

(No Model.)

W. H. FYE.
WEATHER STRIP.

No. 412,493.

Patented Oct. 8, 1889.

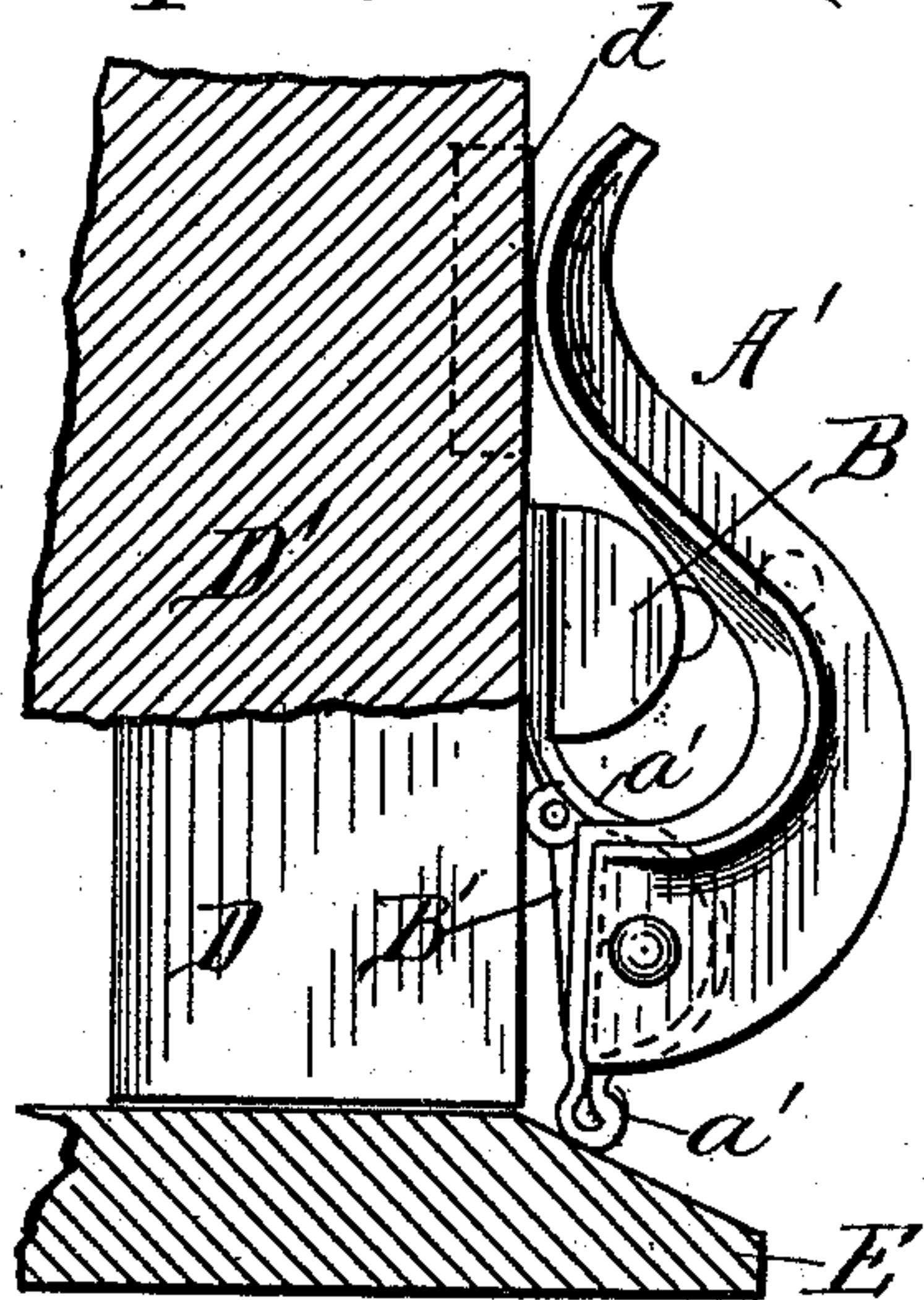
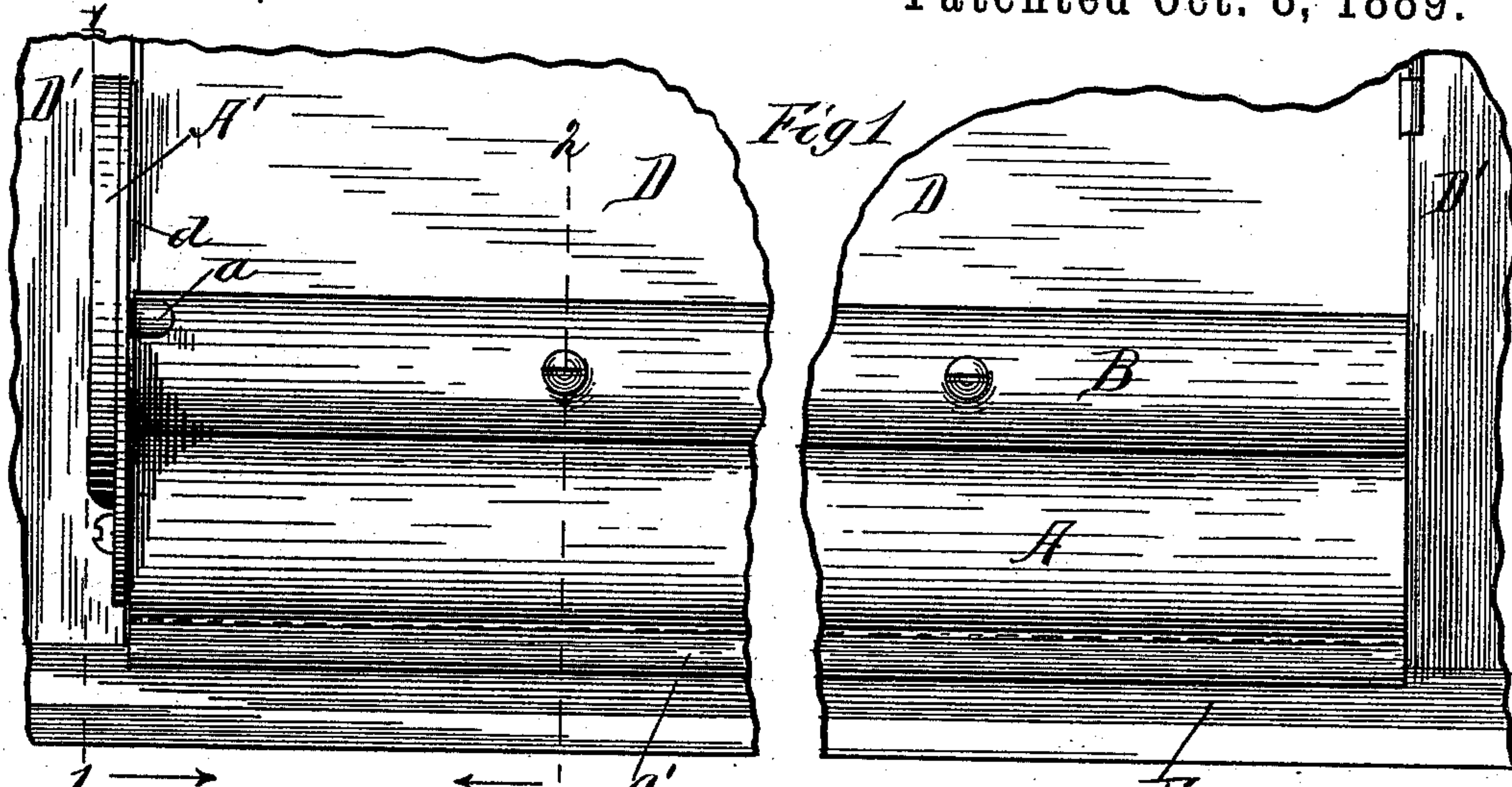


