

(Model.)

E. R. WETHERED.

FASTENER FOR MEETING RAILS OF SASHES.

No. 287,747.

Patented Oct. 30, 1883.

Fig. 6. Fig. 7.

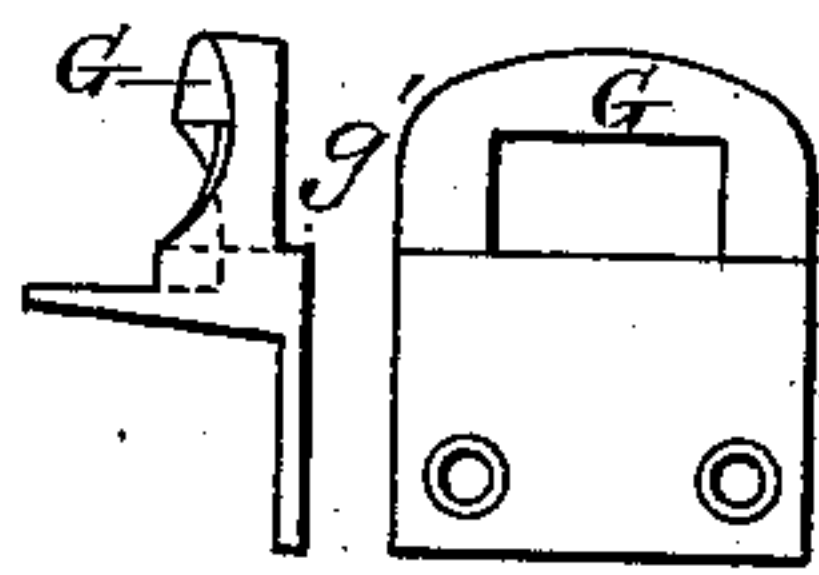


Fig. 8.

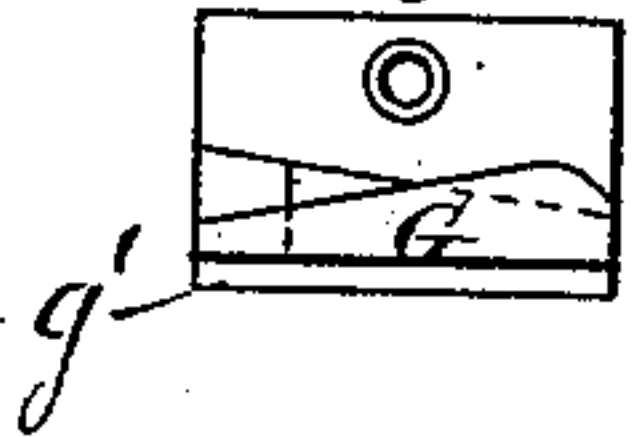


Fig. 3.

