(No Model.)

O. TATMAN & J. BYAR.

WEATHER STRIP.

No. 382,780. Patented May 15, 1888.

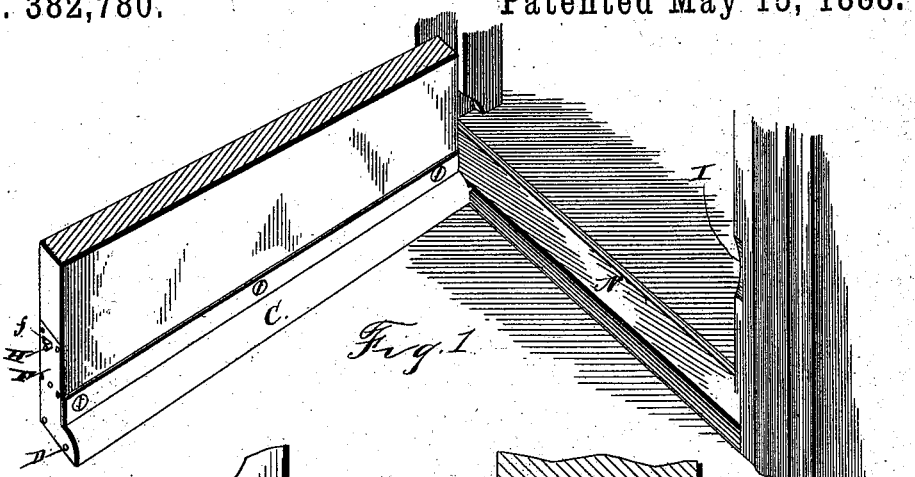

Fig. 1.

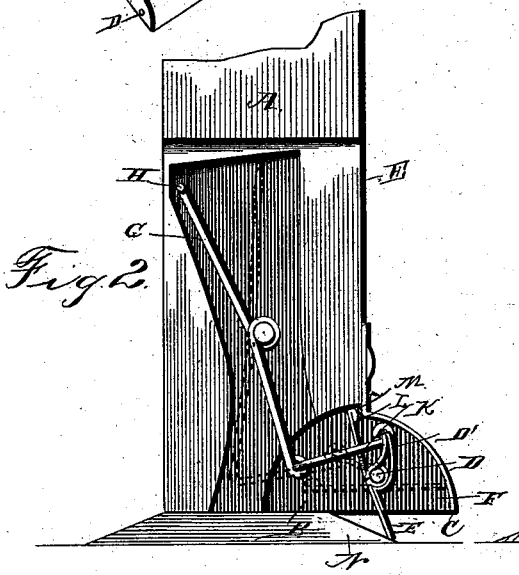

Fig. 2.

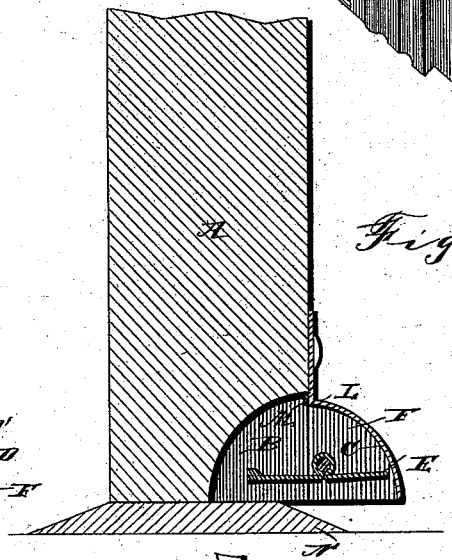

Fig. 3.

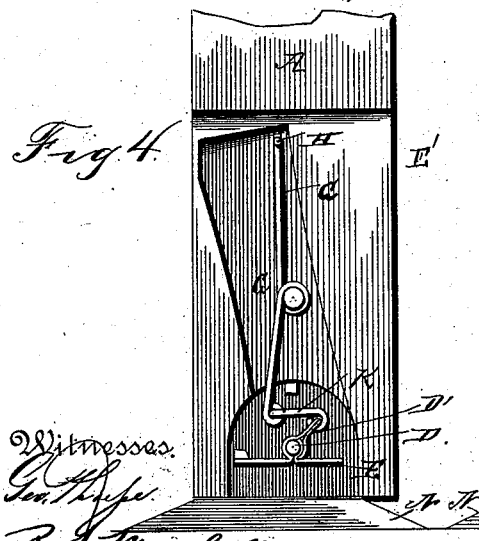

Fig. 4.

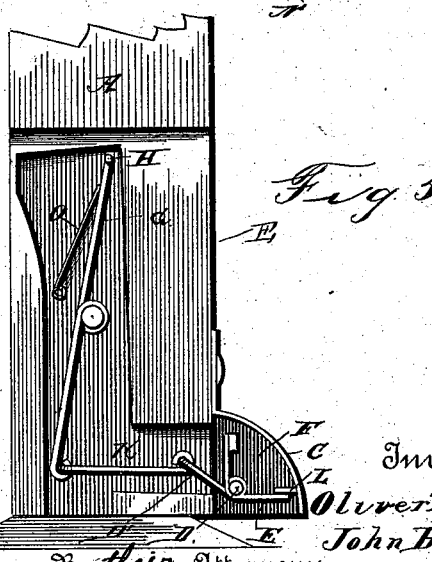

Fig. 5.

