

(No Model.)

E. KOCH.
WEATHER STRIP.

No. 572,810.

Patented Dec. 8, 1896.

Fig. 1.

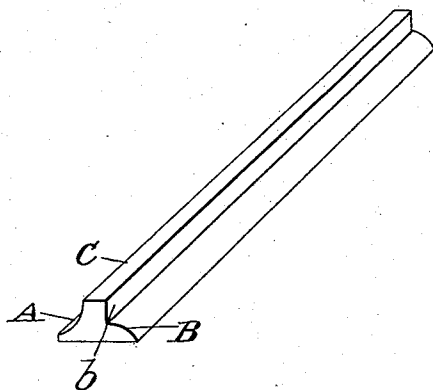


Fig. 2.

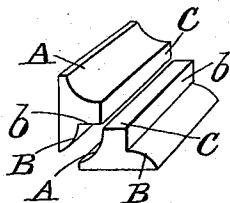
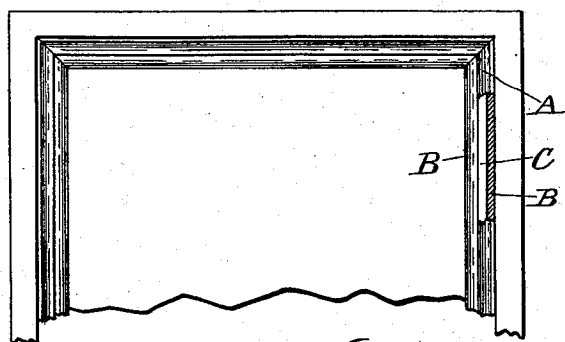


Fig. 3.



Witnesses

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WEATHER-STRIP.

SPECIFICATION forming part of Letters Patent No. 572,810, dated December 8, 1896.

Application filed September 18, 1896. Serial No. 606,293. (No model.)

To all whom it may concern:

Be it known that I, ELI KOCH, a citizen of the United States, residing at Harrisburg, in the county of Dauphin and State of Pennsylvania, have invented certain new and useful Improvements in Weather-Strips, of which the following is a specification.

My invention relates to weather-strips for attachment to the separable joints of doors, windows, and similar openings to exclude cold, snow, rain, and dust, and has for one of its objects to provide a single strip with its face cut so that one edge or side will register with its opposite side when one part of the strip is attached to the casing of a door or window and another part of the same piece having the edge thereof reversed is attached to the window or door supported in said casing.

Another object of my invention is to provide a strip the reversed edges of which will register accurately with each other, making a close joint without the interposition of strips of felt or other material between the parts.

Still another object of my invention is to provide a weather-strip that will not present contacting surfaces easily affected by changes of the weather such as produce swelling, shrinking, or warping of the parts and cause them to stick to each other so they cannot be readily moved by sliding or cannot be made to register when one part is attached to a door and the complementary part thereof to the casing of the door.

Still another object of my invention is to provide a weather-strip for breaking the separable joints of doors and windows which will present an ornamental surface when the edges of two such strips are in contact or out of contact with each other.

Heretofore weather-strips of the class to which my invention appertains have usually been made of two or more parts, one of which has been formed with a circular groove, channel, or cavity in its edge or face and its complementary part has been formed with a tongue or rib adapted to coincide therewith or register therein when the parts are in position on a door or window and the casing thereof.

The surfaces of these parts have usually been formed with irregular curves, whereby a slight swelling or warping of either or both

parts renders it difficult to secure and maintain a close and accurate contact of the parts or when either or both parts become gummed or sticky by the softening of the paint or varnish used thereon or from any cause whatever.

I accomplish the objects of my invention in the manner and by the means hereinafter fully described in detail, reference being made to the accompanying drawings, in which the same letters refer to like parts in all the figures of the drawings.

Figure 1 is a perspective view of my improved weather-strip. Fig. 2 shows said strip cut into two parts with the registering edges opposite to each other, and Fig. 3 shows said strip in operative position on a door having its lower portion cut away.

In carrying out my invention I use a single strip of any suitable material, preferably of wood, either soft or hard, and cut the edge of one side in the form indicated by A, and in the opposite edge thereof I cut a reverse form, as indicated by B. The face of one edge is slightly grooved, the bottom of the groove being circular in cross-section. The opposite side of the strip is formed with a curved or beaded edge B to correspond with the circular-bottomed groove A, the bead being cut to the back or flat side of the strip and terminating a distance from the outer or face part of the strip, leaving a perpendicular wall or edge *b* from the termination of the top of the bead to the face of the strip. A narrow rib C is left or formed on the face of the strip midway of the groove A and the bead B by the cutting of the groove and bead. The width of this rib or face and the size of the groove and bead may vary according to the size of the strip, the use of large strips being preferable on heavy doors and windows and small strips on small doors and windows, to correspond with the heavy or light moldings used thereon. When the beaded and grooved edges of two pieces of such a strip as herein described are placed together at a right angle, the bead B will register in the groove A, and the side of the wall or edge *b* will fit over the face of the rib C and form a close joint.

When attaching my improved strip to a door or window, the strip is cut into pieces of suitable lengths for attachment to the cas-

ing of the door or window. The strip may first be secured to the door or sash, and then the complemental part fitted to it and then secured to the casing. If the strip is to be 5 attached to the top and sides of the door, or to the top, sides, or bottom of a window, the ends of the strips at the corners are cut at an acute angle and fitted to each other in order to make a more perfect joint.

10 By forming the strip of one piece of material both the cutting operation and the handling of the finished strip is quickened and simplified.

In putting up the strips for shipment or 15 sending them out for attachment there is but the single strip to keep count of, and whatever the length of parts to which it is to be applied the strip may be effectively fitted thereon so long as there is any portion of 20 the strip left. There is no loss, such as is often the case, where the parts which contact are cut on separate strips. In the latter case defects in the material of which one strip is made or injury to the fitting part thereof 25 often causes a corresponding loss or waste of the complemental strip where the number of strips are limited.

Having thus described my invention, what I claim as new, and desire to secure by Letters 30 Patent, is—

1. A weather-strip for windows and doors

formed of a single piece, one edge provided with a shallow, longitudinal cavity having a bottom circular in cross-section, the other 35 edge of said strip formed with a longitudinal bead, and a plane wall perpendicular to said bead, said strip having a rib between said cavity and said bead, and a plane face formed on said rib at a right angle to the perpendicular wall in the beaded edge of said strip, sub- 40 stantially as shown and described and for purpose specified.

2. A weather-strip having one of its edges formed with a shallow, longitudinal cavity circular in cross-section, the other edge of 45 said strip having a bead formed thereon and a plane wall from the termination of said bead to the outer surface of said strip and perpendicular to said bead, said strip having a rib between said bead and said cavity, a plane 50 face formed on said rib and at a right angle to said perpendicular wall, said strip, when cut into two parts and the opposite edges thereof placed together at right angles to each other, adapted to form a close joint, substan- 55 tially as shown and described.

In testimony whereof I hereto affix my signature in the presence of two witnesses.

ELI KOCH.

Witnesses:

ALICE V. HOSTER,
MARTIN KAYLOR.