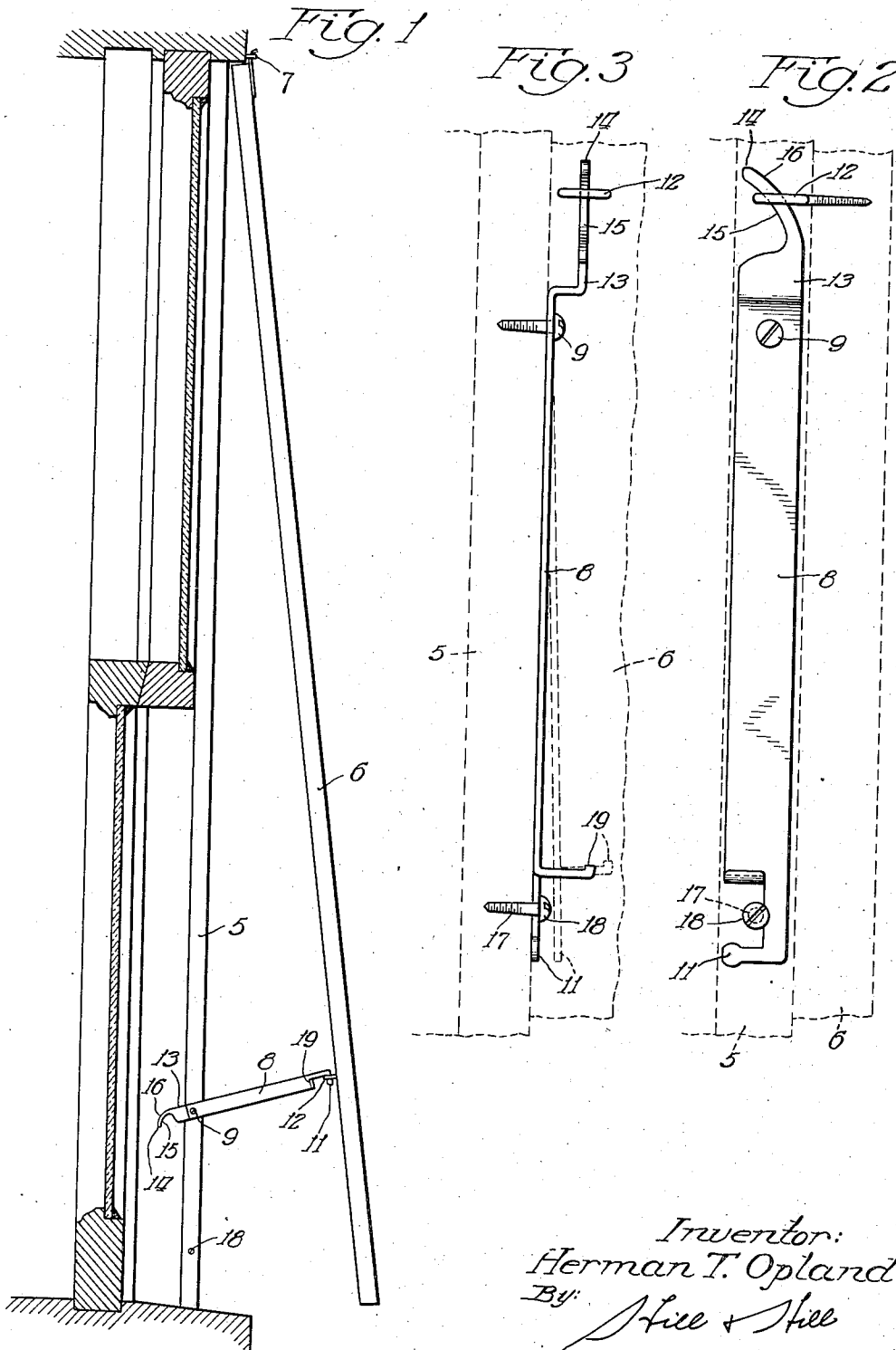


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H. T. OPLAND
STORM SASH FASTENER

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Inventor:
Herman T. Opland
By: *Steel & Steel*

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STORM SASH FASTENER

Herman T. Opland, Minneapolis, Minn.

