No. 627,096. Patented June 20, 1899.

W. H. BRADLEY.

SASH FASTENER.

(Application filed Mar. 2, 1899.)

(No Model.)

Fig. 1.

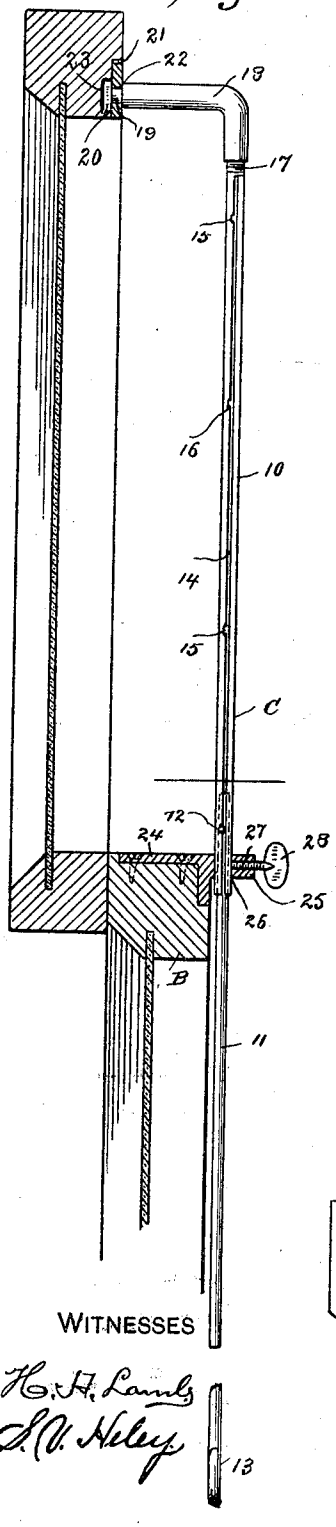


Fig. 2.

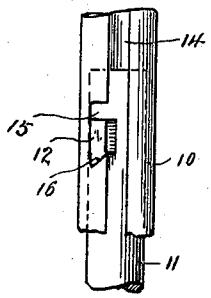


Fig. 3.

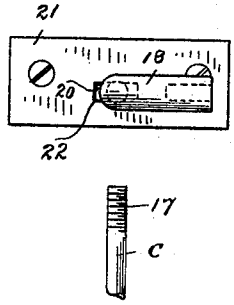


Fig. 4.

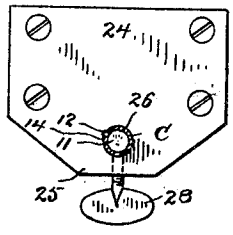
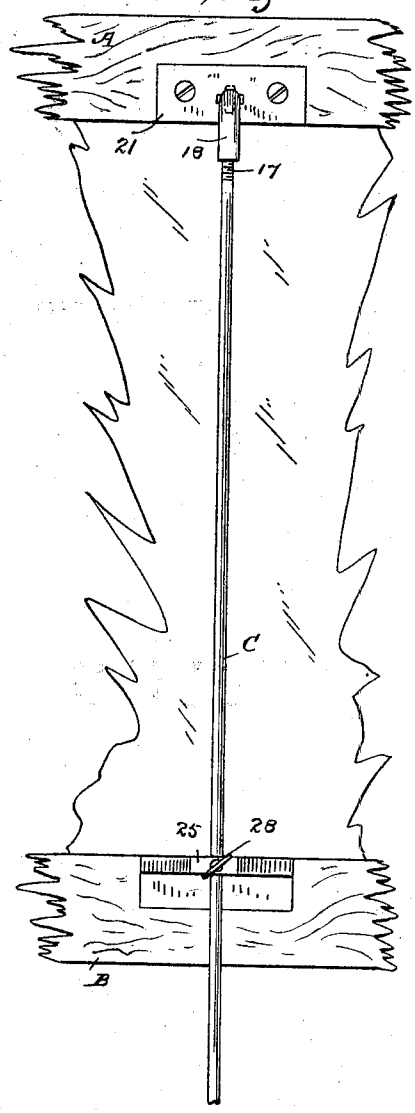
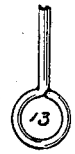


Fig. 5.





WITNESSES

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UNITED STATES PATENT OFFICE.

WILLIAM H. BRADLEY, OF BRIDGEPORT, CONNECTICUT, ASSIGNOR OF ONE-HALF TO GEORGE F. AMTHOR, OF SAME PLACE.

SASH-FASTENER.

SPECIFICATION forming part of Letters Patent No. 627,096, dated June 20, 1899.

Application filed March 2, 1899. Serial No. 707,479. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. BRADLEY, a citizen of the United States, residing at Bridgeport, county of Fairfield, State of Connecticut, have invented a new and useful Sash-Fastener, of which the following is a specification.

My invention has for its object to provide a simple and inexpensive sash-fastener which may be readily applied to all styles of sashes without serious cutting or marring of the sash, which will permit the upper sash to be lowered and the lower sash to be raised and will lock both sashes in either the open or closed position, so that they cannot be tampered with from the outer side, and which will permit the ready removal of the connecting-rod, should that be desirable, for convenience in washing the window.

With these ends in view I have devised the simple and novel sash-fastener of which the following description, in connection with the accompanying drawings, is a specification, letters and numbers being used to designate the several parts.

Figure 1 is a sectional view of upper and lower window-sashes, illustrating the application thereto of my novel sash-fastener; Figs. 2, 3, and 4, detail views, on enlarged scales, illustrating different portions of my novel fastener, Fig. 2 being a view illustrating the construction of an extensible connecting-rod, Fig. 3 a view illustrating the manner in which the rod is detachably connected to the upper sash, and Fig. 4 a plan view illustrating the manner in which the plate upon the meeting-rail of the lower sash is locked to the connecting-rod; and Fig. 5 is a front elevation corresponding with Fig. 1, with the exception that the connecting-rod is not made extensible.

