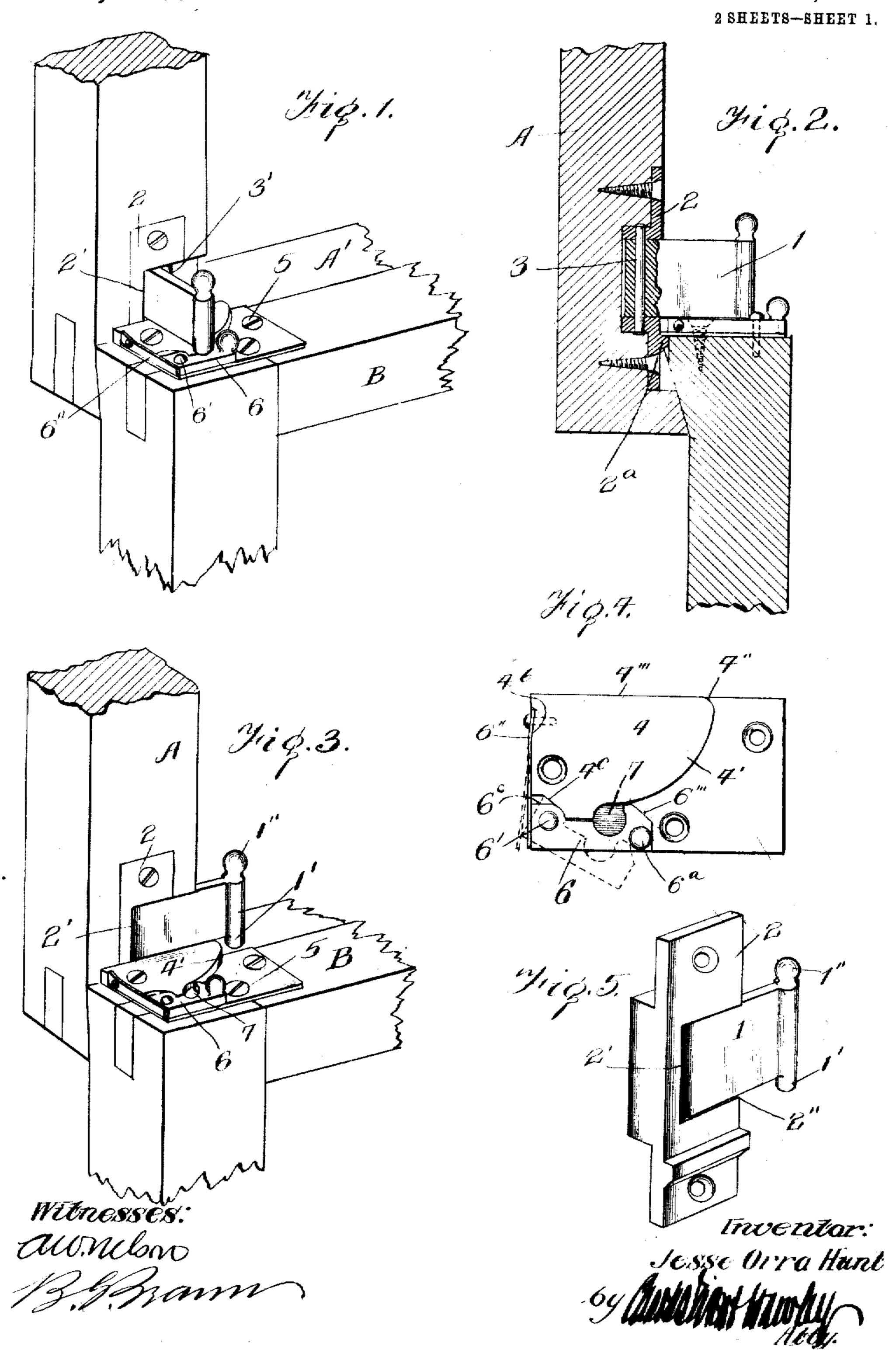
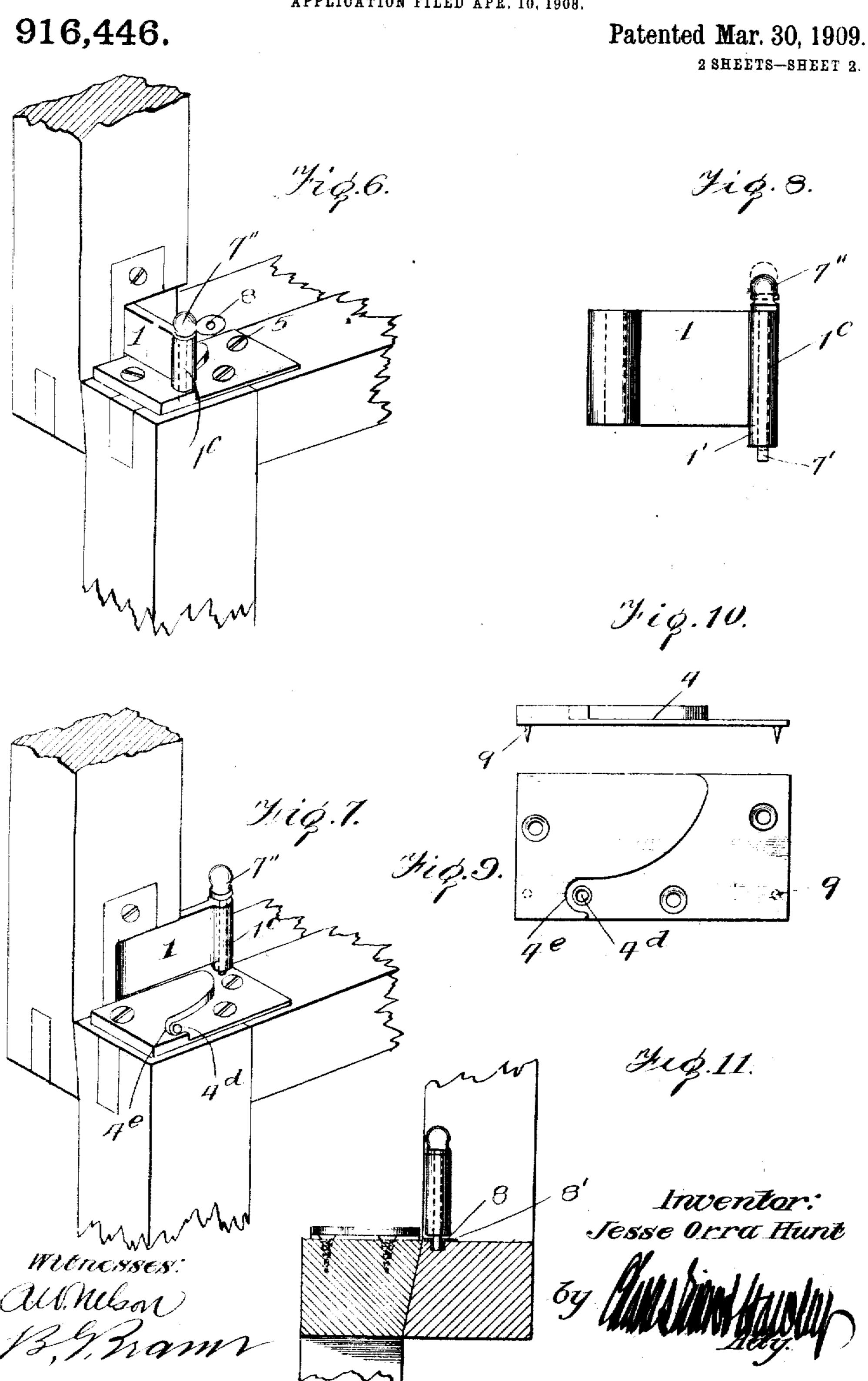
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WINDOW SASH LOCK.
APPLICATION FILED APR. 10, 1908.