Fig 2

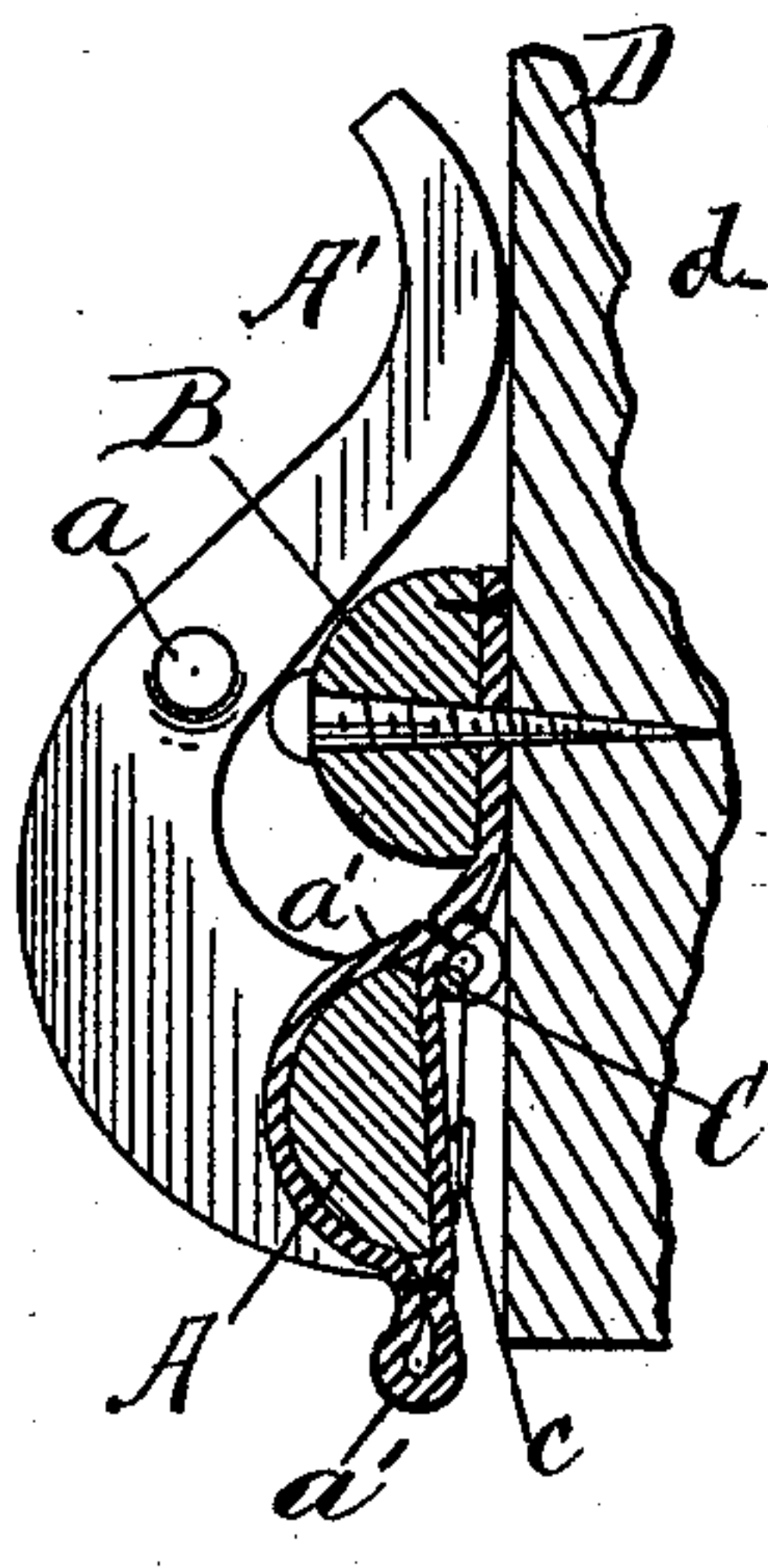


Fig 3

