

No. 620,348.

Patented Feb. 28, 1899.

B. MURPHY.
WEATHER STRIP.

(Application filed Dec. 19, 1898.)

(No Model.)

Fig. 1.

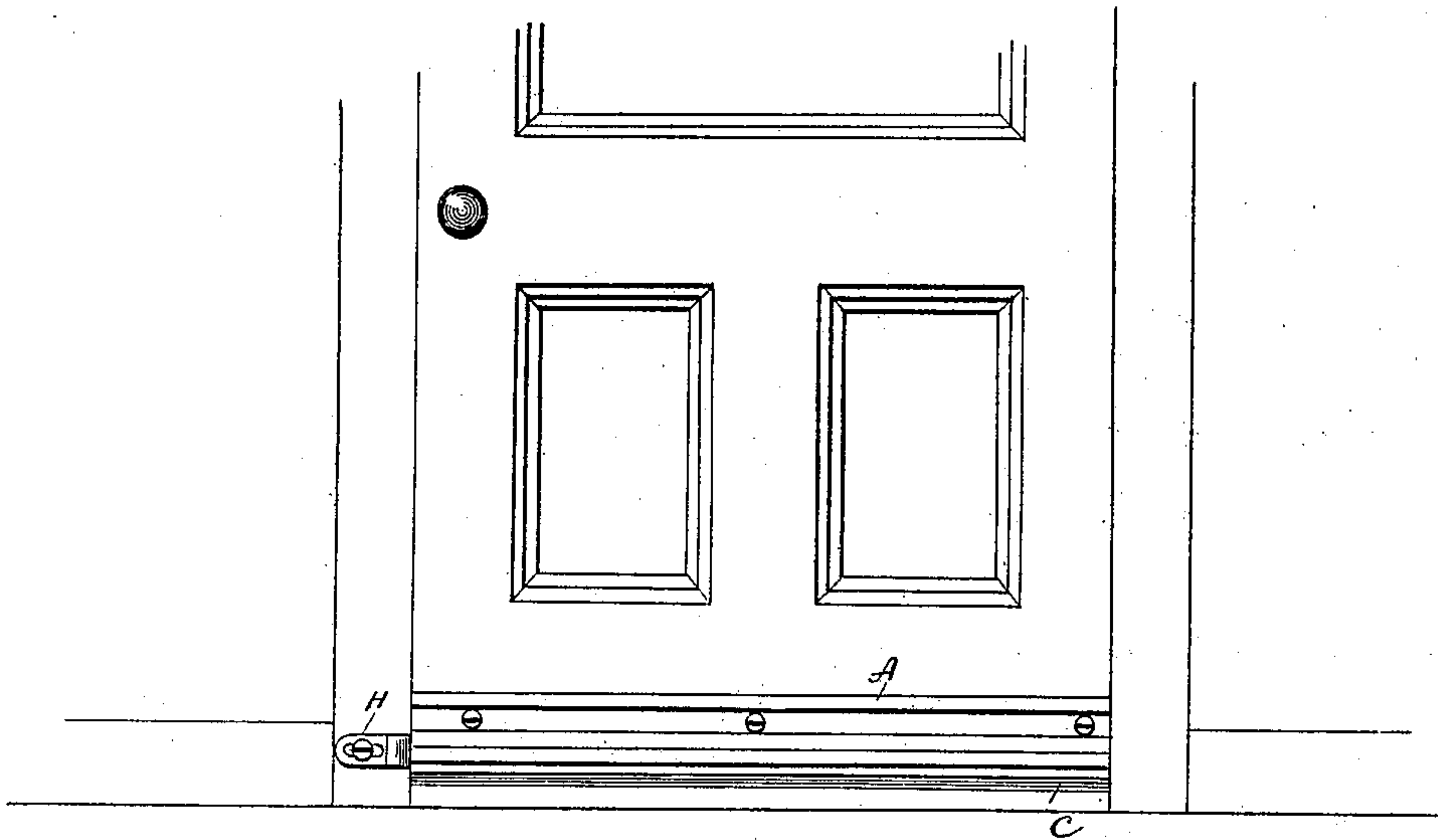


Fig. 2.

