April 27, 1937. D. H. HARNLY 2,078,243

WEATHER STRIP AND METHOD OF MAKING THE SAME

Filed Aug. 19, 1935

Fig. 1.

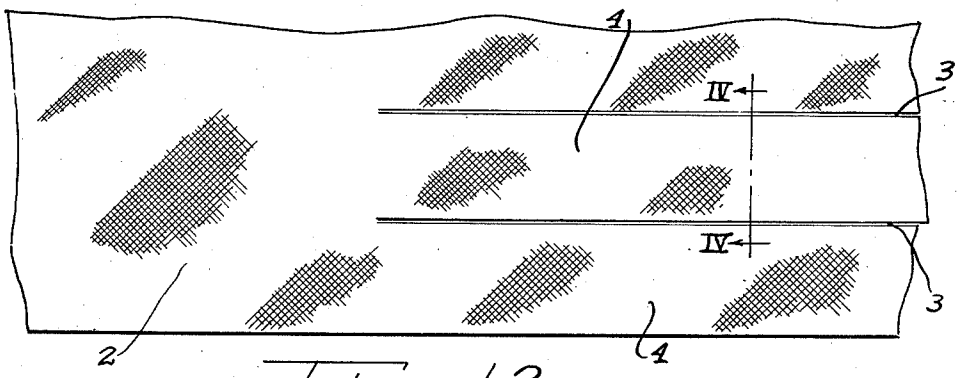


Fig. 2.

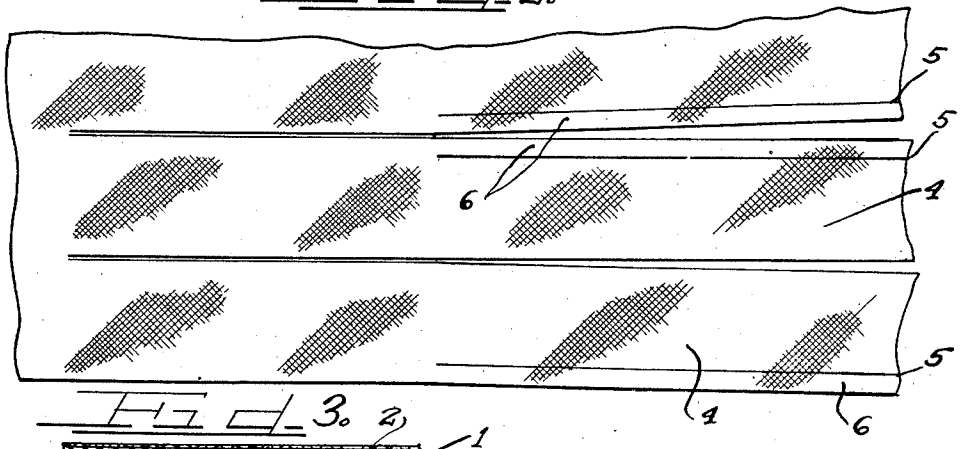


Fig. 3.

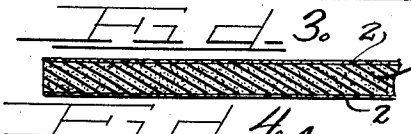


Fig. 4.

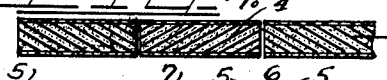


Fig. 5.

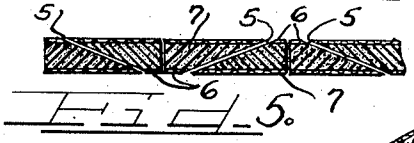
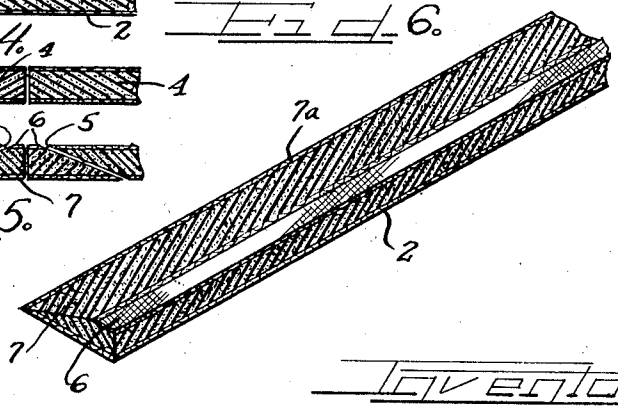


Fig. 6.