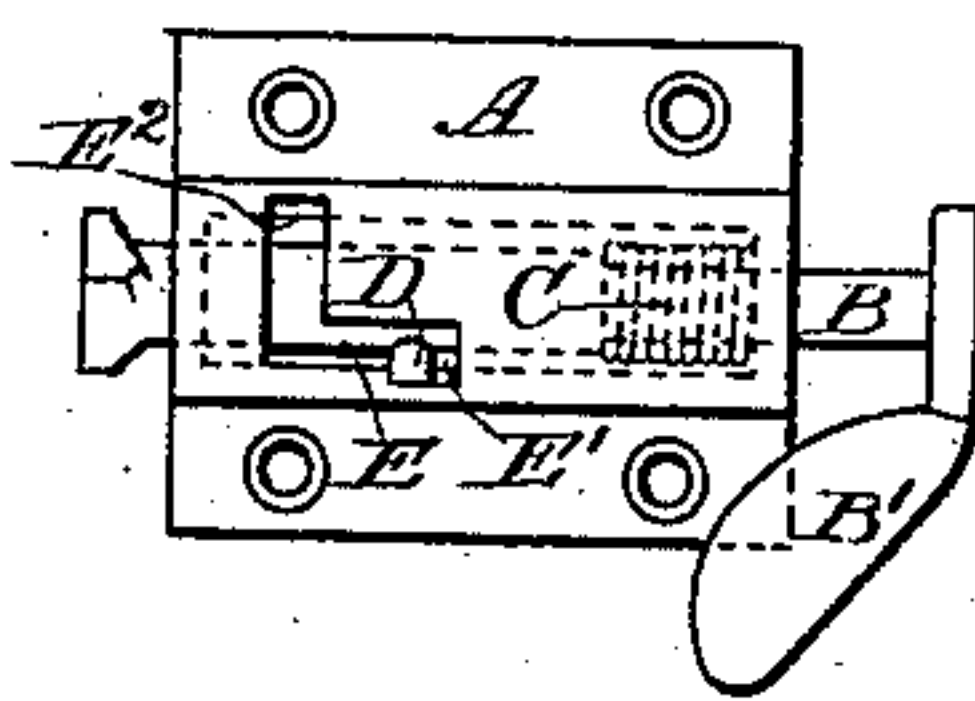


Fig. 5.



Fig. 4.

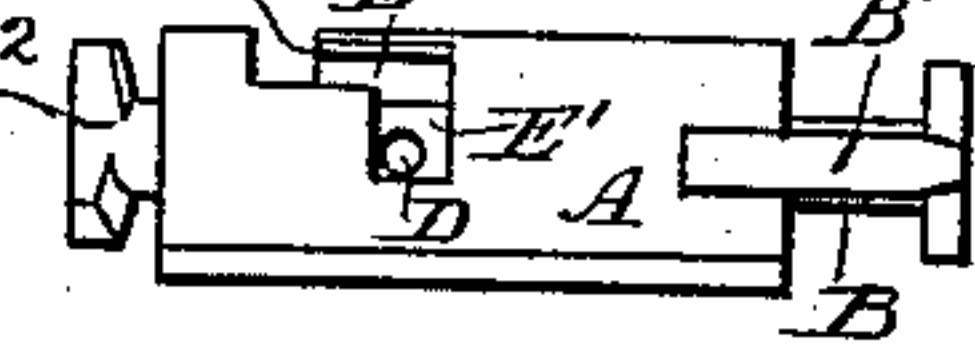


Fig. 1.

