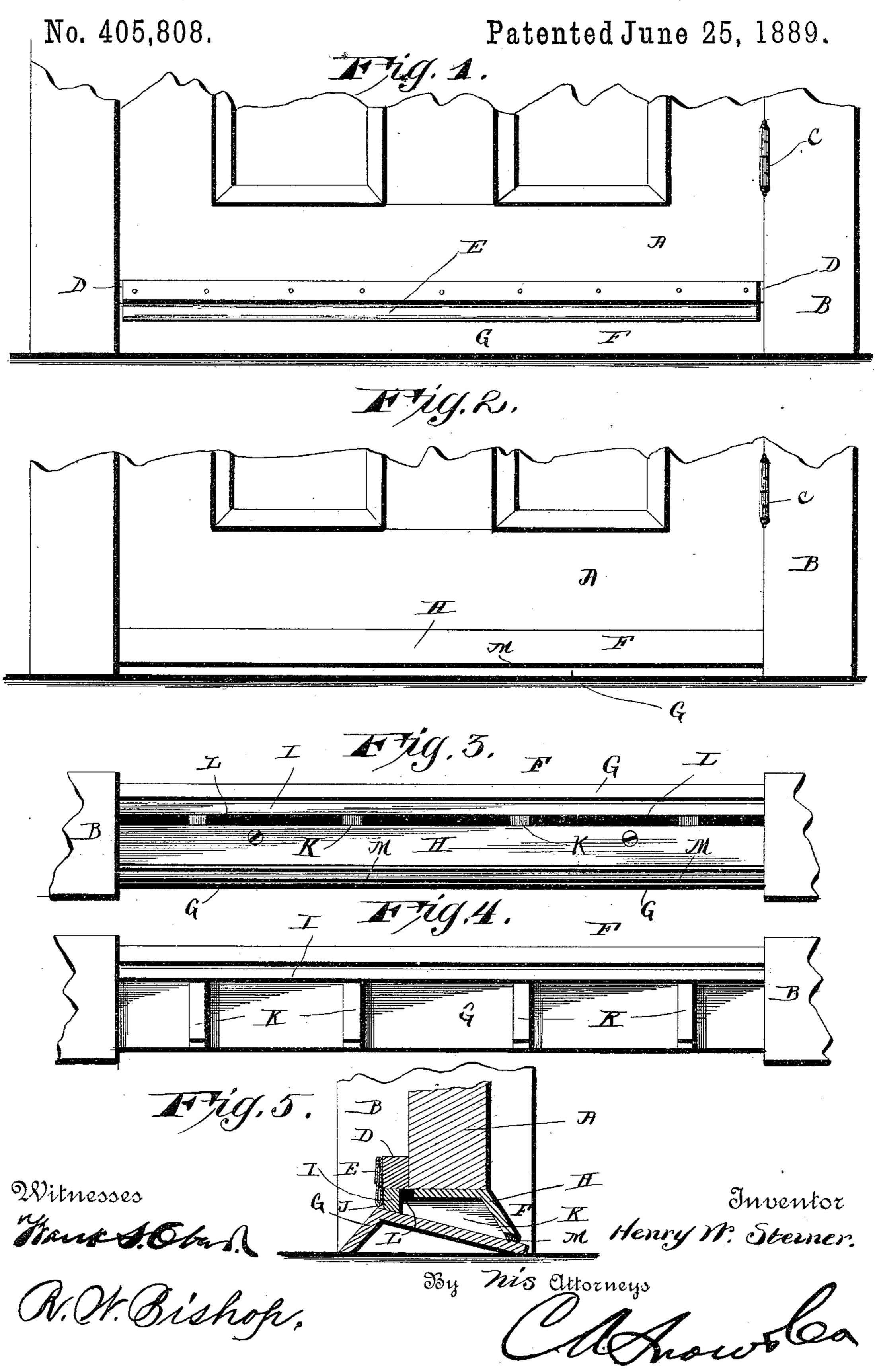
H. W. STEINER.

WEATHER STRIP AND DOOR SILL COMBINED.



United States Patent Office.

HENRY W. STEINER, OF EASTON, PENNSYLVANIA.

WEATHER-STRIP AND DOOR-SILL COMBINED.

SPECIFICATION forming part of Letters Patent No. 405,808, dated June 25, 1889.

Application filed October 31, 1888. Serial No. 289,584. (No model.)