Inventor

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by Charles W. Hills Atty.

Patented Apr. 27, 1937 2,078,243

UNITED STATES PATENT OFFICE

2,078,243

WEATHER STRIP AND METHOD OF MAKING THE SAME

David H. Harnly, Chicago, Ill.

Application August 19, 1935, Serial No. 36,794

3 Claims. (Cl. 154—2)

This invention relates to a weather strip and the method of making the same.

The invention concerns itself primarily with a novel method that produces a novel product in an expeditious manner and without any waste of material, and in which the production of such weather strips is doubled by a single finishing operation.

The invention comprises the novel method and structure hereinafter described and more particularly pointed out and defined in the appended claims.

In the accompanying drawing which illustrates certain steps in the method and the finished product and certain applications thereof, and in which similar reference numerals refer to similar features in the different views:

Figure 1 is a plan view of a strip of material illustrating the first slitting operation involving this invention.

Figure 2 is also a top plan view of the material illustrating the second slitting operation with parts displaced.

Figure 3 is a fragmentary sectional view of the material used.

Figure 4 is a fragmentary transverse sectional view through the slit material taken substantially upon the line IV—IV of Figure 1.

Figure 5 is a fragmentary transverse sectional view through the completely slit material.

Figure 6 is a fragmentary perspective view of a weather strip involving this invention.

According to this invention, a suitable strip 1 of sponge rubber or the like is first formed, and fabric 2 or similar suitable material is vulcanized upon the sides thereof to form a wearing surface and impart thereto a more resilient character. These operations are preferably performed in a rubber manufacturing establishment.

The strip of material is then longitudinally slitted, as indicated at 3 in Figure 1, to provide narrow strips 4 which should be somewhat wider than the width of the desired finished weather strips. The strips 4 are then diagonally slitted, as indicated at 5 in Figures 2 and 5. The slits 5 are started a short distance from a lateral edge of the strip 4 to provide a top covered margin 6 for the finished weather strips. The slits 5 are directed at such an angle as to leave a similar margin 6 at the bottom of the strip. Thus the strips 4 are diagonally severed to provide two completed weather strips ready for use. One of these completed weather strips 7 is shown in Figure 6.

It will be noted that the weather strip 7 has a base formed by the fabric 2, a top marginal fabric 6, and a downwardly sloping surface 7a that serves as a nailing flange.

It will be noted that the weather strips as constructed have excellent compressibility so as to form effective seals for closures. In addition, the same can be easily and economically manufactured without any loss of material.

I am aware that many changes may be made in the method and resulting product without departing from the principles of this invention and I, therefore, do not propose limiting the patent granted hereon otherwise than necessitated by the prior art and appended claims.

I claim as my invention:

1. The herein described method of making weather strips which consists in vulcanizing a piece of fabric upon opposite sides of an elongated piece of sponge rubber, longitudinally slitting said piece to form narrower strips, and slitting said narrower strips upon diagonal lines spaced from the lateral edges thereof.

2. The herein described method of making weather strips which consists in slitting a piece of rubber to produce strips wider than the desired width of weather strips, and slitting said severed strips upon a diagonal plane spaced inwardly from the lateral edges thereof.

3. The herein described method of making weather strips which consists in forming a strip of material wider than the desired width of weather strip and slitting said strip upon a diagonal plane spaced from the lateral edges of said strip for forming a pair of similar weather strips.

DAVID H. HARNLY.