

(No Model.)

J. FISHER.
WEATHER STRIP.

No. 444,523.

Patented Jan. 13, 1891.

Fig. 1.

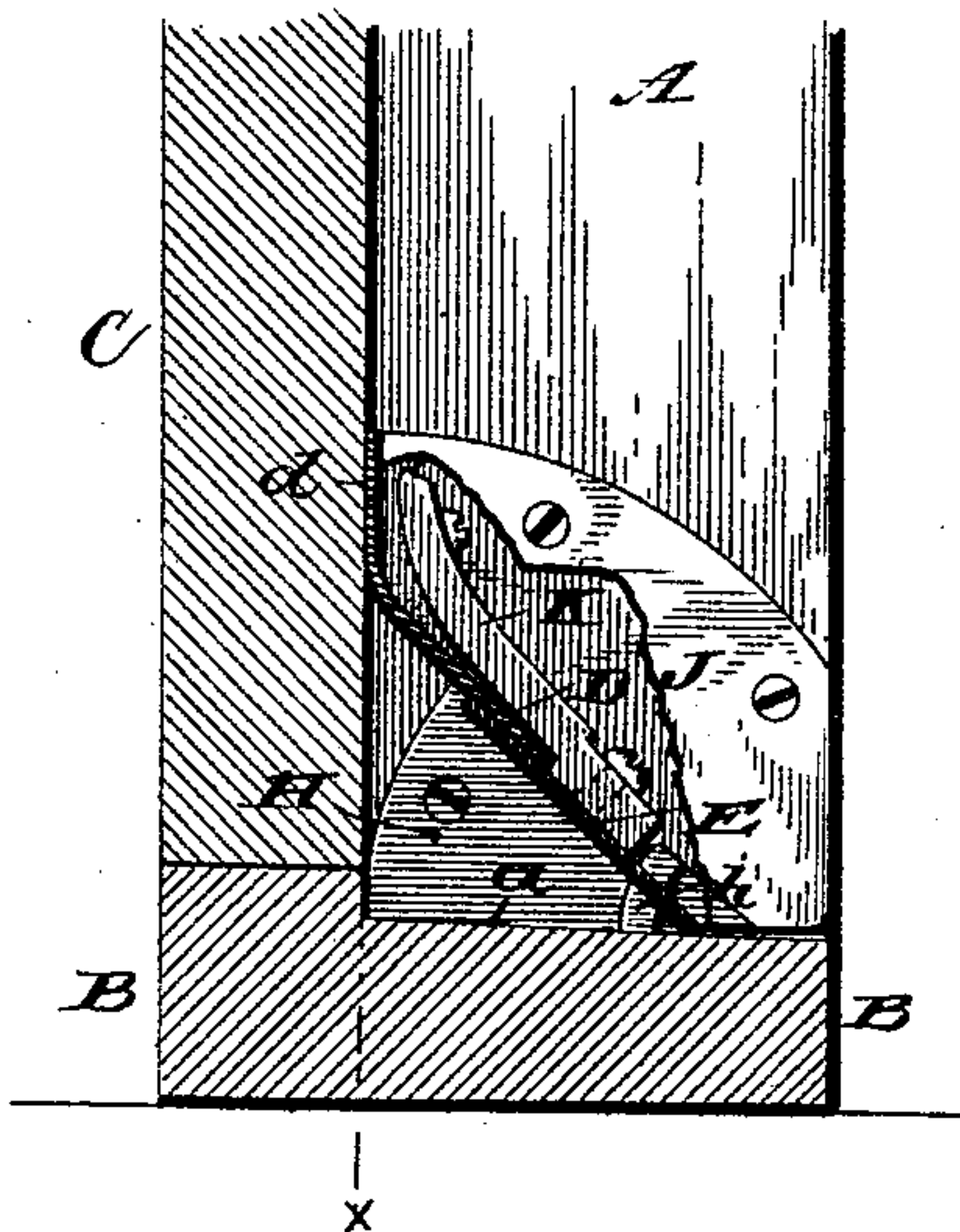


Fig. 2.

