(No Model.)

H. M. HOPKINS.

DOOR.

No. 306,753. Patented Oct. 21, 1884.

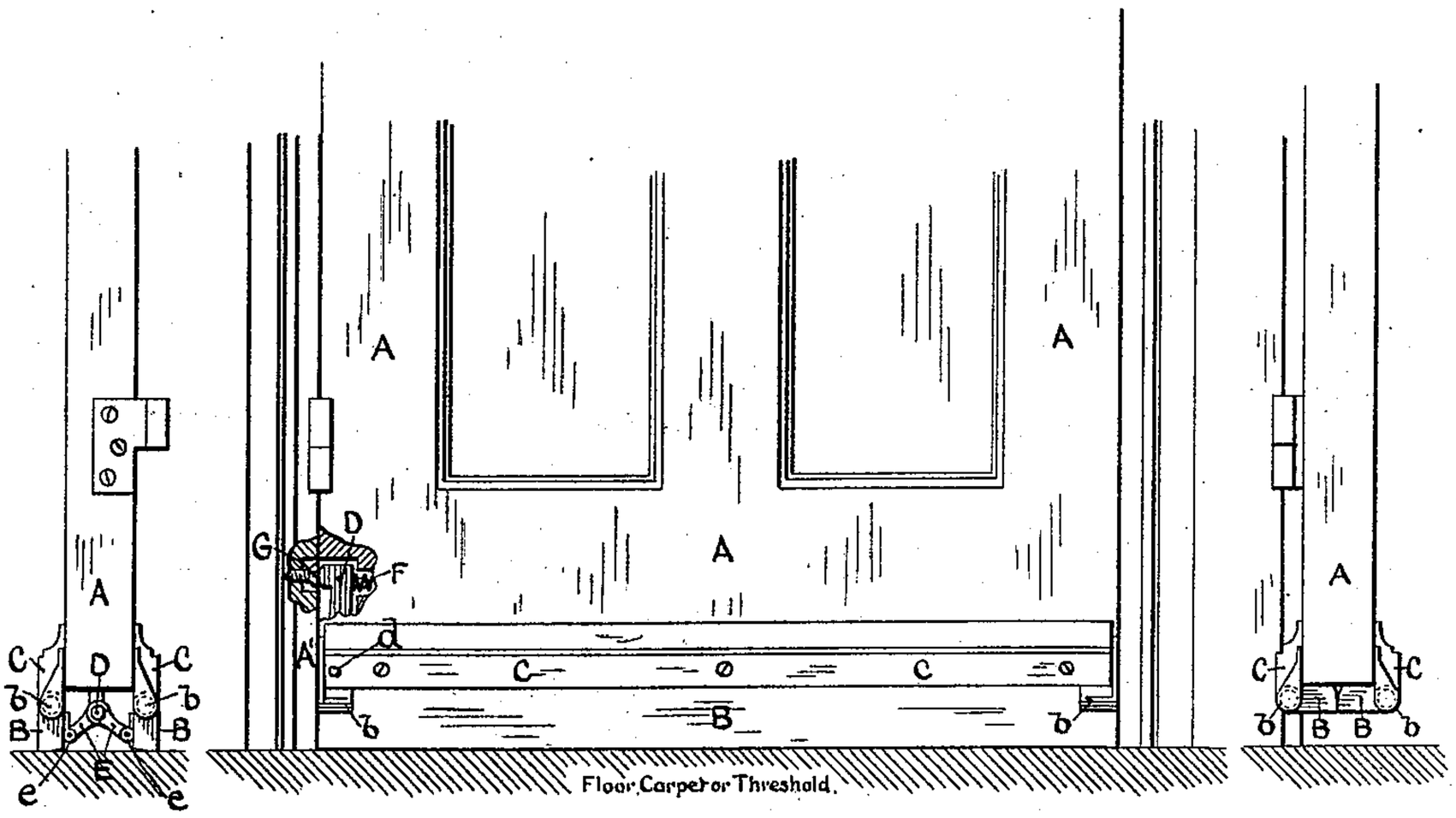

FIG. 3. FIG. 1. FIG. 2.

