

(No Model.)

E. I. CHURCH.
DOOR WEATHER STRIP.

No. 459,943.

Patented Sept. 22, 1891.

Fig. 1.

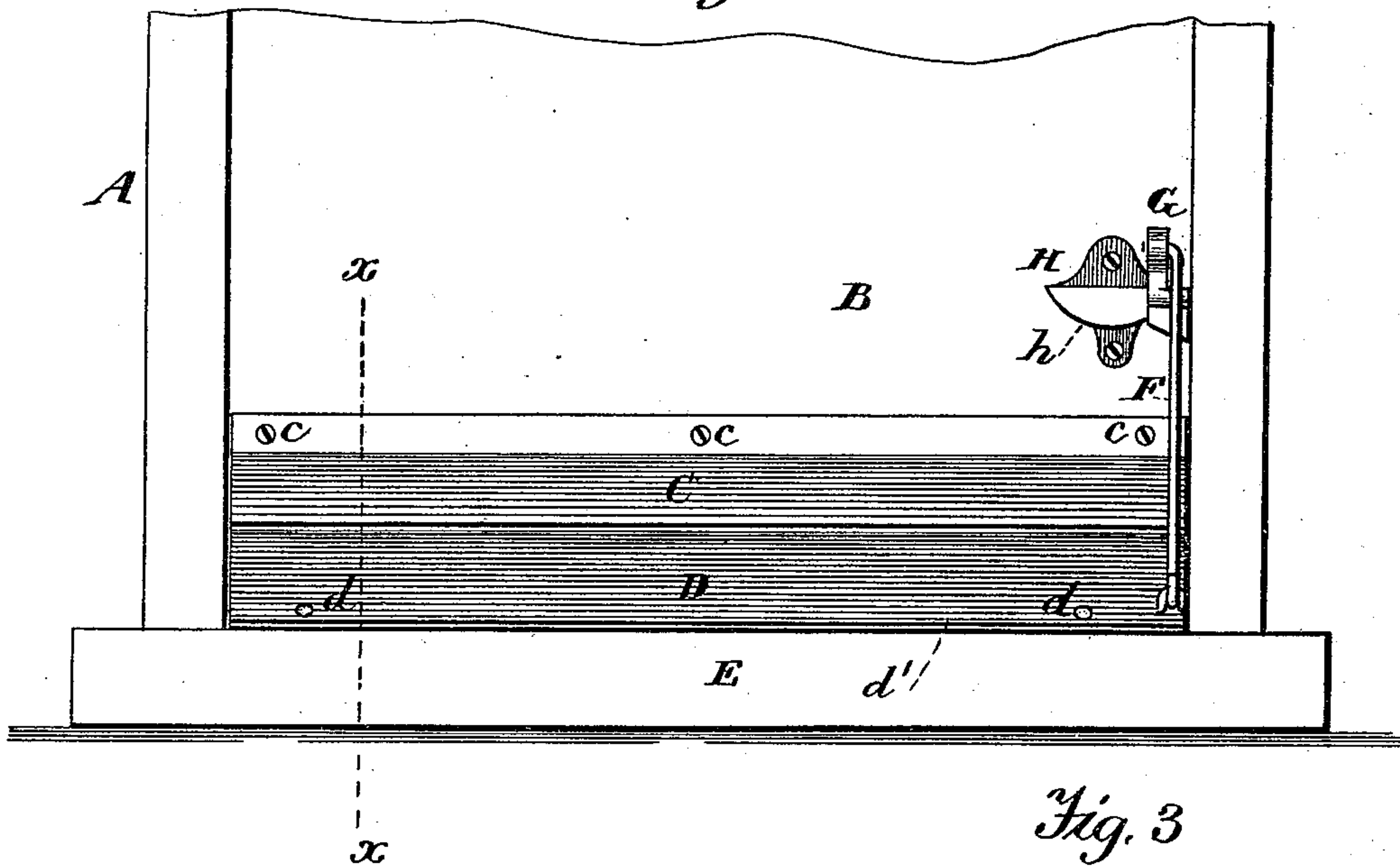


Fig. 2.

