No. 796,710. PATENTED AUG. 8, 1905.

E. I. DODDS & A. L. CLARK.

WINDOW SASH FASTENER.

APPLICATION FILED OCT. 28, 1897.

Fig. 1.

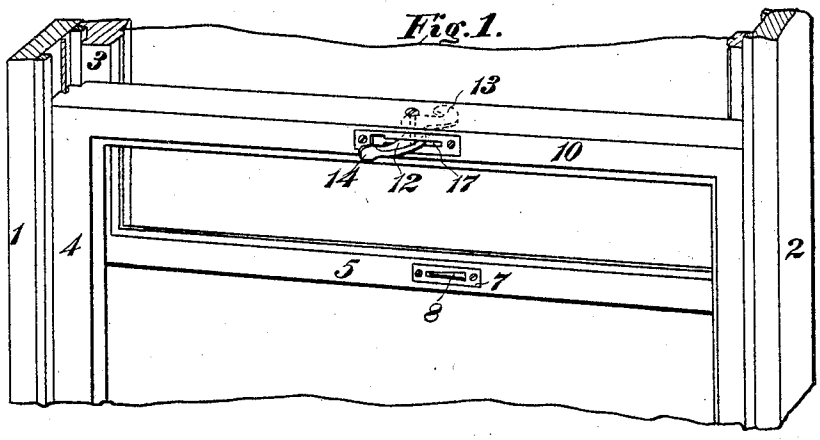


Fig. 5.

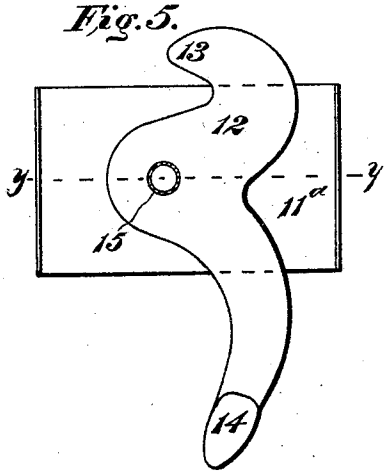


Fig. 2.

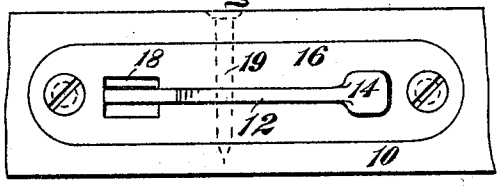


Fig. 3.

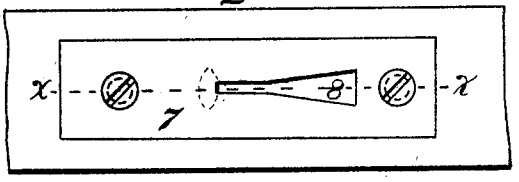


Fig. 6.

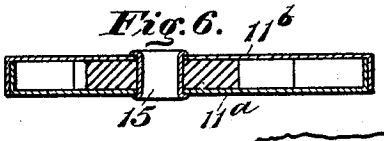


Fig. 4.



Fig. 7.

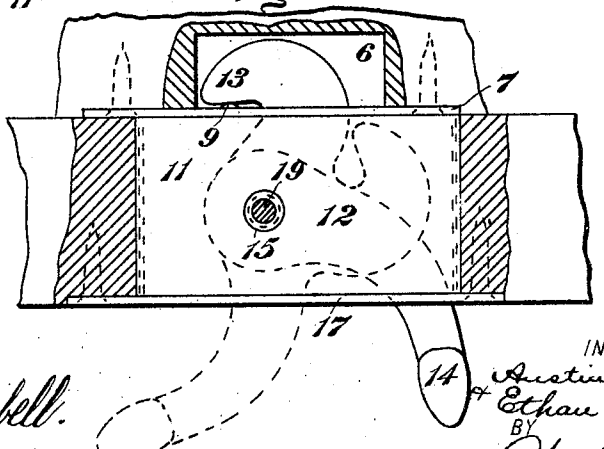
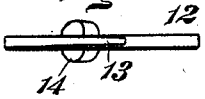


Fig. 8.



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ETHAN I. DODDS AND AUSTIN L. CLARK, OF AVALON, PENNSYLVANIA; SAID DODDS ASSIGNOR TO SAID CLARK.

WINDOW-SASH FASTENER.

No. 796,710. Specification of Letters Patent. Patented Aug. 8, 1905.

Application filed October 28, 1897. Serial No. 656,617.

To all whom it may concern:

Be it known that we, ETHAN I. DODDS and AUSTIN L. CLARK, citizens of the United States, residing in Avalon, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Window-Sash Fasteners, of which the following is a specification.