A denotes the top rail of an upper sash, B the upper or meeting rail of a lower sash, and C a removable connecting-rod extending between said rails. This connecting-rod may or may not be made extensible, as shown in Figs. 1, 2, and 4. If made extensible, said rod consists of an upper tubular section 10 and a lower section 11. Section 11 of the extensible rod is provided at its upper end with a lug 12 and at its lower end with a suitable head or ring 13 for convenience in manipulating the upper sash. Section 10 is made tubular and is provided with a slot 14, which is adapted to receive lug 12 on section 11 freely, and with recesses 15, which open into said slot and either of which is adapted to receive lug 12, as clearly shown in Fig. 2. The lower ends of recesses 15 are preferably inclined downward away from the slot, as at 16, in order to prevent accidental detachment of the lower section of the connecting-rod from the upper section thereof. The lower end of lug 12 may be inclined to correspond therewith. It will be seen that these inclines upon section 11 and the lug will prevent disengagement of one section from the other unless section 11 is intentionally twisted toward the right, in which event the lug will ride up incline 16 and pass into the slot, thus permitting ready disconnection of one section from the other. The upper end of rod C, whether said rod is extensible or not, is threaded, as at 17, to adapt it to engage a threaded recess in an angle-piece 18, by means of which the rod is connected to the top rail of the upper sash. At the upper end of the angle-piece is a neck 19 and beyond the neck an elongated head 20.

21 denotes a plate which is secured to the upper sash and is provided with a horizontal slot 22, which just permits the elongated head to pass freely when the angle-piece is turned to a position at a right angle to its normal position, as in Fig. 3. When the parts are in this position, head 20 may be readily passed through the slot in either direction, a recess 23 being provided under plate 21 large enough to accommodate the head in any position. This recess is the only opening or cutting that is required to be made in attaching my novel sash-fastener to the sashes. I have shown plate 21 as recessed into the rail; but this is wholly immaterial, it being just as feasible, if preferred, to make the plate ornamental in shape and finish and to attach it upon the outer side of the rail.

24 denotes a plate which is secured to the upper or meeting rail of the lower sash. I have shown this plate also as recessed into the rail; but it is wholly immaterial, so far as my invention is concerned, as it is perfectly

feasible to make this plate as well as plate A ornamental in shape and finish and to attach it upon the outer side of the rail, which would render any cutting or mortising of the rail unnecessary. I have shown plate 24 as an angle-plate to adapt it to engage the top and outer face of the rail. This, however, is not an essential feature of construction.

25 denotes a lug or projection extending outward from plate 24, which is provided with a vertical opening through which the connecting-rod passes freely and with a threaded opening 27, extending inward at right angles to opening 26 and intersecting said opening, which receives a set-screw 28, by means of which the connecting-rod, and consequently the sashes, may be locked in either the open or closed position, as may be desired.

The operation is as follows: When it is desired to raise or lower either of the sashes, set-screw 28 is loosened, which permits either sash to be raised or lowered freely, the upper sash being conveniently manipulated by means of the connecting-rod. For high windows, or whenever it may be desired for convenience, I preferably use an extensible connecting-rod. In using this form, to change the length of the rod the operator simply twists section 11 of the rod toward the right, which causes lug 12 to ride up incline 16 and into the slot, raises or lowers section 11 of the rod, as may be required, and then locks section 11 in position and connects it to section 10 by turning the lug into one of the slots 14 in section 10, in which position it will be retained by the incline until intentionally removed. Having placed the sashes in the required position, they may be locked there in such a manner as to effectually prevent tampering from the outside by tightening up set-screw 28. It will of course be apparent that the fastener may be placed at the center or at either end of the rails of the sashes, as may be preferred. Should it be required at any time to remove the connecting-rod—as, for example, when washing the windows—set-screw 28 would be loosened and the rod would be turned backward to disconnect it from the threaded opening in the angle-piece. The angle-piece might then be removed, if required, by turning it at right angles to its normal position, as in Fig. 3, and the connecting-rod lowered as much as required or wholly removed from plate 24 by simply passing it down and out of the vertical opening. It is obvious that the fastener may be again placed in operative condition by returning the angle-piece to its normal position by first turning it so that the elongated head will pass through slot 22 in plate 21, and then allowing the outer end to drop to place, and then passing the connecting-rod up through opening 26 in plate 24 and turning the threaded end thereof into the opening in the angle-piece.

Having thus described my invention, I claim—

1. A sash-fastener consisting of a plate adapted for attachment to the top rail of an upper sash and having a slot, an angle-piece having a head which is adapted to pass through the slot and detachably engage said plate, a plate adapted for attachment to the meeting-rail of a lower sash and having a vertical opening and a connecting-rod adapted to pass through the opening in the plate on the lower sash and to detachably engage the angle-piece, said connecting-rod consisting of a tubular section 10 having a slot 14 and recesses 15 and a section 11 having a lug adapted to pass along the slot and to engage the recesses, whereby said sections are extensibly connected together.

2. The connecting-rod C, consisting of a tubular section 10 having a slot 14 and recesses 15 which intersect said slot and are provided with inclines 16, and a section 11 having a lug 12 which is adapted to engage either of the recesses and to ride up the inclines into the slot when it is desired to lengthen or shorten the rod or to separate the sections.

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

WILLIAM H. BRADLEY.

Witnesses:
A. M. WOOSTER,
H. SINCERBEAUX.