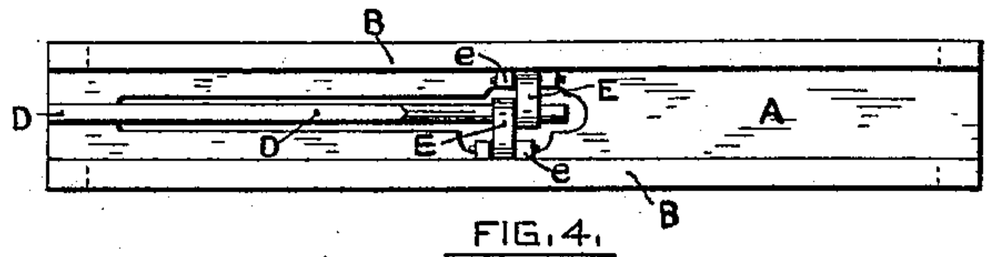

FIG. 4.

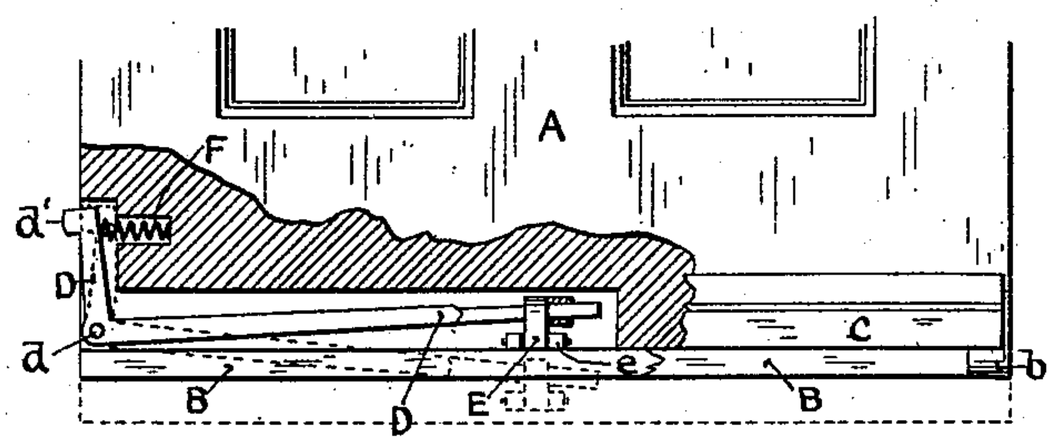

FIG. 5.

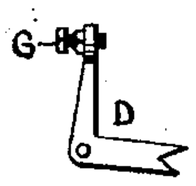

FIG. 6.

WITNESSES.

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UNITED STATES PATENT OFFICE.

HENRY M. HOPKINS, OF PUTNAM, CONNECTICUT.

DOOR.

SPECIFICATION forming part of Letters Patent No. 306,753, dated October 21, 1884.

Application filed March 8, 1884. (No model.)

To all whom it may concern:

Be it known that I, HENRY M. HOPKINS, of Putnam, in the county of Windham and State of Connecticut, have invented a new and useful Improvement in Doors; and I do hereby declare the following specification, taken in connection with the accompanying drawings, forming a part of the same, to be a description thereof.

This invention consists in a strip or strips of wood, metal, or other material, pivoted or hinged to a door at its bottom, so as to be capable of being turned from a substantially horizontal position to a substantially vertical position, a lever connected to said strip or strips, and arranged so that when the door is closed one end of said lever will engage the door-jamb and swing or move the said strip or strips into a substantially vertical position, and thereby close the opening between the bottom of the door and the floor, carpet, or threshold, and a spring for returning the said strip or strips into a substantially horizontal position as the door is opened, as will hereinafter appear.