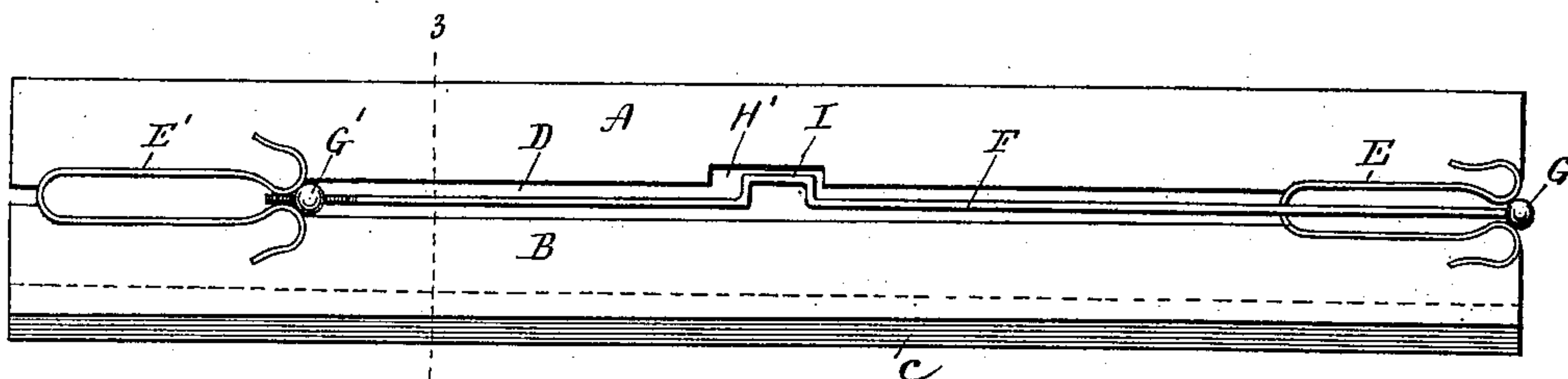


Fig. 3.

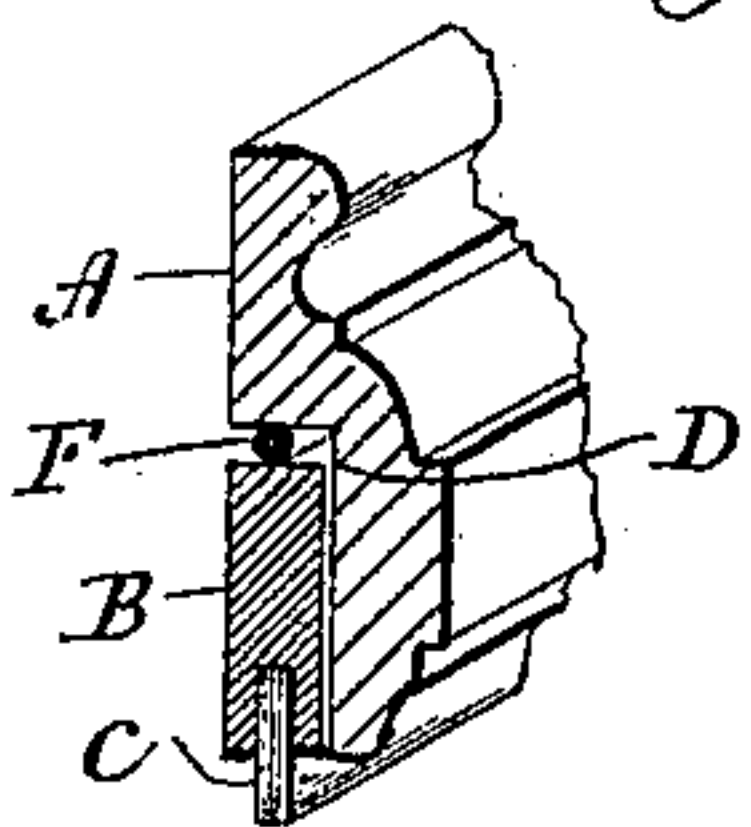


Fig. 4.