916,446.

Patented Mar. 30, 1909.



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## UNITED STATES PATENT OFFICE.

JESSE ORRA HUNT, OF CAIRO, ILLINOIS.

## WINDOW-SASH LOCK.

No. 916,446.

Specification of Letters Patent.

Patented March 30, 1909.

Application filed April 10, 1908. Serial No. 426,416.

To all whom it may concern:

Be it known that I, JESSE ORRA HUNT, a 5 State of Illinois, have invented certain new and useful Improvements in Window-Sash and exact description, such as will enable member in open position. others skilled in the art to make and use the 10 same.

My invention relates to improvements in sash locks, of that class in which the lock 15 to prevent relative movement of the sashes.

.20 fastened thereto shall be effective to prevent | sash. One side 2', of the opening in the of the building.

A further object of the invention is to provide a sash lock which shall be of neat ap-25 pearance and that shall be practically concealed from view from the exterior of the window and which shall be capable of easy operation from the interior.

A further and essential object of the in-30 vention is to provide a sash lock, the mem- | ing rail A' of the upper sash, and that it is bers of which shall be positively locked or engaged in such manner as to prevent any other than the deliberate disengagement thereof from the inner side of the window, it

35 being my special purpose to form the lock in such manner that it cannot be opened or operated by means of a knife blade or other instrument inserted between the meeting rails of the sashes.

My invention consists in a sash lock of the construction and combination of parts hereinafter described and particularly pointed out in the appended claims.

