

(No Model.)

M. S. HARSHA.

WEATHER STRIP.

No. 248,832.

Patented Oct. 25, 1881.

Fig. 1.

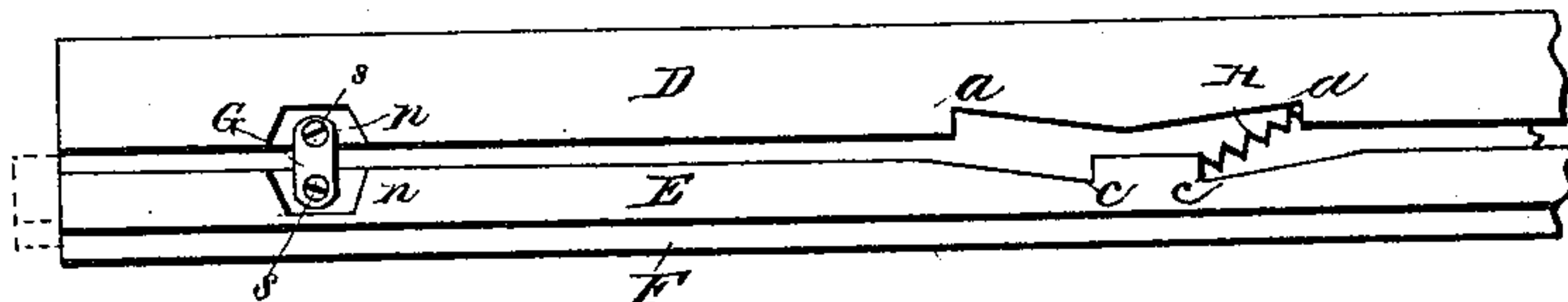


Fig. 2.

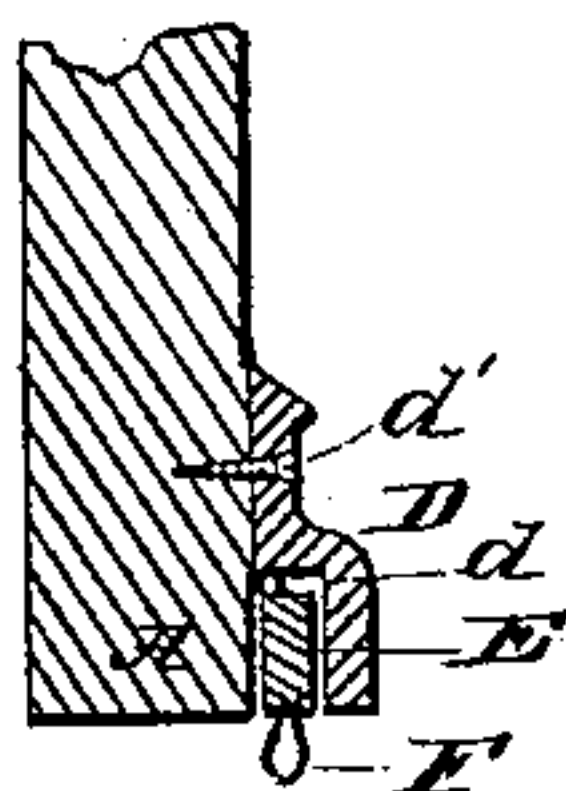


Fig. 3.

