H. KOCOUREK.

WINDOW HOOK.

APPLICATION FILED JUNE 27, 1912.

1,067,524. Patented July 15, 1913.

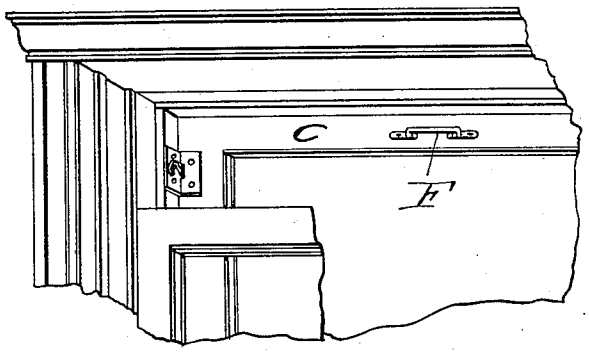


Fig. 1

Fig. 2.

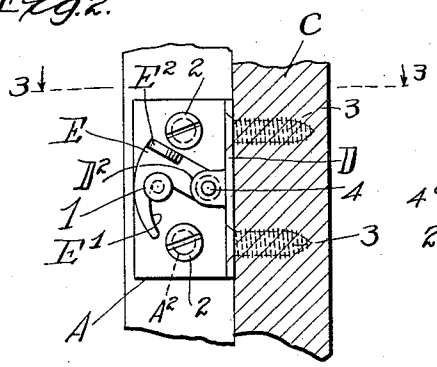


Fig. 3.

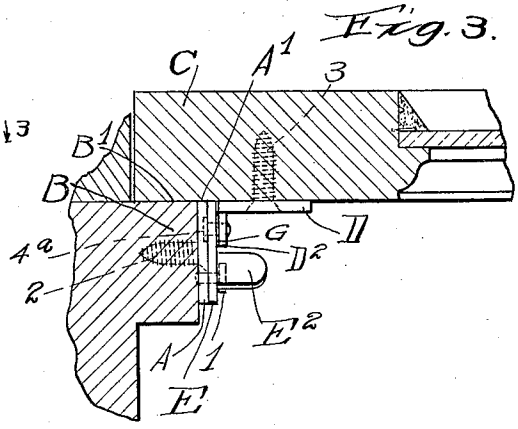


Fig. 6.

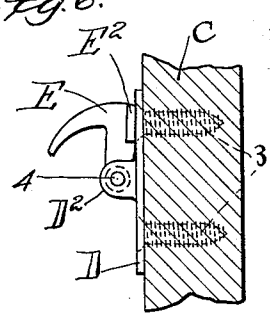


Fig. 4.

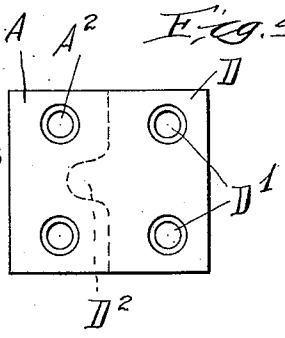


Fig. 5.



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WINDOW-HOOK.

1,067,524. Specification of Letters Patent. **Patented July 15, 1913.**

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To all whom it may concern:

Be it known that I, HENRY KOCOUREK, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented new and useful Improvements in Window-Hooks, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof.

The purpose of this invention is to provide an improved form of fastening device adapted for securing a removable sash, such as a storm window or a fly screen in place in a window frame.

It consists of the features and elements described and shown in the drawings as indicated in the claims.

Figure 1 is a perspective view of a corner of a window frame showing the upper sliding sash slightly lowered to reveal the fastening device embodying this invention in use for securing a storm window in place. Fig. 2 is a side elevation of the fastening device. Fig. 3 is an edge view taken as indicated at line 3—3 on Fig. 2. Fig. 4 is a plan view of the two plates indicating how the lug of one plate is struck out to form the notch of the other. Fig. 5 is a detail view of the spring washer employed in the device. Fig. 6 is a side view of the hook member and its base plate with the hook swung upward in inoperative position.

The difficulties involved in using ordinary hooks and screw eyes for securing storm windows and screen sashes in place have long been recognized. If the eye is not placed in the window frame in exactly the proper relation to the hook as secured in the sash, the sash will either be loosely held against the stops of the window jamb or the hook will prove too short to engage the eye without undue strain and effort. The length of the hook is the only fixed element in the proper relative positioning of hook and eye, but this dimension serves as no reliable gage for positioning either the hook or the eye, and such positioning must usually be done while the removable sash is temporarily held in place by some other means,—an operation both awkward and tedious. The present device is designed to overcome the difficulties in the application and use of ordinary hooks and eyes for this purpose.

