No. 618,013. Patented Jan. 17, 1899.

W. D. ROEDER.

THRESHOLD FOR DOORS.

(Application filed Feb. 12, 1898.)

(No Model.)

Fig. 1.

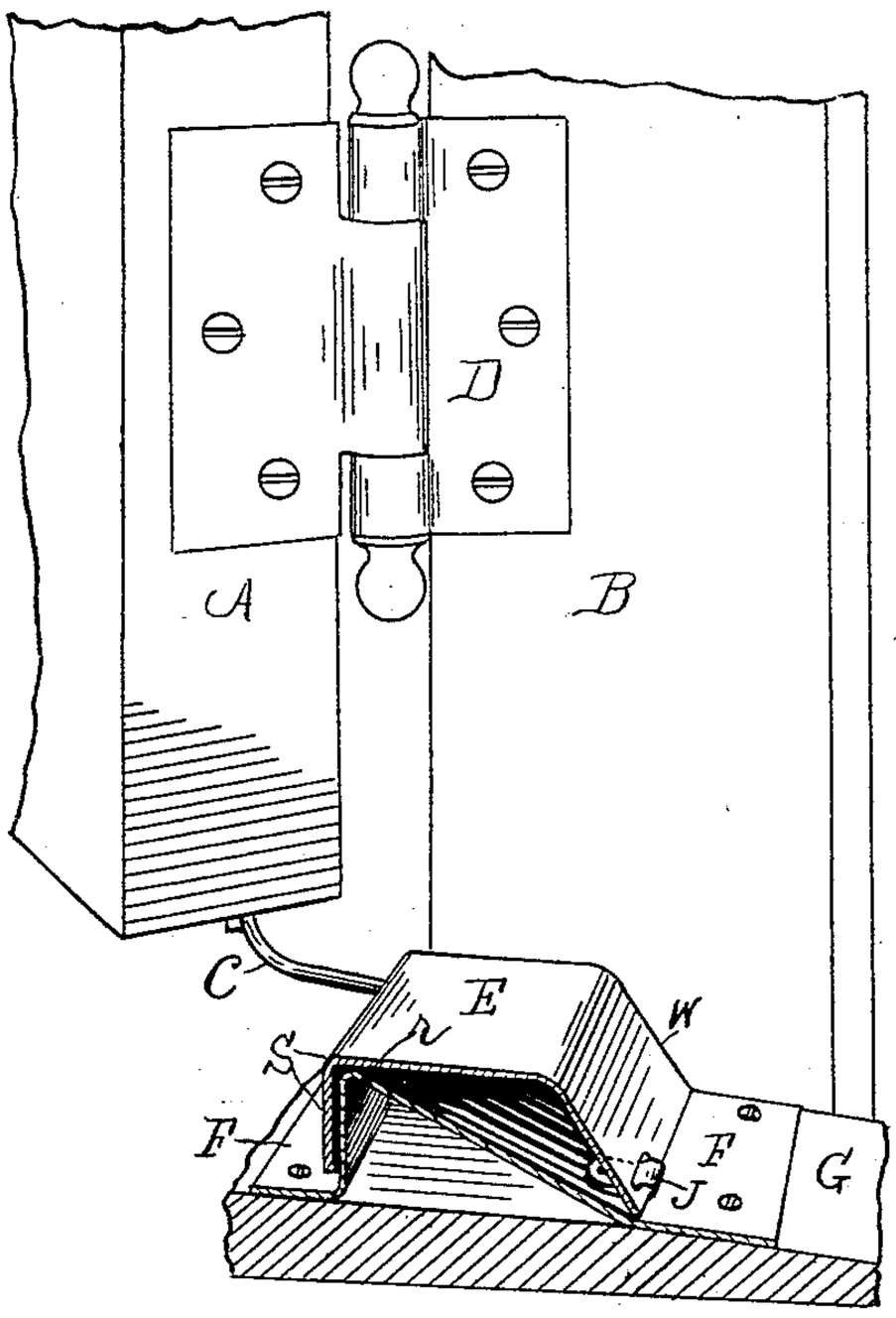


Fig. 2.