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5 Claims. (Cl. 292—262)

This invention relates to fasteners, and particularly to devices of the character described intended for use on storm sashes or the like.

One object of the present invention is to provide a novel device, whereby a storm sash or the like may be maintained in open or ventilating position, and wherein, by suitable manipulation of the device, the storm sash may be securely fastened in closed position.

Another object of the invention is to provide a novel construction, whereby the device may be arranged to exert a camming action on the storm sash to move the sash in opposite directions with respect to a window frame in a manner to facilitate the positioning of the storm sash in relatively different positions with respect to the frame.

A further object of the invention is to improve devices of the character described in sundry details hereinafter referred to and particularly pointed out in the appended claims.

One embodiment of the present invention is shown for illustrative purposes in the accompanying drawing, in which:

Fig. 1 is a sectional elevational view of a window frame and storm sash, illustrating the application of my improved storm sash fastener thereto;

Fig. 2 is an enlarged elevational view of a portion of the structure illustrated in Fig. 1 showing portions thereof in changed or sash securing position, a portion of the window frame and storm sash being shown in dotted lines to facilitate the showing of the fastener; and

Fig. 3 is an edge elevational view of the structure illustrated in Fig. 2.

The illustrative embodiment of the invention is shown, in the present instance, as applied to a window frame indicated as a whole by the numeral 5 and a storm sash indicated by the numeral 6, hingedly connected, in the present instance, adjacent its upper end to the upper end portion of the window frame 5 as indicated at 7.

The fastener shown comprises a substantially flat elongated body member 8 pivotally mounted at 9 adjacent one of its ends to the frame 5, and having a hook-like portion 11 adjacent its opposite end adapted to engage a ring-like connector 12, shown in the present instance as a screw-eye suitably mounted on the sash 6 for securing the sash in open position as clearly illustrated in Fig. 1.

The opposite or hinged end of the fastener 8 is provided with an offset portion 13 having a cam portion 14 formed thereon provided with oppositely disposed oppositely acting cam surfaces

15 and 16, the cam portion 14 being adapted to engage the connector 12 when the body member 8 is swung about its pivot in a manner to position the sash 6 in substantially parallel relation to the window frame 5 or in closed position, the cam surface 15 of the cam portion 14 acting to draw the sash 6 toward the window frame when the body member 8 is swung to the position shown in Figs. 2 and 3, while the cam surface 16 acts to force the storm sash 6 outwardly away from the window frame 5 when the body member 8 is swung in the opposite direction or toward the position shown in Fig. 1, thereby facilitating the closing and opening of the storm sash 6 in the event of binding between the storm sash and window frame.

Rigidly mounted on the window frame in spaced relation to the pivot 9 is a stud shown in the present instance as a screw 17 having a flanged portion or head 18 spaced from the adjacent inner face of the window frame 5 and adapted to be engaged by a portion of the body member 8 adjacent the hooked end thereof, as illustrated in Figs. 2 and 3, in a manner to secure the member 8 against rotation on its pivot and prevent displacement of the storm sash 6 with respect to the window frame 5.

To facilitate the removal of the lower end portion of the body member 8 from engagement with the stud 17, the body member is provided with a laterally extending finger piece 19, which may be grasped to move the adjacent end portion of the member 8 first toward the storm sash 6 and outwardly or away from the frame 5 to substantially the dotted line position shown in Fig. 3, after which the member 8 may be swung about its pivot 9 in a manner to move the storm sash 6 outwardly through the operation of the cam face 16 and disengage the cam portion 14 from the connector 12, and thereafter, by moving the storm sash 6 further from the frame 5, to permit engagement of the hook-like portion 11 with the connector 12, the storm sash may be retained in open or ventilating position as illustrated in Fig. 1.