My invention will be more readily under-45 stood by reference to the accompanying drawings forming a part of this specification, in which,

Figure 1, is a perspective view of a sash lock embodying my invention. Fig. 2, is a 59 vertical section thereof. Fig. 3, is a view like unto Fig. 1, showing the lock in open or unlocked condition. Fig. 4, is a plan view of the plate member of the device. Fig. 5, is a

which a gravity detent is employed for fastening the pivoted member in locked posicitizen of the United States, and a resident | tion. Fig. 8, is a side view of the hinged of Cairo, in the county of Alexander and | member of Fig. 6. Figs. 9 and 10, are plan 60 and edge views of the plate member shown in Fig. 6. Fig. 11, is a sectional detail Locks, of which the following is a full, clear, | showing the manner of securing the hinged

As illustrated in the drawings my device 65 is composed of two principal members, one being the hinged member above spoken of and the other the plate member. The hinged comprises two members, one on each sash | member comprises the vertical swinging and arranged to interlock in such manner as | plate or wing, 1, and the block, 2, in which 70 it is pivoted by means of the vertical pin, 3. The object of my invention is to provide a | The block, 2, is set into the upper sash A, in sash lock of simple construction and rela- | the manner best shown in Fig. 3, with its tively great strength to the end that it shall | face flush with the face of the sash and hence be easy to attach to the sashes and when out of the path of the outer edge of the lower 75 the working of the sashes from the exterior | block serves as a stop for the wing in one direction and the other side 3', of the block is recessed to permit the wing to retire into a position flush with the face of the sash 80 stile. Fig. 7 shows the wing in partly unlocked position. Fig. 3, shows it in proper position to permit the sashes to be moved. up or down. It will be noted that the wing is located slightly above the top of the meet- 85 provided with a depending lug 1' for engagement with the plate portion of the device. The upper corner of the wing is preferably provided with a knob 1", which gives it a 90 neat appearance and facilitates its operation.

The plate member 4, of my device is carried upon the top of the lower sash B, by means of several screws 5, and is positioned directly in front of the block 2, in which 95 position the wing may be swung over the plate when the sashes are closed. The plate 4 is provided with a draft cam 4', which coacts with the lug 1', of the wing, to draw the meeting rails of the sashes together as 100 shown in Figs. 1 and 3. The cam does not exactly conform to the arc described by the lug 1' when the wing is swung, but falls short thereof in the portion 4". This portion is also rounded as shown in Fig. 4. My 105 purpose in thus forming the cam is to prevent the engagement of the wing with the outer edge 4" of the plate 4, in cases where the sashes loosely fit the window frame and perspective view of the hinged member. consequently are liable to slight lateral 110 55 Figs. 6 and 7 are perspective views illustrating a modified form of my invention in as here shown the device compensates for such inaccuracies in the window frame and sashes, the wing when swung into engagement with the plate serving to not only draw the sashes together but also to move them

3 into proper vertical alinement.

It will now be obvious that when the wing and the plate are in locked position they | The end 6° of the latch and the surface 4° of together serve to prevent the lowering of the upper sash or the raising of the lower sash. 10 By reason of the direct engagement of the lower edge of the wing with the top of the plate, the device possesses great strength because of the vertical separation of the actual pivotal points of the wing and also by 15 reason of the engagement of the plate with the wing at a point close to the pivot of the wing.

Some window sashes are smaller than the frame in which they are held and such sashes | pin 7', slidable in the end 1°, of the wing 1, 20 when closed present the condition in which | and at its upper end provided with a knob 85 my device be carelessly attached to such of the pin normally projects below the lug 1' 25 lowering of the lower and upper sashes the locked position, drops into the socket 4d 90 respectively, but might nevertheless fail to prevent such further separation of the sashes as to disengage the lug 1' of the wing from the top of the plate. In such event the 30 jarring of the upper sash might cause the wing to swing into unlocked position, or it | tion, the meeting rail of the upper sash being might be possible to reach and operate the wing through the crack between the meeting rails of the sashes. As a precaution against 35 the careless application of the sash lock in this manner I provide the block, 2, with a lug or ledge 2ª, (see Fig. 2) to engage the lower surface of the plate 4. It follows that when the wing is in locked position, the plate, 40 and hence the lower sash, is rigidly held between the wing and the ledge 2ª, and is therefore held against vertical movement in relation to the upper sash. I regard this as an important feature of my invention, and one 45 which is capable of advantageous use in connection with various modified forms of the sash lock herein illustrated.

