July 19, 1932. F. S. SLATER ET AL 1,868,080

WEATHERPROOF METAL CASEMENT WINDOW

Filed Nov. 24, 1930

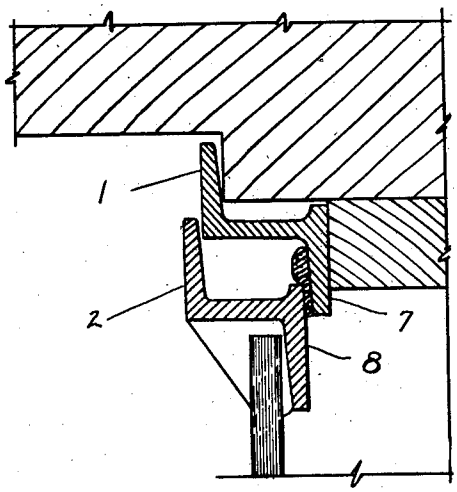


Fig. 2

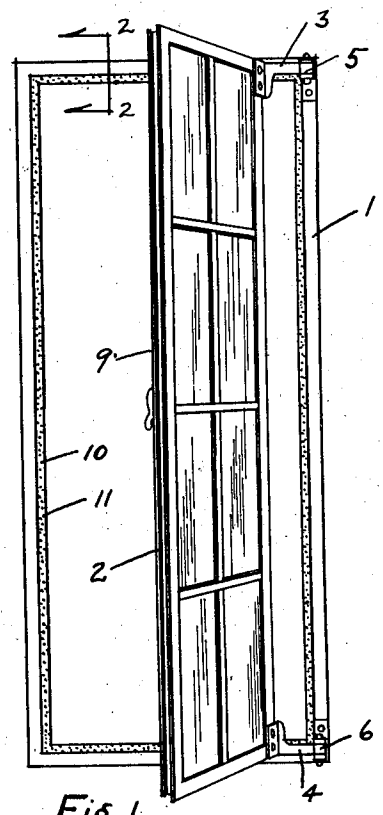


Fig. 1

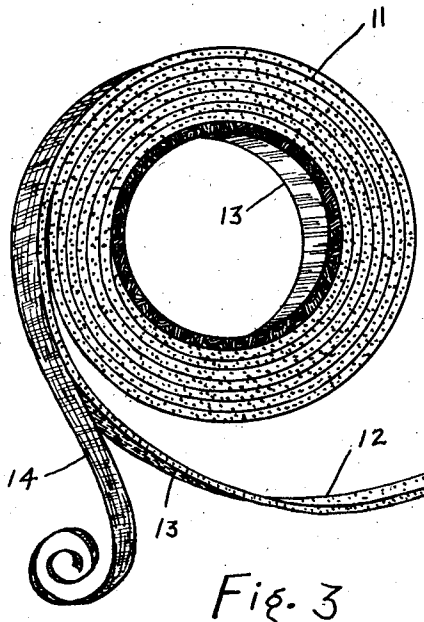
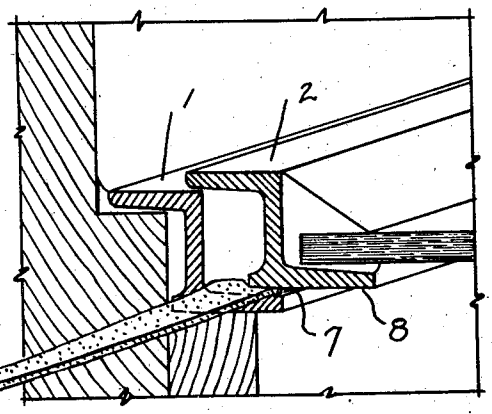


Fig. 3



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WEATHERPROOF METAL CASEMENT WINDOW

Application filed November 24, 1930. Serial No. 497,647.

This invention relates to a weather-proof metal casement window.

It is the object of this invention to produce a weather-proof metal casement window and this has been achieved by means of a resilient weather strip which can be readily and simply attached to the casement frame. This resilient weather strip preferably comes in the form of a strip of sponge rubber, one face of which is adhesive and which is wound in a roll which permits the easy handling and the easy assembly of the weather strip to the casement frame.

In the drawing:

Fig. 1 is a front elevation of the casement frame and opened casement window showing the weather strip applied to the casement frame.

Fig. 2 is a section along the line 2—2 of Fig. 1 when the casement window is closed.

Fig. 3 is an illustrative view showing the method of assembly of the weather strip to the casement frame.