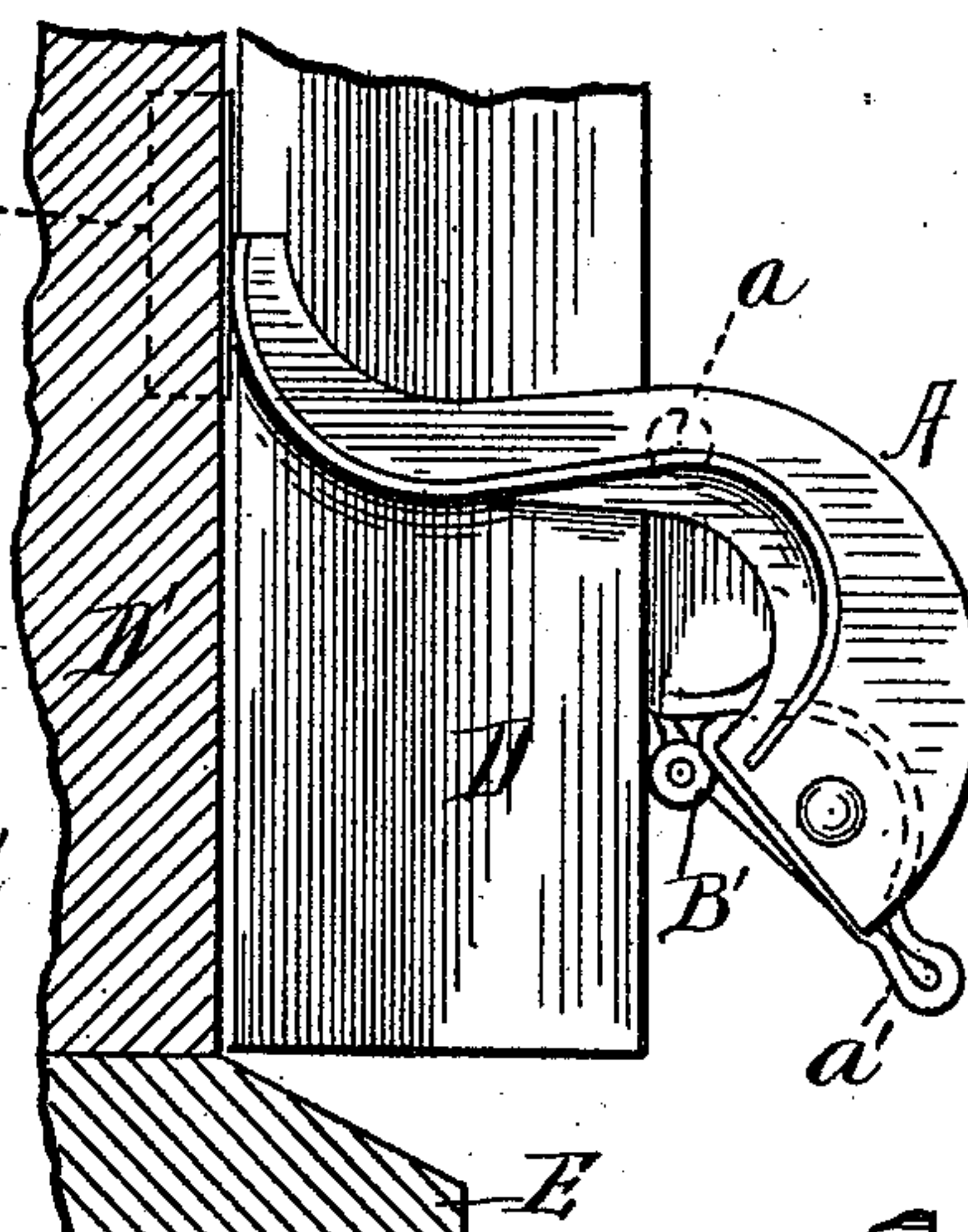


Fig 4

