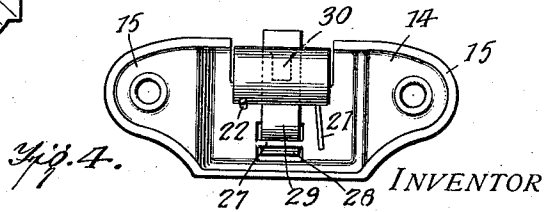
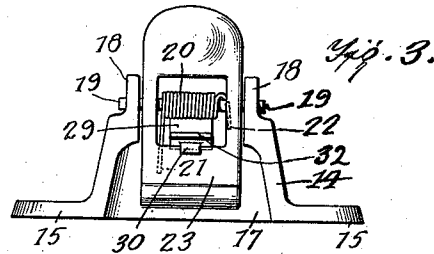
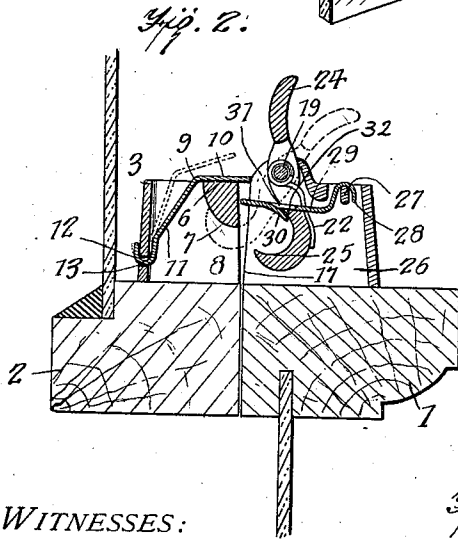
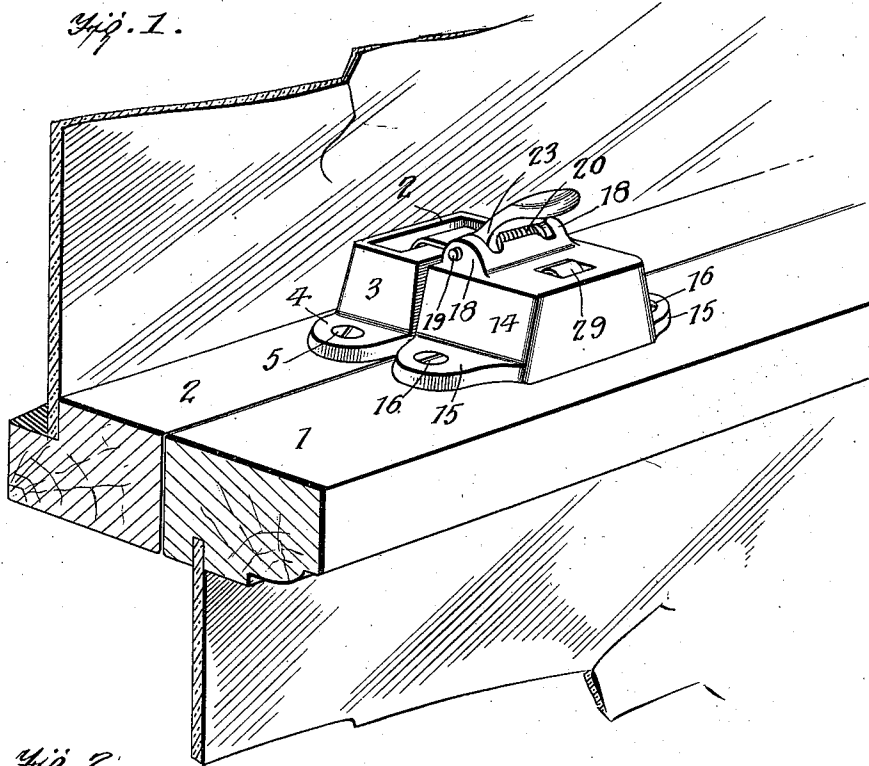


J. BROUGH.
AUTOMATIC WINDOW FASTENER.
APPLICATION FILED APR. 21, 1911.

1,012,803.

Patented Dec. 26, 1911.



WITNESSES:

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UNITED STATES PATENT OFFICE.