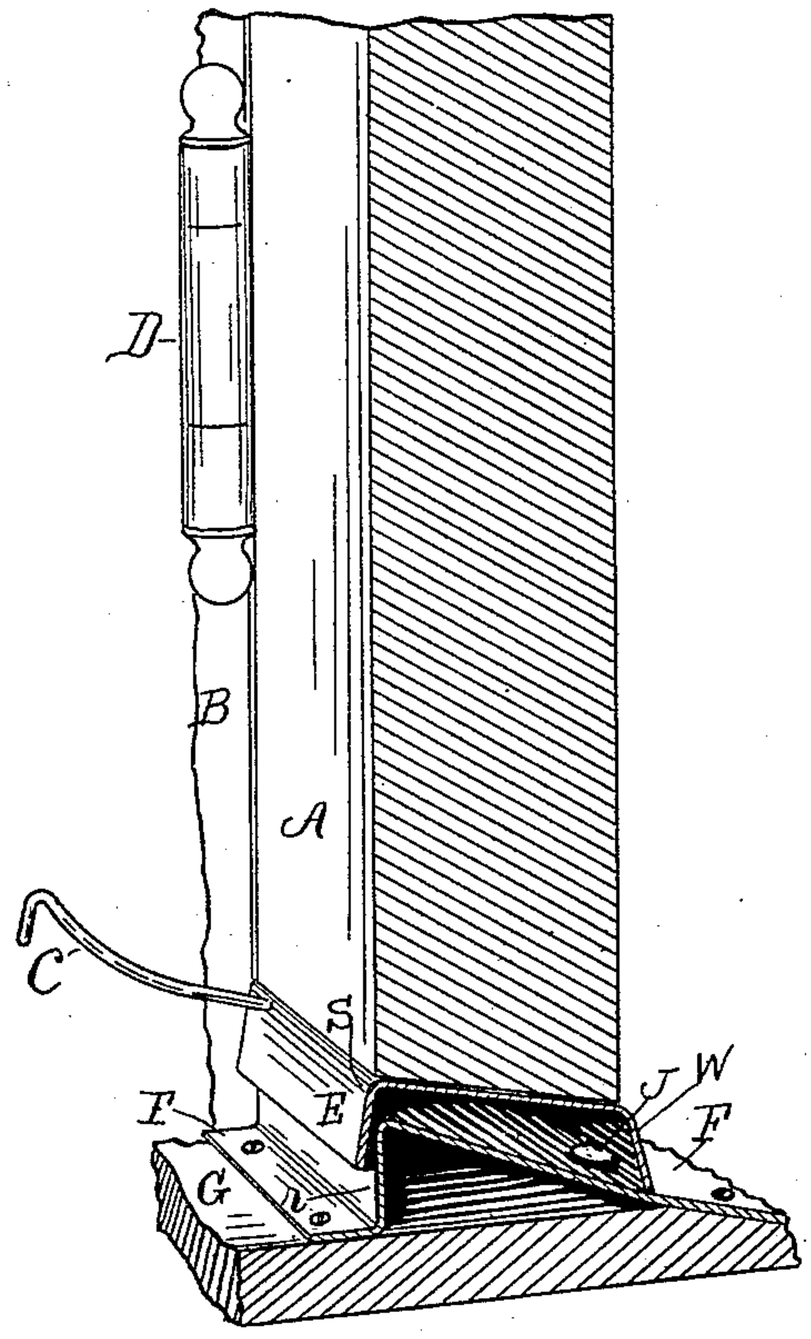
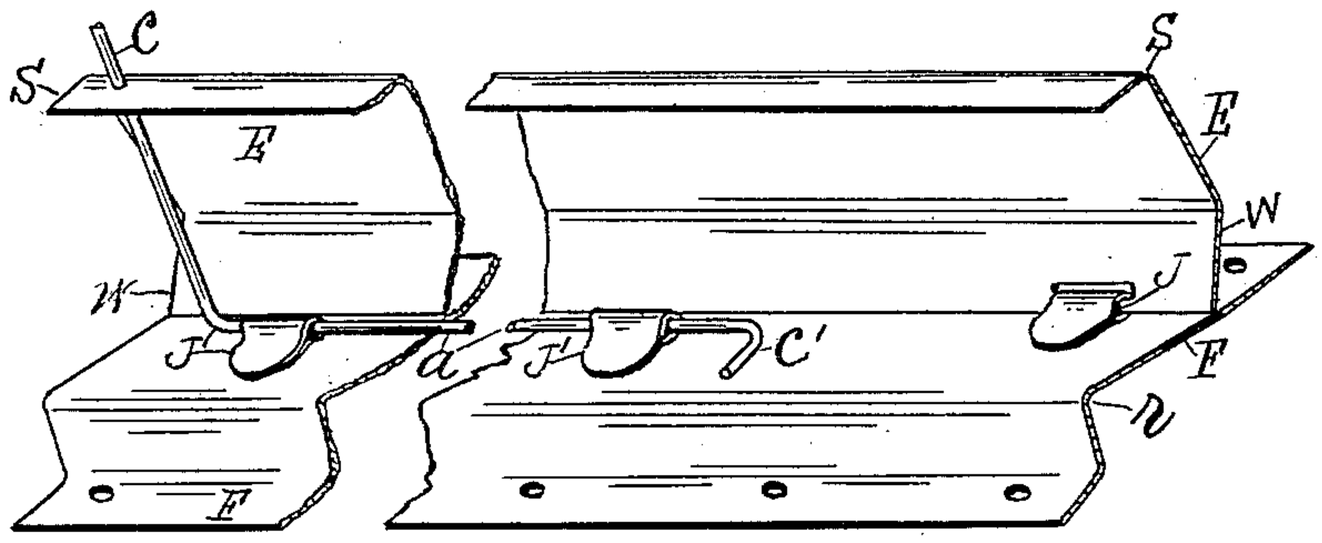


Fig. 3.



