M. B. SMYTH.

WEATHER-STRIP.

No. 182,966. Patented Oct. 3, 1876.

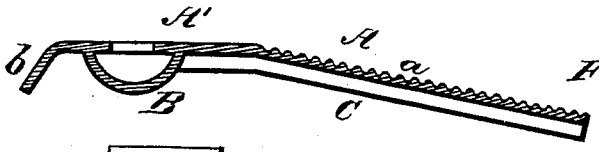

Fig. 1.

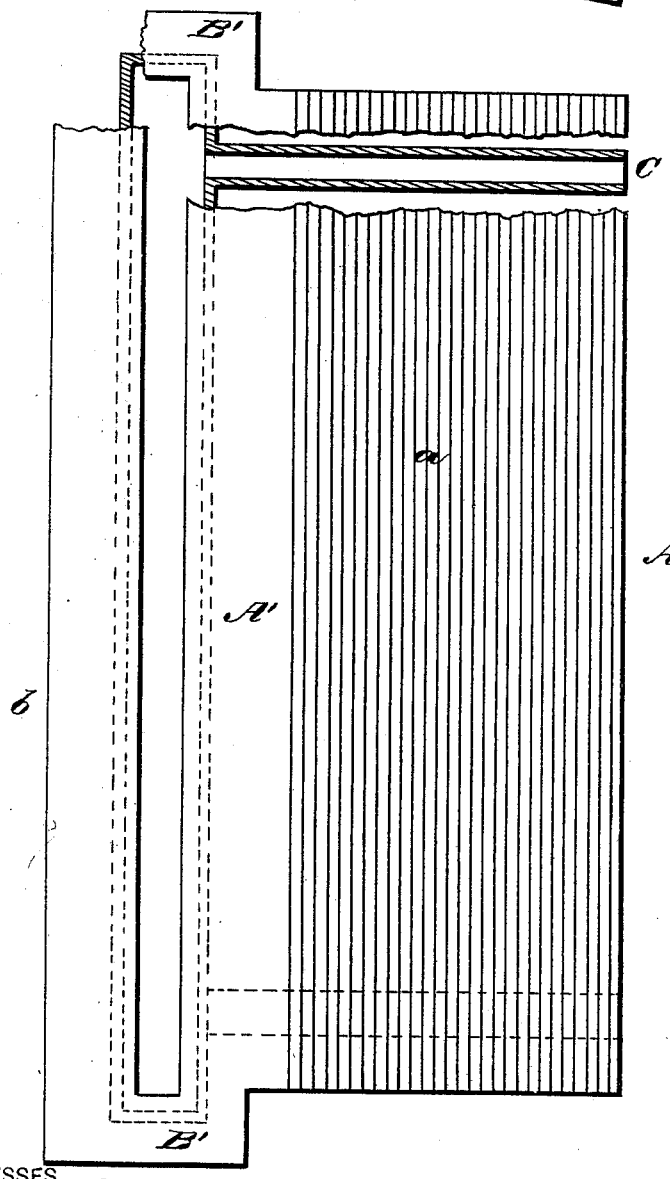

Fig. 2.

WITNESSES

E. H. Bates

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UNITED STATES PATENT OFFICE.

MILTON B. SMYTH, OF HOLTON, KANSAS.

IMPROVEMENT IN WEATHER-STRIPS.

Specification forming part of Letters Patent No. **182,966**, dated October 3, 1876; application filed August 26, 1876.

To all whom it may concern:

Be it known that I, MILTON B. SMYTH, of Holton, in the county of Jackson and State of Kansas, have invented a new and valuable Improvement in Threshold or Door Sills; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a transverse vertical sectional view of my threshold, and Fig. 2 is a plan view of the same, part sectional.

This invention relates to metal thresholds; and it consists, first, in a trough for receiving rain, which trough extends beyond the sides of the door to which said threshold is applied, also in braces on the under side of said threshold, which braces also serve to carry off water from said trough; and, finally, in additional devices hereinafter particularly described.

In the annexed drawing, A indicates an inclined cast-iron plate, which constitutes the threshold proper, and is provided with longitudinal grooves, channels, or corrugations *a*, parallel to the door, the object of said channels or corrugations being to prevent slipping when the feet are placed thereon. B is a metal trough, cast in one piece with threshold A, or rigidly secured thereto, and provided with a rear downward flange, *b*, which rests upon the floor and elevates said trough above the greater part of said threshold-plate A. The rear part A′ of said plate A is made horizontal and even with the upper edges of trough B. C C are transverse tubular ribs or braces which run under threshold plate A from the front to the rear thereof. Said tubular ribs or braces perform several functions. They brace and strengthen said threshold-plate A; they also raise it from the floor, thereby, in a measure, protecting it from rust and wear; and, finally, they communicate with trough B, and serve to lead off the rain-water that accumulates therein and to discharge the same outside of the door. This is facilitated by the slight elevation of trough B already referred to, which enables said tubular ribs C C, as well as said threshold-plate A, to be made with a forward and downward inclination. The length of threshold-plate A corresponds to the width of the door to which it is to be applied; but trough B is provided with extensions B′ B′, which pass beyond the sides of the door, so as to catch the rain that is forced in at these points.

I have described the threshold and trough as being composed of cast-iron; but wrought-iron, bronze, or any other metal, alloy, or suitable material of any kind may be substituted without departing from the spirit of my invention. Said trough is removable from the floor, and easy to be packed and transported. It constitutes in itself a complete article of manufacture and merchandise.

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

1. The combination of threshold-plate A with trough B, having extensions B′ B′ and rear supporting-flange *b*, substantially as and for the purposes set forth.

2. A detachable metal threshold, provided with a trough and with supporting-ribs, which also serve as discharge-tubes for said trough, substantially as and for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

MILTON BURWELL SMYTH.

Witnesses:

JAMES H. LOWELL,

A. H. WILLIAMS.