This invention relates to weather-sealing strips for case-
ment windows, or other windows wherein the window sash moves laterally against a stationary window frame to close the window opening.

An object of this invention is to provide a very eco-
nomically made yet highly efficient non-metallic sealing strip for such windows.

Another object is to provide such a sealing strip which can be readily and quickly assembled upon the window sash, or removed therefrom for replacement or other pur-

Further objects and advantages of the present invention will be apparent from the following description, refer-
ence being had to the accompanying drawings wherein a preferred embodiment of the present invention is clearly shown.

In the drawings:

Fig. 1 shows a front elevation of a casement window having a weather-sealing strip applied thereto according to this invention.

Fig. 2 is a section taken on line 2–2 of Fig. 1 on an enlarged scale.

Fig. 3 is a section taken on line 3–3 of Fig. 1 on an enlarged scale.

Fig. 4 is a perspective detail view illustrating a means for fastening the end of the sealing strip to the sash frame.

Similar reference characters refer to similar parts throughout the several views.

Reference numeral 10 designates the steel sash frame which extends around the periphery of the movable win-
dow sash. Sash frame 10 has an outwardly projecting outside peripheral flange 11, an offset inner flange 12 extending continuously around its inner periphery, and a continuous relatively short outwardly projecting flange or bead 13 at the interior edge 14 of frame 10. Bend 13 thus forms a shallow channel 15 extending continuously around the outer periphery of frame 10.

The movable sash 10 is illustrated in the drawings as closed by being moved to the right (as viewed in Figs. 2 and 3) against a stationary steel frame 20 rigidly fixed in place to the side wall 21 of a building in any suitable well-known manner. Frame 20 has an inwardly pro-
jecting interior flange 22 and an offset exterior flange 23.

Figs. 2 and 3 illustrate how the section of sash frame 10 overlaps and interferes with the section of the stationary window frame 20 when the movable window sash is in window-closing position.

Now according to this invention a flexible flat-section band 30 of elastic resilient rubber or rubber-like material is applied to the steel sash frame 10 so that it fits flatwise snugly within the shallow channel 15 adjacent the small outwardly projecting bead 13. Band 30 is of uniform cross section and has an integral angularly projecting and hence easily flexed sealing flange 31 which extends around bead 13 and projects laterally beyond the interior edge 14 of sash frame 10 so that the edge of said flange 31 is pressed into sealing contact with the flat surface of flange 22 of stationary frame 20 when sash frame 10 is in closed position, as shown in Figs. 2 and 3.

In the preferred form, the flexible elastic band 30 is made in one piece and is retained in place under tension by stretching some around the four sides of the sash frame 10 and fastening only the two ends thereof to frame 10. Fig. 4 shows the preferred form of a bend wire hook 35 which may be used to fasten each end of band 30 to frame 10. Hook 35 is securely fastened to band 30 by forcing the two angularly bent free ends 36 of the wire thru the elastic body of band 30, as clearly shown in Fig.

The bent end 37 of hook 35 is preferably slightly collapsible (due to the springiness of the folded wire) and may be readily forced thru an aperture 38 in the bottom of the shallow channel 15 in frame 10, as shown in Fig. 3.

Now to properly assemble the elastic flexible band 30 to the sash frame 10, one end of band 30 is first attached in place by its hook 35 as above described and then band 30 is simply stretched around frame 10 to lie within its peripheral channel 15 and the hook 35 at the other end of band 30 is hooked into its aperture 38 in frame 10. Thus band 30 is retained in place under such tension as will cause it to lie snugly within its shallow channel 15 at all times and yet be sufficiently yieldable retained as not to restrict any required flexing of the sealing flange 31.

When band 30 is thus held under even tension from end to end thereof it will always be urged to return to its normal snug fit within channel 15 as by any force it be accidently dislodged.

