WEATHER OR BUFFER STRIP FOR WINDOW SASHES

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Atorneys.
This invention has for its object, a weather or buffer strip particularly for window sashes, such as are used in railway coaches, motor busses, and other vehicles, and particularly a weather or buffer strip at the lower edge of the bottom rail of the sash for coacting with and conforming to the window sill when the sash is closed.

The invention consists in the novel features and in the combinations and constructions hereinafter set forth and claimed.

In describing this invention, reference is had to the accompanying drawing, in which like characters designate corresponding parts in all the views.

Figure 1 is a fragmentary elevation of a window sash embodying my invention.

Figure 2 is a transverse, vertical, sectional view through the bottom rail of the sash showing the sash as separated from the sill.

Figure 3 is an enlarged, sectional view through the buffer strip.

Figure 4 is a view similar to Figure 2 showing the buffer strip as compressed and flexed on the sill.

The invention lies primarily in the construction of the weather or buffer strip, which comprises an outer part of sponge rubber, and means for anchoring the sponge rubber part or section to a frame member, as the bottom rail of a window sash. The weather strip here illustrated comprises a base section, which is secured to the edge of the bottom rail, and an outer section projecting beyond the edge of the base section in position to engage the window sill when the sash is closed, and to conform to the incline thereof, and to irregularities due to particles of dust accumulating on the sill, and to the formation of ice on the sill, the base section being composed of a comparatively hard non-metallic material, and the outer section of a soft, flexible, pliable and compressible material. Preferably, the base section is formed of a comparatively hard rubber, and the outer section of sponge rubber integrally united or vulcanized to the base section.

1 designates the bottom rail of the sash, which is here shown as formed up of sheet metal, so that its inner and outer opposing walls 2, 3, are spaced apart, and with an internal brace 4 which, with the margins of the walls 2, 3, provide a channel 5 which opens through the edge of the bottom rail. The bottom rail may be of any suitable construction, and the channel 5 provided in any other manner. The particular construction of the bottom rail per se, forms no part of this invention.

6 designates the weather strip consisting of a hard rubber base section 7, and a soft or sponge rubber outer strip 8 integrally united together, as by vulcanizing, the base section being anchored to the sash member preferably by being located in the channel 5, and substantially fitting the same.

The outer section 8 may be of any suitable form, but the particular form here shown, wherein the outer section 8 is formed with a lengthwise groove 9 opening through its lower edge, is preferable. The particular cross sectional form of the strip is old in so far as this invention is concerned. The strip 6 and the frame member 1 are provided with means for interlocking, and as here illustrated, the strip 6 is provided with lengthwise grooves 10 substantially at the juncture of the base section 7 and the outer section 8, which grooves receive inturned flanges 11 at the lower edges of the walls 2, 3 of the bottom rail. The strip is inserted and removed by an endwise sliding movement of the strip 6.

The hard rubber base 7 firmly anchors the strip to the bottom rail and prevents the strip from displacement during distortion and conformation of the outer section 8 when it comes against the window sill, or when the sash is being raised, and the outer strip 8 adheres to the sill as when frozen to the sill.

Owing to the sponge rubber outer section 8, the section 8 readily conforms to sills of different inclinations, and to any obstructions as accumulations of dirt and ice on the sill, so that the sash is always sealed tight when closed, and also owing to the sponge rubber outer section 8, said section can conform to the sill by compressing and flexing.

What I claim is:

1. A weather or buffer strip of the class described, comprising a hard rubber base sec-
tion, and an outer section of sponge rubber integrally united to the base section throughout substantially the entire length of both sections.

2. A weather or buffer strip of the class described, comprising a hard rubber base section, and a soft rubber outer section integrally united to the base section and having a sponge rubber face forming the contact surface of the strip.

3. A weather or buffer strip of the class described, comprising a hard rubber base section, and a sponge rubber outer section having a sponge rubber contact face, said outer section being integrally united to the base section throughout substantially the entire length of the sections.

4. The combination with a frame member, of a weather or buffer strip comprising a hard, non-metallic base section, and a sponge rubber outer section integrally united with the base section throughout substantially the entire length of the sections, the frame member and the strip having means for interlocking substantially at the junction of the base and the outer section.

5. The combination with the frame member of a window sash, of a buffer strip carried at the edge of the frame member, the buffer strip comprising a base section of hard rubber, and an outer section of sponge rubber integrally united to the base section throughout substantially the entire length of the sections, the frame member and the strip having interlocking means substantially at the junction of the base section and the outer section.

6. The combination of a sash frame member having a channel in its edge, of a weather strip having a base portion of hard rubber, and an outer portion of sponge rubber integrally united with the base section and having a sponge rubber face forming the contact surface of the strip, the strip being formed with grooves substantially at the junction of the sections, and the frame member having inwardly extending flanges interlocking with the grooves.

In testimony whereof, I have hereunto signed my name at Syracuse, in the county of Onondaga, and State of New York, this 17th day of September, 1930.

EDWARD F. CHAFFEE.