

(No Model.)

R. G. COATES.
SASH HINGE.

No. 582,847.

Patented May 18, 1897.

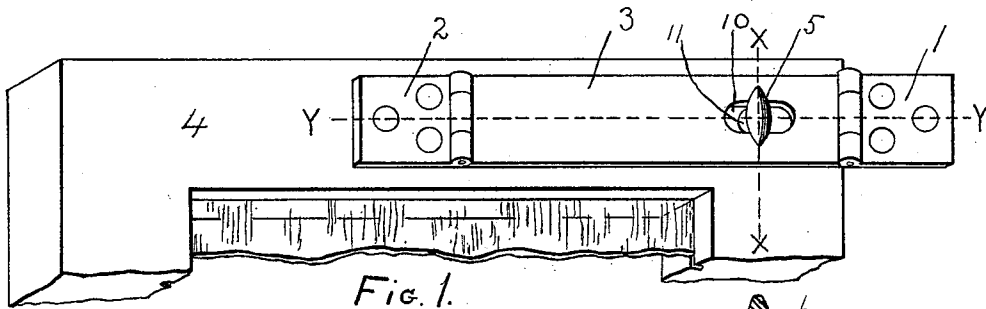


Fig. 1.

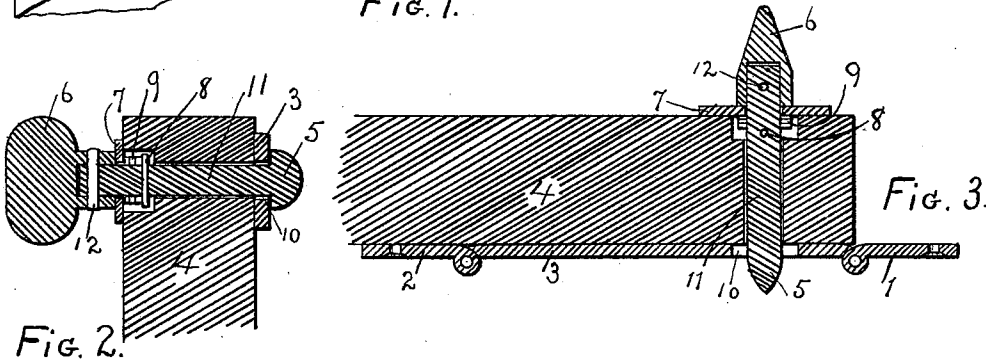


Fig. 2.

Fig. 3.



Fig. 4.

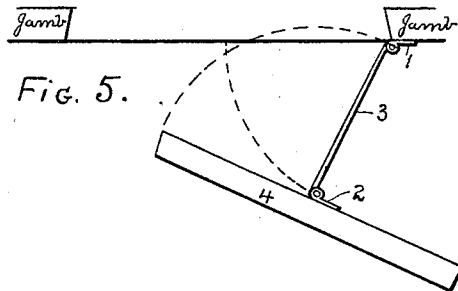


Fig. 5.

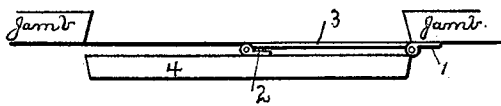


Fig. 6.

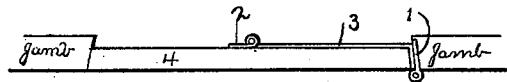


Fig. 7.

WITNESSES:

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SASH-HINGE.

SPECIFICATION forming part of Letters Patent No. 582,847, dated May 18, 1897.

Application filed October 10, 1895. Serial No. 565,284. (No model.)

To all whom it may concern:

Be it known that I, RAY G. COATES, of the city of Pasadena, county of Los Angeles, and State of California, have invented a new and useful Improvement in Sash-Hinges, which improvement is clearly set forth in the following specification and the accompanying drawings.

In hanging casement-sash it is desirable that they swing out of the room. Otherwise the sash in opening interferes with the curtains or other window-furnishings. When so hung, it is extremely difficult to get at the outer surface of the glass for the purpose of cleaning it.

The object of my invention is to so improve the hinges used for casement-sash that the latter may be easily reversed and the outer surface be thereby as accessible as the side which is ordinarily turned inward.

In the drawings similar numbers indicate similar parts of the various figures.