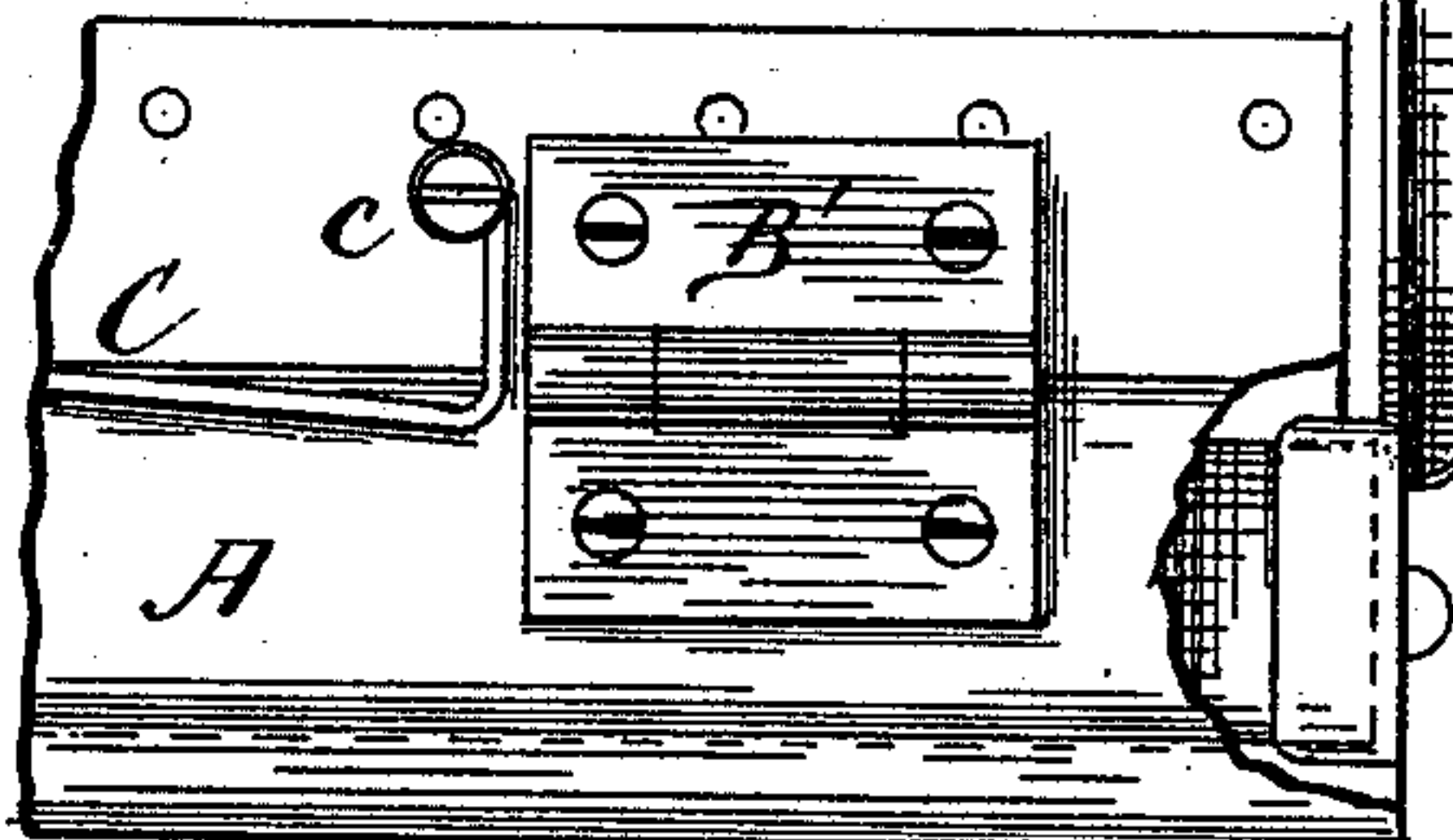
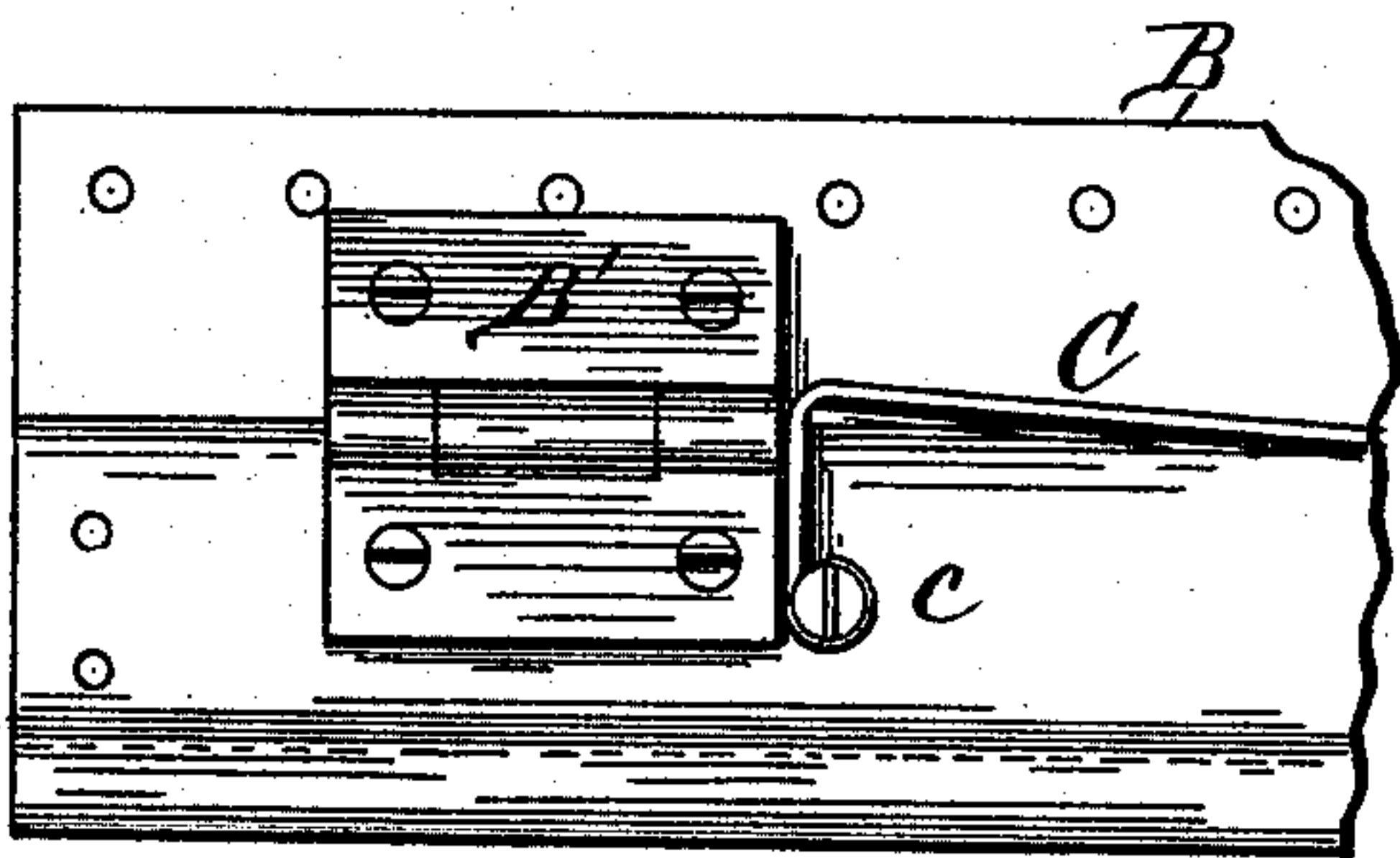


