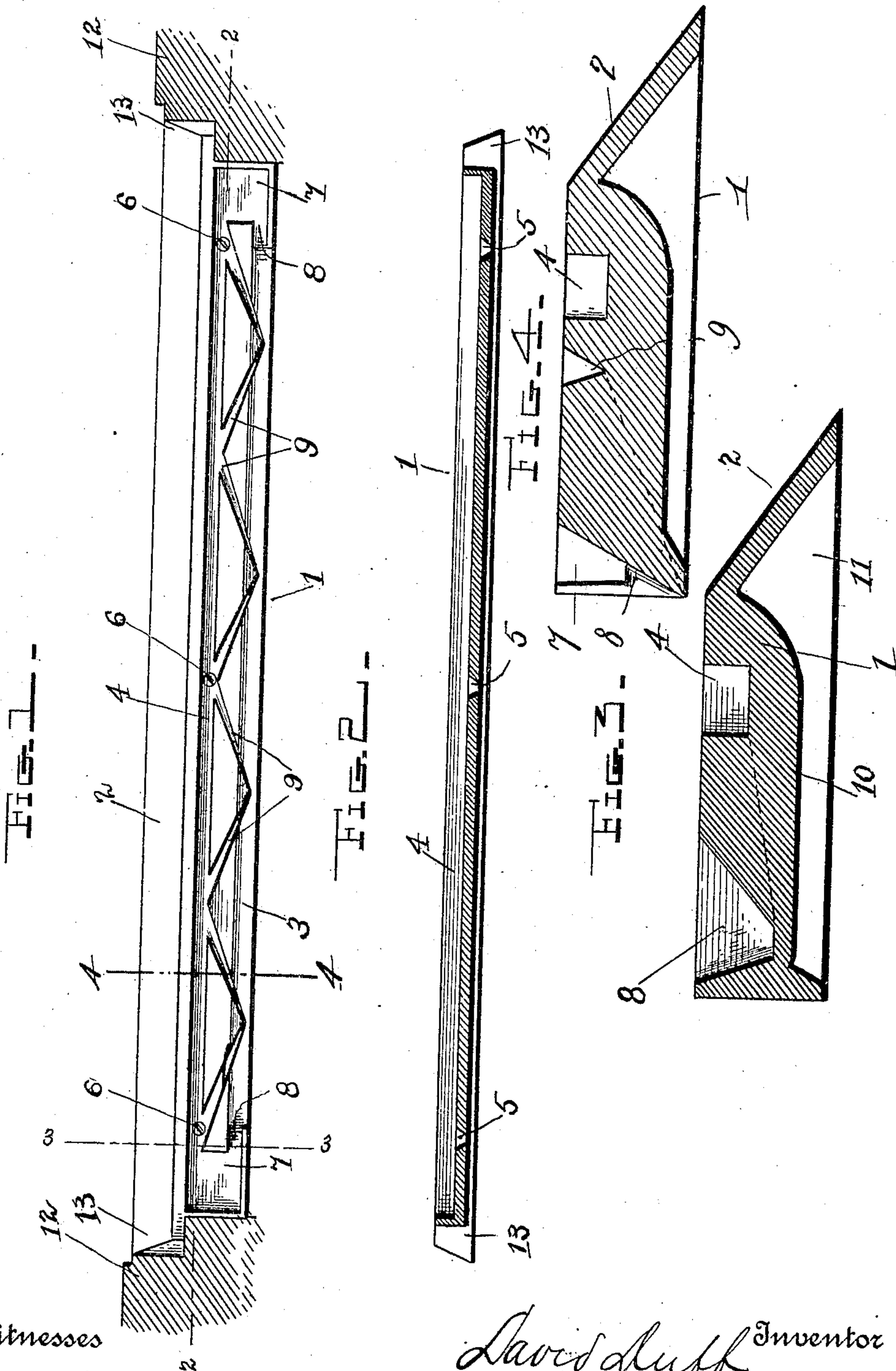


No. 849,380.

PATENTED APR. 9, 1907.

D. DUFF,
COMBINED THRESHOLD AND WEATHER STRIP.
APPLICATION FILED JUNE 14, 1906.



Witnesses

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UNITED STATES PATENT OFFICE.

DAVID DUFF, OF MULBERRY, KANSAS.

COMBINED THRESHOLD AND WEATHER-STRIP.

