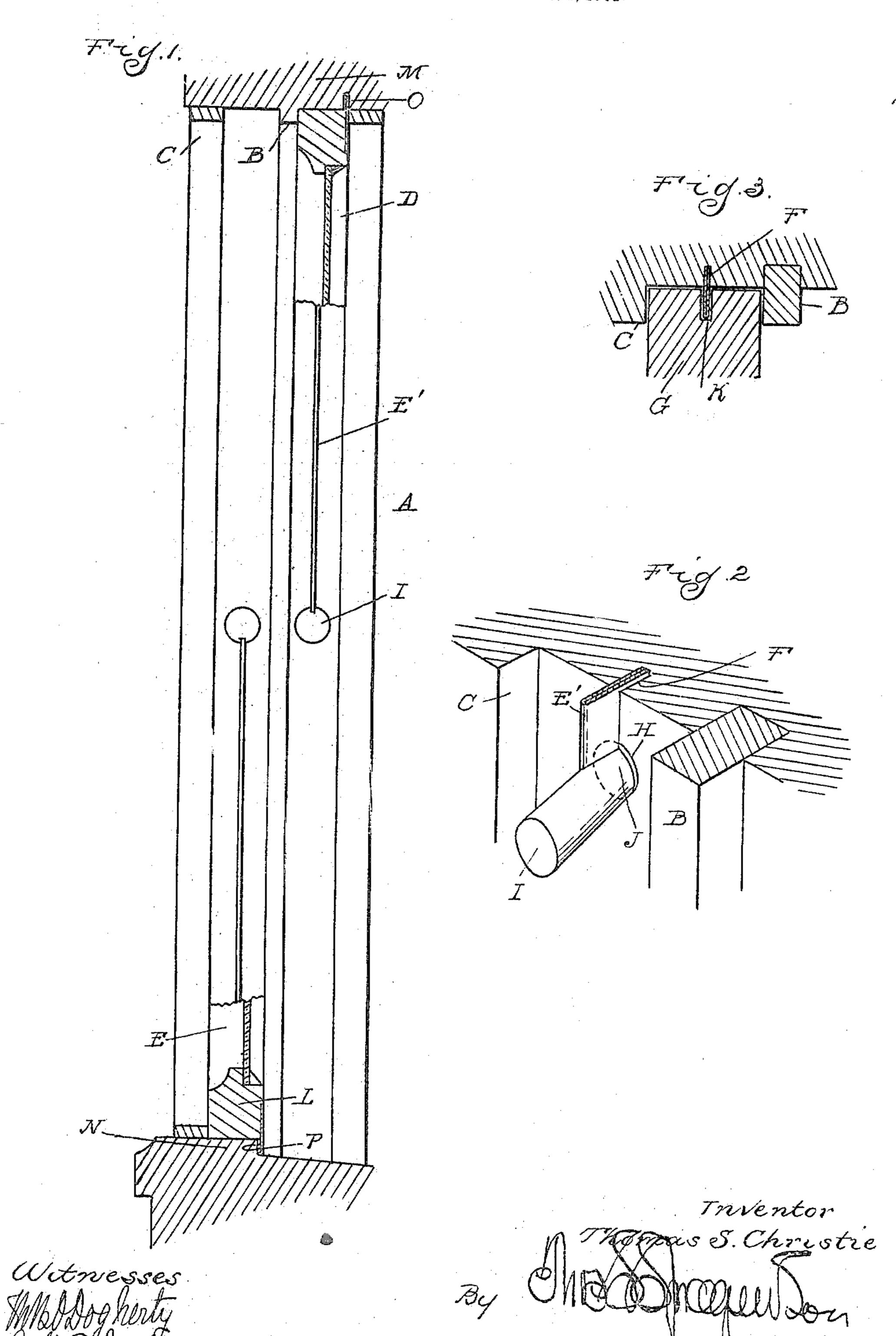
T. S. CHRISTIE. WEATHER STRIP. APPLICATION FILED DEC. 2, 1902.



UNITED STATES PATENT OFFICE.

THOMAS S. CHRISTIE, OF DETROIT, MICHIGAN, ASSIGNOR TO Z AND Z COMPANY, OF DETROIT, MICHIGAN, A CORPORATION OF MICHIGAN.

