W. CORBETT.

SHEET METAL WINDOW SILL.

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2 SHEETS—SHEET 1.

WITNESSES

INVENTOR.

W. CORBETT

ATTY.
To all whom it may concern:

Be it known that I, WILLIAM CORBETT, of Smith’s Falls, in the county of Lanark, Province of Ontario, Dominion of Canada, have invented certain new and useful Improvements in Sheet-Metal Window-Sills, of which the following is a specification.

My invention relates to improvements in sheet metal window sills, and the objects of my invention are to provide means within the sill for at once gaging the inclination of the top bed or wash and reinforcing the sill, and the other objects being to provide means for preventing the water dripping off the sill and defacing the wall of the building and also to provide means to prevent the entrance of water and wind between the window frame and the metal sill, thereby increasing the warmth of the house to an even greater degree than the ordinary stone sill. These objects are accomplished in the first place by a metallic gage reinforcing bar fitting inside at each end of the metal sill and bedded in the sill, thereby rigidly supporting the sill in position; in the second place, by V-shaped notches formed on each returned end of the sill; and in the third place, by an upwardly turned weather strip on the back of the window sill adapted to fit in a groove provided in the window frame.

The improvements are described in detail in the accompanying specification and illustrated in the drawings.

In the drawings,—Figure 1 is a perspective view of my improved metallic sill. Fig. 2 is a vertical section through the same taken substantially through the center of the window frame. Fig. 3 is a section taken through the sill immediately adjacent to the daylight or window opening. Fig. 4 is a perspective view of the gage angle bar. Fig. 5 is a plan view of the underside of an alternative form of sill. Fig. 6 is a plan of the blank from which the form shown in Figs. 1 to 3 is constructed. Fig. 7 is a plan view of the blank from which the form shown in Fig. 4 is constructed. Fig. 8 is an elevation of the sill in position on the wall.

In the drawings like letters of reference indicate corresponding parts in each figure.

Referring to the drawings, A is the sill formed of sheet metal and comprising a bed a having a slight inclination to form the hollow central portion b integral therewith. The inner edge of the bed preferably has a strip of metal c turned up to form a weather strip and adapted to extend into the groove d provided in the window frame B. The outer face e of the central portion b has an upwardly turned flange f provided at the bottom, the juncture forming a sharp edge g serving as an efficient water drip. At each end of the face e, inwardly turned flanges h and i are provided adapted to form the sides of the sill. The bottom portions j of these side portions are turned upwardly and at the line of bending V-shaped notches k are provided adapted, when the portion j is bent up, to guide the water away from the wall and cause it to drip out of contact therewith.

In the preferred form, the portions j are provided with flanges l which are folded over the flange f to give greater rigidity to the sill. The top bed of the sill is also preferably provided with ears m which fold over the side portions and are preferably riveted thereto. On the interior of the sill are provided a plurality of metallic gage bars C adapted to serve as a templet to gage the inclination of the wash and thickness of the sill and also to serve as reinforcing bars to strengthen the sill. In their specific construction, these gage bars have their lower edges p beveled and adapted to fit between the face e and flange f and have their upper ends q also beveled and adapted to be engaged by tongues r which are cut out of the bed of the sill and bent downwardly to engage the underside of the said upper end. These bars are preferably located at the end of the sill and in positioning the latter, the brick or stone wall is built over the gage bar thereby holding the gage bar rigidly in position, and this in turn gives rigidity to the sill. It is evident that as many of these gage bars as desired may be employed, but I have found that one at each end is quite sufficient for an ordinary sill. The gage bars will usually have been inserted in the sill prior to leaving the factory and to place it in position the brick wall is built about to the level of the top of the sill. The sill is bedded in the usual way, the gage bars resting on the brick stretchers at each end, and the wall at each side of the sill being built above them, as shown in Fig. 8. If desired, and as shown in the drawing, the top row of flat brick headers may be projected outwardly to form a ledge s and thus giving strength to the breast of the sill.
In placing the window frame in position, the rest d therein is fitted over the weather strip which latter will prevent any entrance of water along the joint between the sill and the frame and sill also serve to prevent any draft ordinarily created through the shrinkage of the frame. The acute edge g carries any water drip away from the side of the wall while the notches k prevent the ends of the sill dripping water on the face of the wall.

In the form shown in Figs. 5 and 7, the flange f is shortened so that its edge l will, in position, be some distance from the face of the sill, and the overlapping flanges l are omitted. This form is useful where the face of the wall is rough in character rendering it difficult to fit the edge of the sill close to it. It may be observed that the blank for this second form of sill may be very easily stamped by the same dies as employed for the other form, as the only change is the omission of a strip of metal at the edge, and if the blanks shown in Fig. 6 were cut along the dotted lines w it would form the blank of Fig. 7.

The dotted lines v in the blank indicate the position of the acute edge g and the dotted lines w indicate the line of fold for turning up the weather strip.

The sill with its improvements is especially adapted for iron window frames where a protruding window sill is required as the upwardly turned weather strip in the sill can be easily arranged to fit and to be riveted to the bottom of the iron window frame. The sheet metal for the construction of my sill is preferably stamped from galvanized steel, gage Nos. 20 to 26.

The indestructibility and other advantages of this class of sill is well known and will not be further described herein.

While the invention has been described herein with great particularity of detail yet it will be readily understood that in carrying out the same changes within the scope of the appended claims may be made without departing from the spirit of the invention.

What I claim as my invention is:

1. In a window sill the combination with a hollow sheet metal sill, comprising a suitable bed, a front portion, and bottom portion, of side portions having their ends bent inwardly to engage the bottom portion and having V-shaped notches cut in their edges at the bending line, whereby the dripping edge will be removed outwardly from the face of the building as and for the purpose specified.

2. The combination with the bed portion, and face having a bottom flange bent inwardly and upwardly, and inwardly bent side portions, all formed of a single sheet of metal, of extensions on the inwardly bent side portions, the said extensions being bent inwardly and upwardly and folded over the bottom flange on the face.

3. The combination with a hollow sheet metal window sill having an upwardly turned flange at the bottom thereof forming an acute angle with the face of the sill, of an L-shaped reinforcing and gage bar located within the sill having the lower extremity enlarged in width and beveled to fit between the face and the inclined flange at the bottom thereof.

In witness whereof I have hereunto set my hand in the presence of two witnesses.

WILLIAM CORBETT.

Witnesses:
Russel S. Smart,
WM. A. Wyman.