No. 849,380.

Specification of Letters Patent.

Patented April 9, 1907.

Application filed June 14, 1906. Serial No. 321,912.

To all whom it may concern:

Be it known that I, DAVID DUFF, a citizen of the United States, residing at Mulberry, in the county of Crawford and State of Kansas, have invented certain new and useful Improvements in Combined Thresholds and Weather-Strips, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to thresholds for doors, and more particularly to that class of thresholds which serve also as weather-strips to keep rain from beating in under the door during severe storms, one of the objects being to provide a device of the character described that shall be simple and economical in construction and effectual in operation and whereby all the water driven by wind during heavy rainstorms under the door shall be caught and returned to the outside.

Other objects and advantages of the invention, as well as the structural features by means of which they are attained, will be made clear by an examination of the following specification, taken in connection with the drawings accompanying the same, in which the same reference-numerals indicate corresponding portions throughout, and in which—

Figure 1 is a top plan of my threshold and weather-strip, showing it in operative position in a doorway. Fig. 2 is a longitudinal section taken on line 2 2 of Fig. 1, and Fig. 3 is a transverse section on line 3 3 of Fig. 1. Fig. 4 is a transverse section on line 4 4 of Fig. 1.

Referring to the numerals, 1 designates the main frame of the threshold, which is beveled on the rear edge, as at 2, and also on the front edge, as at 3. Extending longitudinally of the frame is a groove or channel 4, having in its floor cone-shaped apertures 5 for the reception of screws 6, whereby said frame is secured to any door-sill of the ordinary well-known construction, upon which the threshold is adapted to rest. Each end of said groove 4 terminates in an open space or recess 7, having an outlet 8, which permits the water which collects in said recess or in the groove 4 to readily flow out and down the beveled front edge of the frame. Leading from said groove 4 are a plurality of waterways or outlets 9 to carry the water away from the groove 4 as fast as it accumulates therein, each waterway or outlet being approximately V-shaped in cross-section, as shown, and terminating at a point about

midway of the beveled front edge of the frame so that water passing down the same can escape over the outer wall thereof as soon as the beveled edge is reached, for the reason that as soon as the waterway reaches the beveled edge it begins to become shallower until it terminates at a point, as heretofore stated. These waterways are arranged in pairs, as shown in Fig. 1, the outlets terminating in points that join in each pair. By this construction no matter how much water is dashed by the wind in under the door and accumulates in the groove or channel 4 it readily finds an outlet through the plurality of waterways 9 and also through the outlets 8, hereinbefore described.

To economize in material, the threshold, being preferably constructed of wrought-iron or other similar metal, the web 10 of the frame 1 is molded to the contour of its upper portion, and is provided with integrally-formed strengthening stays or girders 11 at desired intervals.

12 designates the door-posts, which are cut to fit snugly around the ends of the frame of the threshold, the rear edge of which is longer than the front edge to provide the laterally-projecting beveled lugs 13, which operate, in connection with the screws 6, to hold the threshold securely in place in the door-frame and aid in preventing accidental displacement. This construction of the threshold also prevents water from working in around the ends of the frame during heavy and severe storms.

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

The herein-described combined threshold and weather-strip comprising an integral cast-metal frame 1 of substantially rectangular form having its inner and outer sides, 2, 3, inclined downwardly in opposite directions, the ends of said frame being extended at its inner side to provide the longitudinally-projecting lugs 13 having beveled ends and forming stops to engage the door-frame, the top of said body being formed with a centrally-disposed, longitudinally-extending channel 4 terminating in the substantially rectangular-shaped recesses 7 having downwardly and outwardly inclined bottoms, said recesses 7 also having at their inner sides the downwardly and inwardly inclined outlets 8, said channel 4 having its bottom formed with countersunk apertures 6 to receive fastening-

screws, the upper surface of the downwardly and inwardly inclined side 3 being formed with the diagonally-arranged outlet-grooves 9 leading from the said channel 4 to points
5 adjacent to the extreme outer edge of the frame, said grooves 9 being V-shaped in cross-section and of gradually-decreasing width from their upper and inner ends to their lower and outer ends, said grooves 9 being

also arranged in zigzag relation and in pairs, 10 substantially as shown and for the purposes set forth.

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

DAVID DUFF.

Witnesses:

JAMES CARLIN,
JOHN STILWELL.