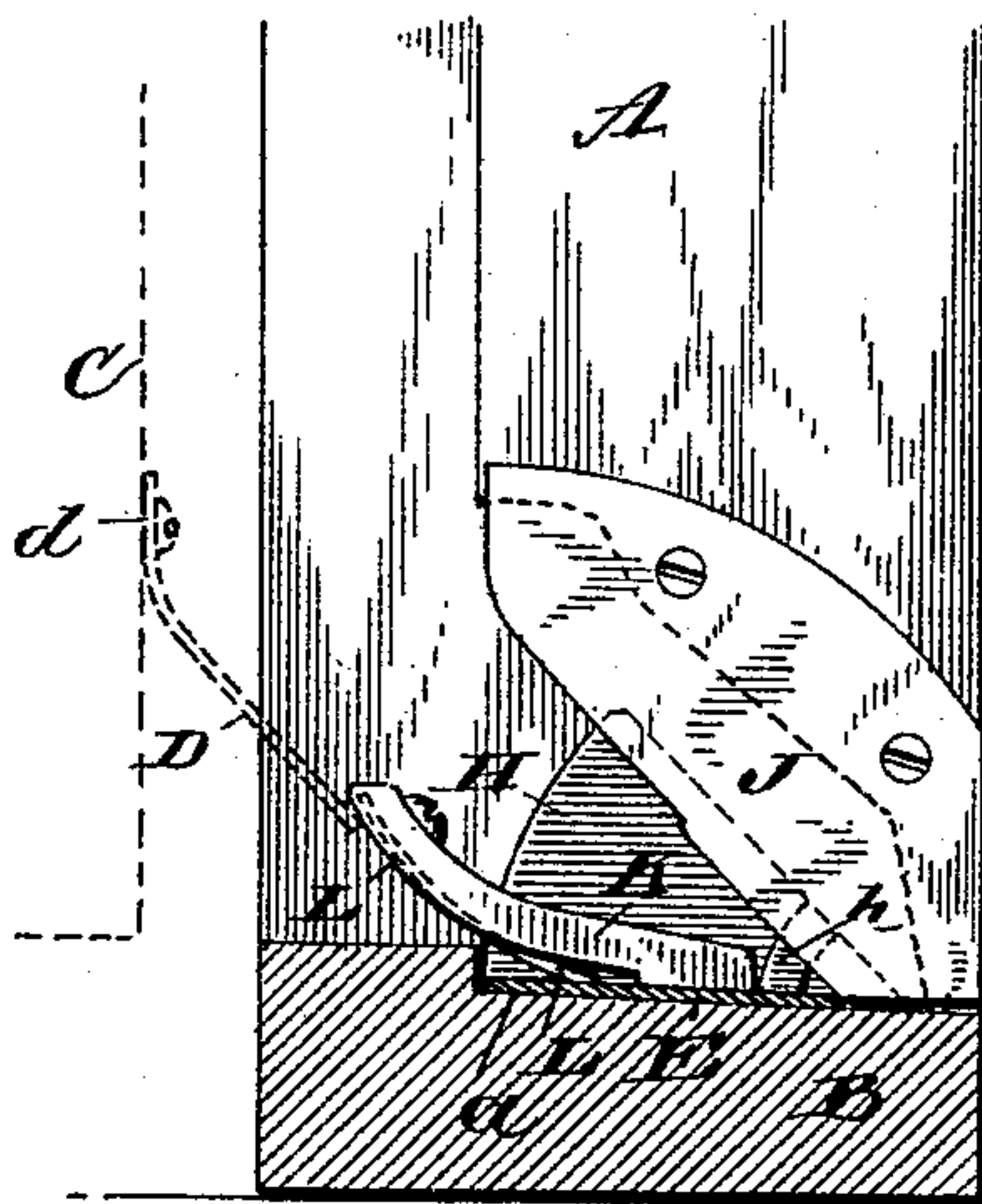


Fig. 3.

