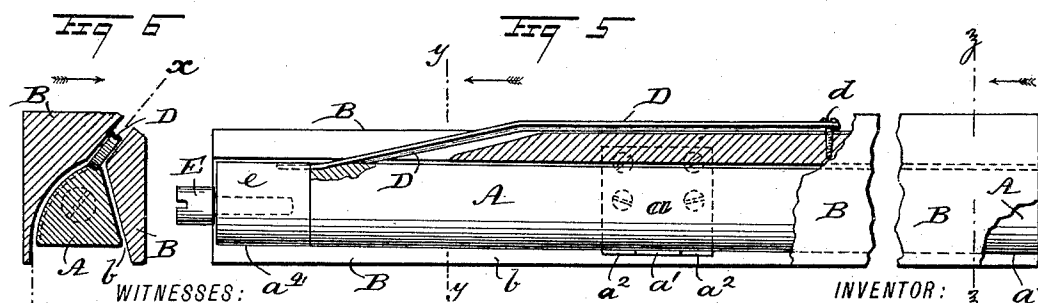
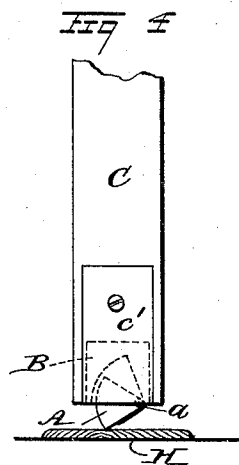
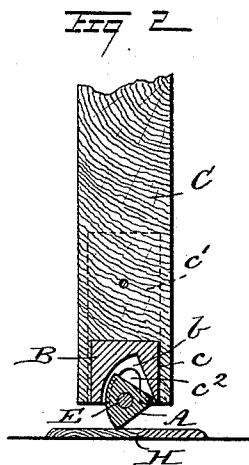
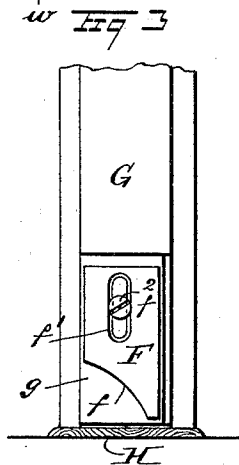
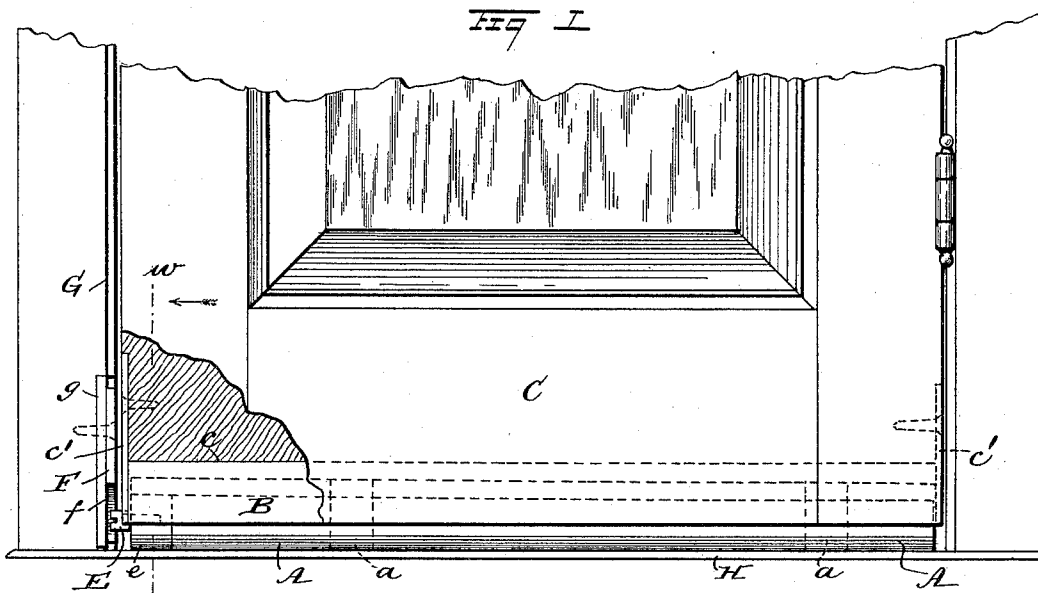


(No Model.)

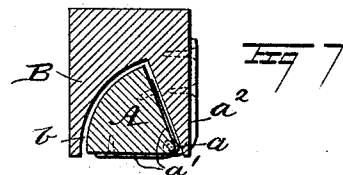
S. R. DEACON.
WEATHER STRIP.

No. 465,755.

Patented Dec. 22, 1891.



WITNESSES:
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UNITED STATES PATENT OFFICE.

SIDNEY R. DEACON, OF ELECTRIC, CALIFORNIA.

WEATHER-STRIP.

SPECIFICATION forming part of Letters Patent No. 465,755, dated December 22, 1891.

Application filed October 24, 1890. Serial No. 369,217. (No model.)

To all whom it may concern:

Be it known that I, SIDNEY R. DEACON, of Electric, in the county of Los Angeles and State of California, have invented a new and Improved Door Weather-Strip, of which the following is a full, clear, and exact description.

My invention relates to a weather guard or strip for the bottoms of doors, and has for its object to provide an efficient and comparatively inexpensive device of this character, which will automatically be closed to the door-sill or floor as the door closes and will rise for protection and be invisible within the door as it is opened, the device being specially adapted for use with outside doors to exclude storms or insects or other intrusive objects and prevent drafts; but it may be used on any door for these or kindred purposes.