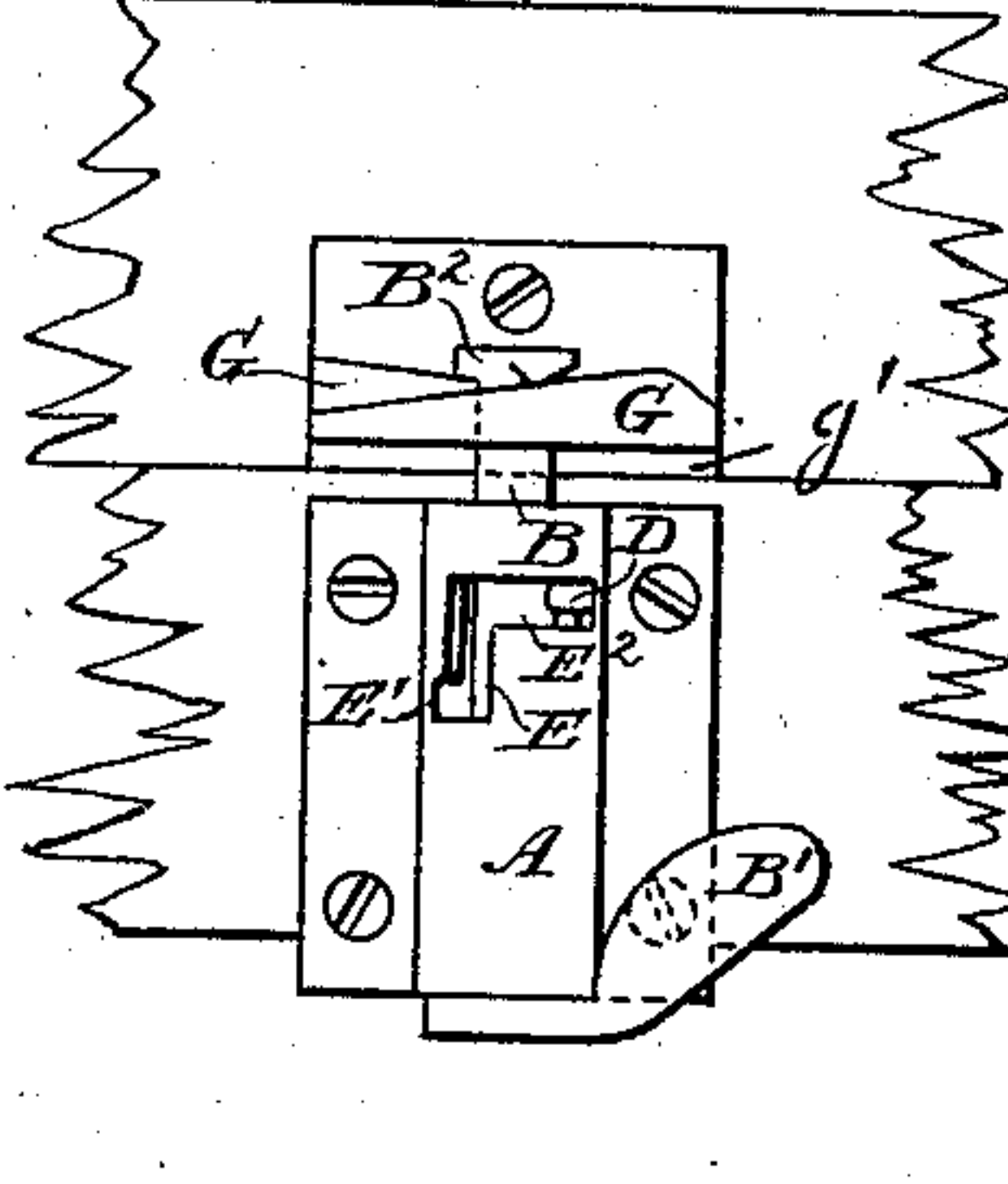
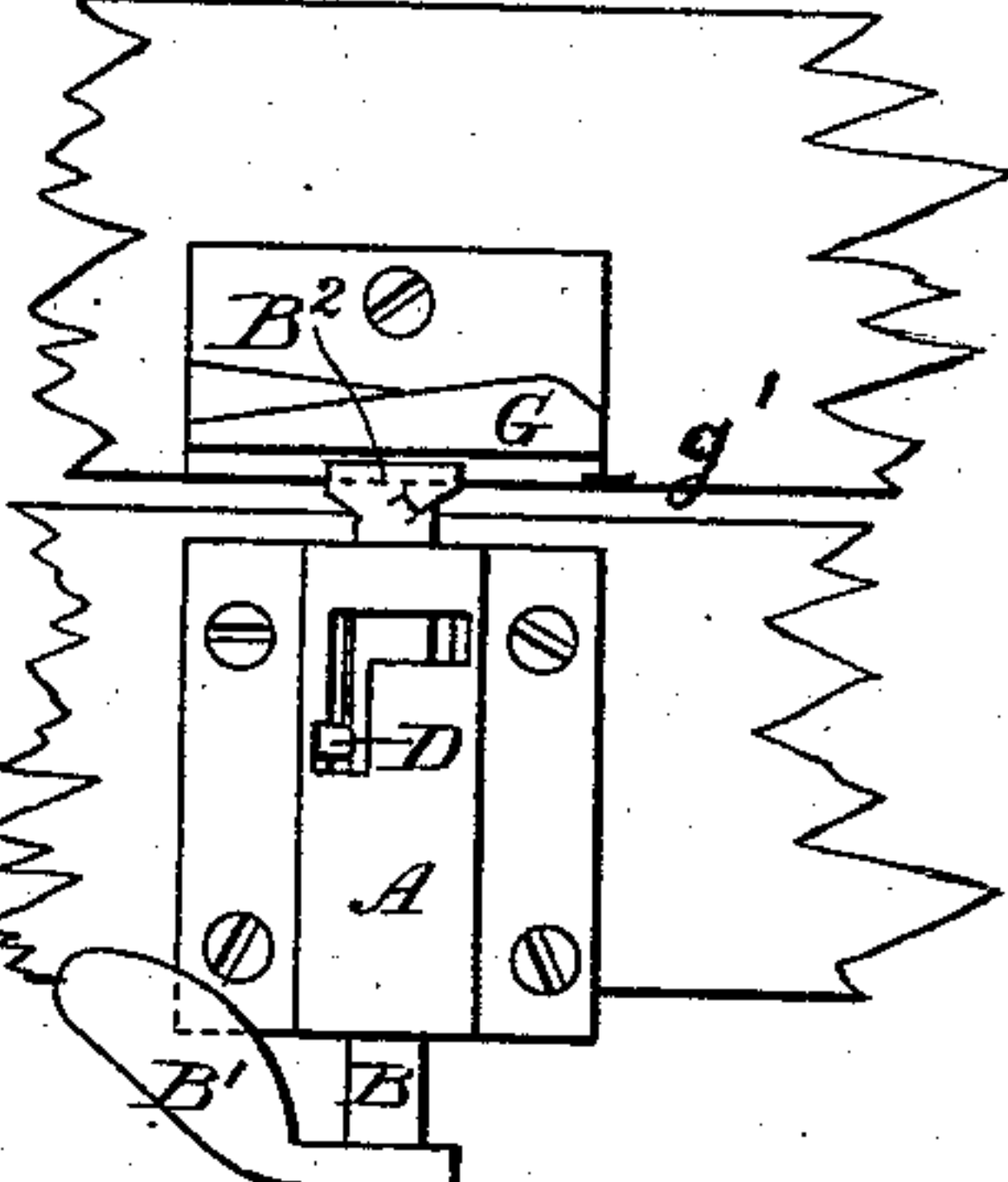