WEATHER-STRIP.

No. 817,223.

Specification of Letters Patent.

Fatented April 10, 1906.

Application filed December 2, 1902. Serial No. 133,543.

To all whom it may concern:

Be it known that I, Thomas S. Christie, a citizen of the United States, residing at Detroit, in the county of Wayne and State of Michigan, 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.

weather-strips for windows; and it consists in the construction of the strip, in the novel means employed for securing the strips in place, and in other details of construction, as will be more fully hereinafter set forth and

illustrated.

In the drawings, Figure 1 is a vertical central section through a window-casing and the sashes therein, the sashes being broken away in parts to more fully illustrate the invention. Fig. 2 is a sectional perspective view of a portion of the casing, showing the application of the retaining means for the strip; and Fig. 3 is a cross-section through a portion of the casing and one of the sash-stiles.

In the drawings thus briefly referred to the reference-letter A designates the usual window frame or casement; B, the parting-strip; C, the usual stop, and D and E the upper and lower sashes sliding within the casing upon

opposite sides of the parting-strip.

The weather-strip E' consists, preferably, of a flat strip of metal bent along its longitudinal axis and folded upon itself so as to form

35 a two-ply member.

In Figs. 2 and 3 I have shown the strip applied to the casing side for the upper sash. When used in this manner, vertical grooves F are formed in the casing opposite the stiles G of the sash, and the strips are inserted within the grooves, as shown. Each groove or slot extends from the upper end or top of the casing to a point preferably in proximity to the middle or center thereof and terminates at said central point in a recess H. The strips are cut to a length to extend from the casing end against which they abut to and slightly within the recesses.

To hold the strip in place, a retaining mem-50 ber is inserted within the casing side below and abutting against the strip. This preferably comprises a plug I, which after the strip has been applied is driven within the recess. As shown, the plug has a tapering end por-

tion J, which allows of its insertion slightly 55 within the recess before the plug-body comes

in contact with the strip end.

Upon driving the plug in place the tapering end portion J of the plug first forces the strip tightly against the top of the casing, 60 and upon the plug being further driven the end of the strip projecting into the recess H is caused to bite into and engage the plugbody in the manner indicated in Fig. 1. The sash-stiles are then vertically grooved, as at 65 K, to receive and slide upon the strips.

The lower window-sash may be provided in a similar manner with the weather-strips connected to the casing as previously set forth.

Similar strips may be applied to the sash 70 ends in the manner shown in Fig. 1. The strips in this case are arranged transversely upon the outer faces of the ends L of the sashes adjoining the opposite ends M and N, respectively, of the window-casing. The strip 75 upon the upper sash projects in the plane thereof into a groove O, formed in the upper end of the casing. The strip upon the lower sash extends in the opposite direction and in a parallel plane and engages against the shoul- 80 der P upon the casing bottom or sill.

It will be obvious from the description of my invention that the strip is exceedingly simple in construction and may be conveniently and readily applied to the casing.

What I claim as my invention is—

1. The combination with the window-casing having a vertical groove formed in its side extending from one of the casing ends into proximity to the middle thereof and terminating at said central portion in a recess, of a flat metallic weather-strip arranged within the groove and projecting slightly within said recess, a plug fitted within said recess and engaging the strip end, and the window-sash 95 within the casing having its stile opposite the weather-strip recessed vertically to receive the strip.

2. The combination with the window-casing having a vertical groove formed in its side 100 extending from one end of the casing into proximity to the middle thereof and terminating at said central portion in a recess, of a flat metallic weather-strip arranged within the groove and projecting slightly within said recess, and a plug arranged to fit in said recess and receive the projecting end of said strip.

3. The combination with the window-cas-

ing having a vertical groove formed in its side extending from one end of the casing into proximity to the middle thereof and terminating at said middle portion in a recess, of a flat metal weather-strip arranged within the groove and projecting slightly within said recess, and a plug provided at its end with a tapering portion arranged to be driven in said

recess and to engage the projecting end of said strip.

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

THOMAS S. CHRISTIE.

Witnesses:

M. B. O'DOGHERTY,

A. G. Robertson