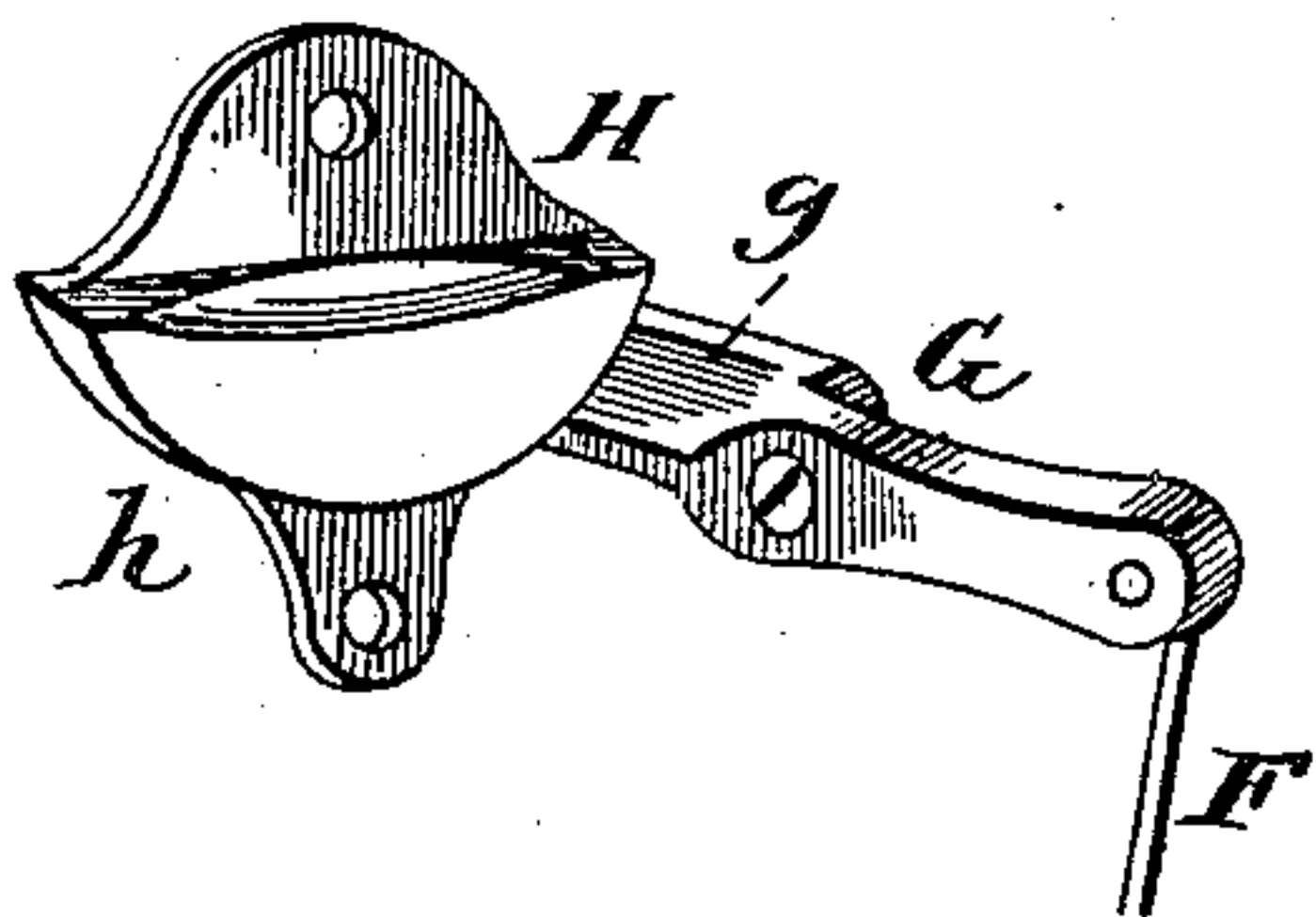
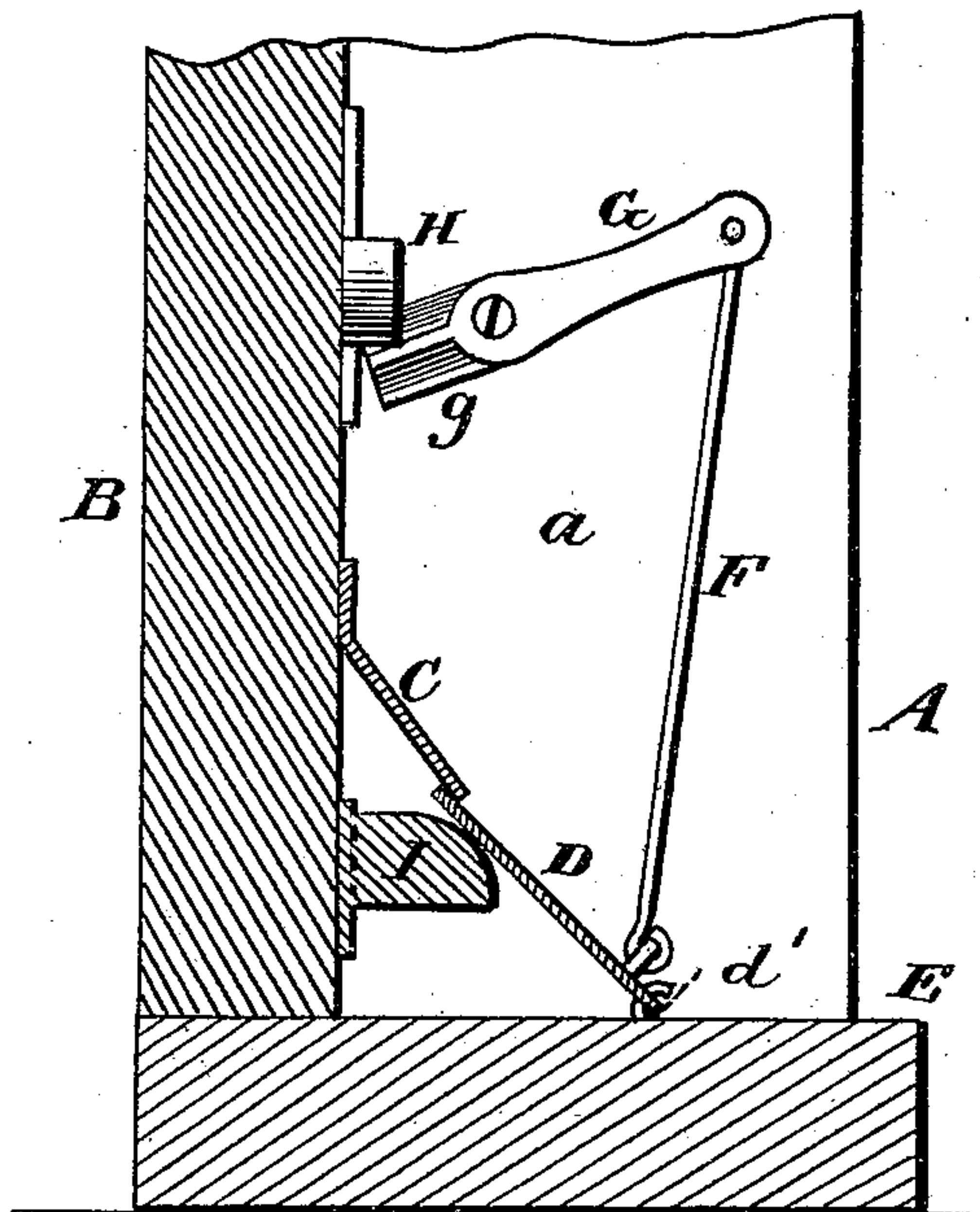


