No. 692,014. Patented Jan. 28, 1902.

P. D. JONES.

WEATHER STRIP.

(Application filed June 29, 1897.)

(No Model.)

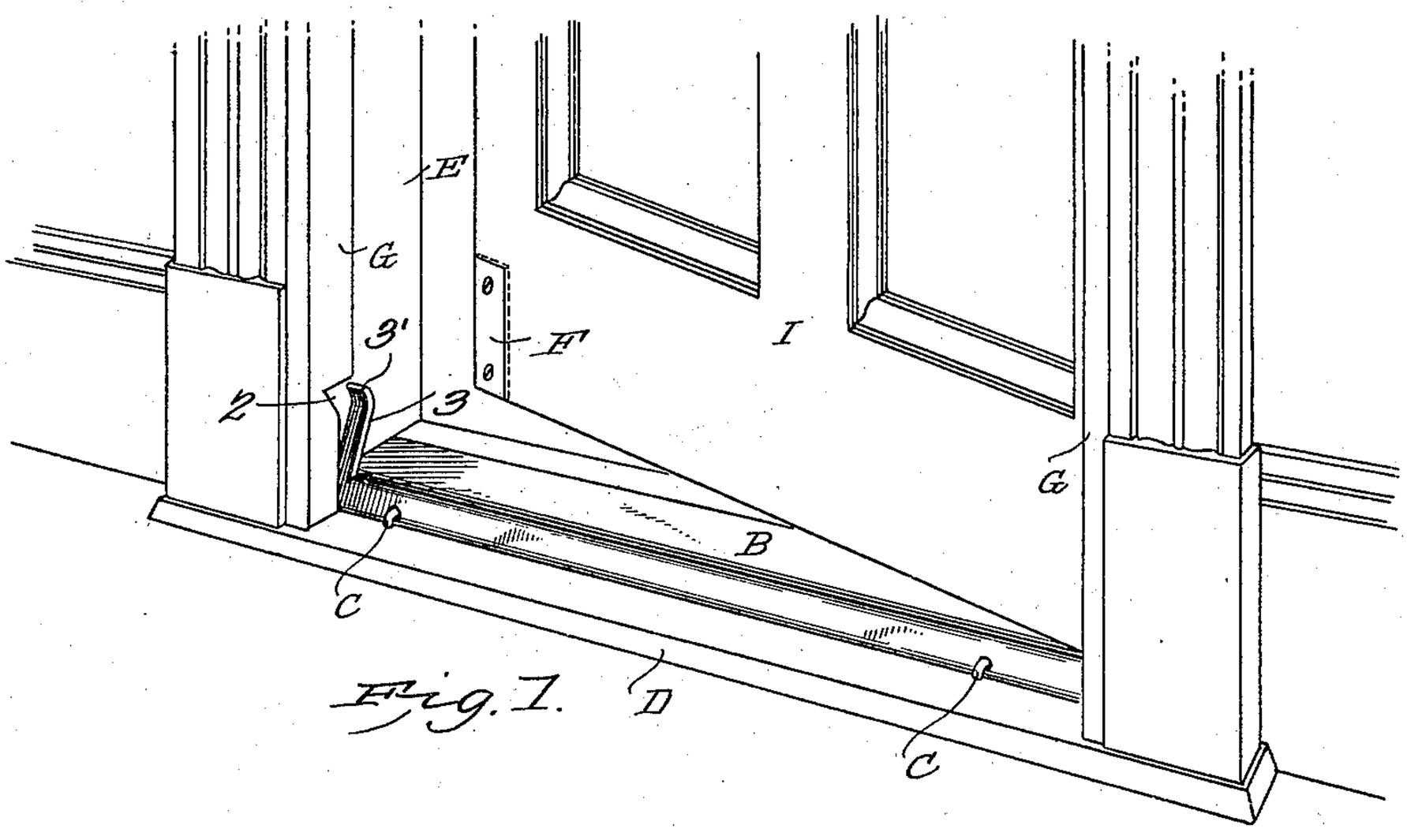


Fig. 1.

Fig. 2.

