(No Model.)

C. F. TAVENER.

WEATHER STRIP.

No. 433,106. Patented July 29, 1890.

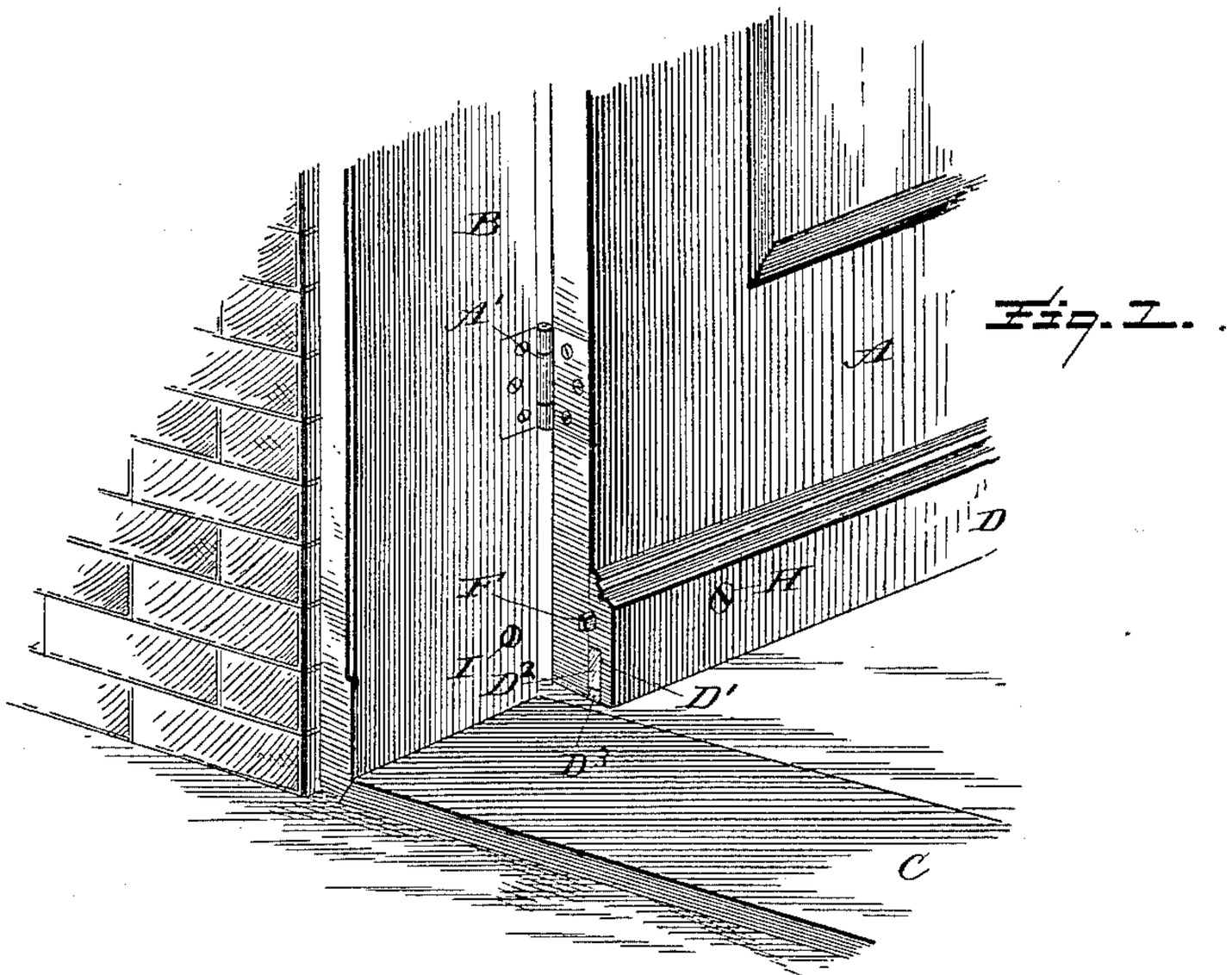


Fig. 1.

Fig. 2.