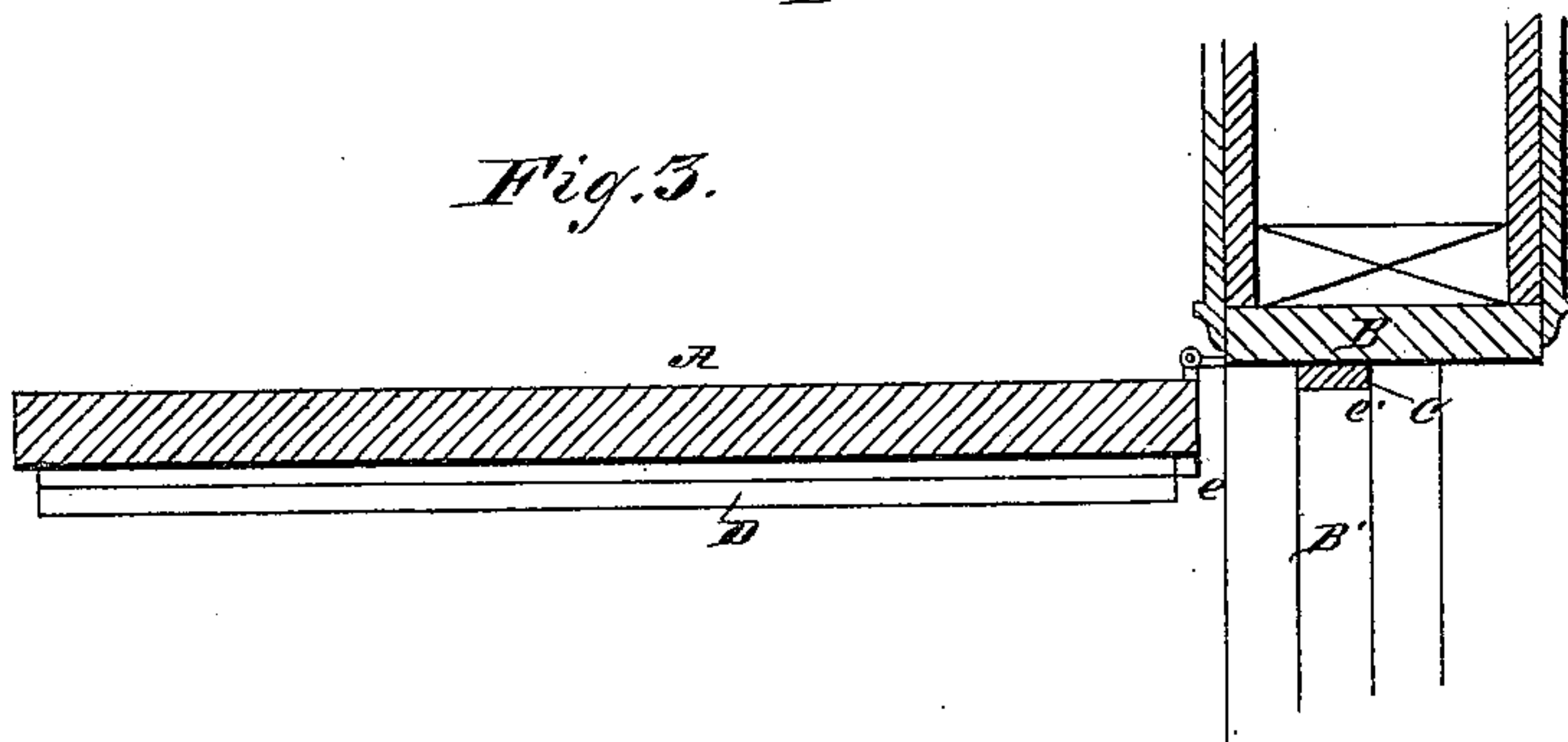
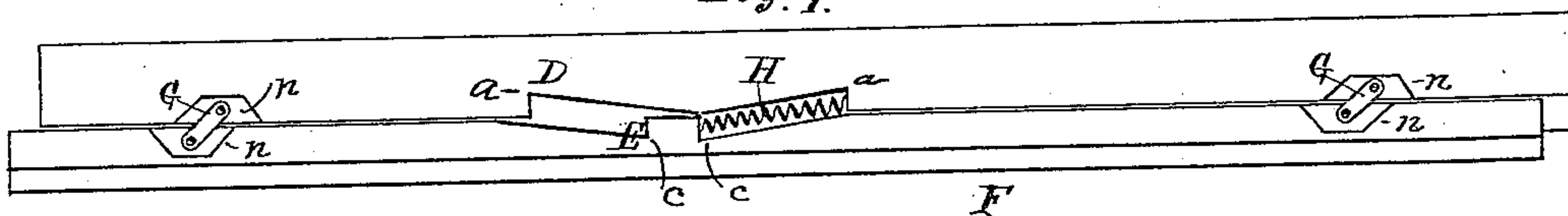


Fig. 4.



Witnesses:
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UNITED STATES PATENT OFFICE.

