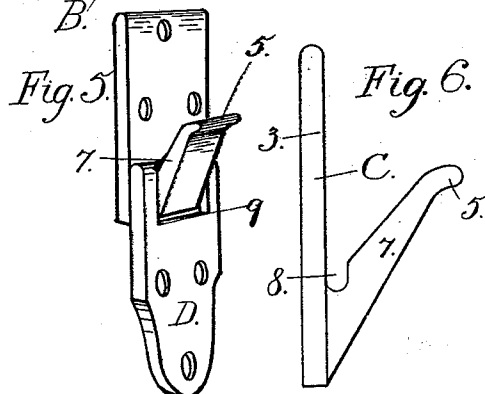
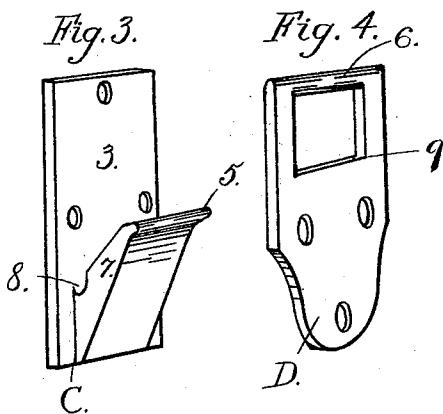
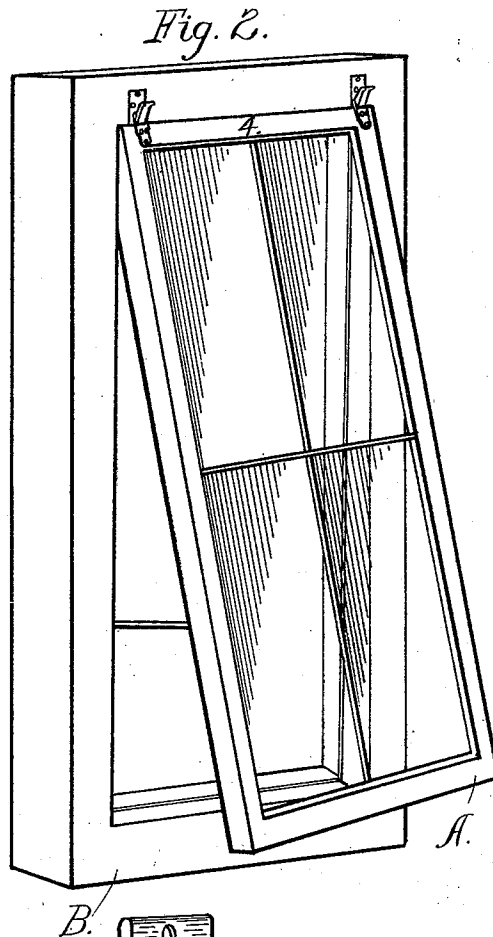
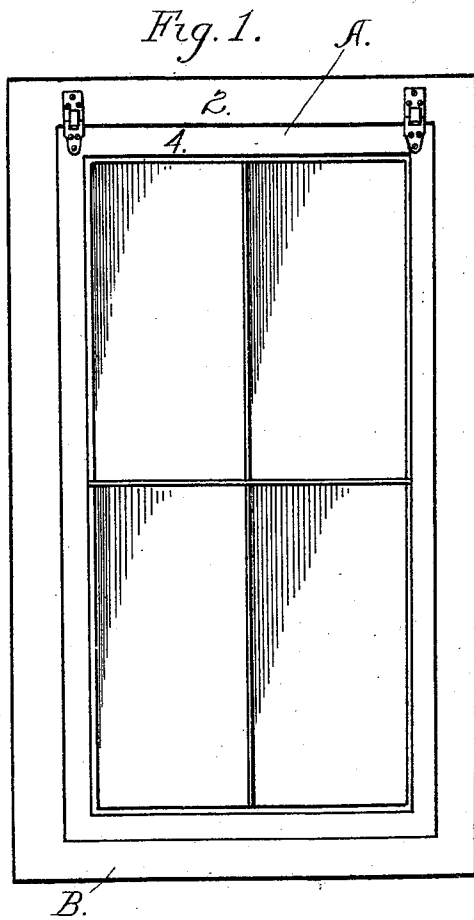


(No Model.)

A. SCHROEDER.
HINGE HANGER.

No. 543,105.

Patented July 23, 1895.



Witnesses:

O. B. Bradbury.
W. C. Swift.

Inventor:

Anton Schroeder.
per. T. D. Marwin
Attorney.

UNITED STATES PATENT OFFICE.

ANTON SCHROEDER, OF ST. PAUL, MINNESOTA.

