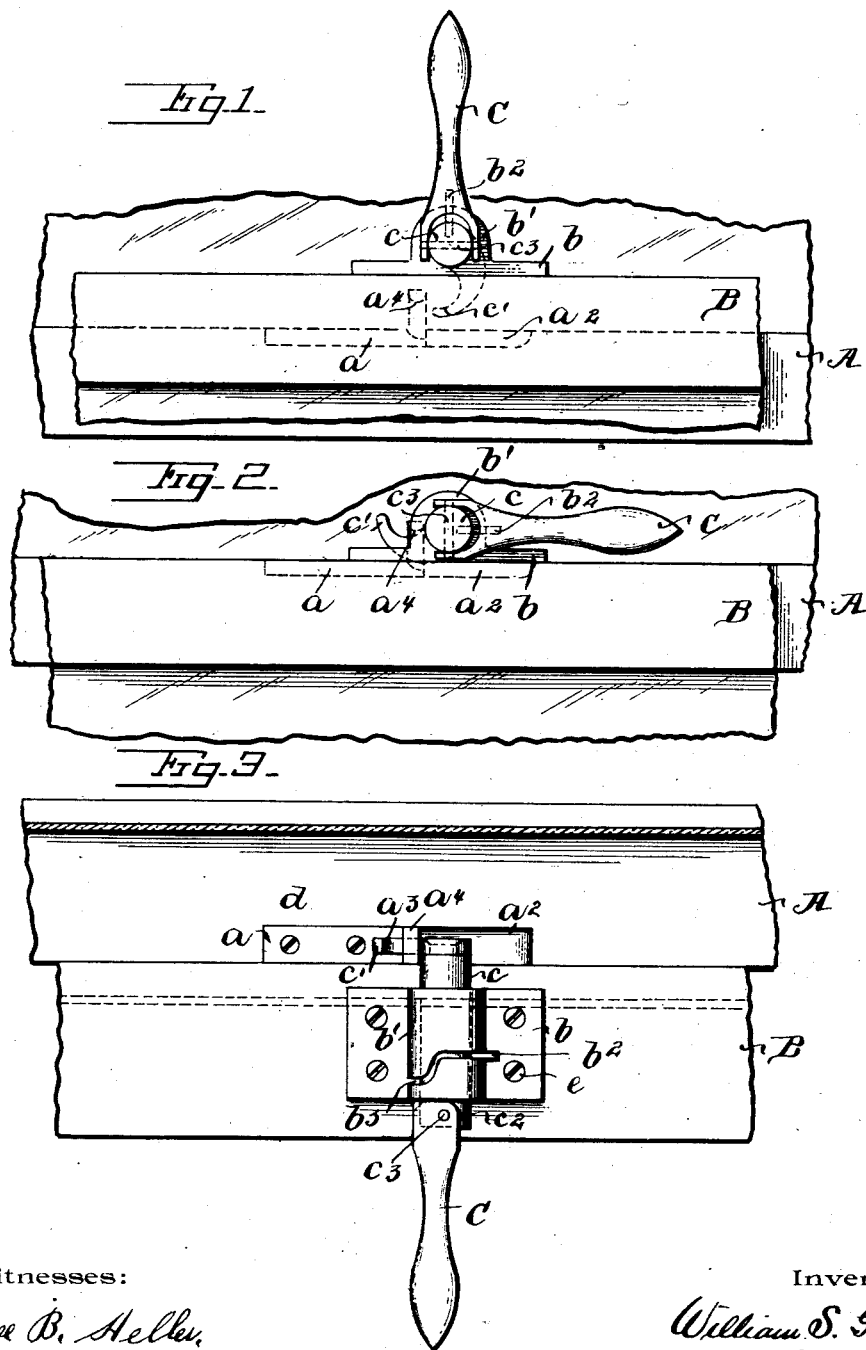


(No Model.)

W. S. GRUNDY.
FASTENER FOR MEETING RAILS OF SASHES.

No. 525,599.

Patented Sept. 4, 1894.



Witnesses:

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UNITED STATES PATENT OFFICE.

WILLIAM S. GRUNDY, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF
ONE-HALF TO OSWALD LEVER, OF SAME PLACE.

FASTENER FOR MEETING-RAILS OF SASHES.

SPECIFICATION forming part of Letters Patent No. 525,599, dated September 4, 1894.

Application filed March 31, 1894. Serial No. 505,815. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM S. GRUNDY, a citizen of the United States, residing in the city of Philadelphia, State of Pennsylvania, have invented certain new and useful Improvements in Window-Sash Fasteners, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

My invention relates to window sash fastening devices, and has for its object the construction of the device in two parts, one of which is fastened to each of the sashes respectively, which co-operate by interlocking with each other, to tighten and fasten together the upper and lower sashes. And to these ends my invention consists in a sash lock composed of two parts, one of which is fastened to the lateral edge of the outer (or upper) sash, and is provided with a vertically projecting link or its equivalent, in combination with the other element of the device which is composed of a journal bearing fastened to the lateral edge of the other (the inner) sash, and a shaft adapted to rotate in the bearing and carrying on one of its ends a curved hook, and provided at its other end with a lever arm so pivoted thereto that it will be free to rotate either vertically or laterally when the hook shaft is rotated thereby. Also in minor details of the device as hereinafter mentioned.