While but one fastener 8 of the character described is shown in the drawing at one side of the window frame 5 and storm sash 6, it will be understood that best results may be obtained by the use of a fastener at each or opposite sides of the storm sash and window frame.

It will be observed from the foregoing description that the present invention provides a novel construction and arrangement whereby a storm sash may be conveniently and variously posi-

tioned with respect to a window frame, and also that the present invention provides a construction and arrangement whereby the device will act in a manner to facilitate the positioning of the storm sash in such positions with respect to the frame.

Obviously, the present invention is not limited to the precise construction and arrangement shown and described, as the same may be variously modified without departing from the spirit and scope of the invention as set forth in the appended claims.

What I claim as new and desire to secure by Letters Patent is:

1. In a storm sash fastener for a window frame and storm sash hingedly related, the combination of an elongated substantially flat body member pivotally mounted adjacent one of its ends and at one of its flat side portions on said frame, said body member having an offset portion spaced from said frame, a connector rigidly mounted on said sash, a stud rigidly mounted on said frame in spaced relation to the pivotal mounting of said body member, a cam portion on said offset portion adjacent the pivoted end of said member and having a pair of cam surfaces on the respective opposite edges of said cam portion engageable with said connector, a hook-like portion on the opposite end of said member engageable with said connector for securing said sash in open position with respect to said frame, the hook end portion of said member being engageable with said stud when said cam portion is in engagement with said connector for securing said sash in closed position with respect to the frame.

2. In a storm sash fastener for a window frame and storm sash hingedly related, the combination of a substantially flat elongated body member pivotally mounted adjacent one of its ends on said frame and having an offset portion spaced from the plane thereof adjacent the pivoted end of said member, a connector rigidly mounted on said sash, a stud rigidly mounted on said frame, a cam portion on the pivoted end of said member and having a pair of oppositely acting cam surfaces on the respective opposite edges of said cam portion engageable with said connector for moving said connector and sash in opposite directions with respect to said frame, a hook-like portion on the opposite end of said member engageable with said connector for securing said sash in open position with respect to said frame, the hook end portion of said member being engageable with said stud when said cam portion

is in engagement with said connector for securing said sash in closed position with respect to the frame.

3. In a storm sash fastener for a window frame and storm sash hingedly connected adjacent its upper end to the upper end portion of said frame, the combination of a substantially flat elongated body member pivotally mounted adjacent one of its ends on said frame and having an offset portion spaced from the plane thereof adjacent the pivoted end of said member, a ring-like connector rigidly mounted on said sash, a flanged stud rigidly mounted on said frame in spaced relation to the pivotal mounting of said body member, a cam portion on said offset portion adjacent the pivoted end of said member and adapted to enter the opening in said ring-like connector, said cam portion having a pair of oppositely disposed oppositely acting cam surfaces engageable with said connector for moving the connector and sash in opposite directions with respect to said frame when said body member is swung in opposite directions about its pivot, a hook-like portion on the opposite end of said member engageable with said connector for securing said sash in open position with respect to said frame, the hook end portion of said member being engageable with said stud when said cam portion is in engagement with said connector for securing said sash in closed position with respect to the frame, and a finger piece extending laterally from said body member adjacent said hook-like portion for disengaging the body member from said stud.

4. A storm sash fastener comprising a substantially flat body portion having an aperture therein adjacent one end thereof, a cam member on said end of the fastener offset from the plane of the body portion thereof, said cam member having oppositely disposed curved edge portions eccentric to the center of said aperture, and a hook-like portion adjacent the opposite end of said body portion.

5. A storm sash fastener comprising a substantially flat body portion having an aperture therein adjacent one end thereof, a cam member on said end of the fastener offset from the plane of the body portion thereof and within the planes of the transverse edges of said body portion, said cam member having oppositely disposed substantially parallel curved edge portions eccentric to the center of said aperture, and a hook-like portion adjacent the opposite end of said body portion.

HERMAN T. OPLAND.