

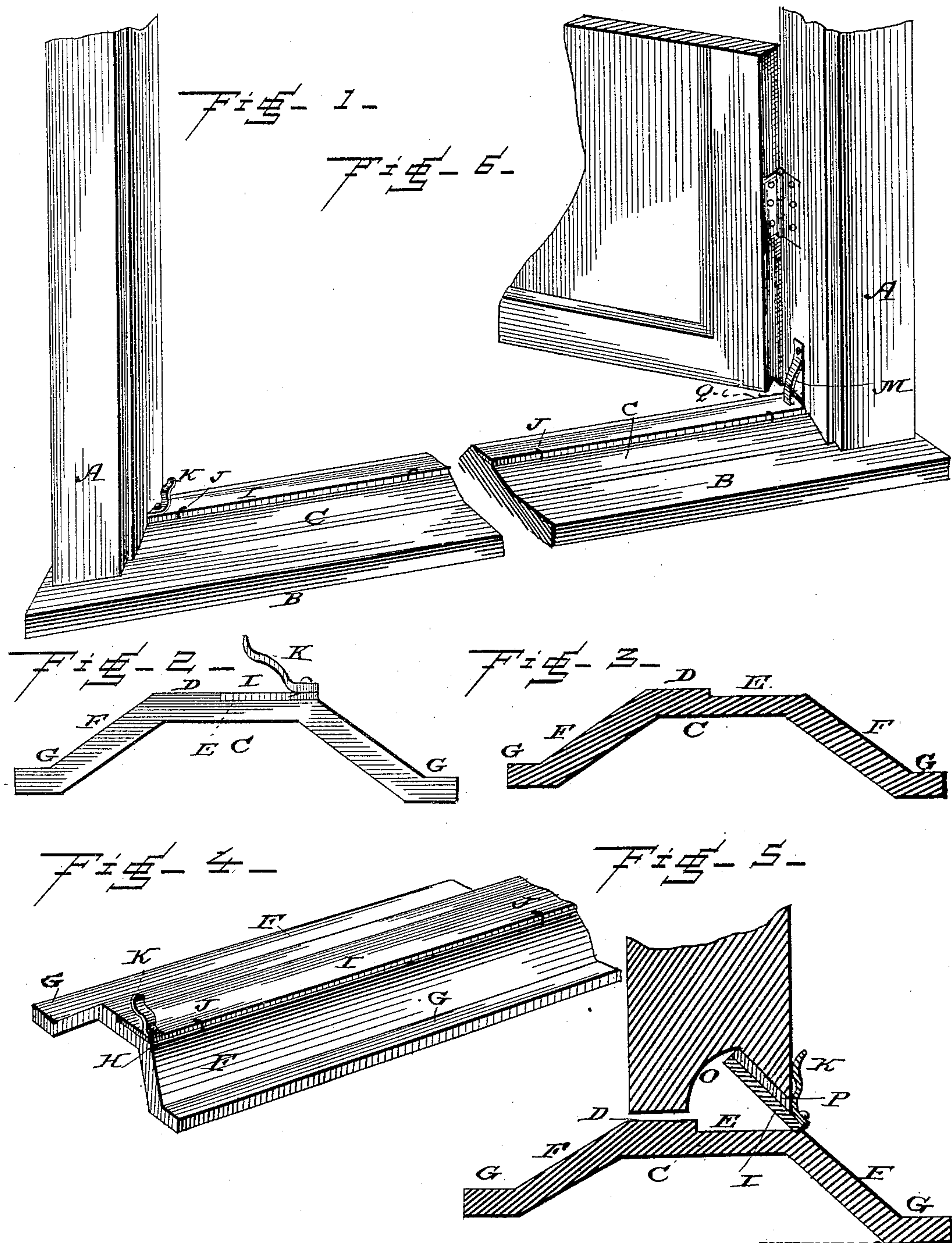
(No Model.)

J. TRACHSEL, J. K. LIPPS, & W. H. TURNEY.

WEATHER STRIP.

No. 318,437.

Patented May 19, 1885.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

JOHN TRACHSEL, JACOB K. LIPPS, AND WILLIAM H. TURNEY, OF COLUMBIA CITY, INDIANA.

## WEATHER-STRIP.

SPECIFICATION forming part of Letters Patent No. 318,437, dated May 19, 1885.

Application filed May 17, 1884. (No model.)

