

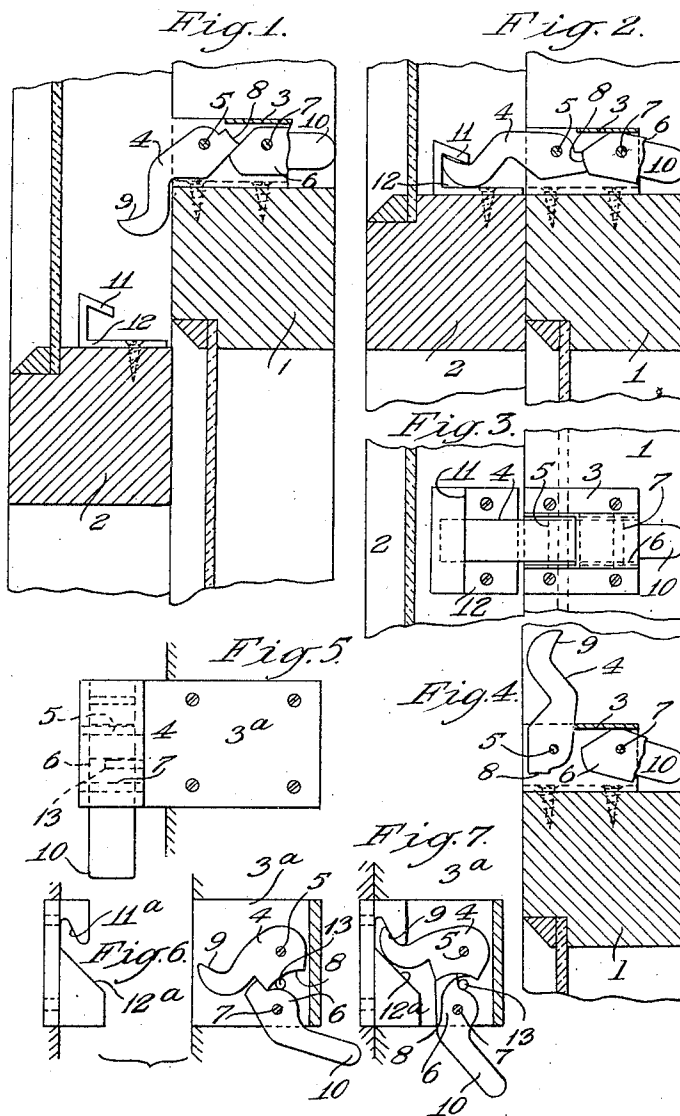
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CATCH FOR WINDOWS OR THE LIKE

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CATCH FOR WINDOWS OR THE LIKE.

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To all whom it may concern:

Be it known that I, ARTHUR ALFRED OGILVY WEBB, a subject of the King of Great Britain, residing in London, England, have invented certain new and useful Improvements in or Relating to Catches for Windows or the like, of which the following is a specification.

This invention relates to catches for windows or the like of the type comprising a catch, a latch and a locking pawl, the latch being pivotally mounted on a bracket secured to one window and provided with a projection or tail adapted, when the latch is moved by the catch on the other window into engagement therewith, to rock the pawl which is pivotally mounted on the bracket and is so arranged that when the latch is engaged by the catch, the pawl moves back under the action of gravity and locks the latch.

According to my invention the engaging portions of the pawl and latch form a substantial arc of a circle whose centre, in the locking position of the parts, coincides with the axis of the pivot on which the pawl works.

The catch may conveniently comprise a hook-shaped part adapted to engage the hook-shaped end of the latch and be provided with a plate or cam adapted, when the window is closed, to move the latch into engagement with the catch and allow the locking pawl to move into engagement. When it is desired to open the window, the pawl must first be moved out of engagement.

A catch formed as above described is applicable either to sliding windows or to casement windows. In the case of sliding windows the bracket on which the latch is pivoted is preferably so formed as to enable the latch to be swung out of the path of the other window to such a position that it rests in unstable equilibrium against the top of the bracket and allows the two windows to be moved past one another, as may be desired, for example, for the purpose of cleaning them.

In the accompanying drawing which illustrates the invention, Figs. 1, 2, 3 and 4 show the invention applied to sliding windows, Fig. 1 being a section showing the catch disengaged, Fig. 2 a section showing the catch engaged. Fig. 3 a plan and Fig.

4 a sectional elevation showing the latch in position to allow the windows to be moved past one another.

Figs. 5, 6 and 7 show the invention applied to a casement window, Fig. 5 being an end elevation, Fig. 6 a section showing the catch disengaged, and Fig. 7 a section showing the catch engaged.

Referring more particularly to Figs. 1-4, 1 shows the meeting rail of the frame of a window sash, and 2 the meeting rail of an upper sash. Secured to the rail 1 is a bracket 3; 4 is a latch pivoted to the bracket 3 at 5, and 6 is a pawl pivoted to the bracket 3 at 7. The latch 4 is provided with a tail 8 which forms an arc of a circle whose centre coincides with the axis of the pivot 7 when the latch and pawl are in locking relation as shown in Fig. 2. The latch is also formed at its other end with a hook 9. The pawl 6 has one end rounded to correspond with the rounded end of the tail 8, the other end of the pawl 6 being provided with an actuating knob 10. The rail 2 has secured to it a catch comprising a hook 11 and a bottom or striking plate 12.