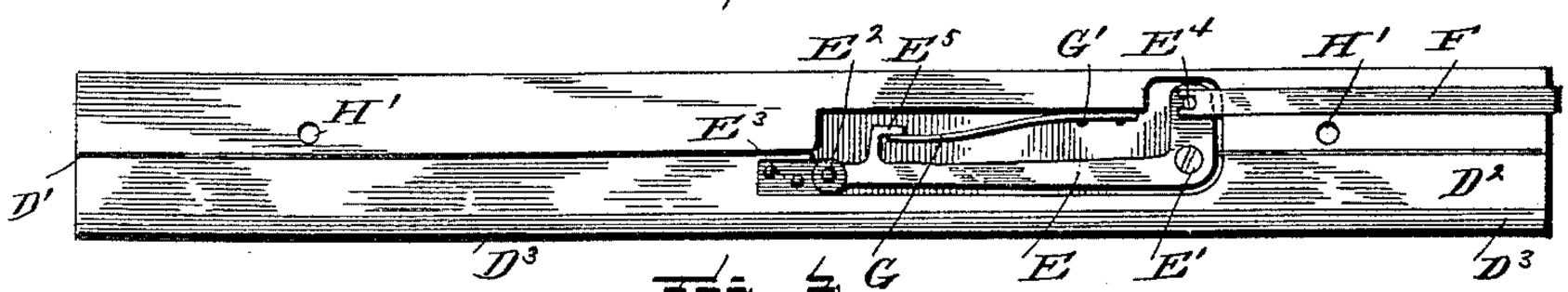
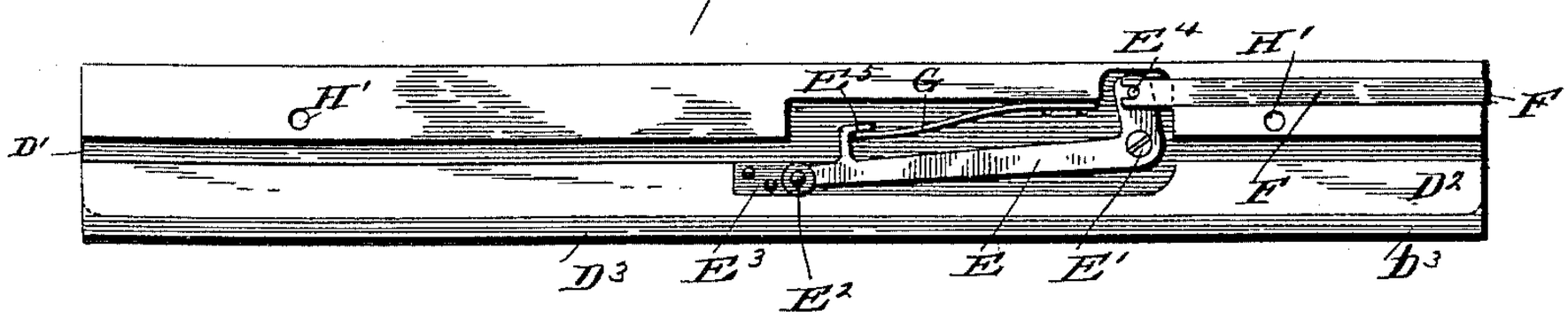


Fig. 3.



Witnesses
L. C. Hills.
E. A. Bond.

Inventor
C. F. Tavener.
E. B. Stocking
Attorney

UNITED STATES PATENT OFFICE.

CHARLES F. TAVENER, OF PAINESVILLE, OHIO.

WEATHER-STRIP.

SPECIFICATION forming part of Letters Patent No. 433,106, dated July 29, 1890.

Application filed October 22, 1889. Serial No. 327,849. (No model.)

To all whom it may concern:

Be it known that I, CHARLES F. TAVENER, a citizen of the United States, residing at Painesville, in the county of Lake, State of Ohio, have invented certain new and useful Improvements in Weather-Strips, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in weather-strips; and it has for its object to provide a simple and efficient device of this character, wherein but little action is required to accomplish the desired result, wherein the working parts are protected from the effects of storm, wherein mutilation of the door is avoided and wherein complete contact with the threshold is provided, and which can be quickly and easily applied or removed.

