(No Model.)

G. A. & J. E. CAPEWELL.

WEATHER STRIP.

No. 437,478. **Patented Sept. 30, 1890.**

Fig. 1

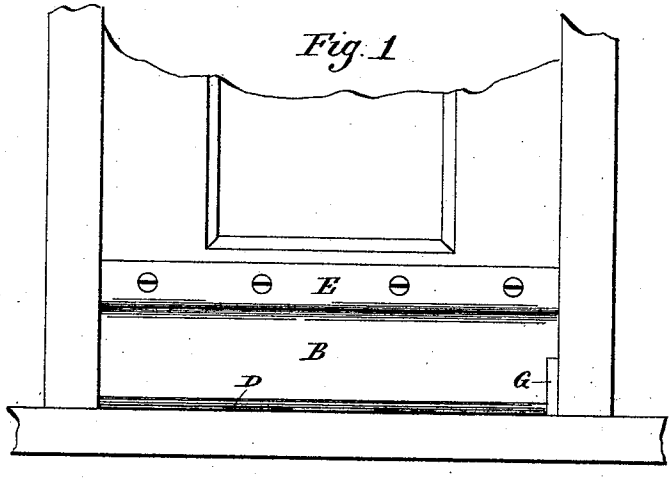


Fig. 2

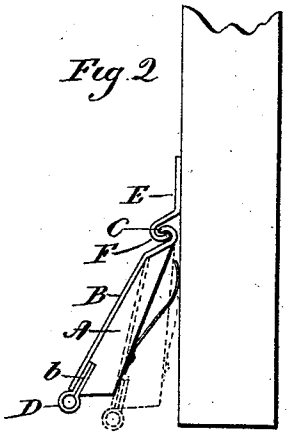


Fig. 3

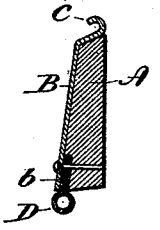
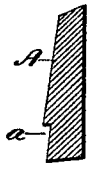


Fig. 4



Witnesses
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UNITED STATES PATENT OFFICE.

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WEATHER-STRIP.

SPECIFICATION forming part of Letters Patent No. 437,478, dated September 30, 1890.

Application filed May 12, 1890. Serial No. 351,446. (No model.)

To all whom it may concern:

Be it known that we, GEORGE A. CAPEWELL and JOHN E. CAPEWELL, of Woodbury, in the county of Litchfield and State of Connecticut, have invented new Improvements in Weather-Strips; and we do hereby declare the following, when taken in connection with accompanying drawings, and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a front view of the door with the strip applied; Fig. 2, an edge view of the door, showing the strip applied; Fig. 3, a vertical section of the strip detached; Fig. 4, a vertical section of the wood body detached.

This invention relates to an improvement in that class of weather-strips for doors and other purposes in which the strip consists of a bar hinged near the lower end of the door and running transversely across the door substantially parallel with the threshold, and the bar hinged to the door at its upper edge and so as to swing outward away from the door under the action of a spring, the strip striking a stop on the jamb of the door as the door is closed to cause the strip to be turned down upon the threshold. This is a well-known class of weather-strips. In order to make a close joint between the strip and the threshold, the lower edge of the strip is provided with a flexible material, as rubber or felt, which will form a packing between the lower edge of the strip and the threshold under the pressure produced by the closing movement of the strip. The bar is usually made from wood, and the packing is introduced into a longitudinal groove in the lower edge of the strip. The strip is necessarily light, and the grooving for the introduction of the packing greatly weakens the strip, so that it frequently splits or gives way and loosens the packing. Again, the wood strip is exposed to the weather, which tends to warp or twist the strip and throw it out of shape, so that its proper operation is interfered with. The wood strip is desirable, as being the best material to which to attach the packing.

The object of our invention is a construction of strip in which the wood may be employed, yet protected from the weather or the liabilities of splitting before referred to; and the invention consists in the construction, as hereinafter described, and particularly recited in the claim.

A represents the wood strip or bar, which is in length corresponding to the width of the door, substantially as in the usual construction of this class of weather-strips. The face or outside of the strip A is covered with a facing B of sheet metal. This facing extends above the wood and its upper edge turned outward to form an outwardly-projecting longitudinal flange C. At the lower edge and upon its outer surface the wood strip A is rabbeted, as at *a*. The facing B extends over this rabbet, so as to form a groove into which the upper edge *b* of the packing D is introduced, the packing being secured by rivets through the facing-strip and wood, as seen in Fig. 3, the facing also being secured to the wood strip above, so as to firmly unite the facing and strip. Across the door above the strip, the hinged plate E is applied. This plate is constructed with a groove F on its lower edge on the inside, which corresponds to the flange C of the metal facing, and so that the flange C, being set within the groove F of the hinged plate E, will be held therein, and so as to swing thereon as a hinge, thus forming a hinge throughout the entire length of the strip, which must always be free to work. The usual stop G is provided on the jamb to force the strip downward as the door closes, and as indicated in broken lines, Fig. 2.

Under this construction all the advantages of a wood strip are attained and the disadvantages thereof avoided by giving to the wood strip all the advantages of a metal strip—that is to say, the wood strip is unexposed to weather or other influences to its detriment, the metal surface taking the entire exposure.

I claim—

The herein-described weather-strip, consisting of the wood body A, the metal facing B, the wood rabbeted upon its face side at the lower edge, so as to form a groove between the metal plate and the wood, combined with

a flexible packing D, secured in the said groove between the metal and the wood, the upper edge of the metal facing turned outward to form a flange C, with a hinged plate E, adapted to be attached to the door and constructed with a groove F upon its inside at its lower edge corresponding to the flange C of the said metal facing, and whereby the strip is hinged to the door, substantially as described.

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