The improvement is particularly designed to be applied to inside doors, or to doors between rooms where it is desired that the carpet shall run from one room to the other, although it is equally applicable to outside doors, and may be used where a threshold is employed.

Figure 1 of the drawings shows a front view of the lower portion of a door provided with my improvement. Fig. 2 represents an edge view of the door when it is swung open. Fig. 3 shows a view of the hinged edge of the door. Fig. 4 represents a view of the bottom of the door when closed. Fig. 5 shows the door in partial section. Fig. 6 shows one end of the lever provided with an adjusting-screw to govern the throw of the lever.

A is the door.

B B are the strips of wood or other material, which are pivoted at their ends in socket-pieces *b b*. These socket-pieces may be secured directly to the door, if desired, but are preferably attached to moldings C C, which serve to produce a more ornamental and finished appearance, and also serve to allow the strips to be attached to the door without the necessity of fitting the edges of the strips to the bottom edge of the door, should the latter be uneven. The moldings C C are secured to the opposite faces of the door by screws, or in any preferred manner.

D is a lever of the bell-crank form, which is pivoted directly to the door or to the moldings C C by a pin, *d*, Figs. 1 and 5. The strips B B are connected to the lever D by links E E, which are pivoted at one end to plates *e e*, secured to said strips, respectively, and at the other end loosely surround said lever, as shown in Figs. 3, 4, and 5. As shown in Fig. 5, the outer end, *d'*, of the lever D projects beyond the edge of the door when the same is open, the said end of the lever being forced into such position by a spring, F. When the door is closed, the end *d'* of the lever D comes in contact with the door-jamb A', Fig. 1, and moves the strips B B from the position shown in Fig. 2 to that shown in Figs. 1 and 3, thereby closing the opening between the bottom of the door and the floor, carpet, or threshold, and substantially preventing any draft of air from passing under the door. When the door is opened, the spring F operates upon the lever D and causes the strips B B to assume the positions shown in Fig. 2, so that the door can be easily swung.

As shown in Fig. 1, the door-jamb A' is furnished with a screw, G, against which the end *d'* of the lever D comes in contact when the door is closed. By adjusting this screw the amount of movement of the strips B B can be regulated so that they will assume an inclined or a vertical position when the door is closed, according to the space between the bottom of the door and the floor, carpet, or threshold, and properly close said space.

In place of locating the screw G in the door-jamb it may be placed in the end of the lever D, as shown in Fig. 6, so as to govern the throw of said lever for the purpose described.

Although I prefer to employ two strips B, as shown, yet a single strip B may be employed, and the bottom edge of such strip or strips may be shod, if desired, with rubber tubing or other elastic material, in order the more closely to fit the floor, carpet, or threshold.

As will be readily understood, the improvement is equally applicable to sliding doors.

From the foregoing it will be seen that by

the use of my improvement a threshold can be dispensed with, and yet the space between the bottom of the door and the floor or carpet can be closed and the door be swung without danger of coming in contact with the floor or carpet during its movements.

I am aware that vertically-sliding weather-strips operated by levers and springs have been applied to doors, and I do not claim such constructions.

What I claim, and desire to secure by Letters Patent, is—

1. The combination, with a door, of a strip or strips, B, pivoted so as to swing as described, a lever connected with said strip or strips for moving the same as the door is closed, and a spring for returning said strip or strips to and holding them in a substantially horizontal position, substantially as set forth.

2. The combination, with a door, of the strips B, pivoted to swing as described, the moldings C C, the lever D, and spring G, substantially as and for the purposes specified.

3. The combination, with a door, of the strip or strips B, pivoted so as to swing as described, a lever connected with said strip or strips for moving the same as the door is closed, an adjustable stop or bearing for regulating the throw of said lever, and a spring for returning the strip or strips to and holding them in a horizontal position, substantially as set forth.

HENRY M. HOPKINS.

Witnesses:
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GEO. W. CADY.