Our invention relates to means for fastening or locking together the meeting-rails of the two sliding sashes ordinarily employed in window construction; and it has for its object to provide a fastening or locking means the parts of which may be cheaply manufactured and easily assembled and fitted to the sash and which when combined with the sash will be substantially inclosed thereby, will serve to lock the meeting-rails against relative movement either transversely or longitudinally, and which may be easily manipulated to release the rails when desired.

In the accompanying drawings, Figure 1 is a perspective view of a portion of a window-casing and two sliding sashes provided with our improvement. Figs. 2 and 3 are respectively front elevations of portions of the two meeting-rails provided with the coöperating parts of our device. Fig. 4 is a section on line *x x* of Fig. 3. Fig. 5 is a detail plan view of the locking-lever and the lower half of its frame or casing. Fig. 6 is a sectional view of the locking-lever and its casing, taken on line *y y* of Fig. 5. Fig. 7 is a view, partially in plan and partially in section, of our fastening device and portions of the meeting-rails to which it is fitted. Fig. 8 is a detail view of the locking-lever.

The details of construction are as follows:

1 and 2 are the side portions of the window-casing, which are provided with the usual guideways for the upper and outer sash 3 and the lower and inner sash 4. The lower rail 5 of this upper sash 3 is provided in its front side with a recess 6, which is preferably, though not necessarily, located midway of its ends and also midway of its upper and lower sides.

A plate 7 is set in the front face of the rail 5 over the recess 6 and so that its outer face will be flush with that of the rail. This plate is provided with a longitudinally-extending slot 8, that is materially wider at one end than the other. The inner side of the plate 7 is also provided with a projection 9 adjacent to the narrow end of the slot 8.

The upper rail 10 of the sash 4 is provided, preferably midway of its ends and its top and bottom sides, with a comparatively long and narrow slot, which extends through the rail from front to rear. A sheet-metal frame or casing 11 is located in the slot and closely fits the same. This casing may be constructed, as shown in Fig. 6, of two sheet-metal plates 11^a and 11^b, having their ends bent at right angles to the body portions so as to overlap. A locking-lever 12, having a hook 13, preferably of wedge shape, at its inner end and a knob or handle 14 at its outer end, is eccentrically pivoted in the casing 11 by means of a hollow rivet 15, which also serves to fasten the plates 11^a and 11^b together.

After the lever 12 and its casing 11 are placed in position a face-plate 16, having a long narrow slot 17, is set over the slot in the rail so that its outer face is flush with the face of the rail, the slot 17 being enlarged at one end, as indicated at 18, to accommodate the knob or handle 14. Plates 7 and 16 may be fastened in position by means of screws in the usual manner, as is indicated in the drawings, and the lever 12 and its casing 11 may also be held in position by means of a long screw or pin 19, extending downwardly through the hollow rivet 15, the head of the screw being flush with the upper side of the rail. When the lever 12 is in the position indicated in broken lines in Fig. 7, it is obvious that each sash is free to move vertically in its guideways. If the outer sash be moved to or nearly to its uppermost position and the inner sash to or nearly to its lowermost position, they may be locked together by moving the knob or handle 14 to the position indicated in full lines in Fig. 7, the hook 13 of the lever 12 engaging with the projection 9, and thus serving to draw the two rails closely together. If either sash has not been moved entirely to its closed position, the thin end of the wedge-shaped hook 13 will enter the wide end of the slot 8, and as the lever is moved to the locking position the thick portion of the lever will enter the narrower portion of the slot, and thus serve to draw the sashes into proper position without the expenditure of a materially greater amount of energy than is required to lock them when the hook 13 and

the narrow portion of the slot 8 are in exact alinement.

It will be observed that our device consists of a small number of easily-assembled parts and that the device as a whole is simple in construction, compact in arrangement, easily operated, and not likely to get out of order. It is also particularly desirable by reason of the fact that all of the mechanism except one end of the locking-lever is either inclosed in recesses in the sash-frames or is flush with the surface, so that the upper side of each of the meeting-rails presents a smooth unobstructed surface.

So far as we are aware, every fastening device for the meeting-rails of window-sashes used or suggested for use prior to our invention was either wholly or partially so located that it would catch and retain dust and dirt and interfere to a greater or less extent with the cleaning of the upper sides of the meeting-rails, whereas our invention is not in position to collect dust and dirt and does not in the least interfere with the removal of the same from those portions of the sash where it is most likely to accumulate.

We do not desire or intend to limit our invention to the details of construction shown and described, except as restrictions are imposed by the state of the art.

We claim as our invention—

The combination with a plate having a wedge-shaped slot and a projection adjacent to the narrow end of the same, of a locking-lever having an operating-handle at one end and a wedge-shaped hook at its other end, said hook being adapted to enter the wide end of said slot and move forward to engage said projection when actuated by movement of the handle.

In testimony whereof we have hereunto subscribed our names this 26th day of October, 1897.

ETHAN I. DODDS.
AUSTIN L. CLARK.

Witnesses:
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JNO. M. WINTERS.