The element corresponding to the hook is made in the form of a stud, 1, secured in a plate, A, said plate having an outline which is generally rectangular. The stud, 1, is thus located at a fixed distance from the edge, A^1, of the plate, A, and this edge is designed to be set flush with the outer edge, B^1, of the stop, B, against which the removable sash, C, is to be secured. The plate, A, is provided with screw-holes, A^2, through which the screws, 2, may be set into the stop, B. A second plate, D, preferably of about the same size as the plate, A, is similarly provided with screw-holes, D^1, through which the screws, 3, may be set to secure it to the inner face of the sash, C. This plate is formed at one edge with an upstanding lug, D^2, to which is pivoted a hook, E, which is adapted to engage the stud, 1, for securing the sash, C, in place against the stop, B. Preferably the working side, E^1, of the hook, E, is a curve slightly eccentric to the hook pivot, 4, so that as the hook is swung downward to its final position, as indicated in Fig. 2, the sash, C, will be drawn firmly against the stop, B, and all possibility of looseness and rattling is avoided. Thus it will be seen that practically all difficulty of positioning the fittings on the sash, C, and stop, B, respectively, is done away with. As already stated, the plate, A, is set with its edge, A^1, flush with the edge, B, of the stop. At a corresponding distance from the top or bottom of the sash, C, the plate, D, is secured to the face of the sash and at a distance from the extreme edge thereof just sufficient to allow for the depth of the stop, B, plus the thickness of the plate, A. It then becomes certain that the hook, E, will properly engage the stud, 1, when the sash, C, is set in place. A spring washer, G, such as that shown in Fig. 5, is preferably placed between the lug, D^2, and the hook, E, so that the hook will be frictionally retained in any position in which it may be set. Then to prepare the sash, C, for insertion into the window frame the hooks, E, of each of the fastenings carried by the sash may be set at the upper limit of their swing, as indicated in Fig. 6, and the sash may be set in place, being grasped in any convenient manner, preferably by means of one or more handles, F, affixed to its inner face. Each hook, E, may then be swung downward into engagement with the corresponding stud, 1, on the stop, B, the final portion of the movement being accomplished by pressure upon the finger-lug, E^2, which extends from one side of the hook, E.

Preferably the pivot, 4, which carries the hook, E, is provided with a head, 4^a, which extends beyond the plane of the hook and, consequently, beyond the plane of the stud plate, A. The latter plate, A, is, therefore, provided with a notch adapted to accommodate this head, 4^a, of the pivot, 4, and it is found convenient as well as economical to form this notch by cutting the plates, A and D, from consecutive portions of the stock from which they are made, so that the pivot-carrying lug, D^2, of the plate, D, is taken from the area of the notch of the plate, A, thus avoiding unnecessary waste in the forming of the two plates.

It will be understood that for the purpose of causing a yielding pressure and consequent friction between the lug, D^2, and the hook, E, the spring washer, G, might be positioned at any point in the length of the hook pivot, 4; but by making the washer, G, of brass or other non-rusting material while the other parts of the fastening are formed of sheet steel, and then placing the washer, G, between the lug, D^2, and the hook, E, it serves the added purpose of preventing the hook and lug from rusting together and thus becoming difficult to operate.

I claim:—

1. A hook device for connecting mutually transverse surfaces comprising a plate provided with screw holes and a stud projecting from its surface, a second plate provided with screw holes and a lug extending transversely from one edge of the plate, and a hook pivoted to said lug formed to engage the stud of the first plate.

2. A hook device for connecting mutually transverse surfaces comprising a plate provided with screw holes and a stud projecting from its surface, a second plate provided with screw holes and a lug extending transversely from one edge of the plate, and a hook pivoted to said lug formed to engage the stud of the first plate and having a finger lug extending from its hooked end transversely of the plane of swing of the hook.

3. A hook device for connecting mutually transverse surfaces comprising a plate provided with screw holes and a stud projecting from its surface, a second plate provided with screw holes and a lug extending transversely from one edge of the plate, a hook and a pivot securing it to said lug of the second plate, said hook being formed to engage the stud of the first plate, and said first plate having a notch or recess positioned to accommodate the head of the hook pivot.

In testimony whereof I have hereunto set my hand at Chicago, Illinois, this 25th day of June, 1912.

HENRY KOCOUREK.

Witnesses:
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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."