Fig. 2.



Witnesses
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UNITED STATES PATENT OFFICE.

EDWIN R. WETHERED, OF WOOLWICH, COUNTY OF KENT, ENGLAND.

FASTENER FOR MEETING-RAILS OF SASHES.

SPECIFICATION forming part of Letters Patent No. 287,747, dated October 30, 1883.

Application filed January 5, 1883. (Model.) Patented in England January 9, 1882, No. 119.

To all whom it may concern:

Be it known that I, EDWIN ROBERT WETHERED, a subject of the Queen of Great Britain, residing at Woolwich, in the county of Kent, England, have invented new and useful Improvements in Window-Sash Fastenings, (for which I have obtained a patent in Great Britain, No. 119, dated January 9, 1882, sealed May 23, 1882,) of which the following is a specification.

The object of the invention is to provide a simple and efficient fastening for window-sashes, which cannot be opened from the outside, and which, when fastened, will hold the window-sashes firmly together. The part of the fastening which is to be secured to the top rail of the lower window-sash carries a bolt somewhat similar to an ordinary door-bolt, which can be turned and slid backward or forward horizontally at right angles to the window-sashes. The end of the bolt has a projection or projections standing out sidewise from it, so as to form an oblong head at its end. The part of the fastening which is to be secured to the bottom rail of the upper sash is formed with a metal plate standing up vertically from the rail of the window-sash. In this plate is an oblong slot for the end of the bolt before mentioned to pass through. When the bolt is drawn back, a pin projecting from it enters a horizontal slot in the casing within which the bolt slides, and the head of the bolt is then in a line with the slot in the plate carried by the upper sash. When the bolt is thrust forward to lock the sashes together, the head of the bolt passes through this slot, and when a partial turn is given to the bolt, projecting ends of the head come against the back of the plate, and the bolt so is locked. In order that the sashes may be drawn toward one another at the same time that the bolt is locked, inclines may be formed at the end of the casing within which the bolt slides, for projections at the tail end of the bolt to bear against. In this way the bolt, as it is turned after being pushed forward, will also be somewhat drawn backward, and as the head of the bolt then bears against the back of the slotted plate in the upper sash the two sashes will be drawn together; or the incline might be at some other part of the cas-

ing of the bolt, or upon the back of the slotted plate on the upper sash. The tail end of the bolt is formed with a knob or handle, by which it can be turned and moved backward or forward, as above described. If the plate which is secured to the upper sash is made a few inches in height, a second slot may be formed in the upper part of the plate. This would allow of the windows being locked when partly opened. The bolt-fastener might also be made so as automatically to fasten the sashes whenever they were closed. To effect this the bolt might be thrust forward by a spring, and when drawn back the bolt might be held from being thrust forward by the spring by its guide-pin being turned into a small vertical slot branching out from the rear end of the horizontal guide-slot in the casing. When the sashes were closed, a part of the fastener carried by the upper sash might strike against the head of the bolt and turn the bolt, so as to withdraw the guide-pin from the small vertical branch slot. The spring would then press the bolt forward and cause it to lock the sashes.