HINGE-HANGER.

SPECIFICATION forming part of Letters Patent No. 543,105, dated July 23, 1895.

Application filed January 22, 1894. Serial No. 497,602. (No model.)

To all whom it may concern:

Be it known that I, ANTON SCHROEDER, of St. Paul, Ramsey county, Minnesota, have invented certain Improvements in Hinge-Hangers, of which the following is a specification.

The inseparable hinge ordinarily used requires at each putting on of the storm-sash that one member of each hinge be fastened to the storm-sash or window-frame by the slow and laborious method of securing that piece thereto with screws, and its removal is accomplished by the equally-objectionable reverse operation. With my separable hanger after the first application of the parts to the sash and frame all replacing and removals of the sash can be accomplished by the simple operation of hooking and unhooking the same from the window-frame, and with the ordinary size of sash can be easily accomplished by one person from the inside of the house without requiring ladders outside by simply passing the sash through the window, hanging it, and closing into place.

To this end my invention consists in providing a two-part separable hanger, the pintle member of which is secured permanently to the top of the storm-sash and the hook member to the top of the window-frame.

My invention further consists in the specific construction and combination hereinafter particularly described and claimed.

In the accompanying drawings, forming part of this specification, Figure 1 is an elevation of a window-frame and storm-sash hung therein with my improved hangers. Fig. 2 is a perspective view of a window-frame and storm-sash hung therein with my improved hangers and swung partly open. Fig. 3 is a perspective view of that part or the hook member of the hanger which is fastened to the window-frame. Fig. 4 is a perspective view of that part or the pintle member of the hanger which is fastened to the storm-sash. Fig. 5 is a perspective view of the hanger complete and by itself, and Fig. 6 is a side elevation of the hook member of the hanger.

To apply my improved hanger to the storm-sash A and window-frame B, the hook members C of the two or more hangers to be used in hanging the sash A are symmetrically set in and secured to the cross-piece 2 of the window-frame so that the lower ends of the hook-

bases 3 are just flush with the lower edge of the cross-piece. The sash having been fitted to the window-frame, the pintle members D of the hangers are then hung in the hook members C and screwed to the upper ends 4 of the storm-sash A. The V-shaped hook of the member C of the hanger is peculiarly formed, its point 5 being turned out in order that the catching of the pintle 6 upon the hook when hanging the sash may be easily accomplished. The inner edge of the hook proper 7 is straight and tends downwardly and inwardly to the pintle-socket 8, so that as the sash, the hangers of which have been hung over the points 5, is drawn into place and the end of the sash bears up against the lower side of the frame cross-piece 2 the pintles are drawn down and necessarily in at the same time, thereby setting the storm-sash closely into place in the window-frame as the pintle 6 slips into its socket 8.

It will be observed that the inside face of the hook 7 is inclined outwardly at an oblique angle to the vertical face of the plate C and that the socket 8 drops or extends below the end of the inclined face. The effect of this is to allow the plate D to slide inwardly until it reaches the socket 8, when it drops vertically, so as to bring the pintle 6 below the lower end of the inclined face portion of the hook and the shoulder 9 beneath the lower portion of the hook, with the result of holding the plate D in a vertical position and preventing it moving upward until its lower portion is thrown outward at an acute angle, as illustrated in Fig. 2, when it can be lifted and then slid outwardly along the inclined face until released from the hook.

It will further be observed that the outwardly-turned end 5 will constitute an abutment against which the plate D will bear when thrown into a substantially horizontal position, and thus hold the pintle 6 in the socket 8 and prevent the plate D being moved from off the hook 7, except when the plate stands at an acute angle to the face of the plate C. These features afford safeguards to the secure holding together of the two plates and prevent accidental disconnection of the two parts.

The cylindrical socket for the pintle presents a good bearing-surface, holds the sash

immovable, and prevents the sash, except when approximately horizontal, from being blown or jarred out, since it is held down by the window-frame. The sash hung with my improved hanger is designed to be fastened when closed with the ordinary hook or shutter-fastener upon the inside of the frame, thereby permitting the opening of the sash for airing the room, washing the windows, and similar purposes.

I claim—

The hinge hanger composed of the plate provided with the hook having its inside face

inclined at an oblique angle to the face of the plate and formed with a socket at the lower end of the inclined face, in combination with the plate having the pintle to lie in said socket and the shoulder to bear against the under side of the hook, substantially as and for the purposes described.

In testimony whereof I have hereunto set my hand this 6th day of January, 1894.

ANTON SCHROEDER.

Witnesses:

F. G. BRADBURY,
W. C. SWIFT.