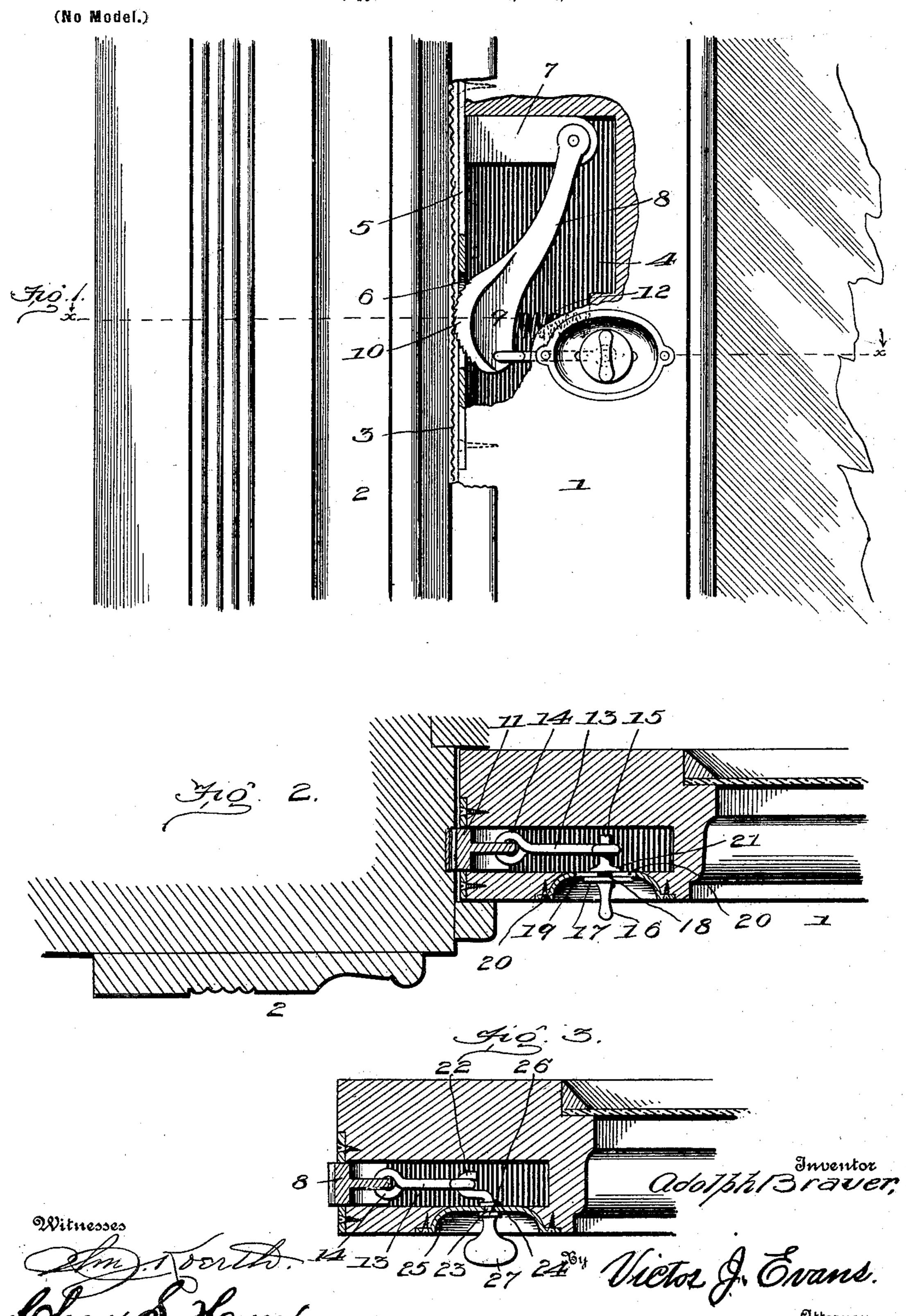
## A. BRAUER. SASH FASTENER.

(Application filed Feb. 14, 1902.)



## United States Patent Office.

ADOLPH BRAUER, OF SEATTLE, WASHINGTON.

## SASH-FASTENER.

SPECIFICATION forming part of Letters Patent No. 704,433, dated July 8, 1902.

Application filed February 14, 1902. Serial No. 94,073. (No model.)

To all whom it may concern:

Be it known that I, ADOLPH BRAUER, a citizen of the United States, residing at Seattle, in the county of King and State of Washington, have invented new and useful Improvements in Sash-Fasteners, of which the following is a specification.

This invention relates to sash-fasteners of that class adapted to hold window-sash at any desired height within range of their movement; and the object of the same is to provide a simple and inexpensive and readily-manipulated fastener for holding a window-sash in any desired position and for securely locking a sash to prevent unauthorized persons from opening it.

The invention consists in the construction and arrangement of the several parts, which will be more fully hereinafter described and claimed.

In the drawings, Figure 1 is an elevation of a portion of a window-sash and window-frame, showing the improved fastener applied in operative position. Fig. 2 is a horizontal section on the line x x, Fig. 1. Fig. 3 is a horizontal section of the frame and part of the sash, showing a modified form of the fastener.

Similar numerals of reference are employed to indicate corresponding parts in the several views.

