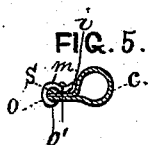
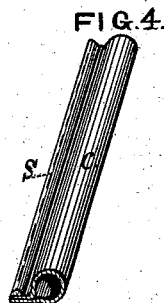
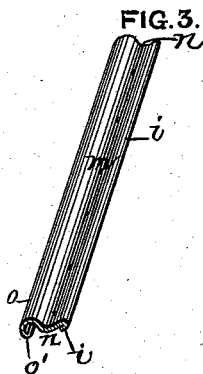
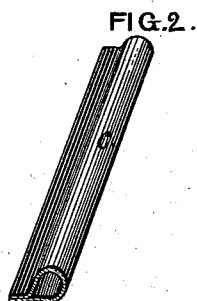
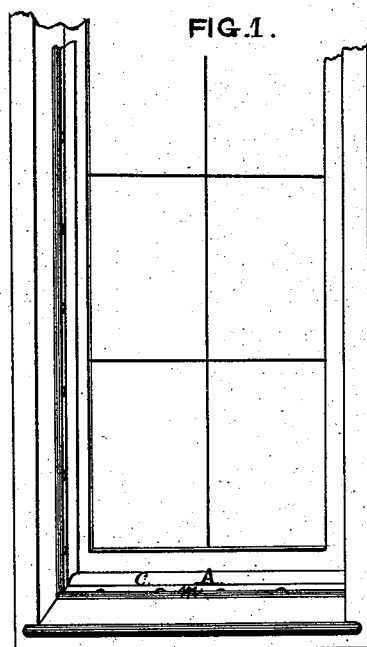


(No Model.)

J. POYTON.
WEATHER STRIP.

No. 381,166.

Patented Apr. 17, 1888.



WITNESSES:
George V. Morey
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UNITED STATES PATENT OFFICE.

JOSIAH POYTON, OF NEW YORK, N. Y., ASSIGNOR, BY MESNE ASSIGNMENTS,
TO CHARLES R. VINCENT, OF SAME PLACE.

WEATHER-STRIP.

SPECIFICATION forming part of Letters Patent No. 381,166, dated April 17, 1888.

Application filed November 9, 1887. Serial No. 254,713. (No model.)

To all whom it may concern:

Be it known that I, JOSIAH POYTON, a citizen of the United States, and a resident of the city of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Weather-Strips, of which the following is a specification.

I have improved the weather-strip in which a tubular cushion is employed as the weather-protecting strip; and my improvement consists in the particular construction of the device, whereby it is rendered more durable in maintaining its tubular form, and by which its connection with its metallic supporting part is rendered strong and firm and of simple construction.

The precise improvement consists in the provision whereby the joined edges of the tubular cushion are re-enforced by a binding rib or cord of textile material, and the provision of a metallic binding-plate adapted by its peculiar construction to be bound over and upon the re-enforced edges of the tubular cushion and to form a bearing upon the outer side only of the lapped edges of the cushion part, as I will now describe, and make such precise improvement the subject of my claims.

To enable the public to understand and those skilled in the mechanic arts to construct my said improved invention, I will describe it as follows, to wit:

Referring to the accompanying drawings, Figure 1 represents a front view of a section of a window, having my improved weather-strip A secured upon the sill thereof. Fig. 2 is a section of the thin rubber cushion *c* formed into shape for use. Fig. 3 is a section of the metallic binding-strip *m*, fashioned into shape to receive the flexible cushion *c*. Fig. 4 shows the two edges of the rubber cushion *c* laid together and firmly stitched or otherwise secured to a textile strengthening cord or strip, *s*, ready to receive the corrugated binding-strip *m*. Fig. 5 is a transverse or cross section of a finished weather-strip, showing the arrangement of the several parts of my improved device A. Fig. 6 is an enlarged cross-section of the device shown in Fig. 5.

First form the cushion *c* into shape by bringing the longitudinal edges together and stitch-

ing the same onto the textile strip or cord *s*. Then pass any suitable strip of thin metal through rotary dies, which produces by a single rotatory motion the corrugated strip *m* ready to receive the thin edges and strengthening-cord of the rubber cushion *c*, and by a second rotatory motion the outer edge, *o o'*, of the metallic binding-strip *m* is turned under and upward to receive and firmly hold within its coiled recess the 'corded edges *s'* of rubber cushion *c*. The inner edge, *i*, of the metallic binding is also turned under at the same time by the same rotary device to produce a rigid bearing (when the strip A is nailed in position upon the window-sill) at the foot of the cushion *c*.

It will be noticed that the binding-strip *s* is secured to the outer side of the lapped parts of the tubular cushion and at the top re-enforced edges of such lapped parts, and that the upper edge of the binding-plate is so bent and formed as to grasp this re-enforced edge part, so that the re-enforcing rib will lie in a hollow on the inner side of the grasping-edge of the plate, with the latter on one side only of the cushion-lapping parts, as shown in Fig. 5. The other edge of this plate is folded in closed relation to this innerside, so as to form a rounded bearing, *i*, which, being clamped upon the rubber cushion at the joining of its lapped sides with its tubular body, prevents injury or breaking of the rubber at such joining. Immediately between these grasping and bearing edges of the plate it is formed with an inward-projecting rib corrugation, *n*, which forms a ridge bearing the length of the strip upon the lapped parts of the cushion, and it is through this bearing-ridge that the lapped sides of the cushion are nailed with the uncovered side against the parts to be stripped, and thereby bind the plate at the middle of its width and at its edges hard upon the outer side of the lapped parts of the cushion. This construction so firmly binds the lapped cushion parts that they cannot be pulled apart, while the lapped rounded edge presses firmly upon the tubular base without cutting it.

What is claimed in this application for Letters Patent is—

1. A weather-strip cushion consisting of a tubular part, *c*, having its edges lapped and

re-enforced by an edge-binding ridge or cord, *s*, in combination with a metallic binding-plate having one edge grasping the re enforced lapped edges of the cushion, its other edge
5 having a closed lap or fold forming a bearing upon the tubular part of the cushion at one side only of its lapped parts, substantially as described, for the purpose specified.

2. A weather-strip consisting of a rubber
10 tubular-formed cushion having its lapped edge parts re-enforced by a lateral edge-binding ridge or cord, *s*, in combination with a metallic binding-plate, *m*, having one edge formed with a grasped or turned-over part for the re-
15 enforced lapped cushion parts, its other edge having a closed lap or fold, and having between these formed edges a longitudinal ridge corrugation forming a bearing upon the outer side

only of the cushion-lapped parts, substantially as described.

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3. A weather-strip composed of a rubber tubular part having its lapped edge parts bound by a metallic plate placed upon one side only of such lapped parts and formed with a semi-tubular edge part, *o o'*, for grasp-
25 ing the lapped edge parts, an inner under lapped edge forming a bearing, *i*, and a longitudinal bearing-rib, *n*, on its inner side, as shown and described.

Signed at the city of New York, in the county
of New York and State of New York, this 8th
day of September, A. D. 1887.

JOSIAH POYTON.

Witnesses:

WILLIAM RIGBY,
JAMES P. MCLEAN.