No. 865,204. PATENTED SEPT. 3, 1907.

W. NICOL.

WEATHERPROOF FITTING FOR WINDOWS.

APPLICATION FILED OCT. 11, 1904.

Fig. 1.

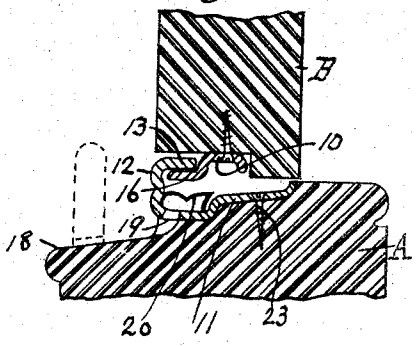


Fig. 2.

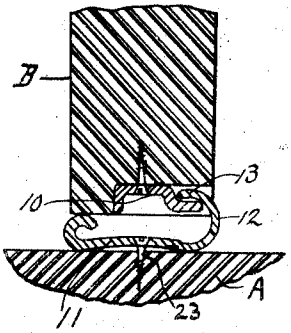


Fig. 6a

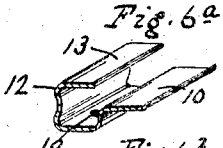


Fig. 6b

Fig. 3.

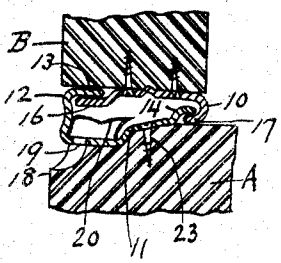


Fig. 4.

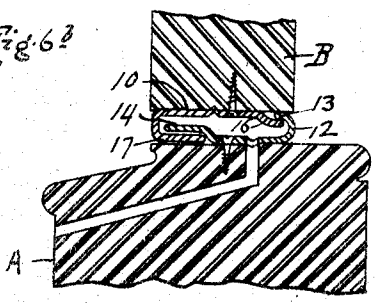
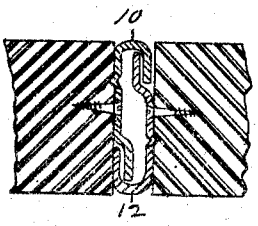


Fig. 5.



WITNESSES

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WEATHERPROOF FITTING FOR WINDOWS.

No. 865,204. Specification of Letters Patent. Patented Sept. 3, 1907.

Application filed October 11, 1904. Serial No. 228,049.

To all whom it may concern:

Be it known that I, WILLIAM NICOL, a subject of the King of Great Britain and Ireland, and a resident of Glasgow, Scotland, have invented certain new and useful Improvements in Weatherproof and Like Fittings for Windows, of which the following is a specification.

This invention has reference to improvements in weatherproof and like fittings for windows, and essentially comprises improvements on my prior United States Patent No. 601,081, dated March 22, 1898.

In order to enable others skilled in the art to which my invention relates, to understand how same may be carried into practice, I have hereunto appended a sheet of explanatory drawings representing sectional views of parts of windows and their connected parts as fitted with my improvements, and hereinafter referred to.

In the accompanying drawings Figure 1 represents a sectional elevation showing a casement window, with my invention applied thereto, opening inwardly; Fig. 2 is a similar view showing the window opening outwardly; Fig. 3 is a view similar to Fig. 1, showing a slight modification; Fig. 4 is another modification; Fig. 5 represents a sectional plan view of the sash and window frames with my invention applied thereto, and Figs. 6[a] and 6[b] are perspective views of portions of the sill and the baffle plates respectively.

My invention is particularly applicable to casement windows which swing from side hinges or to windows pivoted at a middle point in the top and bottom sashes. In Figs. 1 to 4 I have shown my invention applied to the window sill A and the lower sash B of windows of this character. In Fig. 5 it is shown as applied to the side sashes of casement windows at their meeting point or to the side sash and the upright of the window frame in windows of the character second above mentioned.

The substance of my invention is formed in the interlocking of two plates 10 and 11, one secured to the sash B and one to the sill A. In my preferred form of construction (Fig. 3) these plates are formed to doubly interlock as illustrated.

To carry out my purpose one edge of the sill plate 11 is formed with a hooked part 12, the upper arm 13 of which is adapted to work under the lower face of the sash B, while the other edge 14 is formed with an offset extension which is clear of the sill. Attached to the lower face of the sash is secured the sash plate 10 which by means of a similar offset extension 16 and a hooked edge 17 coöperates with the sill plate to form a storm and dust proof joint between the sill and the sash when the window is closed. I make provision for the escape of any moisture that may enter the space inclosed by these interlocking plates by inclining the sill plate downwardly toward the outer face 18 of the sill and opening therein drainage holes 19 which permit the moisture to drain onto the ledge or the inclined outer face 18 of the sill. In addition, I provide arched baffle plates 20 which arch over the holes 19 and to some extent impede the entrance of wind through these holes. Of course openings 21 must be provided in the baffle plates to permit the flow of moisture to the holes 19. I have found it advantageous also to form projecting ridges 22 on the faces of the plates which adjoin the sill and sash respectively and project into the surface thereof. These ridges not only aid in resisting the torsional strain to which the plates may be subjected in the opening and closing of the windows, but serve also as a further safeguard against rain and wind in case the screws 23 by which the plates are secured, become loosened and the plates become slightly separated from the surfaces to which they are attached.

Modifications of my invention may be variously devised. Thus in Fig. 1 the inner hook and coöperating offset projection are omitted. In Fig. 2 the baffle plate also is omitted and the sill plate instead of being inclined throughout its width, is merely arched. The outer half has thus the necessary incline and the plate is perfectly effective for drainage purposes since the moisture can enter only over the outer edge of the sash plate and must drip upon the incline mentioned. In Fig. 4 drainage channels through the sill into which the holes in the sill plate open, are shown.

Where the plates are vertical as at the junction of the vertical edges of two casement sashes (Fig. 5) there is of course no need of drainage holes and therefore of baffle plates. The plates merely doubly interlock as shown.

I claim as my invention:

1. In swinging windows and the like, storm plates borne on separate parts and having their front and back edges correspondingly hooked and offset substantially as described, so as to doubly interlock when the window is closed.

2. In swinging windows and the like, having interlocking storm plates borne on separate parts which adjoin when the window is closed, comprising a sill plate provided with drainage openings and inclined towards such openings so as to drain the chamber formed by said interlocking plate.

3. In swinging windows and the like, having interlocking storm plates borne on separate parts which adjoin when the window is closed, comprising a sill plate provided with

drainage openings and arched so as to present inclined surfaces leading to said openings so as to drain the chamber formed by said interlocking plates.

4. In swinging windows and the like, interlocking storm plates borne on separate parts which adjoin when the window is closed, in combination with drainage openings from the chamber formed by said interlocking plates, and baffle plates arranged over said drainage openings.

5. In swinging windows and the like, interlocking storm plates borne on separate parts which adjoin when the window is closed, in combination with drainage openings, baffle plates covering the same and drainage openings through said baffle plates.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses.

WILLIAM NICOL.

Witnesses:
JOHN LIME,
THOS. BENNIE BROWNLIE.