To all whom it may concern:

Be it known that I, Henry W. Steiner, a citizen of the United States, residing at Easton, in the county of Northampton and State of Pennsylvania, have invented new and useful Improvements in Weather-Strips and Door-Sills Combined, of which the following is a specification.

My invention relates to improvements in weather-strips; and it consists in certain novel features hereinafter described and claimed.

In the accompanying drawings, Figure 1 is an elevation of a portion of a door provided with my improved weather-strip, looking at the inside of the door. Fig. 2 is a similar view, looking at the outer side of the door. Fig. 3. is a plan view of the sill. Fig. 4 is a plan view of the lower portion of the sill; and Fig. 5 is a cross-section showing the door closed.

Referring to the drawings by letter, A designates the door, of the usual or any preferred construction, secured to the jamb B by the hinges C in the ordinary manner.

The door is provided at its lower end on its inner side with a horizontal rib D, to which I secure a strip E of felt, rubber, or equivalent water-proof material.

F designates the door-sill, which is composed 30 of two plates GH, which are substantially triangular in cross-section, as clearly shown. The plate G is secured between the doorjambs and has its upper longer side inclined outward and downward. Upon this inclined 35 side, at the upper end of the same, I secure the vertical strip I, thereby forming the shoulder J, against which the flexible strip E fits when the door is closed. Upon the upper side of the plate G and at the outer side 40 of the strip I, I form a series of lugs or offsets K, which serve as supports for the plate H, as clearly shown. The said plate H rests upon these lugs K and is secured to the plate G by suitable securing-screws passed downward 45 through the plate H into the plate G. The inner upper edge of the plate H is arranged a slight distance from the strip I, thereby forming a slot L extending the entire length of the door-sill, and permitting the escape of the 50 water, which would otherwise beat in under the door into the room. The lower outer edge of the plate H is arranged a slight distance | above the upper surface of the plate G, thereby forming a slot M for the passage of the water and dirt escaping through the slot L. 55

From the foregoing description, taken in connection with the accompanying drawings, it is thought the operation and advantages of my device will be readily understood. When the door is closed, the flexible strip E, fitting 60 against the shoulder J, effectually closes the space between the door and the sill, so that cold air cannot pass into the room. In stormy weather the rain which beats in under the door will be directed through the slot L and 65 will run down the upper inclined surface of the lower plate G of the sill and pass out through the opening M, so that its entry into the room is effectually prevented.

It will be observed that the device is very 70 simple and is composed of few parts, so that it can be manufactured and sold at a slight cost. The improved sill does not detract from the appearance of the doorway when the door is open, and presents no obstruction to 75 persons passing through the doorway. Should one of the parts of the device be broken or worn out, (as the upper plate H, which receives the wear,) it can be replaced without necessitating the renewal of any of the other 80 parts or procuring an entirely new device.

The upper plate H, it will be noticed, is supported with its upper surface in the same plane with the upper surface of the strip I, and thus a flat surface is provided, so that a 85 person passing over the sill will not be liable to be thrown down by reason of his foot twisting on the sill. At the same time the water is allowed to fall over the entire surface of the lower plate, and I overcome the necessity 90 of providing a longitudinal groove in the sill, which is liable to retain dust and dirt.

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

1. The combination of the plate G, having an upper inclined surface, a strip I, secured on the upper side of the said plate G, and the plate H removably secured upon the plate G on a level with the strip I, and having its upper inner edge arranged a slight distance from the strip I and its lower outer edge arranged a slight distance above the upper side of the plate G, as set forth.

2. The combination of the plate G, having an upper inclined side, and the lugs K on said side, the strip I, secured upon the plate G, and the plate H, removably supported above the 5 plate G on a level with the strip I and resting upon the lugs K, and having its lower outer edge terminating above the plate G and its inner upper edge arranged a slight distance from the strip I, as set forth.

to 3. As an improvement in weather-strips, the combination of the plate G, having an upper inclined side and provided with the lugs K, the vertical strip I, secured to the plate G, thereby forming the shoulder J, the flexible

strip secured to the door and fitting against 15 the shoulder J, and the plate H, resting on the lugs K and having its lower outer edge arranged a slight distance above the plate G and its upper inner edge arranged a slight distance from the strip I, as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature

in presence of two witnesses.

HENRY W. STEINER.

Witnesses: JOHN STOTZER, CYRUS LANDA.