O. G. THOMAS.

Thresholds for Doors.

No. 138,300. Patented April 29, 1873.

Fig. 1.

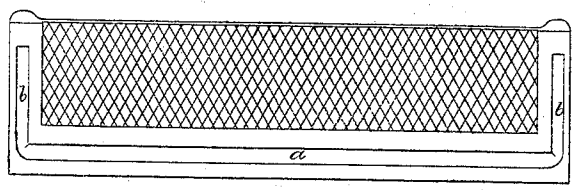


Fig. 2.

Fig. 4.

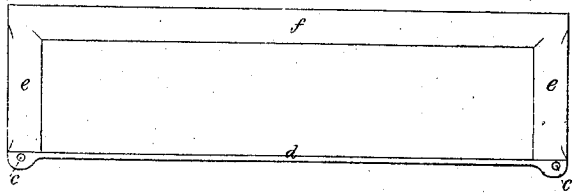


Fig. 3.

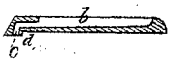
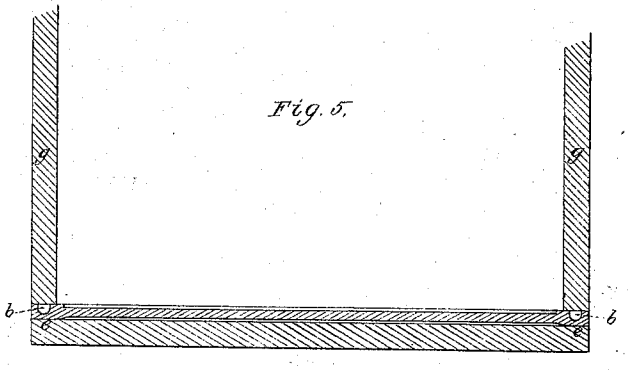


Fig. 5.



Witnesses.
S. N. Piper.
J. R. Snow

Oscar G. Thomas.
by his attorney.
R. H. Eddy

UNITED STATES PATENT OFFICE.

OSCAR G. THOMAS, OF TAUNTON, MASSACHUSETTS.

IMPROVEMENT IN THRESHOLDS FOR DOORS.

Specification forming part of Letters Patent No. **138,300**, dated April 29, 1873; application filed January 7, 1873.

To all whom it may concern:

Be it known that I, OSCAR G. THOMAS, of Taunton, of the county of Bristol and State of Massachusetts, have invented a new and useful Improvement in Thresholds for Doors; and do hereby declare the same to be fully described in the following specification and represented in the accompanying drawing, of which—

Figure 1 is a top view of one of my improved thresholds. Fig. 2 is a transverse section taken through its middle. Fig. 3 is a transverse section taken through one of its edge-grooves and educts. Fig. 4 is an under-side view of it. Fig. 5 shows a longitudinal section of it and the door-casing.

It, as represented, is a plate of metal to be fixed to the sill of a door, although it may be made of any proper material. At its rear it is provided with a long groove, *a*, extending longitudinally in it near to and parallel with its inner edge, and opening into two edge-grooves, *b b*, arranged in the threshold at right angles with said first groove. Each of such edge-grooves, at its front end, opens into an educt or passage, *c*, leading down through the plate, as shown in Fig. 3. By the construction of the educt it will be seen that, from its opening out of the groove *b*, it is covered and turns downward, so as to open through the bottom of the threshold. This special construction in covering of the educt prevents its mouth of discharge from being choked with dirt, which it would be liable to be if it opened through the front edge of the plate. Furthermore, at its front edge the threshold is provided with a lip or flange, *d*, to project down from it in manner as shown; and along the ends and opposite edge of the bottom are low ledges *e e f*, to support the plate on the sill, the lip extending over and down the front edge of the sill.

Generally speaking, the door-frame casings *g g* are to rest upon the plate and cover the lateral grooves or ducts. With the thresholds so made any water that may be blown underneath the door during a storm will be intercepted by the main groove, and from thence will flow into and through the edge grooves and into and out of their educts.

I am aware of the water-stop threshold invented by Charles Loring, and described in the United States Patent No. 51,066, dated November 21, 1865, and I make no claim thereto. In such threshold of the said Loring the water groove or channel has an inclination from each end toward its middle, so as to conduct the water into a conduit leading from the said middle underneath or through the threshold to its front. With a threshold so made there is a constant liability of the mouth of the educt being choked by mud or foreign matters, owing to the exposure of the educt to being trodden over at its mouth; but such is not the case with my improved threshold, when the educts are at the edges of the plate, and are covered and protected from dirt, especially by the door-casings. Furthermore, by casting the plate with the front lip *d*, and the bearing-ledges *e e f* projecting from its bottom, any little springing of the plate when cast, or any ordinary irregularity in the door-sill, will rarely prevent the plate from having a firm bearing on the sill. The bearing-ledges also serve to enable the grooves to be formed without any material increase of thickness of the plate.

I do not claim a threshold made with longitudinal and end grooves, and with the latter to open out of the front edge of the plate; but—

I claim—

The improved water-shed threshold or threshold-plate, provided with the rear and edge grooves *a b b*, and the covered educts *c c*, arranged and constructed as described and represented.

Witnesses: OSCAR G. THOMAS.

R. H. EDDY,

S. N. PIPER.