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AUTOMATIC WINDOW-FASTENER.

1,012,803.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JOSEPH BROUGH, a citizen of the United States of America, and resident of Lebanon, county of Lebanon, and State of Pennsylvania, have invented certain new and useful Improvements in Automatic Window-Fasteners, of which the following is a specification.

This invention relates to certain new and useful improvements in automatic window fasteners of that class in which the window is automatically locked as the sash are brought into their closed position.

The present invention has for its objects among others to provide a simple and cheap construction of sash lock or window fastener composed of few parts, those capable of manufacture at minimum cost, readily assembled, positive and reliable in action, and not liable to get out of order or to become deranged or broken in use.

Other objects and advantages of the invention will hereinafter appear and the novel features thereof will be particularly pointed out in the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the numerals of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a view showing in section a portion of the upper and lower sash with my fastener applied thereto. Fig. 2 is a vertical section on the line 2—2 of Fig. 1. Fig. 3 is a rear view of the member for attachment to the lower sash. Fig. 4 is a bottom plan view of Fig. 3.

Like numerals of reference indicate like parts throughout the several views.

While the invention is capable of embodiment in a variety of forms without departing from the essential feature thereof, that herein illustrated is what I at the present time consider preferable. It is to be understood, however, that I do not intend to restrict myself to the exact details of construction, proportion of parts, etc., as herein disclosed.

Referring to the drawings, 1 designates the top rail of the lower sash and 2 the bottom rail of the upper sash, the glass in both sash being broken away for an obvious purpose.

Secured to the bottom rail 2 of the upper sash is a member comprising a casting or

the like 3 having lugs 4 for the reception of the attaching screws or other means 5 by which it is secured in position. This member 3 is shown as open at the top except at its front edge where it has the portion 6, the under face of which is inclined or rounded toward the front wall, as seen at 7. This front wall is open, as seen at 8, beneath the lower edge of this rounded portion, as seen best in Fig. 2, for the passage of the hook member soon to be described, as will be clearly understood upon reference to said Fig. 2.

9 is a member terminating at its free end in the horizontal portion 10 adapted to rest upon the top edge of the member 6, as shown by full lines in Fig. 2, the free end extending a slight distance beyond the front wall of the casting or member 3, as shown, this front wall being inclined slightly rearwardly, as clearly illustrated in Fig. 2. This member 9, which is preferably of sheet metal, is inclined rearwardly and downwardly, as shown at 11 in Fig. 2, its rear end being bent upon itself to form a hook member 12 which is loosely engaged within the slot or opening 13 in the rear wall of the member 3, so that the member 9 has pivotal movement, so that it may be moved into the dotted line position indicated in Fig. 2. It is evident, however, that this is but one way of pivotally mounting the member 9 in the rear wall of the member 3.

On the upper rail 1 of the lower sash is mounted a casing or casting or the like 14 having the lugs 15 for the reception of the screws or the like 16 by which it is secured in position. This member 14 is open upon its rear face, as seen at 17 in Figs. 2 and 3. Upon its upper face, it is formed with the lugs 18 at opposite ends in which is mounted a rod or shaft 19 around which is coiled a spring 20, one end of which bears against the front wall of the member 14, as indicated by dotted lines 21 in Figs. 3 and 4, and the other end of which bears against the pivoted hook member soon to be described, as seen at 22 in Figs. 2, 3 and 4.

23 is a hook member mounted for pivotal movement on the rod or shaft 19, terminating at its upper end in a handle or thumb piece 24 and at its lower end in a hook portion 25. The handle portion 24 is disposed outside of the chamber of the member 14,

while the hook portion thereof is disposed within such chamber 26, as seen clearly in Fig. 2.

Extending across an opening in the top of the member 14 is a cross bar 27 on which is engaged a hooked end 28 of a substantially horizontally extending member 29 having a tongue 30 stamped therefrom, leaving the opening 31 from which the material forming said tongue is stamped, all as clearly illustrated in Fig. 2.