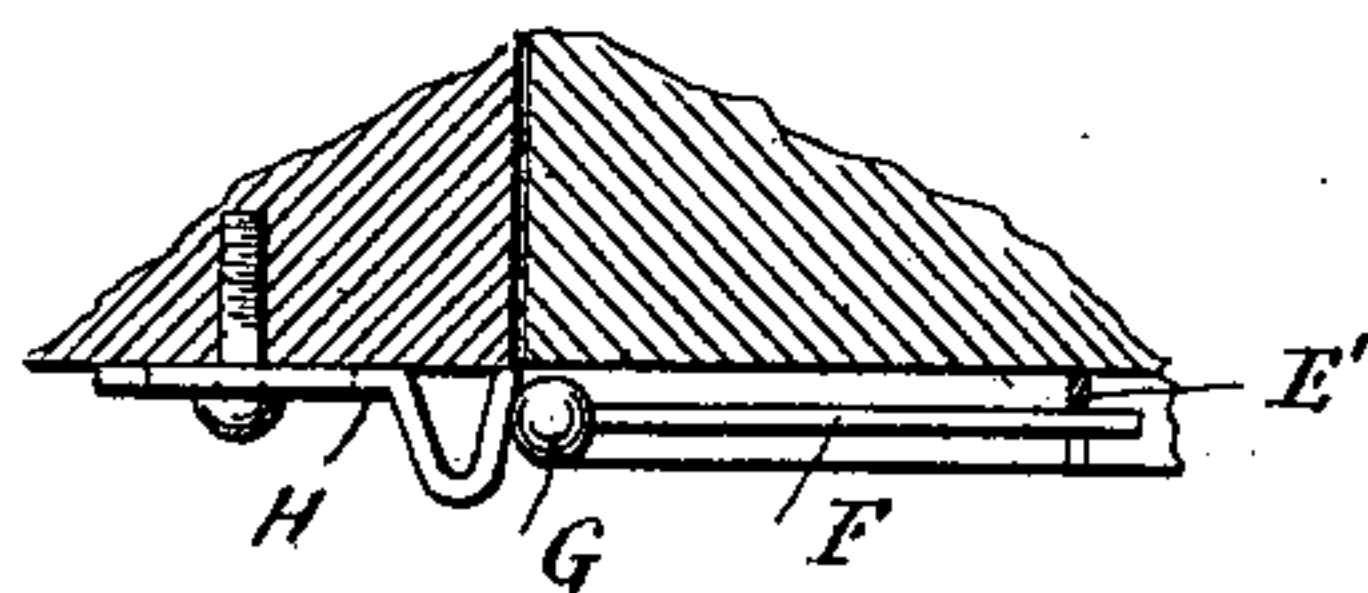
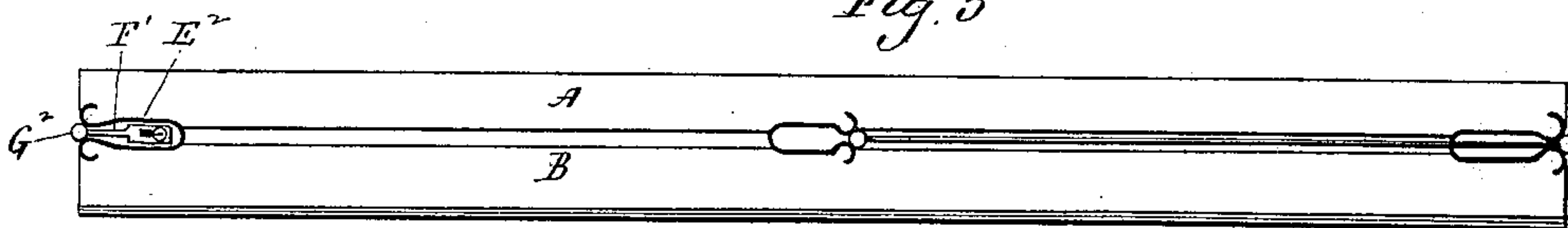


Fig. 5.



Witnesses
J. H. Shumway
Lillian D. Kelley

Barnes Murphy.
Inventor.
By Atty. Earle Heyman

UNITED STATES PATENT OFFICE.

BARNEY MURPHY, OF NEW HAVEN, CONNECTICUT, ASSIGNOR OF ONE-HALF
TO THE STAR MANUFACTURING COMPANY, OF SAME PLACE.

WEATHER-STRIP.