The drawings illustrate common cross sections of steel sash frames and stationary frames used in present day casement windows. The flexible elastic sealing strip 30 of this invention may be very simply and quickly applied to such windows as above described. The strip 30 may be made in continuous length and cut to the desired length on the job when attaching same. Also the wire hooks 35 can be very quickly and simply attached to the strip ends by the workman on the job by simply pressing the wire ends thru the strip at the desired location.

While the embodiment of the present invention as here-
in disclosed, constitutes a preferred form, it is to be understood that other forms might be adopted.

What is claimed is as follows:

1. A window having a stationary frame, a swinging window sash having a sash frame swingable into abutting relationship with said stationary frame to close the window opening, said sash frame having an outwardly-opening relatively wide and shallow channel extending around the periphery thereof, a predetermined length less than the peripheral length of said channel of flat-
section elastomeric strip retained flatwise in said relatively shallow channel and extending substantially around the periphery of said sash frame, said strip having an integral flexible sealing flange extending longitudinally along one edge of said strip and projecting laterally beyond the closing face of said sash frame and pressed edgewise into sealing engagement with said stationary frame when said sash is in closed position, and a pair of hooks engaging the strip and positioned at opposite terminal ends only of said strip and adapted to engage portions of said sash frame, whereby the strip is held in position under tension in said channel for retaining the strip in position therein.

2. A swinging window sash comprising in combination a sash frame having an outwardly-opening relatively shallow channel therein extending around the periphery thereof, a length of elastic flat-section band of flexible and elastic non-metallic material of less free length than the periphery of said channel and retained flatwise within said shallow channel, said band having an integral projecting sealing flange extending continuously along one edge of said band, said flange having a sealing edge pro-
j ecting edgewise beyond the closing face of said sash frame so as to initially engage the stationary surface against which said sash is closed and holding means inserted into opposite terminal ends of the band only and adapted to engage the frame for holding the band in stretched condition to the sash frame.

3. A swinging window sash comprising in combination a sash frame having an outwardly-opening relatively shallow channel therein extending around the periphery thereof, and a predetermined length less than the periphery of said channel of elastomeric sealing strip adapted for being retained flatwise within said shallow channel, said strip having an angularly projecting sealing flange extending continuously along one edge of said strip, said flange having a sealing edge projecting edgewise beyond the closing face of said sash frame so as to initially engage a stationary surface against which said sash is closed, said strip having detachable retaining wire hooks inserted into and overlapping terminal ends of said strip only and projecting therebeyond, said hooks adapted to be hooked into holes in said sash frame to secure the ends of said strip to said frame whereby the strip is held under tension on said frame.

4. A sealing strip for use with a swinging window sash the combination comprising; a window sash, a relatively shallow U-shaped channel on the periphery of said sash, said channel being formed between a projecting flange and a second smaller flange in spaced relation to said projecting flange, an elongated elastomeric sealing strip of predetermined length less than the periphery of said channel for being wound around a major portion of said sash, said strip having a flat portion thereon for being retained in a portion of said U channel and an angularly projecting sealing flange extending continuously along said strip, said sealing flange adapted to project laterally over said second smaller flange of said U channel, and retaining means for said strip, said means including hooks adapted for attachment to the terminal ends only of said strip, and means on the other end of said hooks for engaging portions of said sash whereby the strip may be placed under tension and maintained in said U channel.

5. A sealing strip for use with a swinging window sash the combination comprising; a window sash, a relatively shallow U-shaped channel on the periphery of said sash, said channel being formed between a projecting flange adapted to abut a window opening for said sash and a second smaller flange parallel to and in spaced relation to said projecting flange, an elongated elastomeric sealing strip of predetermined length less than the periphery of said channel adapted to be wound around a major portion of said sash, said strip having a flat portion thereon for being retained in a portion of said U channel and an angularly projecting sealing flange extending continuously along said strip, said sealing flange adapted to project laterally over the smaller flange of the U channel, and retaining means for said strip, said means including hooks adapted for attachment to the terminal ends only of said strip, said hooks having prongs at one end therefor for inserting into the end portion of said strip, and means on the other end of said hooks for engaging portions of said sash whereby the strip may be placed under tension and maintained in said U channel.

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