With the parts constructed and arranged substantially as hereinbefore described and the two members 3 and 14 affixed to the rails 2 and 1 respectively, as seen in Figs. 1 and 2, the operation will be readily understood and, briefly stated, is as follows. When the sash are closed, the parts assume a position to automatically fasten the window against opening. The hook 25 of the pivoted hook member is engaged beneath the lower rounded end of the member 6 of the member 3, as indicated in dotted lines in Fig. 2, the spring 20 acting upon the hook portion of such member to project it beneath and in rigid engagement with said member 6. When it is desired to raise the lower sash or to drop the upper sash, the thumb piece is pressed upon to move it into a substantially upright position, as indicated by full lines in Fig. 2. This moves the projecting point 32 at the upper end of said hooked member into engagement with the tongue 30 of the member 29, the force of the thumb piece being against the tension of the spring and brings the hook member 25 into the position shown by full lines in Fig. 2. Now, when the lower sash is raised, the free end of the member 29 engages the free end of the member 9 and moves the same into the dotted line position seen in Fig. 2. As soon as the sash has passed this point, the member 9 falls back into its normal position by gravity. When this projecting end of the member 30 engages the projecting end of the member 9, the latch 30 is moved out of engagement with the projecting portion 32 and then the spring 20 acts to throw the hook member 25 rearward and under and in contact with the rounded face 7 of the member 6, so that the sash are automatically locked in closed position. The lower sash can not be raised nor the upper sash lowered until the thumb piece 24 is acted upon to throw the hook member 25 out of engagement with the projecting member 6 on the member 3. The construction is such that the lower sash can not be lowered into position without actuating the parts so as to automatically lock the sash. The operation is simple, requires but little power and the thumb piece serves as an additional means for aiding in raising the sash.

Modifications in details may be resorted to without departing from the spirit of the

invention or sacrificing any of its advantages.

What is claimed as new is:—

1. An automatic window fastener embodying cooperating members one for attachment to each sash and one of which is adapted to overlap the other at the top, and a pivoted spring-actuated hooked member, one of said first-named members having a tongue automatically engageable with the hook portion of said pivoted member.

2. An automatic window fastener embodying cooperating members one for attachment to each sash and one of which is adapted to overlap the other at the top, a spring-actuated pivoted hooked member, one of said first-named members having a tongue automatically engageable with the hook portion of said pivoted member, the overlapping portion of the other member cooperating with said tongue member.

3. In an automatic window fastener, a member attachable to the bottom rail of an upper sash and having a keeper portion, a pivoted member thereon overlapping the keeper portion, a member attachable to the upper rail of the bottom sash, a spring actuated member pivoted therein and means adapted to cooperate with said hook member to hold the same in inoperative position, said means being also adapted to cooperate with the overlapping portion of the said pivoted member.

4. In an automatic window fastener, a member attachable to the bottom rail of the upper sash and having a depending portion, a plate pivotally mounted on said member and overlapping the said depending portion, a member attachable to the top rail of the bottom sash, a hooked member pivoted therein and a pivotally mounted plate having a tongue for cooperation with the hooked member to hold the same in inoperative position.

5. In an automatic window fastener, a member attachable to the bottom rail of the upper sash and having a keeper portion, a plate pivotally mounted on said member and overlapping the said keeper portion, a member attachable to the top rail of the bottom sash, a hooked member pivoted therein, a pivotally mounted plate having a tongue for cooperation with the hooked member, and a free terminal engageable with the overlapping portion of said pivoted plate.

6. In an automatic window fastener, a hollow member having a keeper portion with curved lower face, a plate pivoted at one end in said hollow member and having its free edge overlapping said keeper portion, a second hollow member, a hooked member pivoted therein, a spring acting on the hooked member to force it into engagement with said plate, and a pivoted member extending through an opening in the hooked member

and adapted to engage the free end of said pivoted plate.

7. In an automatic window fastener, a hollow member having a keeper portion with
5 curved lower face, a plate pivoted at one end in said hollow member and having its free edge overlapping said keeper portion, a second hollow member, a hooked member pivoted therein, a spring acting on the hooked
10 member to force it into engagement with said plate, a pivoted member extending

through an opening in the hooked member with its free end engageable with the free end of said pivoted plate, and a depending tongue engageable with the hooked member. 15

Signed by me at Lebanon, Pa., this 14th day of April, 1911.

JOSEPH BROUGH.

Witnesses:

EUGENE HOASTER,

Mrs. EUGENE HOASTER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."