In the accompanying drawings illustrating my invention, Figure 1 is a front elevation with the lever raised and showing the locking plate on the outer or rear sash in dotted lines. Fig. 2 is a like view with the lever down, and the rear sash raised to its normal position. Fig. 3 is a plan view of the same position of the parts as shown in Fig. 2 except that the lever is drawn outwardly into its second position thereby locking the device.

The flat edges A and B of a pair of sashes, represented in plan view in Fig. 3 have attached to the edge A of the upper and outer sash, by screws *d* or otherwise, by its flat surface *a'*, a metallic plate *a* which is provided with a central link or loop *a'*, and in order that the latter may not project too high above the surface of the plate the said plate is re-

cessed at *a*² extending under the link to *a*³, in order to give room for the partial rotary movement of the hook *c'* hereinafter described.

On the flat edge B of the inner and lower sash is mounted the partially rotating hook-shaft *c* which turns freely in the journal bearing *b'* therefor which is formed integral with the fastening plate *b* secured to the sash edge B by screws *e* or otherwise. The journal bearing *b* is slotted curvilinearly at *b*³ in which plays the pin *b*² mounted on the periphery of the shaft *c*, the effect of which is to move the shaft longitudinally as it is rotated, outward from the plane of the hook link *a'* and thus allow the outer sash to be moved freely up or down when desired. The shaft *c* is provided at one end with a hook *c'* of such shape and size relatively to the link or loop *a'* as to pass freely into and out of the same at all times and in all relative positions of the device, when the shaft is rotated. The other and outer end of the shaft has pivoted to it by a pin *c*³ a lever arm C which has a square face rounded at one edge *c*² to adapt it to be moved into the position shown in Fig. 2.

The operation of the device is as follows: Window sashes become loose relatively to each other, by wear and shrinkage, and produce a rattling noise, and the outer and upper sash which is suspended by weighted cords drops from its normal position by reason of the wear and stretching of the cords. Both these objections are overcome by my device. The front elevation (Fig. 1) shows the outer and upper sash A dropped below the plane of the inner and lower sash B. In order to raise this sash A to its normal position, tighten the two sashes in the window frame, and lock the two together, the lever C is given a quarter turn to the right as shown in Fig. 2 whereby the shaft *c* is partially rotated and the hook *c'* on the end thereof caused to engage with the loop or link *a'* mounted by its retaining plate *a* on the outer sash, hence the latter is raised until the edge A is flush with the edge B. If the lever C is then given a quarter turn in a horizontal plane, on its pivot pin *c*³, thus bringing it into the position shown in Fig. 3, it is apparent that the two sashes will be securely locked

together. The reverse of these two movements of the lever C, successively, will have the effect first to unlock the sashes, and secondly to release the hook c' from engagement with the link a^4 and by the same movement the pin b^2 on the shaft c , moving in the curved slot b^3 in the journal bearing b' will cause the shaft c to move outward longitudinally carrying it and its hook past the vertical plane of the sash A so that the latter may be raised or lowered as desired.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A sash lock consisting of a link or its equivalent adapted to be secured upon the edge of one sash, and a curved hook adapted to engage therewith, a shaft upon which the hook is mounted, a journal-bearing for said shaft secured to the opposite and inner sash, means between the journal-bearing and the shaft operating to cause the latter to be reciprocated longitudinally while being rotated, and a lever pivotally mounted upon the free end of said shaft and operating to partially rotate the same; substantially as described.

2. In combination forming a sash lock, a link or its equivalent secured to the edge of one sash, and a partially rotatable shaft pro-

vided at one end with a curved hook adapted to engage with said link, a journal bearing for said shaft with means to secure it to the edge of the opposite sash, and a locking lever C having a rounded edge c^2 , and pivoted to said shaft in such manner that its rounded edge will be on the side opposite the hook when the parts are brought into locked position; substantially as described.

3. In combination forming a sash lock, the link a^4 and means to secure the same to the edge of one of the sashes; and the partially rotating shaft c provided with a hook c' at one end, the pivoted lever arm C at the other end, and a pin b^2 on its periphery, the journal bearing b' for said shaft and means to secure it to the edge of the inner and opposite window sash, said journal bearing having a curved slot b^3 on its circumference adapted to cooperate with the pin b^2 on the shaft; substantially as and for the purpose described.

In testimony whereof I have hereunto affixed my signature this 28th day of February, A. D. 1894.

WILLIAM S. GRUNDY.

Witnesses:

FRANK S. BUSSEY,
H. T. FENTON.