I sometimes depend upon the spring of the sashes to hold the wing and plate in locked position, in such cases providing a slight depression at the inner end of the cam surface 4'. This method of fastening the parts is not wholly reliable and I therefore prefer to provide positive means for fastening the 55 members of the lock in locked position. The fastener may partake of various forms and I have shown two different fastening devices in the drawings. The first, illustrated in Figs. 1 to 4, comprises a horizontal latch 6, at-60 tached to the plate by a vertical pin 6', and held in closed position by a flat spring 6" on the end of the plate. The latch and cam surface together form a socket 7, to receive the lug 1' of the wing. The end 6" of the 65 latch is beveled to readily admit the lug

when swung into locked position and the hook of the latch prevents the disengagement of the wing from locked position, except when the latch is drawn out to the dotted position shown in Fig. 4. The small 70 knob 6° on the latch facilitates its operation. the plate co-act as stops to prevent excessive movement of the latch. The flat spring 6" is held in position by a screw or rivet and by 75 the engagement of its end with a shoulder 4<sup>b</sup> on the plate 4 (see Figs. 1, 2 and 4).

Instead of placing the fastener upon the plate portion of my device I may arrange it upon the pivoted portion thereof and in 80 Figs. 6 to 11, have illustrated one of the many forms in which such a fastener may be made. This fastener comprises a gravity the meeting rail of the upper sash is above 7". Means are provided to prevent the liftthe meeting rail of the lower sash. Should | ing of the wing from the pin. The lower end sashes it would prevent the raising and of the wing and when the wing is swung to in the plate 4. In this case the cam surface of the plate terminates in an abrupt shoulder 4° to serve as a stop for the wing. The pin 7' may also be used as a convenient means for fastening the wing in an unlocked posi- 95 provided with a socket 8 to receive the pin. In some cases I form the socket in a separate metal part 8' constructed as shown in Fig. 11. Short spuds 9 on the bottom of the 10c plate 4 facilitate the placing of the plateon the lower sash by holding the plate in position while the screws are being driven into place.

As various modifications of my invention 10K will readily suggest themselves to one skilled in the art, I do not confine the invention to the specific structures herein shown and described.

Having thus fully described my invention 110 I claim as new and desire to secure by Letters Patent:

1. A sash lock comprising a plate portion having a draft cam, in combination with a complementary block having a ledge for 115 engagement with the bottom of the plate and a swinging member for engagement with the draft cam thereof, said ledge and member together being adapted to prevent movement of said plate in either direction, 120 substantially as described.

2. An upper sash, in combination with a block set into the stile thereof, said block and sash being recessed, a wing vertically pivoted in said block and adapted to occupy 120 said recess, said block having a ledge below said wing, a lower sash, a plate attached to the top of the lower sash in position to substantially contact said block and to engage the top of said ledge on the block, a cam on 13

said plate for co-action with said wing and a spring fastener on the plate adapted to secure the wing in locked position, substan-

tially as described.

3. A sash lock comprising a plate having a cam surface, in combination with a block having a ledge on its lower part, a wing pivoted in said block above said ledge for engagement with the top of the plate and 10 the cam surface thereof, said ledge upon the block being adapted for engagement with adapted to secure the wing in locked posithe bottom of said plate and a hook like | tion, substantially as described. spring detent vertically pivoted on the | 6. An upper sash and a lower sash having 45

15 tion, substantially as described. 4. The combination with upper and lower | window sashes, of a locking member pivoted at one end to said upper sash and adapted to be swung into the vertical path of the 20 lower sash, a lug upon the free end of said member, a plate upon the upper surface of the lower sash, a draft cam upon the said plate, a detent upon said plate, said detent , being provided with a curved hooked end 25 normally forming with said draft cam, a recess for the reception of said lug, a beveled surface upon said detent whereby the hooked end thereof is moved out of the path of the lug when said lug contacts with 30 said surface, and resilient means adapted to return said hooked end to its normal

position, substantially as described.

5. An upper sash, in combination with a block set into the stile thereof, said block and sash being recessed, a wing vertically 35 pivoted in said block and adapted to occupy said recess, said block having a ledge below said wing, a lower sash, a plate attached to the top of the lower sash in position to substantially contact said block and the top 40 of the ledge thereon, a cam on said plate for co-action with said wing and a fastener

plate for securing the wing in locked posi- | meeting rails, in combination with a block set into the stile of said upper sash and projecting below the top of the meeting rail of the lower sash, said block and sash being recessed, a wing vertically pivoted in said 50 block and adapted to occupy said recess, a plate upon the top of the meeting rail of the lower sash, a draft cam thereon for co-action with said wing and a ledge upon said block in position to engage the lower side of said 55 plate, substantially as described.

In testimony whereof, I have hereunto set my hand, this 24th day of March, 1908, in the presence of two subscribing witnesses.

JESSE ORRA HUNT.

Witnesses:

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CHARLES GILBERT HAWLEY, M. SIMON.