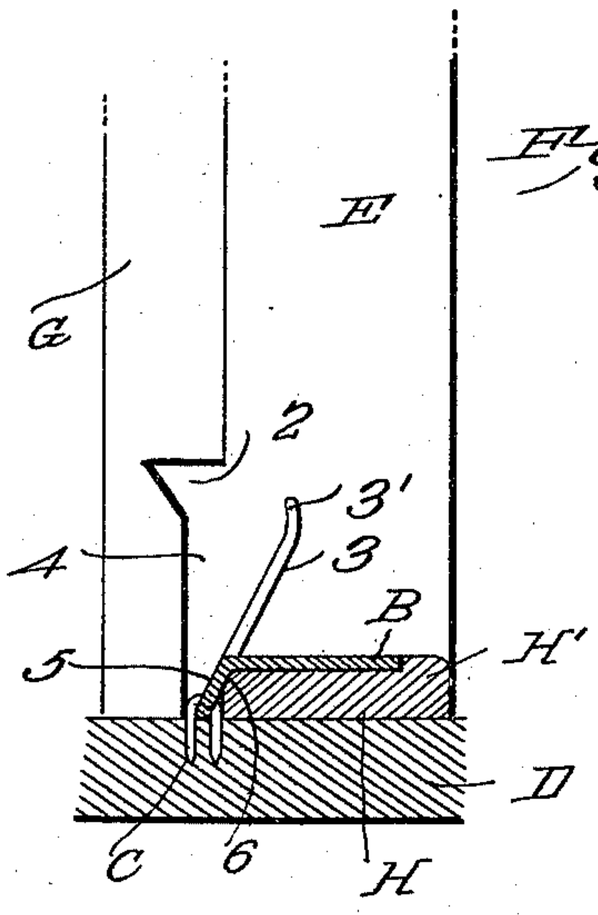
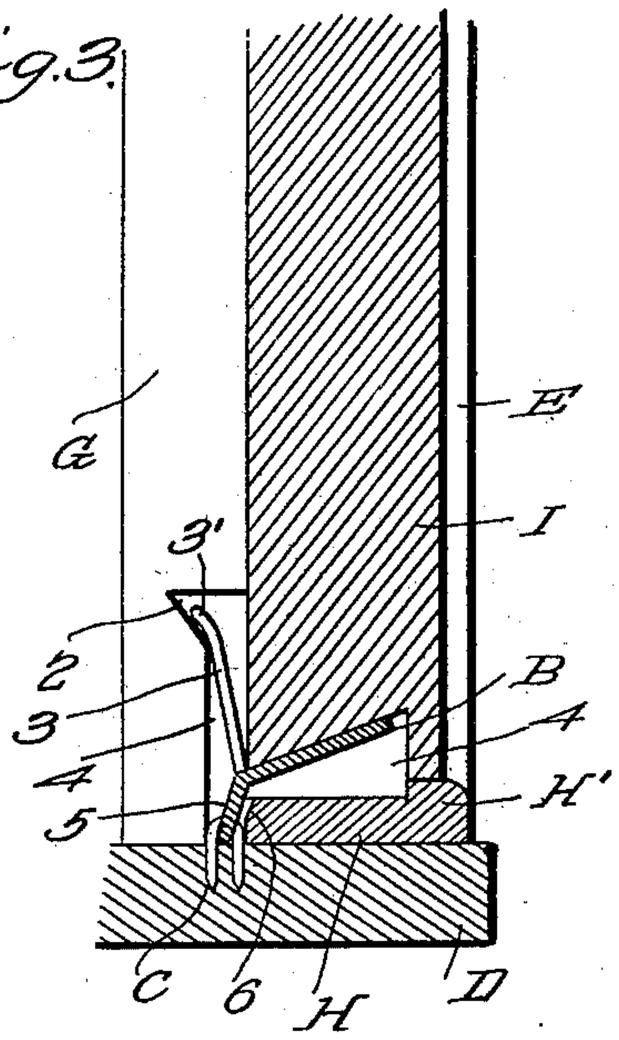


Fig. 3.



Witnesses
C. F. Stewart
J. C. Fitzpatrick

Parks D. Jones, Inventor.
by Cushman & Co
Attorneys

UNITED STATES PATENT OFFICE.

PARKS D. JONES, OF LOVELAND, IOWA.

WEATHER-STRIP.

SPECIFICATION forming part of Letters Patent No. 692,014, dated January 28, 1902.

Application filed June 29, 1897. Serial No. 642,870. (No model.)

To all whom it may concern:

Be it known that I, PARKS D. JONES, residing at Loveland, in the county of Pottawattamie and State of Iowa, have invented certain useful Improvements in Weather-Strips; and I do hereby declare that the following is 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, reference being had to the accompanying drawings, which form a part of this specification.

The invention relates to improvements in weather-strips.

The object of the present invention is to improve the construction of that class of weather-strips having a hinged strip or plate to fit against the lower edge of a door and provided with an arm arranged to be engaged by the door to actuate the strip or plate and to arrange such arm so that it will be flexed by the door in closing, whereby the strip or plate will be tightly held against the bottom of the door by the resiliency of the lever.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claim hereto appended.