In the drawings hereunto annexed I have shown a sash-fastener formed as above described.

At Figure 1, I have shown the two parts of the fastener secured, the one to the bottom rail of the upper window-sash and the other to the top rail of the lower window-sash. In this figure the two parts of the fastener are shown to be locked together. Fig. 2 is a similar view of the fastener unlocked. Figs. 3, 4, and 5 show a plan, side view, and end view of the locking-bolt and the casing which carries it. Figs. 6, 7, and 8 show a side view, end view, and plan of the other part of the fastener.

The casing carrying the locking-bolt (shown at Figs. 3, 4, and 5) is fixed to the top rail of the lower sash, while the other part of the fastener (shown at Figs. 6, 7, and 8) is fixed to the bottom rail of the top sash. In the drawings the bolt is shown as pressed forward by a spring, so that it may always be ready to lock the window automatically whenever the window is closed.

A is the casing containing the locking-bolt.

B is the locking-bolt. It passes through holes in the ends of the casing, and can be slid

endwise through these holes, and also turned in them. At one end it is provided with a handle, B', by which it can be turned and drawn backward. At the opposite end it is
5 formed into a T-shaped head, B². The stem of the bolt is shown to be surrounded by a coiled spring, C, which tends to thrust the bolt forward.

D is a pin projecting outward from the bolt
10 B. It enters a slot, E, cut in the casing A. One portion of the slot is made longitudinally of the casing. When the pin projecting from the bolt is in this portion of the slot, the head of the bolt is horizontal and in position to pass
15 through the slot in the other part of the fastener. At each end of the longitudinal portion of the slot is a transverse slot, which allows of the bolt being turned at either end of its traverse. When the bolt is drawn back and
20 turned so that its pin D enters the transverse slot E', the bolt is retained in its backward position and cannot be thrust forward by the spring. The head of the bolt is then in an inclined position. When the lower sash is pulled down
25 to shut it, the lower arm of the T lug or head of the bolt (which head is then by means of the pin D and the short slot E' standing at an incline or angle, as seen in Fig. 5) strikes against the ledge or striking plate or part g' of the
30 keeper, as shown in Fig. 2, and the bolt is thereby automatically turned on its axis, so as to change the T-head from its inclined position to a horizontal one, and when thus brought to this position it immediately, by force of the
35 spring, is thrust forward through the opening in the keeper, thus automatically locking the window whenever the latter is closed. By then turning the bolt so that the pin D passes

into the transverse slot E², the two sashes will be drawn together, as the two arms of the head 40 of the bolt then act against inclined surfaces G G, formed above and below the slot in the portion of the fastener which is fixed to the upper sash, and through which the head of the bolt is passed. The construction of the part 45 of the fastener which is fixed to the upper sash is clearly shown at Figs. 6, 7, and 8.

In place of the handle B' being at the rear end of the bolt, the pin D might be prolonged outward and formed into a handle. A cord 50 might also be connected to the handle, so that the bolt might be drawn back and the window unfastened by pulling upon the cord.

When the sash-fasteners are not required to be made self-fastening, they might be made 55 without the spring C for thrusting the bolt forward. The transverse slot E' in the bolt-casing would then not be required.

I do not claim, broadly, a spring to project the bolt forward, nor a T-shaped head on a 60 bolt; but

I claim—

In a sash-fastener, a T-headed spring-bolt on the lower sash, held back by a pin and slot, and arranged to project slightly over the sash 65 when held back, with the T-head at an incline, as set forth, combined with a keeper having a ledge or striking-plate, g', which on shutting the window acts on this inclined head and automatically causes the turning of the 70 bolt on its axis, releases the pin, and permits the shooting forward of the bolt into its keeper.

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Witnesses:

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