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UNITED STATES PATENT OFFICE.

WILLIAM D. ROEDER, OF DWIGHT, ILLINOIS.

THRESHOLD FOR DOORS.

SPECIFICATION forming part of Letters Patent No. 618,013, dated January 17, 1899.

Application filed February 12, 1898. Serial No. 670,024. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM D. ROEDER, a citizen of the United States of America, residing at Dwight, in the county of Livingston and State of Illinois, have invented certain new and useful Improvements in Thresholds for Doors, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain improvements in thresholds for doors of the class known as "two-part" thresholds, which improvements are fully set forth and explained in the following specification and claims, reference being had to the accompanying drawings, and the letters of reference thereon, forming a part of this specification, in which—

Figure 1 is a perspective view of a portion of the threshold as it would appear when the door is open. Fig. 2 is a perspective view of a portion of the threshold as it would appear when the door is closed; and Fig. 3 is a perspective view of the threshold as it would appear detached from the door, the central portion being broken away to shorten the figure.

Referring to the drawings, A represents a portion of an ordinary house-door, G its sill, and B its jamb.

The threshold is composed of two parts E and F, made of sheet metal. The base-plate F of the threshold is formed with a vertical offset (shown at *r*) and is secured to the sill G of the door by means of screws along each edge, as shown, the inclined part of said base-plate extending outward a little beyond the line of the door. The leaf or upper member of the threshold (shown at E) is formed with a right-angle flange S on one side and an obtuse-angle flange W on its opposite side and is connected with the base-plate F by means of hinges J, formed of struck-up portions of said base-plate, passing through eyes near the lower edge of the flange W, as shown more particularly in Fig. 3, said hinges being located at or near the foot of the inclined part of said base-plate a little beyond the outer line of the door. The two portions of the threshold E and F are also connected by means of a torsion-spring *a*, located between them, as shown in Fig. 3, and held in place by means of the hinges J′, formed of struck-up portions of the base-plate F. Said spring has one end terminating in an arm *c*, extending at right angles with its body portion and through an eye in the flange S of leaf E. Its opposite end terminates in a similar arm *c*′, extending at right angles with the body portion of said spring and at an angle with the arm *c* and is intended to lie in contact with the base-plate F, so that said spring will have the tendency to hold the upper leaf or member E up, as shown particularly in Fig. 3.

In operation when the door is opened, as shown in Fig. 1, the arm *c* of the torsion-spring *a* is engaged by the bottom of the door and forced downward and carries with it the upper leaf or member E, so its flange S will pass down over the vertical offset *r* of the base-plate and rest on the horizontal part thereof next said offset, so the member E will form a solid and substantial threshold to travel upon. When the door is closed, as shown in Fig. 2, the arm *c* is relieved from contact with the bottom of the door and permits the torsion-spring *a* to raise the leaf or upper member E up to bear closely against the bottom of the door and also cause the flange S to come in close contact with the offset *r* of the base-plate F, so as to exclude any air from passing between them.

The bottom of the door is inclined, so as to be lower at its outer side, and the leaf E of the threshold is formed to fit the inclined bottom of the door, so that water, dust, or snow cannot blow through under the door, between it and the threshold.

In attaching the base-plate F to the sill it should be fitted down so closely that no wind, water, dust, or snow may pass between them, the whole forming a very effective, cheap, and durable threshold for doors.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is as follows, to wit:

1. The threshold for doors shown and described comprising the combination of the base-plate F having the longitudinal vertical offset *r*, the leaf E having the longitudinal right-angle flange S on one side, and the obtuse-angle flange W on its opposite side and hinged by means of said obtuse flange to said base-plate, and the torsion-spring *a* for connecting said base-plate and leaf substantially as and for the purpose set forth.

2. The combination of the sill G, base-plate F having the longitudinal vertical offset *r*, the leaf E having the right-angle longitudinal flange S and the longitudinal obtuse flange W, hinges J formed of struck-up portions of said base-plate for connecting said base-plate and leaf, torsion-spring *a* having the arms *c*, *c'* and connecting said base-plate and leaf, and the door A for engaging arm *c* all arranged to operate substantially as and for the purpose set forth.

3. A two-part threshold comprising the combination of a base-plate having a longitudinal vertical offset flange facing inwardly, and inclined outwardly to a line outside the door, and a leaf having its two sides flanged and hinged to the base-plate at the lower edge of its outer flange, and having its opposite flange fit over the vertical offset of said base-plate, and a torsion spring or springs arranged between said leaf and base-plate for holding said leaf lifted, and the means connecting said leaf and door substantially as and for the purpose set forth.

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