Fig 5

Witnesses
W. C. Coates
W. Hurlbut

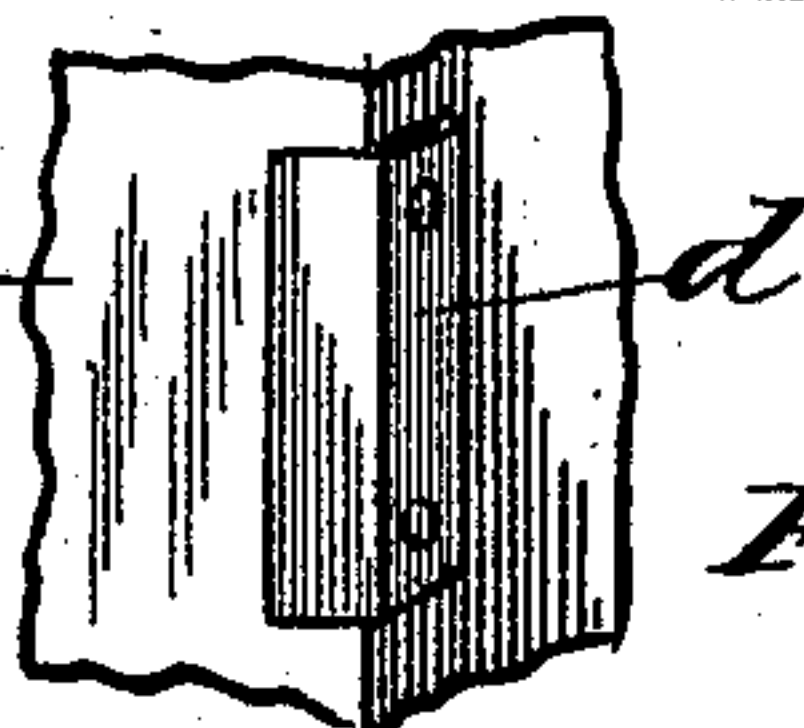


Fig 6

Inventor
William H. Eye

By E. Crawford, Atty.

UNITED STATES PATENT OFFICE.

WILLIAM H. FYE, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF TO FRED-
ERICK W. MEYER, OF SAME PLACE.