MORTIMER S. HARSHA, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF TO
CHARLES C. SARGENT AND WARREN BROWN, BOTH OF SAME PLACE.

WEATHER-STRIP.

SPECIFICATION forming part of Letters Patent No. 248,832, dated October 25, 1881.

Application filed May 24, 1881. (No model.)

To all whom it may concern:

Be it known that I, MORTIMER S. HARSHA, of Chicago, Illinois, have invented certain new and useful Improvements in Weather-Strips for Door-Bottoms; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to weather-strips intended for the bottoms of doors; and it has for its object to provide a construction at once durable, reliable, and convenient of application to right or left hand doors, as may be required.

To this end it consists in the combination and arrangement of parts hereinafter described, and pointed out in the appended claim.

In the drawings, Figure 1 is a fragmentary rear view of my improved strip detached. Fig. 2 is a transverse vertical section thereof applied to the door. Fig. 3 is a horizontal section of a door-frame and a door having my improved strip applied thereto. Fig. 4 is a rear elevation of the detached strip, showing the relative positions of the parts when the door is open.

A represents a door, hinged to the frame B, having the usual stop or bead, C. B' is the threshold.

D is a molding, having a broad rabbet, *d*, cut in its lower rear face, and having, preferably, the external sectional contour shown in Fig. 2.

E is a bar of equal length with the molding, fitted to move freely in the rabbet *d*, and bearing on its lower edge the closing-strip F, of rubber or other suitable material. The bar E is joined with the molding D by the flat connecting-links G G, set in the notches *n n*, so as to clear the door when the strip is in place, and screwed to the several parts loosely, so as to permit the bar E to move freely. The links G are so applied, as shown, that where their pivotal points (or the screws *s s*) are squarely opposite each other there will be a considerable space between the edge of the bar E and the top of the rabbet, and the ends of the molding and bar will be flush, all as shown in Fig. 1. Being thus connected, a nearly horizontal ex-

panding-spring, H, inserted in the opposite notches *a c* of the several parts, so as to bear at one end against the molding and at the other against the bar, as also shown in Fig. 1, operates to slide the bar E longitudinally in the rabbet and to throw one end thereof beyond the end of the molding D. The parts D and E, connected and operating as described, are cut of length to freely enter between the opposite beads C of the door-frame, and the molding D is screwed to the outer face of the door, at its lower edge, in proper position for this purpose. The spring H is applied to the parts D and E, so as to throw out the bar E at the hinged side of the door, whereby, when the door is being closed, the protruding end of said bar will strike the bead C, and will be forced inward and downward to close the space or passage beneath the door.

The weather-strip is adapted to be readily applied to either a right or a left hand door by providing two oppositely-directed sets of notches, *a c*, as shown in Fig. 1, and also providing a movable expanding-spring, H, which may be inserted in either set of notches or shifted at pleasure from one to the other. Strips of suitable length for all ordinary doors thus constructed may be conveniently fitted and applied to the door by the purchaser without the aid of a skilled carpenter.

I am aware that a similar weather-strip has been made, having the relatively moving parts joined by flat rubber strips set in the vertical inner faces of the parts and tacked at their ends thereto under tension, so as to draw them together. Such springs not only soon lose their efficiency, but they require additional parts as fastenings, and are liable to become detached and useless. By means of an expanding-spring on the other hand, and by arranging the same between opposing shoulders made by notching the opposite horizontal meeting faces of the relatively moving parts, as described, so as to push instead of to pull, all special fastenings are dispensed with. Moreover, being held in place by its own expansive force alone, when thus applied, the spring is readily removable, and by providing two sets of oppositely-directed shoulders or notches said spring may be conveniently applied to give

the proper throw to the bar E to suit the door to which it is to be attached.

I claim as my invention—

5 The weather-strip described, consisting of the parts D and E F, connected by links G, and provided with two sets of opposite notches, *a c*, as shown, combined with an expanding-spring, H, held removably in place by its expanding force, whereby said strip is readily

applicable to either a right or left hand door, 10 as set forth.

In testimony that I claim the foregoing as my invention I affix my signature in presence of two witnesses.

MORTIMER S. HARSHA.

Witnesses:

M. E. DAYTON,
JESSE COX, Jr.