S. W. CURTIS.

Improvement in Movable Thresholds.

No. 133,207.

Patented Nov. 19, 1872.

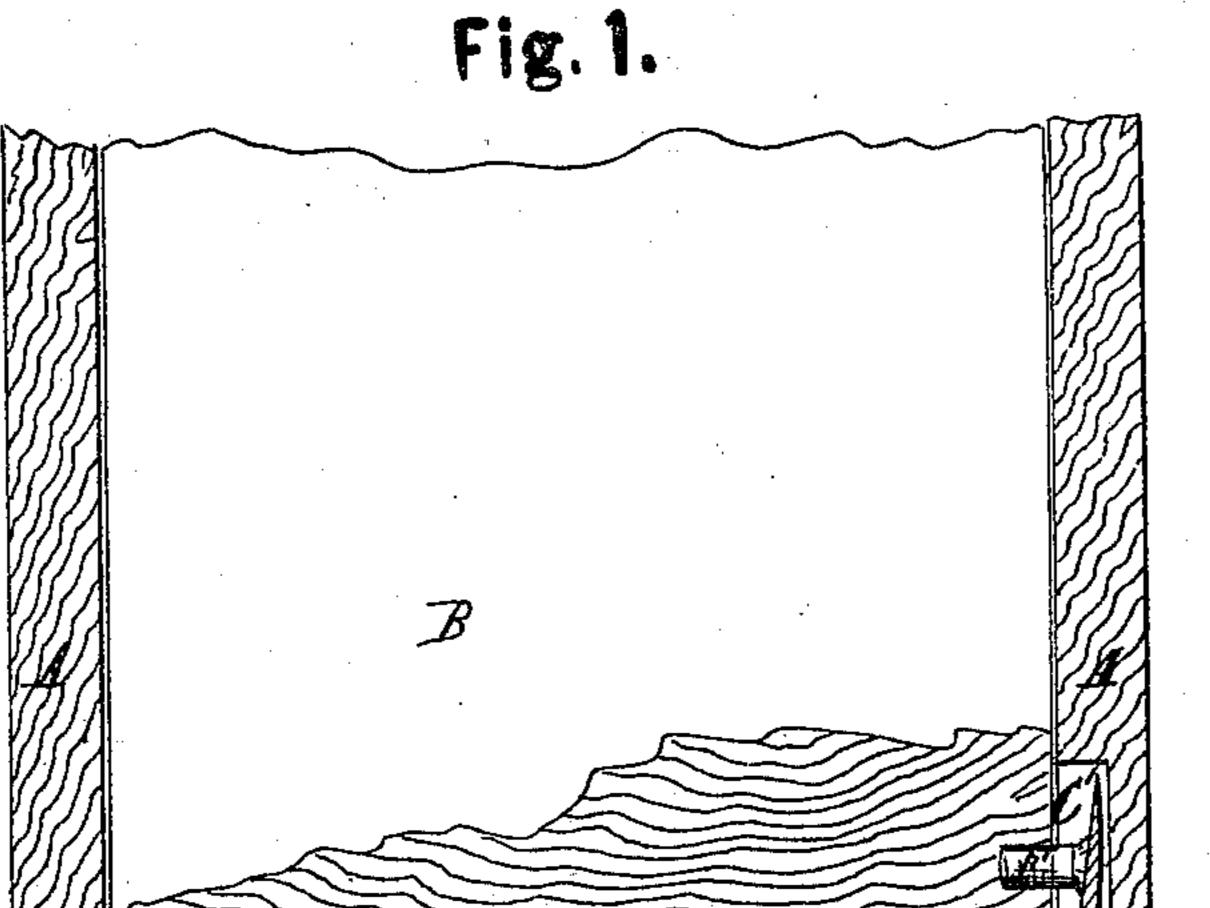
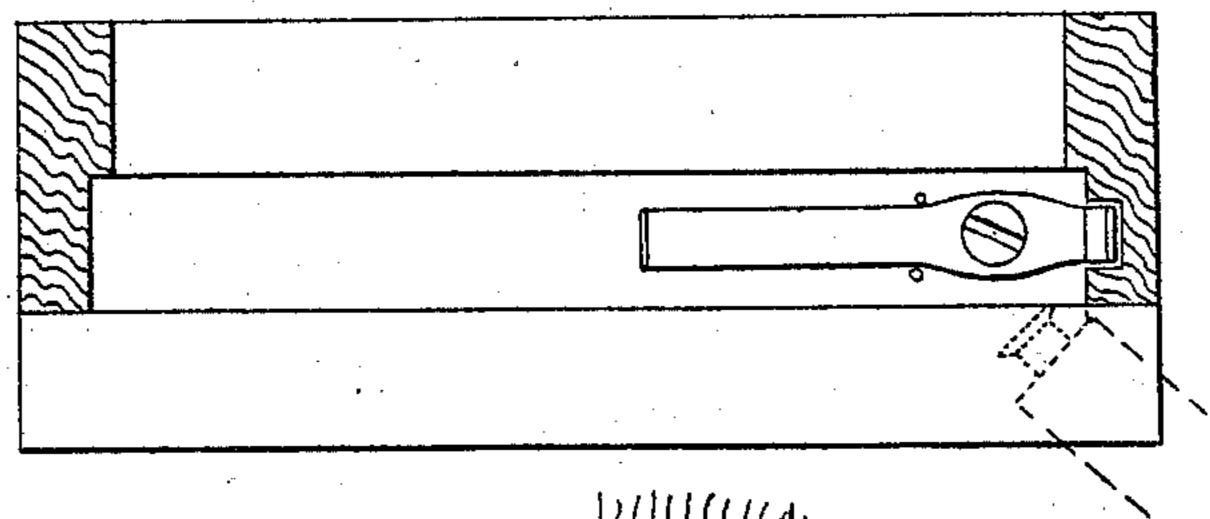
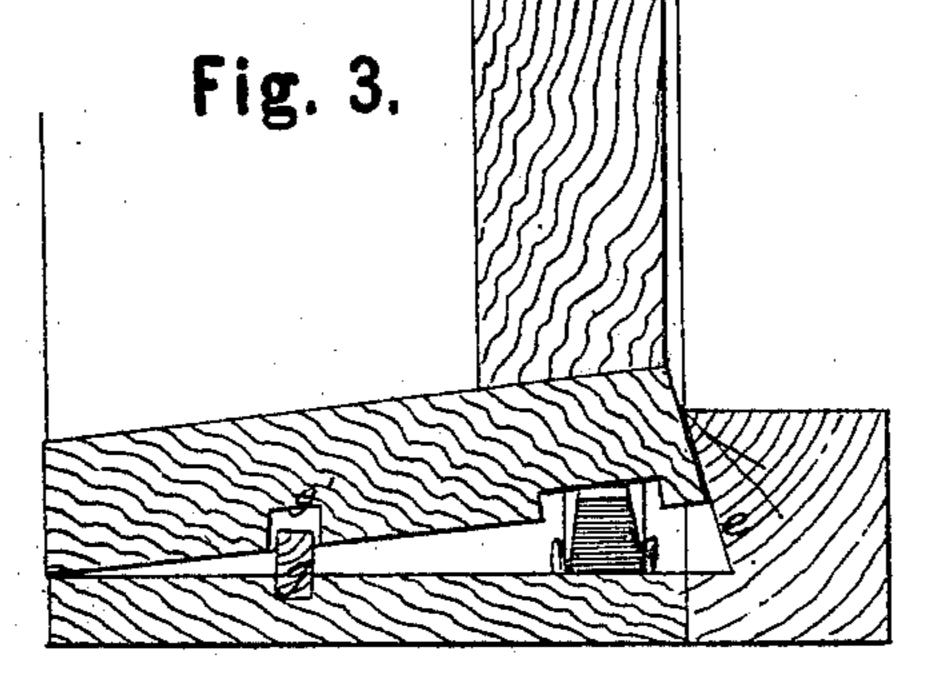