Witnesses.
Geo. Hope.
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Inventors.
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By their Attorneys.
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UNITED STATES PATENT OFFICE.

OLIVER TATMAN AND JOHN BYAR, OF AUGUSTA, KENTUCKY.

WEATHER-STRIP.

SPECIFICATION forming part of Letters Patent No. 382,780, dated May 15, 1888.

Application filed January 5, 1888. Serial No. 259,833. (No model.)

To all whom it may concern:

Be it known that we, OLIVER TATMAN and JOHN BYAR, citizens of the United States, residing at Augusta, in the county of Bracken and State of Kentucky, have invented new and useful Improvements in Weather-Strips, of which the following is a specification.

Our invention relates to improvements in weather-strips; and it has for its object to provide a simple, easily-applied, and reliable strip, which will be automatically operated by the movement of the door and will be suitable for both inside and outside doors.

The device consists, mainly, of a strip pivoted at the centers of its ends to the door and having one of its edges weighted to normally hold the other edge raised clear of the floor. In a suitable recess in the free edge of the door is mounted a lever connected at its lower end to the strip and provided at its upper end with a short arm or detent which is adapted to strike the jamb as the door is closed and thereby depress the unweighted edge of the strip.

The device is more fully described hereinafter in connection with the accompanying drawings, wherein—

Figure 1 is a perspective view of a door partly open and having one of our improved weather-strips attached thereto. Fig. 2 is an edge view of the door, showing the operating mechanism. Fig. 3 is a vertical section of the bottom of the door, indicating the raised position of the strip. Fig. 4 is a similar view showing the device when attached to an inside door. Fig. 5 is a view of another modification, in which the groove in the door is omitted.

Referring by letter to the drawings, the door A is provided at its lower edge with a groove, B, and over this groove is arranged a hood, C, which extends outward a short distance from the door and resembles a molding or bead. The ends of this hood are provided with bearings in which are mounted the trunnions D on the ends of the strip E. These trunnions are arranged at intermediate points of the ends of the strip, and the inner or upper edge of the latter is weighted to cause the same to automatically assume a horizontal position. The strip is further provided at the end adjacent to the free edge of the door with an upwardly and inwardly extending arm, D′, for a purpose to be explained.

A recess, E′, is formed in the free edge of the door, and over the recess is secured a plate, F, having a slot, *f*, near its upper end. A lever, G, is mounted in this recess and is provided at its upper end with a short arm or detent, H, which operates in the slot *f*, and is so arranged that when the door is closed it strikes in a slight rounded depression, I, in the jamb of the door. A link, K, connects the lower end of the lever to the inner end of the arm D′, whereby when the lever is operated the strip is turned.

The operation of the device is as follows: The strip is normally horizontal, (in which position it will pass over the carpet-strip N,) and the arm or detent H is in the outer end of the slot *f*. When the door is closed, the detent H strikes in the depression I and is forced inward, thereby swinging the arm D′ outward and causing the outer or lower edge of the strip to bear against the floor. When in this position, the upper or weighted edge of the strip closes against a shoulder, L, which acts as a stop for the movement of the strip. This shoulder is provided with a padding, M, of rubber, felt, or other similar material, whereby when the strip is pressed against it no air may penetrate and cause a draft under the door. When the door is opened again, the weighted inner edge of the strip will drop, thereby raising the outer edge and returning the detent H to the outer end of the slot *f*.

In the modification, Fig. 4, instead of a hood over the groove, the hood is dispensed with and the groove is formed entirely in the edge of the door, and is therefore concealed from view. The operating mechanism is mounted, as in the first form, in a recess in the edge of the door.

In the modification which is shown in Fig. 5 the groove in the lower edge of the door is dispensed with and the entire operating device is disposed in the hood. The strip is bent longitudinally at its center to form an angle plate or strip. The shoulder, which is designated by the letter L in the other figures, is arranged nearer the lower edge of the hood, and the strip, instead of having its inner or upper edge weighted to normally hold it in

the elevated position, is operated by a spring, O, which is arranged in the recess at the edge of the door and bears against the upper arm of the lever G. The result attained is the same, but by different means.

Having thus described our invention, we claim—

1. The combination, with a door, of the hood C, attached to the bottom thereof, the strip mounted in bearings at the ends of the hood, the lever G, mounted in a recess at the free edge of the door and having the detents H, adapted to strike at its upper end against the jamb when the door is closed, and the connecting-link B between the lower end of the lever and the strip, substantially as specified.

2. The combination, with a door having a groove in its lower edge, of the weighted strip mounted therein, the shoulder L, having the padding or cushion M thereon, the upwardly and rearwardly extending arm D′ on the strip, and the lever connected to the said arm and adapted to engage the jamb of the door, substantially as specified.

3. The combination, with a door having a groove, B, in its lower edge and a recess, E′, in its free edge, of the hood C over the groove B, the weighted strip mounted therein, the plate F over the recess E′ and having a slot, *f*, therein, and the lever G, mounted in the recess E′ and connected to the strip and having a detent, H, on its upper end projecting through the slot *f*, substantially as and for the purpose specified.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in presence of two witnesses:

OLIVER TATMAN.
JOHN BYAR.

Witnesses:
G. P. GRIGSON,
WM. HAFER.