No. 623,917. Patented Apr. 25, 1899.

G. W. KREBS.

WEATHER STRIP.

(Application filed Oct. 27, 1897. Renewed Feb. 27, 1899.)

(No Model.)

Fig. 1.

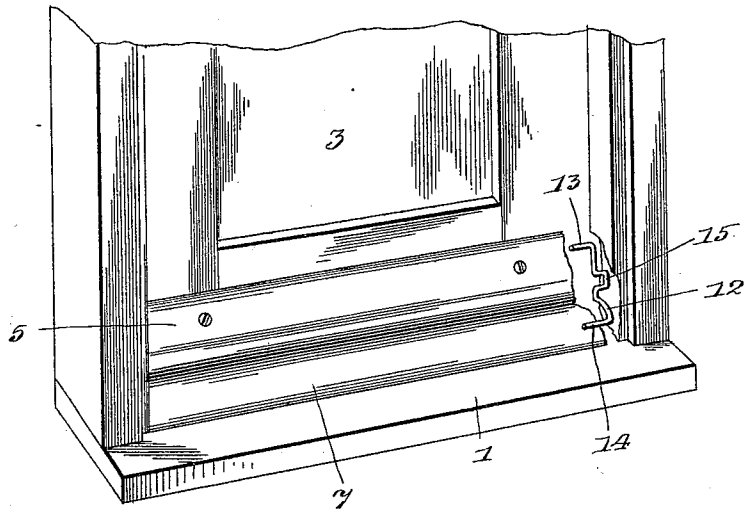


Fig. 2.

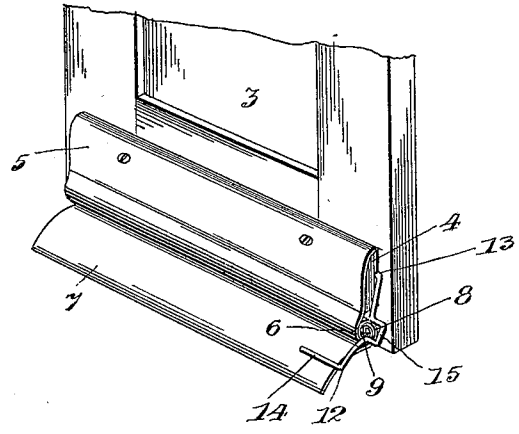
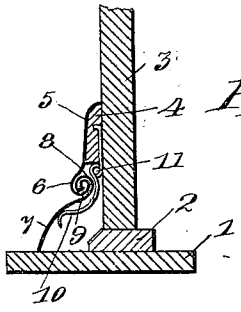


Fig. 3.



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UNITED STATES PATENT OFFICE.

GEORGE W. KREBS, OF CONWAY SPRINGS, KANSAS, ASSIGNOR OF ONE-HALF TO LAFAYETTE V. CLARK, OF SAME PLACE.

WEATHER-STRIP.

SPECIFICATION forming part of Letters Patent No. 623,917, dated April 25, 1899.

Application filed October 27, 1897. Renewed February 27, 1899. Serial No. 707,089. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. KREBS, a citizen of the United States, residing at Conway Springs, in the county of Sumner and State of Kansas, have invented certain new and useful Improvements in Weather-Strips; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to weather-strips; and the object in view is to provide a simple, durable, and perfectly efficient device of the character referred to which may be applied to any door or entrance for the purpose of excluding moisture, dirt, and other foreign matter from the entrance to a building.

The detailed objects and advantages of the invention will be pointed out in the course of the subjoined description.

The invention consists in an improved weather-strip embodying certain novel features of construction and arrangements of parts, as hereinafter fully described, illustrated in the drawings, and incorporated in the claim.

In the accompanying drawings, forming a part of this specification, Figure 1 is a detail perspective view showing a portion of a door and door-frame with the improved weather-strip in its applied position, a portion of the weather-strip being broken away to show the spring-depressor. Fig. 2 is a similar view showing a portion of the door and looking toward the swinging edge of the latter. Fig. 3 is a vertical cross-section of the door, threshold-strip, &c., also showing the strip-lifting spring.

Similar numerals of reference represent corresponding parts in all the views.

Referring to the drawings, 1 designates a door-sill, 2 a threshold-strip, and 3 the door.

For the purpose of carrying out the present invention I provide a stationary wooden strip 4, extending longitudinally along the inner surface of the door adjacent to but slightly above the bottom edge thereof, said strip having a rounded outer surface. Extending outside of and covering the strip 4 is a stationary strip 5, preferably of galvanized iron, said strip serving as a water table or shed and having its lower edge rolled beneath the wooden strip 4, as indicated at 6. The weather-strip proper (indicated at 7) is also preferably constructed of galvanized iron, and its upper edge is rolled, as indicated at 8, so as to engage the rolled lower edge of the stationary strip 5, thus forming a hinged joint between the rolled edges of the strips 5 and 6, so that the free edge of the strip 7 may rise and fall. The extreme edges of the strips 5 and 7 are bent abruptly, as indicated at 9, and extended radially inward partially across the diameter of the rolled portions of the edges, so that they will serve as stops and coöperate by abutting against each other to limit the upward movement of the strip 7.

The strip 7 is held normally raised by means of a wire spring 10, provided at an intermediate point with one or more coils 11 and having one terminal inserted in the lower side of the wooden strip 4, while the other terminal is curved, so as to extend beneath and bear upward against the lower side of the strip 7 for upholding the latter.

12 designates a spring arm or depressor which is preferably composed of a piece of wire, one end of which is bent at an angle to form a journal 13, which is inserted in a socket in the strip 4. The opposite end of the depressor is also bent at substantially a right angle to form a foot 14, which rests upon and above the strip 7 just inside of its outer edge. At points intermediate its ends the spring-depressor is reversely curved to impart thereto the necessary resiliency and yielding properties, and it is also extended laterally to form a U-shaped bend or stop portion 15, which upon the closing of the door comes in contact with the adjacent door-jamb, thereby rocking the depressor on its journal and causing the foot thereof to press downward on the strip 7, thus causing the free edge of said strip to come in contact with the door-sill, and thereby making a tight joint therewith to exclude rain, dirt, &c. By constructing the depressor of spring material, should the swinging edge of the strip 7 come in contact with the door-sill before the door is entirely closed, it will be seen that the spring-arm will yield to accommodate any such discrepancy in the fitting of the parts. The construction also provides for the expansion and contraction

of the wood in different kinds of weather, causing the strip to always work perfectly. As the door is swung open the spring serves to elevate the weather-strip proper, so that the latter will swing clear of the threshold-strip.

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

In a weather-strip, the combination with a hinged and folding strip and means for raising the latter, of a spring-depressor embodying a foot portion bearing upon the upper side of the folding strip and also providing a lateral projection located intermediate the ends of the depressor and adapted to contact with the door-frame for the purposes specified.

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

GEORGE W. KREBS.

Witnesses:
WILL F. ALMOND,
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