SPECIFICATION forming part of Letters Patent No. 620,348, dated February 28, 1899.

Application filed December 19, 1898. Serial No. 699,656. (No model.)

To all whom it may concern:

Be it known that I, BARNEY MURPHY, of New Haven, in the county of New Haven and State of Connecticut, have invented a new
5 Improvement in Weather - Strips; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the
10 same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a face view of the lower portion of a door with my improved weather-strip applied thereto; Fig. 2, a reverse view of the
15 strip detached; Fig. 3, a broken perspective sectional view on the line 3 3 of Fig. 2; Fig. 4, a broken transverse sectional view of the outer end of the strip and rod operating device; Fig. 5, a reverse plan view illustrating
20 a modification in the arrangement of the connecting - springs and means for operating them.

This invention relates to an improvement in weather-strips, and particularly to that class
25 in which the strip is formed in two parts—one secured to the door and the other connected with the part secured to the door and adapted to be forced downward into engagement with the floor or door-sill and so that
30 when the door is open the free member will rise to permit the ready movement of the door and which when the door is closed will be forced downward into engagement with the floor or door-sill, the object of the invention
35 being a simple arrangement whereby the parts are connected together and the free member readily forced downward; and it consists in the construction as hereinafter described, and particularly recited in the claims.

40 The door-strip A is formed with a rabbet D to receive the movable strip B and so that the strip is free to move between the lower portion of the door-strip and the face of the door. At opposite ends the adjacent edges
45 of the two strips are recessed to receive flat wire springs E E', which are substantially U-shaped, the ends of the springs being brought together near the extreme ends, which ends are curved and secured in corre-
50 sponding recesses formed in the adjacent

edges of the two strips. The tendency of these springs is to draw the two strips together and so hold the movable strip up out of engagement with the floor or door-sill. To force it downward, however, when the door
55 is closed, I provide a rod F, which extends transversely between the rods and is formed at opposite ends with balls G G', which are adapted to be forced between the meeting surfaces of the springs. Preferably the in-
60 ner ball G' is adjustable with relation to the rod, so as to cause more or less movement of the movable strip. To the door-jamb is adjustably secured a striker H, with which the ball G will engage as the door closes and so
65 that the ball G is forced inward between the meeting faces of the spring E, which forces the movable strip B downward at the same time the ball G' at the inner end of the rod F forces the meeting surfaces of the spring E'
70 apart and depresses the corresponding end of the movable strip B. To limit the movement of the rod, I preferably form the strip A with a recess H' and the rod with an offset bend I, which projects into the recess, as shown
75 in Fig. 2.

With wide doors it may be necessary to employ three or more springs, as shown in Fig. 5, in which case the spring at one end and the center are operated substantially as
80 described, while the spring E² at the opposite end is turned in the reverse position and so as to open toward the opposite end of the strip, and this spring is operated by a ball
85 G², mounted on the end of a spindle F', which extends inward between the members of the spring, where it is adjustably secured to the strip A, whereby its transverse movement is permitted. With some narrow doors it may
90 not be necessary to operate both springs together, in which case separate springs, like that shown at the left, Fig. 5, may be provided at each end of the strip. I therefore do not wish to be understood as limiting my in-
95 vention to the employment of a rod for operating two of the springs; but,

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a weather-strip, the combination with 100

a door-strip and a movable strip, the two strips being connected together by U-shaped springs the tendency of which is to lift the movable strip and means for separating the members of the springs whereby the movable strip is forced downward, substantially as described.

2. In a weather-strip, the combination with a door-strip and a movable strip, of U-shaped springs connecting the strips together, and tending to lift the movable strip, and a transverse rod provided at opposite ends with surfaces adapted to separate the meeting faces of the springs, and force the movable strip downward, substantially as described.

3. In a weather-strip, the combination with a door-strip, and movable strip, of U-shaped

springs bent to form meeting faces, and adapted at their ends for engagement with the two strips, whereby the strips are connected together, and a transverse rod arranged between the strips, and provided with enlarged surfaces adapted to be forced between the meeting faces of the springs, the enlarged surfaces at one end of the rod being adjustable thereon, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

BARNEY MURPHY.

Witnesses:

FRED. C. EARLE,
LILLIAN D. KELSEY.