*To all whom it may concern:*

Be it known that we, JOHN TRACHSEL, JACOB K. LIPPS, and WM. H. TURNEY, all of Columbia City, in the county of Whitley and State of Indiana, have invented certain new and useful Improvements in Weather-Strips for Doors; and we do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of a portion of a door sill and jamb to which our invention has been applied. Fig. 2 is an end view of a carpet-strip having our improved weather-strip applied thereto. Fig. 3 is a transverse vertical sectional view of a carpet-strip showing the weather-strip removed. Fig. 4 is a perspective view of the carpet-strip having the weather-strip attached thereto. Fig. 5 is a vertical transverse sectional view of the lower end of a door, showing the same in its closed position, and showing, also, the carpet-strip and the weather-strip in position for operation; and Fig. 6 is a perspective view of a portion of the hinged end of a door, showing, also, the adjacent portions of the jamb, sill, carpet-strip, and weather-strip.

The same letters refer to the same parts in all the figures.

This invention relates to weather-strips for doors, the purpose of which is to exclude wind, snow, and rain; and it has for its object to provide a device which shall possess superior advantages in point of simplicity, durability, and general efficiency.

To this end it consists in the improved construction and arrangement of parts, which will be hereinafter more fully described, and particularly pointed out in the claims.

In the drawings hereto annexed, A designates the door-jamb; B, the sill, and C the carpet-strip. The latter we prefer to construct of metal, either wrought or cast, preferably the latter, as being the cheapest and equally efficient. In cross-section, as shown in Fig. 3, the said carpet-strip will be seen to consist of an

upper raised portion, D, having a recess, E, at its outerside, inclined sides F E, and flanges G G at the lower ends of the latter, whereby the carpet-strip may be secured in position upon the sill by means of screws or other fastening devices.

To the outer edge, H, of the top of the carpet-strip is hinged a strip, I, of sheet metal or other suitable material, the hinge-joints being formed of hooks, wires, or other suitable devices, substantially as shown at J in Fig. 4 of the drawings. One end of the said weather-strip, at the free or swinging end of the door, is provided with a cam or finger, K, which, when the door is closed, will be struck by the end of the door, thus causing the weather-strip to swing upon its hinges and be lifted to the raised position shown in Fig. 5 of the drawings.

Attached to the door-jamb at the hinged end of the door is a flat spring, M, which, when the door is open, will spring out over the weather-strip, thus forcing the latter to remain in a lowered position, and preventing it from being either accidentally raised by the passage of persons through the door or by the sweeping or cleansing of the rooms, which might cause dust to accumulate under the said weather-strip and interfere with its successful operation.

The under side of the door is provided with a groove or recess, O, the outer or front side of which has a strip, P, of rubber or other suitable flexible or elastic material attached thereto.

The operation of my invention will be readily understood when reference is had to the drawings hereto annexed. When the door is closed, its free or swinging end will strike the finger or cam K, thus lifting or raising the weather-strip into the groove in the lower edge of the door or the position shown in Fig. 5 of the drawings. By the same action of closing the door the spring M is pressed back by the hinged end of the door, so as to enter a chamfered recess, Q, in the jamb, this action serving to release the weather-strip from the holding or detaining pressure of the said spring. The weather-strip, being thus thrown up against the rubber strip or cushion in the

groove in the lower edge of the door, will form a practically air-tight joint, and will serve to effectually exclude wind, rain, and snow. When, on the other hand, the door is open, the weight of the weather-strip will cause it to drop down to its former position, while the spring M will immediately lock it in such position.

Having thus described our invention, we claim and desire to secure by Letters Patent of the United States—

1. The combination, with a carpet-strip having a suitable recess, of a hinged weather-strip fitting in the said recess and a spring attached to the jamb of the door and adapted to lock the said weather-strip in a lowered position when the door is open, substantially as herein described.

2. The combination of a carpet-strip having a recess at its upper front edge, a weather-strip

suitably hinged to the said carpet-strip and fitting in the said recess, a cam or finger at the outer end of the said weather-strip, a locking-spring attached in a recess in the door-jamb at the hinged end of the door, and a door provided in its lower edge with a groove adapted to receive the weather-strip when the latter is raised, said groove being provided with a rubber or other elastic cushion on its front side, substantially as and for the purpose herein shown and set forth.

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

JOHN TRACHSEL.

JACOB K. LIPPS.

WILLIAM H. TURNEY.

Witnesses:

G. A. YOUNG,

JAMES YOUNG.