The invention will first be described, and then will be particularly pointed out in the claims hereinafter set forth.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is an outside face view of the lower portion of a closed door, partly broken away, and with my improved weather-strip applied. Fig. 2 is a detail vertical section through the door and weather-strip, taken on the line *ww* in Fig. 1. Fig. 3 is an edge view of the lower part of the door jamb or casing, and shows the adjustable resistance piece or plate thereon. Fig. 4 is a view of the lower part of the door at its hinged or back edge. Fig. 5 is an enlarged broken sectional view of the weather-strip and its casing or holder, the section being on the line *xx* in Fig. 6. Fig. 6 is a transverse section taken on the line *yy* in Fig. 5, and Fig. 7 is a transverse section taken on the line *zz* in Fig. 5.

The weather-strip proper A, in the preferred adaptation of my invention, is hung by hinges *a* within an opening *b*, made in and along the under side of a casing or holder B, which may be made of wood or other material, and is adapted to a recess or groove *c*, plowed or produced in the lower edge of a door C, to which the weather strip or guard is fitted. Metallic plates *c'* *c'*, let into opposite edges of the door and fastened by screws or otherwise, cover the

ends of the weather-strip and its casing. The strip is preferably made in triangular cross-sectional form, nearly quadrantal or sector shape, and its hinges *a* consist, preferably, of an angularly-bent metal plate *a'*, fastened to two faces of it, and a plate *a''*, which is bent inward to receive the hinge-pin which passes through eyes on it and within the bend or angle of the plate *a'*, said plate *a''* being fastened by screws or otherwise to the outer face of the weather-strip casing B. (See Fig. 7 of the drawings.) A spring D, which is fastened at one end by a screw *d* to the casing B—say, to a chamfered corner thereof—extends through a slot in the casing, and at its free end engages the weather-strip and normally draws or holds it up within the casing.

The cap or cover plate *c'* at the free edge of the door is provided with a slot *c''*, giving play to a stud or pin E, which is fastened in the end of the weather-strip A, and preferably into a metal cap *e* fixed thereto. This stud is preferably a screw, which is threaded into the cap *e*, and may be adjusted in or out to assure proper contact of it with the beveled or diagonally-formed edge or face *f* of a resistance piece or plate F, which is fixed to the door-jamb G at the side to which the door closes. This plate F is preferably made adjustable by means of a slot *f'* in it, and through which the fastening-screw *f''* passes into the door-jamb, thus allowing the plate to be set with accuracy relatively to the weather-strip stud E, to compel lowering of the strip to the floor or sill H of the doorway as the door is closed. I prefer to fix a metal re-enforcing plate *g* to the door-jamb G to afford a more firm or substantial fastening for the resistance piece or plate.

Fig. 5 of the drawings shows that the metal cap *e* on the stud end of the weather-strip A affords a reliable catch for the free end of the strip closing or lifting spring D, which is simply slipped in under the cap. This view also clearly illustrates that the weather-strip is hinged to have its end *a''*, which is nearest the hinged edge of the door, set a little lower down than its other end *a'*, which is at the free edge of the door or nearest the door-jamb, and whereby as the door in closing carries the weather-strip stud E against the inclined face

f of the jamb-resistance plate F, and the strip is thus lowered from its casing (or from the bottom edge of the door were the strip hinged directly thereto) toward the floor or sill H, the lower end a^3 of the weather-strip will be caused to strike the sill a little earlier than the other higher end a^4 of the strip. Hence this slight inclination of the lower edge of the strip will always assure a tight closure of it all along the sill, or for the full length of the strip and the full width of the door, to make a most effective guard against beating in of storms or air-drafts or the entrance of insects or other intrusive objects into the room.

The adjustability of the jamb-resistance piece or plate F and of the weather-strip stud E, which acts upon it, makes every necessary provision for assuring the positive and reliable closure of the weather-strip to the sill or floor, however the door or its jamb may shrink or change relative positions by settling of the building. The instant the door C is opened and the weather-strip stud E leaves the jamb-resistance plate F the spring D will swing the weather-strip up into its casing within the door, where it will be invisible and safe from injury, as will readily be understood.

By making the weather-strip sector shape in cross-section and arranging it in a correspondingly-shaped recess the recess will be always closed, whether the strip be projected from the bottom of the door or drawn up into the recess thereof, thereby effectually preventing the entrance of foreign matter into the said recess.

Having thus described my invention, what

I claim as new, and desire to secure by Letters Patent, is—

1. A weather-strip comprising a strip proper, sector-shaped in cross-section and adapted to be hinged in a correspondingly-shaped recess in the bottom of a door, a spring for holding the strip within the recess, and a beveled plate adapted to be secured to the door-jamb and against which a projection on the weather-strip acts to force the strip from its recess, substantially as described.

2. In a weather-strip, the combination, with a casing adapted to be secured in the bottom of a door, of a strip sector-shaped in cross-section, hinged to the casing and provided with a projecting screw or stud, a spring secured to the casing and weather-strip, and a plate having a beveled edge and adapted to be secured to the door-jamb, substantially as described.

3. In a weather-strip, the combination, with a door and its jamb, of the casing B, secured in the lower edge of the door, a strip sector-shaped in cross-section, hinged to the casing and provided with the screw E, the spring D, having one end secured to the casing and its other to the weather-strip, and the slotted plate F, having beveled edge f and secured to the jamb by screw f^2 , passing through the slot of the plate, substantially as herein shown and described.

SIDNEY R. DEACON.

Witnesses:

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EDW. V. JONES.