WEATHER-STRIP.

SPECIFICATION forming part of Letters Patent No. 412,493, dated October 8, 1889.

Application filed January 21, 1889. Serial No. 297,010. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. FYE, a citizen of the United States, residing in the city of Chicago, county of Cook, and State of Illinois, have invented a certain new and useful Improvement in Weather-Strips, of which the following is a specification.

The object of my invention is to provide a weather-strip to be secured to the bottom of a door in such manner as to close the opening beneath the door air-tight and at the same time reduce the friction of the closing medium to a minimum. I accomplish such results by means fully described below and illustrated in the accompanying drawings, in which—

Figure 1 is an elevation of the lower part of a door and jambs, with my improved weather-strip attached to the door. Fig. 2 is a transverse section of the same, taken on the line 1 1 of Fig. 1, in the direction of the arrow. Fig. 3 is a detail section of the weather-strip and door, taken on the line 2 2 of Fig. 1, in the direction of the arrow. Fig. 4 is a section, similar to that shown in Fig. 2, with the door partly open. Fig. 5 is a rear elevation of the weather-strip detached, and Fig. 6 is a perspective view of the door-jamb and striking-plate.

Like letters refer to like parts throughout the several views.

Referring to the drawings, A is a strip of wood or metal.

a' is felt, rubber, or other elastic material secured on the strip along its entire length. In the drawings this material is shown as embracing the strip; but it is not necessary that it shall do this, as only the part of the material which is along one edge of the strip and one side of the strip and of the cleat is in actual use for the purpose sought. Hence, it may be secured only along such edge and sides, its object being to provide an air-tight joint between the strip and cleat and the door.

B is a cleat designed to be secured to a door near its bottom, and B' B' are hinges fastening the strip and cleat together side by side with the elastic material extending beyond the outer edge of the strip. The cleat

and strip being thus connected are secured by screws, pins, or nails passing through the cleat into the door, at the bottom of the door, so that when the strip is pressed against the door the felt or other like material will be pressed so tightly down upon the threshold as to stop the opening beneath the door air-tight. Of course, the ends of the strip and cleat must be flush with the edges of the door.

C is a spring secured by the screws c c at its ends, respectively, to the strip and cleat, on the side of each next to the door D.

I do not wish to be restricted to the use of a wire spring like that shown. Any suitable spring can be used which will force the lower edge of the strip away from the door.

A' is a lever rigidly secured at one of its ends to the end of the strip next to the latch-edge of the door and extending upward. As the door begins to close, the upper end of the lever is stopped in its horizontal motion by the jamb D'. The other end must then move in the arc of a circle toward the door-jamb, and hence the strip will turn in like manner and will thus force the elastic material down upon the threshold, thus closing the opening beneath the door. When the door begins to open, the spring throws the lower edge of the strip outward and thus relieves the elastic material from friction. The stop a is made on the side of the lever next to the cleat and strip so as to prevent the lever from turning completely around when the door is open. The lever is preferably made in the form of a compound curve, but may be straight with the inner part of the upper end beveled so that it will slide when it comes against the jamb.

d is a striking-plate secured to the jamb at the place where the upper end of the lever strikes, to prevent the latter from injuring the jamb.

Having now described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. The combination of a cleat and strip hinged to each other edge to edge, a spring connecting them so as to force their free edges out of their common plane, felt or other elastic material secured to corresponding sides

of the strip and cleat and extending beyond the edge of the strip opposite to the cleat, and a lever rigidly secured to one end of the strip at right angles to the same, having its
5 free end beveled or curved and having a stop on its side next to the strip and cleat, as and for the purpose stated.

2. The combination of the door D, the door-jamb D', the cleat B, secured to the door near
10 its bottom, the strip A hinged to the cleat on its lower edge, the spring C, connecting the cleat and strip and adjusted to throw the lower edge of the strip from the door, felt or

other elastic material *a'*, secured to like sides of the strip and cleat and to the lower edge 15 of the strip, and the lever A', rigidly secured at one end to the strip at the end of the same next to the latch-edge of the door and adjusted to act across the said edge and to strike the door-jamb above the strip, substan- 20 tially as and for the purpose specified.

WILLIAM H. FYE.

Witnesses:

E. C. CRAWFORD,
FRED. MEYER.