Referring more particularly to the drawing, the casement window assembly consists of a casement frame generally designated 1 and the casement window generally designated 2. The casement frame 1 and window frame 2 are of metal construction and the window 2 fits within the casement frame 1 when in closed position as brought out nicely in Fig. 2. The window frame 2 has fixed thereto the upper and lower hinge brackets 3 and 4 which are hinged to the frame 1 as at 5 and 6 respectively.

The casement frame is provided with a jamb face 7 which is arranged to engage with the inner face 8 of the window frame 2 when the window frame 2 is closed. Since metal casement window assemblies are made accurate only within commercial limits it follows that the joint between the jamb face 7 and the inner face 8 of the window frame is not a weather proof joint. Further, since the engaging faces 7 and 8 of the casement frame 1 and the window frame 2 extend completely around the casement and window frames, that is, along the top and bottom as well as both sides, and since the window frame 2 is hinged to the casement frame 1 as at 5 and 6, it necessarily follows that if the face 7 of the casement 1 extending between the hinges 5 and 6 is weather-stripped by a strip that is not sufficiently resilient and distortable to give appreciably when the window is closed that the outer edge 9 of the window frame 2 will be spaced from the face 10 of the casement frame 1 and thus permit the rain, sleet, and air to pass through the casement from the outside. Hence, to obviate this difficulty the casement frame 1 is weather-stripped by means of a thin strip of resilient material which is highly distortable and has high come-back qualities and is preferably fabricated from sponge rubber, rubber similar to that used in rubber bands, and any other type of vulcanized rubber which has the above mentioned qualities.

This weather strip may be generally designated 11 and consists preferably of a continuous strip of sponge rubber 12 which is provided with a suitable adhesive 13 on one face thereof, this adhesive preferably having a rubber content and being of the type that will adhere both to metal and to rubber.

Preferably the weather strip 11 is wound about a mandrel 13 as shown in Fig. 3. Hence, to prevent the adhesive 13 from integrating or sticking together, the successive convolutions of a sponge rubber strip 12 and adhesive 13 is covered by a continuous strip 14 which will not adhere to the adhesive 13. This strip 14 is preferably a fabric of the type known to the trade as "Holland cloth".

The application of the weather strip 11 to the jamb face 7 of the casement frame 1 is nicely brought out in Fig. 3. To assemble the weather strip to the casement frame 1 the non-adhesive cloth strip 14 is peeled back to expose the adhesive face 13 of the sponge rubber strip 12. The exposed adhesive face of the sponge rubber strip 12 is then pressed against the jamb face 8 of the casement frame 1 to which it adheres. Whatever length of weather strip is desired is unrolled from the mandrel 13, the cloth 14 rolled back and when a sufficient length of weather strip has been unrolled it is simply severed from the weather strip roll.

The roll of weather strip is very easy and

convenient to handle and owing to the simplicity of the removal of the cloth 14 from the adhesive face 13 of the weather strip 12, the weather strip 12 is readily assembled to a window casement and therefore does not require the services of a skilled artisan. Owing to the high distortability and high come-back qualities of the sponge rubber strip 12, a complete seal along the top and bottom as well as the side edges of the frame 1 and the window frame 2 can be attained without in any wise impairing the function of the hinges 5 and 6 or preventing the window frame 2 from being completely closed in relation to the casement frame 1.

Claims:

1. A weather strip for a casement window or the like comprising in combination of a strip of resilient rubber material having an adhesive face, a mandrel upon which the said resilient rubber material strip may be wound to form a roll and a non-adhesive strip contacting with the adhesive face of the resilient rubber material strip throughout its length whereby successive convolutions of the said weather strip are prevented from adhering one to the other.

2. A weather strip for a casement window or the like comprising in combination of a continuous strip of sponge rubber having an adhesive face, a mandrel about which the sponge rubber strip is wound to form a roll, and a non-adhesive fabric continuously in contact with the adhesive face of the said sponge rubber strip to prevent the sticking of one convolution of the sponge rubber strip to the other whereby the said sponge rubber weather strip may be readily applied to the casement window to weatherproof the same by peeling back a portion of the non-adhesive strip to expose the adhesive face of the said sponge rubber weather-strip, which adhesive face may be applied to the window casement and the length of weather-strip required severed from the roll.

3. A weather strip for a window casement or the like comprising in combination of a continuous narrow strip of sponge rubber, an adhesive applied to one face of the sponge rubber strip and a non-adhesive strip continuously in contact with the adhesive face of the said sponge rubber strip whereby the sponge rubber strip may be rolled up with the successive convolutions of the sponge rubber strip in non-sticking relation.

In testimony whereof we affix our signatures.

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