The numeral 1 designates the side stile of a window-sash, and 2 a window-frame. In the groove between the stops of the frame a corrugated strip 3 is secured and extends verti-35 cally a length equal to the full vertical movement of the sash. The side stile 1 is formed with a suitable mortise or recess 4, which opens outwardly therefrom and is covered by a metallic plate 5, having a slot 6 there-40 through, the said plate being secured in immovable position over the mortise or recess 4. Extending inwardly into the upper portion of the mortise or recess 4 from the plate 5 is an arm 7, and to the inner terminal of 45 said arm the upper end of a dog or lever 8 is pivotally attached, the said dog or lever having a lower enlarged head 9 with an outer convex contour, the outer edge of the head being formed with a series of serrations or 50 corrugations 10, corresponding to those of the strip 3. The head 9 is increased in width by the formation of oppositely-extending simi-

lar flanges 11 to provide an extended bearing in relation to the strip 3, and said head is normally held in contact with the strip 3 by a ;5 spring 12, interposed between the inner edge thereof and a part of the wall of the mortise or recess 4. To retract the dog into the mortise or recess 4 or to disengage the head thereof from contact with the strip 3, a link 13 is em- 60 ployed and has an eye 14 at its outer end movably attached to the lower extremity of the head 9, and at its inner end said link is movably attached to an operating-shank 15, projecting inwardly from an exteriorly-exposed 65 knob 16, having a guard-flange 17. The shank 15 is projected through an opening 18, formed in the center of a concave socket 19, let into the inner side of the stile 1 at a suitable elevation relatively to the link 13. The open- 70 ing 18 has communication with a horizontally-disposed slot 20, and in the operation of the shank 15 to release the dog 8 the head 16 is pushed inwardly to draw the head 9 of the dog in the same direction against the resist- 75 ance of the spring 12, and thereby clear the serrations or corrugations 10 from those on the strip 3 to permit the sash to be raised or lowered. It will be observed, however, from the construction set forth that the sash can 80 be pushed upwardly without operating the link to release the same in view of the arrangement of the parts set forth, and the head 9 will automatically lock in relation to the strip 3 through the pressure of the spring 85 12 continually imposed thereon, and hence it is only necessary to release the head 9 from the strip 3 in lowering the sash. To hold the shank 15 in place in relation to the socket 19, it is formed with an inner circumferential 90 shoulder 21, which bears against the inner side of the socket adjacent the opening 18, and that portion of the shank which is located between the shoulder 21 and guard 17 may be of such form that it will have to be 95 turned before it can be moved in the inner extremity of the slot 20. The slot 20 is provided in connection with the opening 18 for convenience in the application of the socket and without requiring any specific arrange- 100 ment with regard to right or left positions. The guard 17 materially closes the slots 20 and the opening 18, as well as providing a means against which the fingers of the hand

of the operator may bear in grasping and moving the shank through the medium of the head 16. In applying this form of the device the metallic plate 5, carrying the arm 7 5 and dog or lever 8 and the link 13, will be first placed in position before the socket 19 is applied. The shank 15, having the shoulder 21 thereon, and before the guard 17 and head 16 are secured thereto, will be inserted 10 through the opening over which the socket is finally placed, and the inner end of said shank will be secured to the inner extremity of the link 13 by a soldering or otherwise. The socket 19 is then slipped over the outwardly-15 projecting portion of the shank 15, and the guard 17 and head 16 are then applied and secured to the said shank.

In Fig. 3 a modification of the construction of the shank is shown, as well as of the 20 socket, the remaining portions of the fastener being similar to those heretofore described and similarly designated or having the same reference-numerals applied thereto. In this instance the inner end of the link 13 is mov-25 ably attached to a hook 22, formed on the inner terminal of the shank 23, the latter being rotatably mounted in an opening 24 in the center of the socket 25, the said socket in this instance also being without the slot here-30 tofore set forth. The shank 23 is held in place by inner and outer circumferential shoulders 26, and the outer part of said shank is continued into an operating-head 27. By rotating the shank 23 through the medium of 35 the head 27 the inner hooked terminal of said shank is drawn inwardly on the link 13 and operates similarly to a cam, and thereby releases the dog 8 from the frame 2 or the strip 3, secured to the latter. The head 27 of this 40 modified form of the device will be applied

after the shank 23 is inserted through the opening 24 and before the socket 25 is applied in operative position. Before the shank 23 is inserted through the opening 24 the inner shoulder 26 will be applied to said shank, 45 and the outer shoulder 26 will afterward be secured in proper position and previous to the application of the head 27, it being understood that the said head may be of any preferred form and applied in any suitable 50 manner.

The improved fastening can be easily applied in operative position and is reliable in its operation, as well as inexpensive in construction.

Having thus fully described the invention, what is claimed as new is—

In a sash-fastener, the combination with a window-frame having a vertically-disposed corrugated strip thereon, of a sash having a 60 dog mounted in the side stile and pivotally attached at its upper end, the lower extremity of the dog being enlarged to form a head and provided with corrugations to engage the said strip, a spring interposed between the 65 lower extremity of the dog and an adjacent portion of the stile, a link attached to the lower extremity of the dog, a socket secured to the inner side of the stile and having an opening therein, and a shank projecting 70 through the socket and connected to the inner end of the link, the outer extremity of the shank being in the form of a head.

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

ADOLPH BRAUER.

Witnesses:

AVERILL BEAVERS, EVA STEVENSON.