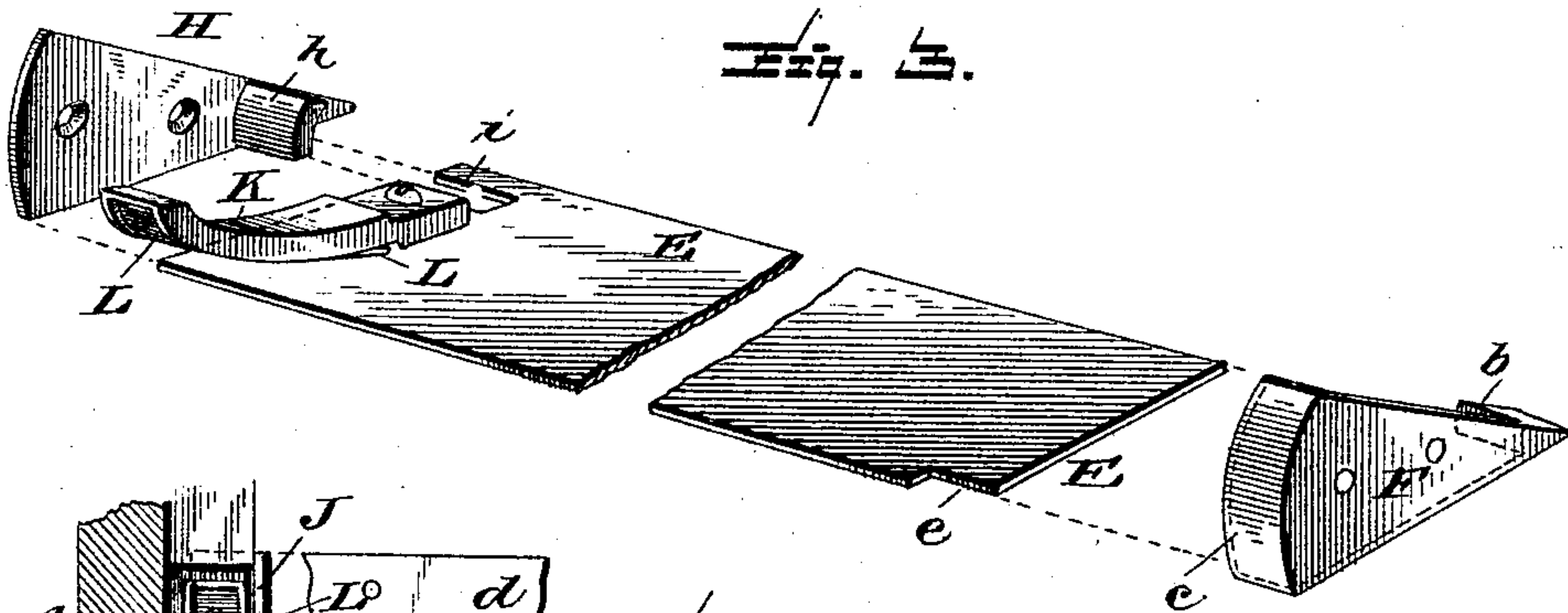