The invention resides in the peculiarities of construction and the novel combinations, arrangement, and adaptation of parts, all as more fully hereinafter described, shown in the drawings, and then particularly pointed out in the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a perspective view illustrating my improved weather-strip applied to a door. Fig. 2 is a rear view of the strip detached and in its closed position. Fig. 3 is a like view with the parts separated or distended.

Like letters of reference indicate like parts throughout the several views.

Referring to the drawings by letter, A designates a door, B a portion of the casing, and C the threshold or sill, the door being hinged by means of the hinges A′ in the usual manner, and all of these parts being of any well-known or approved construction.

My improved weather-strip consists of a strip D, which may be of any suitable material and of as fanciful a design as desired, preferably, however, being molded near its upper edge, as shown in Fig. 1. This strip is provided upon its rear face with a longitudinal recess D′, in which works the movable portion D^2, said movable portion being preferably provided along its lower edge with a strip of felt, rubber, or other analogous yielding material, as D^3. This movable portion is of the same length as the portion D and fits quite snugly within its recess and normally with its lower edge flush with the lower edge D^4 of the portion D, which position it assumes when the door is opened, as indicated in Fig. 1.

E is a lever fulcrumed on the pivot E′ and working within a recess or chamber formed in the adjacent faces of the portion D and the movable portion D^2, the long arm of the lever being pivoted at its end on the pivot E^2 on the movable portion, said pivot being preferably supported in the ears or metallic portion E^3, as seen best in Figs. 2 and 3. The short arm of this lever normally extends vertically, as shown in Fig. 2, and is formed or provided with a pin E^4, designed to be engaged by the forked end of the piston or plunger F, which works in the guide-groove in the rear face of the fixed portion D, with its outer end normally projecting beyond the end of said portion, as indicated in Figs. 1 and 2, and when said end is extended, as shown in said figures, the lower edge of the movable portion will be flush with the lower edge of the fixed portion D, as indicated in said figures.

The long arm of the lever E, near its end farthest from its pivot, is formed or provided with a substantially inverted-L-shaped projection or lug E^5, the horizontal portion of which is designed to engage the upper surface of the free end of a flat spring G, the other end of which is attached to the lower face or wall of the recess in the fixed portion D, as shown at G′.

In practice the strip is attached to the door by means of suitable fastenings, as the screws H, passed through suitable holes H′, adapted therefor, with the lower edge of the fixed and movable strips flush with the bottom of the door. The normal tendency of the spring G is to keep the movable portion D^2 pressed upward, as indicated in Figs. 1 and 2; but when the door is closed the projecting end of the plunger F comes in contact with some fixed portion of or on the casing B and is forced inward, which presses downward the long arm of the lever, and thus forces the movable portion D^2 in close contact with the threshold or sill C. The movable portion D^2, being pivoted

at the longitudinal center of the strip, insures close contact of the lower edge of the movable strip with the threshold or sill throughout its entire length. In order to adjust the amount of stroke of the plunger F and thus determine the amount of pressure of the movable part against the threshold, I provide the adjustable screw I, which I place in the casing B at a point where it will be struck by the plunger F when the door is closed.

By the above construction but little action of the parts is required to accomplish the desired result. The parts are protected from storm and moisture, and no mutilation of the doors is required in applying the strip. It is not liable to break or wear out, and can be made as an ornament to the door.

What I claim as new is—

1. A weather-strip consisting of a recessed portion, a vertically-movable portion thereon, and a bell-crank lever having a long arm extending substantially parallel with the strip in the recess, a longitudinal spring bearing on a lug on the lever and extended substantially parallel therewith, and a plunger connected with the short arm of the lever and extended beyond the end of the strip, substantially as described.

2. A weather-strip consisting of a recessed portion and a movable portion, a bell-crank lever pivoted at its elbow to the recessed portion and at the end of its long arm pivotally connected with the movable portion, and a spring attached to the recessed portion and bearing on the long arm of the lever, and a plunger connected with the short arm of the lever and projecting beyond the end of the strip, as set forth.

3. A weather-strip consisting of a recessed portion, a movable portion, a lever pivoted to one of said portions and acting on the other and formed with a projection E^5, a spring on one portion engaging said projection, and a plunger connected with said lever, substantially as described.

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

CHARLES F. TAVENER.

Witnesses:

C. W. COATES,

H. C. QUIGLEY.