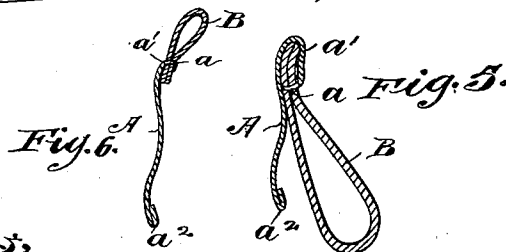
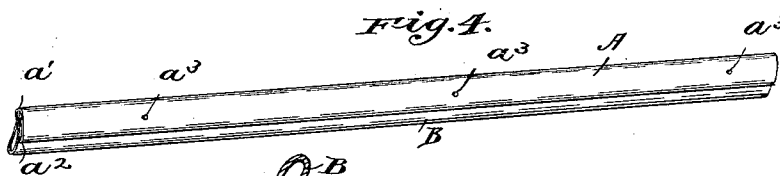
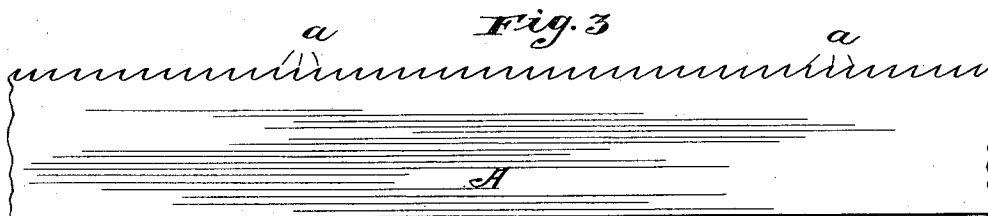
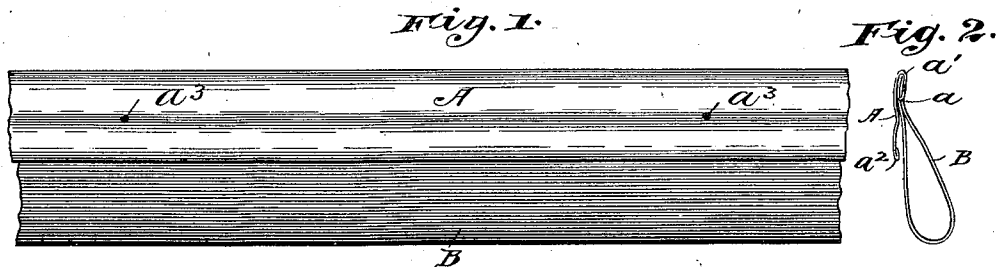


(No Model.)

G. J. BLUM.  
WEATHER STRIP.

No. 596,318.

Patented Dec. 28, 1897.



Witnesses,  
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# UNITED STATES PATENT OFFICE.

GEORGE J. BLUM, OF CHICAGO, ILLINOIS.

## WEATHER-STRIP.

SPECIFICATION forming part of Letters Patent No. 596,318, dated December 28, 1897.

Application filed June 7, 1897. Serial No. 639,679. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE J. BLUM, of Chicago, Illinois, have invented a certain new and useful Improvement in Weather-Strips, of which the following is a specification.

This invention relates to weather-strips, and more particularly to that class known as "metallic" weather-strips, wherein the back is constructed of sheet metal, and has for its object to effect a firmer and more durable connection between the metallic back and the rubber cushion of which the strip is composed.

To this end my invention consists in the combination, with the rubber cushion, of a metallic back having a toothed or serrated edge, whereby when the marginal portion of the back is turned or bent over upon itself to clamp and hold the cushion said teeth or serrations will pass through the cushion and hold the same firmly and securely, preventing its being torn out or being otherwise loosened or separated from the back.

In the accompanying drawings, Figure 1 is a plan view of a weather-strip embodying my invention. Fig. 2 is a transverse sectional view of the same. Fig. 3 is a plan view of the blank from which the back is formed. Fig. 4 is a perspective view of the strip. Fig. 5 is an enlarged transverse sectional view similar to Fig. 2. Fig. 6 is a view similar to Fig. 5, showing a construction embodying my invention in a modified form.

In the said drawings let A represent the back, which is made of sheet metal and which is provided along one of its edges with teeth or serrations  $a$ , as shown more particularly in Figs. 3 and 5.

B represents the cushion, which is constructed, as usual, of a strip of rubber or rubber cloth folded upon itself.

The back A is made from a blank, such as is shown in Fig. 3, and is bent or struck up into shape, its marginal portion, comprising the serrated edge  $a$ , being bent or turned over upon itself, as shown at  $a'$ , to clamp the cushion B between said edge and the body of the back, and the serrations or teeth  $a$  being also bent during this operation in such manner that they are approximately at a right angle to the body of the back and, passing through both plies of the cushion, impinge upon the

back and serve to hold the cushion firmly and securely in position. The other edge of the back is preferably bent or turned over upon itself, as shown at  $a^2$ , to give increased strength and a better finish to the back. These operations may all be readily performed by suitable mechanism for the purpose, and the back may be grooved, as shown, or be what is known as an "oval" back, both forms being well known, and said back will also be provided with the usual perforations  $a^3$  for the tacks or other means whereby the strip is secured in place.

It will be seen that by reason of the serration of the edge of the clamping margin of the back said serrations are adapted to pass entirely through both plies of the cushion and firmly hold this latter in place, offering much greater resistance to strains which tend to displace the cushion than where a mere clamping action by frictional contact only is relied upon to hold the cushion in place. Moreover, if the teeth are caused to impinge upon the body of the back with sufficient force, and in practice I prefer this mode of construction, the extremities of the teeth are bent or upset and thereby clenched on the under side of the cushion, thereby rendering the connection still more secure and permanent.

In Fig. 6 I have shown a modified form of my invention adapted for more economical construction, since less metal and less rubber are employed. In this construction the serrated edge is bent up and forced through the cushion without overlapping and embracing the edges of the plies thereof, as in the structure shown in Figs. 1 to 5, and the protruding ends are upset and clenched upon the cushion to hold the same in contact with the back. Moreover, in this construction the cushion is clamped to that margin of the back toward the direction in which it projects, so that a much less amount of rubber or rubber cloth is employed to provide a cushion having a suitable amount of its body projecting beyond the back than in the case of the construction shown in Figs. 1 to 5.

I claim—

1. In a weather-strip, the combination, with the cushion, of a metallic back having a serrated edge bent or folded and forced through

the cushion and there upset and clenched, substantially as set forth.

2. In a weather-strip, the combination, with the cushion, of a metallic back, having a serrated edge and having its adjacent marginal portion bent or folded upon itself, and over the cushion, the serrations of the edge being forced through the cushion, substantially as set forth.

10 3. In a weather-strip, the combination, with the cushion, of a metallic back having a serrated edge and having its adjacent marginal portion bent or folded upon itself and over the cushion, the serrations of the edge being  
15 forced through the plies of the cushion and

caused to impinge on the body of the back, substantially as set forth.

4. In a weather-strip, the combination, with the cushion, of a metallic back having a serrated edge and having its adjacent marginal portion bent or folded upon itself and over the cushion, the serrations of the edge being forced through the cushion and caused to forcibly impinge upon the body of the back, whereby said serrations are upset and clenched, substantially as set forth.

GEORGE J. BLUM.

Witnesses:

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