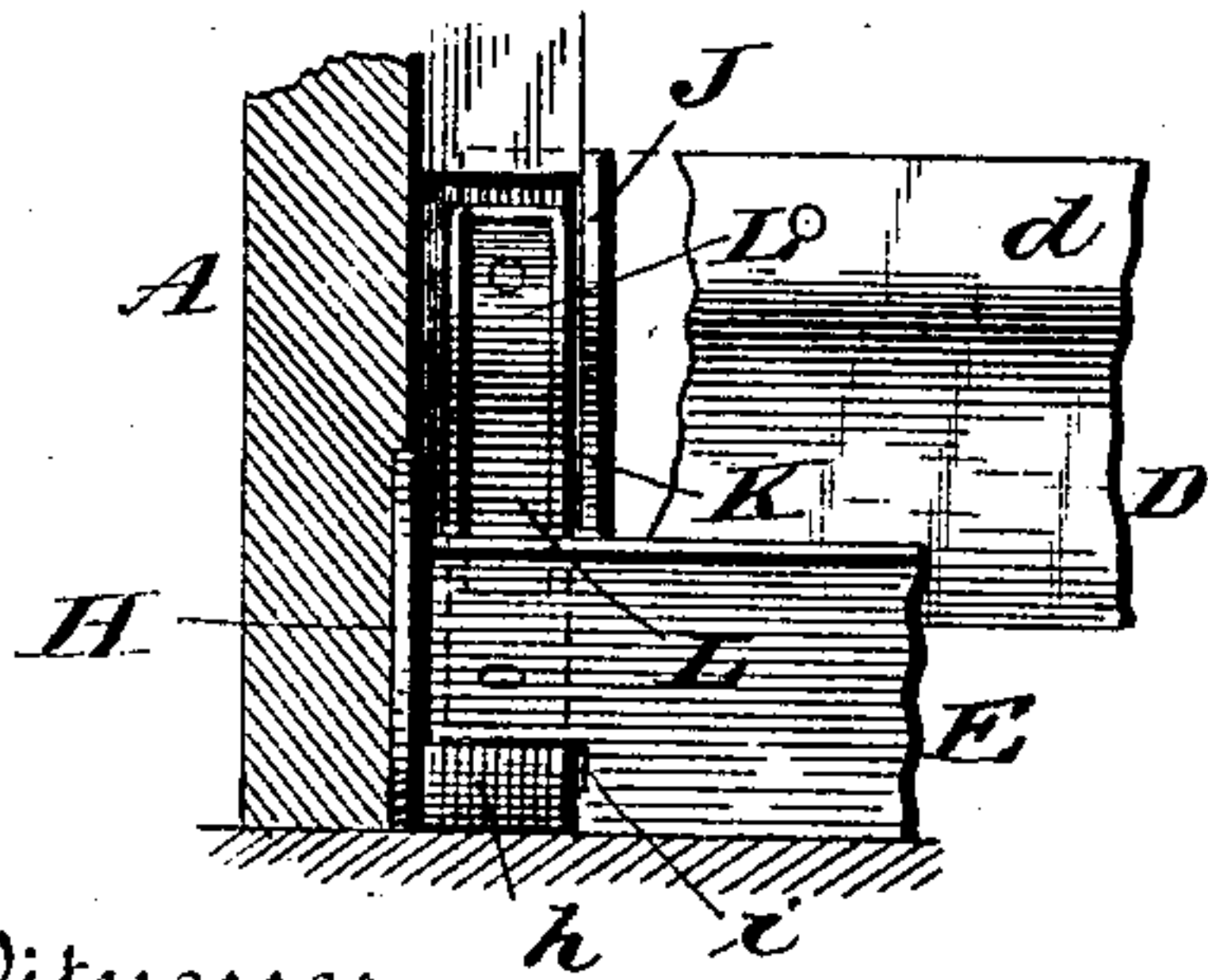