In operation, when the sash are closed the striking plate 12 raises the hook 9 of the latch 4 into engagement with the hook 11 of the catch; at the same time the tail 8 of the latch 4 rocks the pawl 6 until the tail 8 moves clear of the pawl and allows the pawl to swing back to the position shown in Fig. 2, in which position the pawl is arrested by the bracket 3 acting as a stop, and the rounded end of the pawl 6 engages the tail 8 of the latch 4, thus preventing the hook 9 from being lowered.

When it is desired to open the sash the pawl 6 must first be raised by lifting the actuating knob 10 to allow the latch 4 to swing from the position shown in Fig. 2 to that shown in Fig. 1.

If it be desired to move the sashes past one another, to allow them to be cleaned for example, the latch 4 is swung into the position shown in Fig. 4 so as to be clear of the upper sash.

In the modification shown in Figs. 5, 6 and 7, similar parts have similar reference letters. The latch 4 is provided with a hook 9 and a tail 8 which forms an arc of a circle whose centre, in the locking position, coincides with the axis of the pivot 7 of the pawl

6. The pawl 6 has a rounded end adapted to engage the tail 8 of the latch 4 and an actuating knob 10. The latch 4 and pawl 6 are carried by a bracket 3^a which is attached to the side of the casement window. The catch comprises a striking plate 12^a and a hook 11^a. 13 is a stop to limit the movement of the pawl 6.

In operation, when the window is being closed, the striking plate 12^a raises the hook 9 into engagement with the hook 11^a of the catch and the tail 8 rocks the pawl 6 until the latter is clear and swings back into the position shown in Fig. 7, in which position the hook 9 cannot be forced out of engagement with the hook 11^a of the catch.

If it be desired to open the casement window it is first necessary to rock the pawl 6 by the actuating knob 10 to allow the latch 4 to swing from the position shown in Fig. 7 to that shown in Fig. 6.

Having thus described the nature of the said invention and the best means I know of carrying the same into practical effect, I claim:—

1. A fastening for windows or the like, comprising a latch pivoted on one of the two members to be fastened and having an over-weighted nose projected therefrom and a tail portion having a concave recess, a pawl pivoted on the same member as the latch and having a convex portion and a nose cooperating with the tail of said latch, the convex portion on the nose of the pawl forming a substantial arc of a circle struck from the pivot axis of the pawl, and the recess of the latch forming a substantial arc of a circle of the same curvature as the said convex surface of the pawl, a catch on the remaining member cooperating with said nose portion of the latch, and a stop limiting the movement of the pawl in one direction.

2. A fastening for windows or the like, comprising a catch on one of the two members to be fastened, a latch pivoted on the remaining member and having an over-weighted nose portion and a tail portion, a pawl pivoted on the same member as the latch and having a nose portion cooperating with the tail of said latch, the nose of the pawl and the tail of the latch having cooperating surfaces for relative contact engagement, a bracket having the latch and pawl pivoted therein and secured on the

member carrying the latter, said bracket having an upper closed top with an outwardly opening slot to receive and permit the latch to be raised in an upright position clear of the member carrying the catch and also out of engagement with the pawl.

3. A fastening for windows or the like, comprising a bracket secured on one of the two members to be fastened, a catch secured on the other of said members and held in fixed position relatively to its member, the said catch being provided with an overhanging hook and a striking plate, a latch pivoted on said bracket and having an over-weighted nose portion to automatically cooperate with said catch to engage the hook, a pawl pivoted on said bracket and having an over-weighted inner tail end and an outer nose portion which cooperates with the rear portion of the said latch, a surface of the latch cooperating with the striking plate to tilt the latch when the two members are closed one upon the other, the latch and pawl also having curved locking surfaces brought into engagement by the tilting of the pawl by the latch and operating to hold the latter in engagement with the catch, the curved surfaces of the latch and pawl being of the same radius and respectively concave and convex.

4. A fastening for windows or the like, comprising a latch pivoted on one of the two members to be fastened and having an over-weighted nose projected therefrom and a tail portion having a concave recess, a pawl pivoted on the same member as the latch and having a convex portion and a nose cooperating with the tail of said latch, the convex portion on the nose of the pawl forming a substantial arc of a circle struck from the pivotal axis of the pawl and the recess of the latch forming a substantial arc of a circle of the same curvature as the said convex surface of the pawl, and a catch adapted to be secured to the other member, said catch having a striking plate with an overhanging hook at the rear thereof, the striking plate being adapted to lift the hook-shaped end of the latch and cause it to engage with the hook of the catch prior to locking of the latch by the said pawl.

In testimony whereof I have signed my name to this specification.

ARTHUR ALFRED OGILVY WEBB.