A. I. Smith,

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NO: 90,400.

Patented May 25, 1869.

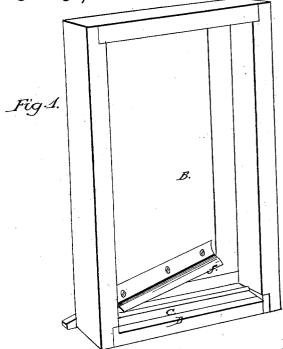


Fig. 2.

Fig. 5.

Witnesses: E. C. Dour Johnsk clintick

Travertor: A. D. Smith

United States Patent Office.

A. D. SMITH, OF GRAFTON, OHIO.

Letters Patent No. 90,400, dated May 25, 1869.

IMPROVED METALLIC DOOR-STRIP.

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern:

Be it known that I, A. D. SMITH, of Grafton, county of Lorain, in the State of Ohio, have invented an Improvement in Door-Strips; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Figures 3, 4, and 5, are end views of the two parts

of the strip.

Figure $\hat{2}$, a sectional view of parts combined.

Figure 1, a perspective, showing shear-cut of part figs. 1 and 2.

The nature of my improvement consists in the use of a flexible or gravitating latch-strip on the door, with a convex latch-catch on and forming a part of the threshold, so arranged in relation to each other and to the adjoining parts as to prevent wind, rain, or snow from passing, and at the same time form a latch and catch to hold the door closed.

The following description will enable those skilled

in the art to make and use the same.

The latch-strip A, fig. 3, is made from sheet-metal or other suitable material, and of any desired length and thickness, usually from one inch and a half to three inches wide, and is then cramped or pressed to the proper shape, as shown.

It may then be made fast to the bottom of the outside of the door B, with screws or otherwise, and as much lower than the top of the catch C as is desirable, to have it latch over on the other side when the

door is closed.

The convexed latch-catch C, fig. 4, may be formed or made the proper length and shape, in the same way as the latch-strip, and may be made fast to and form a part of the threshold D, or may be cast or formed on it when made, (or a three-eighths or half-inch halfround rod will do.)

The latch-catch C is secured on the threshold D, and parallel with the door, but sufficiently near to permit the outer edge F of the latch-strip A to rise up on to end latch, down on the opposite side of the catch C from the door B when closed.

The part of the latch-strip from E to F has a corresponding curve or angle of the latch-catch C at E, for the purpose of making a perfect joint, that runs nearly at right angles from the direction in which rain or wind would come, the action of which, or of opening the door, would be to tighten the joint between parts A and C, by pressing the latch-strip against the latchcatch.

The operation of my improvement in door-strips is

as follows:

On closing the door, the latch-strip A is made to rise and make an outward shear-cut on and over to the opposite side of the latch-catch C, or its equivalent, and from the hinge to the front edge of the door, thus removing ice or other obstructions, and not only forming a tight joint at the bottom of the door, but all around it, from the gravitating or spring-action of the latch-catch A, drawing the door snug against the jambcasings.

What I claim as my invention, and desire to secure

by Letters Patent, is-

The combination of the latch-strip A with a latchcatch, C, when so arranged, in relation to each other and to the adjoining parts, that by closing the door the latch-strip A is made to rise up from the inside on to the latch-catch C, and latch down on the opposite and outside of it and the door B, substantially as herein shown and described.

A. D. SMITH.

Witnesses: E. C. Doane, JOHN MCLINTICK.