In the drawings, Figure 1 is a perspective view of a portion of a door provided with a weather-strip constructed in accordance with this invention. Fig. 2 is a vertical sectional view illustrating the arrangement of the weather-strip when the door is open. Fig. 3 is a similar view showing the arrangement of the parts when the door is closed and illustrating the position of the arm, whereby it is adapted to be flexed sufficiently to hold the strip or plate tightly against the bottom of the door.

Like letters and numerals of reference designate corresponding parts in all the figures of the drawings.

H designates a threshold-strip mounted on a door-sill D and provided at its inner edge with an upwardly-projecting rib H′ and having a recess in advance of the rib to receive the body portion of a hinged strip or plate B, which fits within the said recess and has its upper face flush with the upper face of the rib H′ when the door is open, as shown in Fig. 2. The front or outer edge of the strip H is beveled, as shown at 6, and the strip or plate B is angular in cross-section to fit the horizontal upper face and the beveled front edge of the threshold-strip. The inclined flange or front portion of the strip or plate is provided at intervals with perforations for the reception of staples *c*, which are embedded in the sill to hinge the strip or plate to the latter. When the strip or plate is arranged as shown in Fig. 2, it forms a wear-plate and protects the threshold-strip at the point where it is subjected to the greatest wear and the angularly-disposed flange or front portion of the strip or plate forms a smooth inclined plate, so that there is no liability of the foot of a person becoming caught in the weather-strip.

One end of the weather strip or plate is provided with an arm 3, which is substantially straight and it extends upward from and is arranged substantially in the same plane as the inclined flange or front portion of the strip or plate and it is located adjacent to the bead G. This bead G is recessed at its lower end to provide a vertical shoulder 4, and it has a notch 2 at the upper end of the shoulder 4 for the upper terminal 3′ of the arm 3. The upper end 3′ of the arm 3 is slightly curved toward the bead and is adapted to be engaged by the door before the latter contacts with the body portion of the arm, which being located in the same plane as the bead is out of the way and will not catch the clothes of a person passing through the doorway. The door is provided with a wear-plate F, arranged on its outer face in position to be engaged by the arm 3.

When the arm 3 is engaged and swung in the direction of the bead G by the closing of the door, the strip or plate is raised and is received within a groove 4′, formed in the bottom of the door and provided with an inclined top wall, against which the body portion of the strip or plate abuts. The notch 2 forms at its bottom a tapering portion, which is arranged to be engaged by the extension or arm 3 of the weather-strip when the door is closed, and, as clearly illustrated in Fig. 3 of the accompanying drawings, the curved end of the arm or extension 3 projects into the notch 2. The lower edge of the door engages the arm or extension at the lower end thereof, and as

the lower end of the extension or arm is spaced from the vertical shoulder of the bead and the upper end of the same is spaced from the door the said arm or extension is adapted to be bowed or flexed, whereby the strip or plate is held tightly against the lower edge of the door by the resiliency of the metal. The strip or plate is automatically operated by the arm or extension, and as soon as the door opens it drops back from the position shown in Fig. 3 to that illustrated in Fig. 2.

It will be seen that the weather-strip, which is simple and comparatively inexpensive in construction, is adapted to be applied to an ordinary door, and that the arm or extension of the hinged strip or plate is arranged so that it will be flexed by the door in closing to cause the strip or plate to be held tightly against the lower edge of the door by the resiliency of the metal of which the weather-strip is constructed.

What is claimed is—

The combination of a door-frame having one of its beads recessed to provide a vertical shoulder 4 and having a notch 2, at the top thereof forming a tapering portion at its bottom, the threshold-strip provided at its inner edge with an upwardly-projecting rib, a hinged strip or plate angular in cross-section, and conforming to the configuration of the front portion of the threshold-strip, and arranged to fit against the same, and the substantially straight arm extending upward from the front portion of the hinged plate or strip, adjacent to the recessed portion of the bead and having its upper end curved toward the notch 2 and adapted to project into the same and abut against the tapering portion at the bottom thereof, said arm being arranged at an inclination when the door is closed, and having its upper portion bearing against the tapering portion of the bead and its lower portion engaged by the door and spaced from the door and the bead, whereby it is adapted to be flexed by the former to cause the strip or plate to be held tightly against the lower edge of the door, by the natural resiliency of the metal, substantially as described.

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

PARKS D. JONES.

Witnesses:
J. R. JONES,
GEO. W. SUES.