Figure 1 represents a general view of one end of a sash, showing the improvement applied. Fig. 2 represents a cross-section on the line X X of Fig. 1. Fig. 3 represents a longitudinal section on the line Y Y of Fig. 1. Figs. 4, 5, and 6 represent, diagrammatically, various positions of a sash hung with the improved device. Fig. 7 is a diagrammatical representation of a construction in which the hinge is attached to the inner side of the sash.

In the drawings the member 1 represents that part of the hinge which is fastened to the window-frame. The member 2 represents that part which is permanently secured to the sash. An intermediate member 3 is pivotally connected at one end to the member 1 and at the opposite end to the member 2. This pivotal connection may be the common hinge, as shown, or it may be any of the usual constructions now known and practiced in this particular art. The hinge is represented as attached to the upper part of a sash 4.

The spindle 11 and its accessories represent a means of temporarily fastening the member 3 to the sash 4. Figs. 2 and 3 show these parts more clearly. The oval-shaped head 5 of the spindle 11 passes through the elongated opening 10 of the member 3 when their long axes are in the same direction and allows the sash 4 to swing on the member 2, as

is indicated in Figs. 5 and 6. When the head 5 is inserted in the opening 10 and is turned by the thumb-piece 6 so that its longer axis is about at right angles to the longer axis of the opening 10, then the member 3 is held firmly against the sash 4 and the latter swings on the member 1 as an ordinary hinged sash. This last position of the members is the normal one. The spindle 11 of Figs. 2 and 3 may be adjusted to a variation in the thickness of the sash by the use of any of the usual constructions for such adjustments. As shown, the escutcheon-plate 7 is secured to the sash 4, and washers 9 fill out the spindle to the pin 8. By removing one or more washers to the other side of the plate 7 a limited amount of adjustment is secured. On the inner side of the sash the thumb-piece 6 is attached to the spindle 11 by the pin or screw 12, as shown in Figs. 2 and 3. I do not limit myself to this particular method of securing the member 3 to the sash 4, since any method operated independently of any movement of the sash by which the member 3 may be temporarily secured to the sash will answer the purpose with more or less convenience. The only other restriction that I place upon the construction is that the means of securing shall be accessible from the inside of the sash. Otherwise the very object of the improvement will be frustrated.

It is obvious that for all ordinary cases a complete hinge will be required for each end of the sash.

In operation, the head 5 being in the position shown in Fig. 1, the sash will swing on the member 1 as an ordinarily-hinged sash. It being desired to get at the outer surface of the sash for any purpose, the thumb-piece 6 is turned a quarter-revolution and then, by swinging the sash on the members 1, 2, and 3 jointly, as shown in Fig. 5, the said sash may be brought into the position shown in Fig. 6, the previous outer surface then facing the inside of the window. By reversing the operations mentioned and refastening the member 3 to the sash the latter will swing again as if hung with an ordinary hinge.

I have shown the hinge as constructed for the outside of a sash and window-frame. The member 1 may be attached to the outside of

the frame, as shown in Figs. 1, 4, 5, and 6, or it may be attached to the jamb, as shown in Fig. 7. In the latter figure the member 2 is shown attached to the inside of the sash, and the member 3 is bent so as to also pass inside. In this case the head 5 will be on the inside of the sash, and it may also fill the office of the thumb-piece, only so long a spindle 11 being then necessary as will pass through the plate 7 and hold a pin or other retaining device to keep said spindle in position.

The length of the member 3 should be about half the width of the sash in order that the latter may approximately register upon reversal. An exact registration is not necessary. The drawings show merely the simplest construction. The design may be made as ornamental as the circumstances may require.

I am aware that hinges of three or more sections are well known in the arts; also, that the intermediate members have been temporarily secured to the sash. Therefore the above I do not broadly claim.

What I do claim as new, and desire to secure by Letters Patent, is—

1. In sash-hinges, the combination of a member fastened to the window-frame, a member fastened to the sash, an intermediate member pivotally connected at one end to the member fastened to the sash and at the other to the member fastened to the window-frame, and means, operated independently of any movement of the said sash, for temporarily locking said intermediate member to the said sash, substantially as described.

2. The combination of the member 1, the member 2, the member 3, and a locking device for the member 3 having its controlling handle on that side of the sash which is opposite to the side next the pintle of the member 1, and which device is operated independently of any movement of the said sash, substantially as described.

RAY G. COATES.

Witnesses:

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