Fig. 2.





WITNESSES. Phil. Co. Mass.

Geo Ellpham.

INVENTOR.

S. W. Curtis

youwwomurte. Allys

UNITED STATES PATENT OFFICE.

SAMUEL W. CURTIS, OF ERIEVILLE, NEW YORK.

IMPROVEMENT IN MOVABLE THRESHOLDS.

Specification forming part of Letters Patent No. 133,207, dated November 19, 1872.

To all whom it may concern:

Be it known that I, SAMUEL W. CURTIS, of Erieville, in the county of Madison and State of New York, have invented a new and valuable Improvement in Self-Adjusting Threshold; 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 drawing making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a sectional view of my invention; Fig. 2 is a top view of my invention; and Fig. 3 is a

transverse section of my invention.

My invention has relation to movable thresholds; and consists in the novel construction and arrangement of an angular lever, made of flattened bar-iron, having a perforation near its angle end for the reception of a vertical stud, by which a suitable and convenient fulcrum is obtained, in connection with guide-studs placed on each side of the horizontal part of the lever, whereby a vertical movement of the lever is secured in the operation of the threshold, as hereinafter more fully set forth.

In the drawing, A designates the door-frame; B, the door; and C, the threshold lying in a recess, B', of the floor or door-frame. C' designates a vertical recess cut in the upright of the frame at one end of the recess containing the threshold. D indicates an L-shaped lever laid on the bottom of the recess B', and held by a vertical pin or screw, E, which passes through the long arm of said lever close to the short arm, as shown. d designates studs to prevent lateral movement of the lever. The short arm of the latter rises into the recess C' and plays back and forth therein. A stud, F, projecting from the hinge edge of the door, comes in contact with said short arm when the door is closed and presses it back, at the same time raising the end of the long arm, and elevating the end of the threshold nearest the short arm until it touches the lower edge of the door. The continuing pressure of the stud F, combined with the pressure of the door on the raised end of the threshold,

tends to elevate the other end so as to bring the whole upper surface in contact with the door. When the lever is operated it turns on the angle of its arms as a fulcrum, and when the end of the long arm is raised it serves as a fulcrum to the threshold to enable it to be raised by the pressure of the door, as above described. G designates a recess cut in the under side of the threshold to make room for the lever. H indicates a metallic weight inserted in the end of the threshold and designed to depress the latter when the door is opened, and also to prevent the threshold from being thrown too high when the door is suddenly shut. The arrangement of the threshold and lever provides for the gradual and easy raising of the threshold by distributing the weight and strain.

Fig. 3 illustrates a somewhat different form of threshold, which is wider than the other, and has only its side nearest the door raised when the latter is closed. The lower edge of the door is beveled to correspond to the inclination of the threshold. The door-sill is also beveled at e to correspond to the bevel of the adjacent edge of the threshold. A stud, g, under the threshold, enters a recess, g', and prevents the threshold from moving out of place. By properly adjusting the screw or stud F the threshold may be made to rise to any height desired to compensate for the expansion or shrinkage of the door.

I am well aware that it is not new to operate a threshold by means of a rising lever. Therefore, I make no claim to such a means; but

What I do claim is—

The combination, with a door having an adjustable or screw-stud F, of the rising threshold C, fulcrum-post E, guide-studs d, and the perforated angle-lever D, all constructed and arranged substantially as specified.

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

SAMUEL W. CURTIS.

Witnesses:

ALBERT P. TILLINGHAST, AMOS A. DALTON.