Fig. 3.



Witnesses.

A. Ruppert.

H. A. Daniels

Inventor.

Eugene I. Church

Per
Thomas P. Simpson
att'y

UNITED STATES PATENT OFFICE.

EUGENE IRVING CHURCH, OF WEST HANOVER, MASSACHUSETTS.

DOOR WEATHER-STRIP.

SPECIFICATION forming part of Letters Patent No. 459,943, dated September 22, 1891.

Application filed September 12, 1890. Serial No. 364,779. (No model.)

To all whom it may concern:

Be it known that I, EUGENE IRVING CHURCH, a citizen of the United States, residing at West Hanover, in the county of Plymouth and State of Massachusetts, have invented certain new and useful Improvements in Weather-Strips for Doors; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The special object of the invention is to make a weather-strip which will effectually carry off water, and thus prevent it from finding its way under a door; also, prevent cold winds from blowing under the door.

Figure 1 of the drawings is an elevation showing the outside of door and the door-frame; Fig. 2, a detail view of the lever and its actuating-cam; and Fig. 3 is a vertical section on dotted line *xx* of Fig. 1 near the free end of the door, showing the projection I on the door in section.

In the drawings, A represents the frame, to which the door may be hinged and latched or locked in any suitable way.

The weather-strip consists of an obtuse-angled plate C, which may be held to the lower part of the door B by the screws *c* and the straight flat plate D, which is hinged at *d d* to the bottom of the door-frame. These parts are old and well known to the public.

In order that the plate D may be raised and lowered by the door as it opens and closes, I connect them by the end pivoted rod F, the lever G, fulcrumed between its ends to the frame side *a*, and the cam H, which is fastened to the door. The lever G has a flat diagonal surface *g* on its front end, and against this surface works the curved edge *h* of the cam. The plate D is lifted by the mechanism F G H high enough for the support I to pass under it before the latter reaches it, and is then carried up by said support until it forms a close joint with the plate C.

What I claim as new, and desire to protect by Letters Patent, is—

A weather-strip formed of one fixed plate C on the door and another hinged plate D on the door-sill, in combination with the pivoted rod F, lever G, door-cam H, and support I on the door, whereby the mechanism F G H first lifts the hinged plate before the support I reaches it and then leaves it to be raised by said support until the two plates C D form a close joint, the plate C overlapping the other, as shown and described.

In testimony whereof I hereby affix my signature in presence of two witnesses.

EUGENE IRVING CHURCH.

Witnesses:

JOHN CURTIS,

ELIZABETH A. DWELLEY.