Fig. 4.



Witnesses

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UNITED STATES PATENT OFFICE.

JOSEPH FISHER, OF ATTLEBOROUGH, MASSACHUSETTS.

WEATHER-STRIP.

SPECIFICATION forming part of Letters Patent No. 444,523, dated January 13, 1891.

Application filed December 26, 1889. Renewed December 11, 1890. Serial No. 374,327. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH FISHER, a citizen of the United States, residing at Attleborough, in the county of Bristol and State of Massachusetts, have invented certain new and useful Improvements in Weather-Strips; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters of reference marked thereon.

This invention relates to certain new and useful improvements in weather-strips; and it has for its object among others to provide a simple and cheap weather-strip consisting of few parts, a movable part on the threshold or sill and a fixed part on the door, with provisions for raising the movable strip by the closing of the door, and permitting, when the door is opened, the movable portion to fall by its own weight below the upper face of the threshold out of the way.

The novelty resides in the peculiar combinations and the construction, arrangement, and adaptation of parts, all as more fully hereinafter described, shown in the drawings, and then particularly pointed out in the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a vertical section of the lower portion of a door and its threshold with the door closed. Fig. 2 is a like view of the same parts with the door opened. Fig. 3 is a perspective view of the parts attached to the threshold and sides of the frame detached. Fig. 4 is a section on the line xx of Fig. 1.

Like letters of reference indicate like parts throughout the several views.

Referring now to the details of the drawings by letter, A designates the side of a door-frame, B the threshold, and C the door, the latter being hinged in the ordinary manner.

D is a metallic strip, preferably brass, having a vertical portion d , by which it is attached to the face of the door by suitable nails, screws, or other suitable fastenings, and below the said vertical portion bent outward at an angle, as shown, with its lower edge

terminating a short distance above the bottom of the door, as shown clearly in Figs. 1 and 2. This is the only part attached to or carried by the door. The threshold has a depression a , within which the movable part E of the strip is designed to rest when the door is open, as shown in Fig. 2.

F is a casting attached to the side piece of the frame within a recess provided therefor, and is formed with a curved lug b , which serves as the hinge on which the movable piece turns at that end. This lug is curved or rounded to allow the movable piece to better turn with less friction. The opposite end of this casting is formed on the arc of a circle, as shown at c , to serve as a guide for the movable piece.

The movable piece E is a flat piece of metal, preferably of brass, one end of which is cut away, as shown at e , the narrower portion working within the casting and guided by the said portion c . At the opposite side, within a recess in the opposite side piece of the frame, is secured a casting H, having a curved lug h , which serves as a guide and a hinge on which this end of the movable strip works. This end of the movable strip is formed with a notch i to fit this curved lug, as shown best in Fig. 3. The recesses at the ends in the side pieces of the frame are covered by suitable metallic plates J.

At one end of the movable piece E there is attached a curved arm K, secured to the upper face of the movable piece at one end, with its other end curved upward, as shown, and beneath this arm the edge of the strip D is designed to engage as the door is closed, as shown in Fig. 2, and in the further movement of the door the said strip D is forced under the said arm, and the parts are brought into the position in which they are shown in Fig. 1. This forms a weather and storm tight weather-strip.

The under face of the arm K is recessed, and within this recess is secured at one end a spring L, attached at its outer end, with its inner end free and adapted to press upon the strip D and hold the parts in close contact when the door is closed. As the door is opened the pressure of the spring is not sufficient to prevent the separation of the parts, and as the strip D is withdrawn from under the arm K the movable strip E and its at-

tached parts fall by their own weight into the position shown in Fig. 2. The arm K is hidden behind the plate which covers the recess at this end.

5 What I claim as new is—

1. The combination, with the door and the inclined strip secured thereto, of the movable strip, the inclined or curved arm upon the upper face thereof, and a spring carried by the
10 said arm upon the under face thereof with its lower end free, substantially as specified.

2. The combination, with the door and the strip secured thereto, of the castings secured in recesses in the side pieces of the door-
15 frame, one of the castings being formed with an end c on the arc of a circle, the movable strip turning on lugs on the said castings, and the curved arm on the upper face of the movable strip, substantially as specified.

20 3. The combination, with the door, its frame, the strip secured to the door, the castings in recesses in the side pieces of the frame and formed with curved lugs, of the movable strip

notched at diagonally-opposite corners and guided by said lugs, and the curved arm on
25 the upper face of the movable strip within one of the recesses, substantially as specified.

4. The combination, with the door, its frame, the strip on the door, the castings secured in recesses in the side pieces of the frame and
30 formed with curved lugs, of the movable strip notched at its ends, as shown, the curved arm on the upper face of the movable strip at one end thereof within one of the recesses and recessed upon its under face, and a flat spring
35 held within the recess in the said curved arm, substantially as and for the purpose specified.

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

JOSEPH ^{his} ~~mark~~ X FISHER.

Witnesses:

CYNTHIA B. CAPRON,
JOSEPH W. CAPRON.