(No Model.)

# W. S. CORPMAN.

## WEATHER STRIP.

No. 424,540 Patented Apr. 1, 1890.

*Fig. 1.*

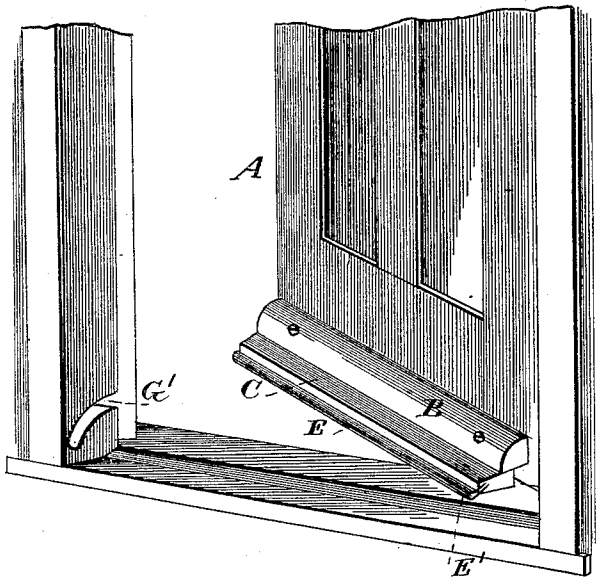



*Fig. 2.*

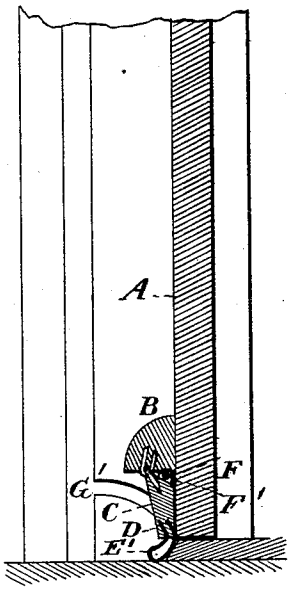



*Fig. 3.*

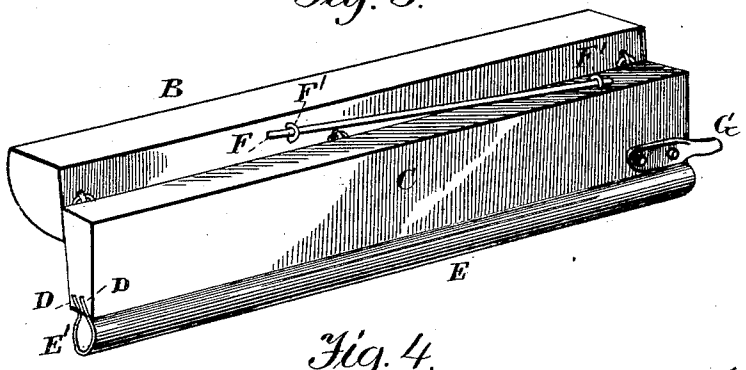



*Fig. 4.*




Witnesses.
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[illegible]

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# UNITED STATES PATENT OFFICE.

WINFIELD S. CORPMAN, OF LEBANON, PENNSYLVANIA.

## WEATHER-STRIP.

SPECIFICATION forming part of Letters Patent No. 424,540, dated April 1, 1890.

Application filed December 10, 1889. Serial No. 333,188. (No model.)

*To all whom it may concern:*

Be it known that I, WINFIELD S. CORPMAN, a citizen of the United States, residing at Lebanon, in the county of Lebanon and State of Pennsylvania, have invented certain new and useful Improvements in Weather-Strips; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to certain new and useful improvements in weather-strips; and it has more especial reference to that class of weather-strips which are secured to the lower edge of hinged doors, and which are adapted to be automatically folded downward by the closing of the door, so as to form a weather-tight joint.

The invention has for its object to improve upon the construction and to render more efficient in operation this class of devices.

To these ends, and to such others as the invention may pertain to, the same consists in the peculiar construction and in the novel combination, arrangement, and adaptation of parts, all as more fully hereinafter described, shown in the accompanying drawings, and then specifically defined in the appended claim.

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

Figure 1 is a perspective view of my new and improved weather-strip attached to the bottom of a door, the parts being in the position they assume when the door is open. Fig. 2 shows the door and weather-strip in sectional elevation, the parts of the strip being in the position they assume when the door is closed. Fig. 3 is a perspective view showing the inside of the strip. Fig. 4 is an edge view of the strip, showing the manner in which the rubber strip is secured.

Reference now being had to the details of the drawings by letter, A represents a door, and B a strip or molding, which is secured to the face of the door, and extends transversely across the same at a point adjacent to its lower edge, as shown.

C is the weather-strip proper, which consists of a thin strip of wood hinged at its rear edge to the lower face of the strip B, the rear edge of the said weather-strip being upon a line drawn through the longitudinal center of the lower face of the said strip B. The lower face of the strip C is flat, while its upper face is beveled, as shown, so that the free outer edge of the strip is much thinner than its rear edge, and this narrow outer edge of the strip is provided with two parallel longitudinal slots D D. It will be observed that these slots D are inclined from their outer edges upwardly at an angle, and that the lower one of the slots is formed along the extreme lower edge of the strip. This form and arrangement of the slots is important, as upon them depend in a great measure the effectiveness of the operation of the strip, as will presently appear.

E is a flat strip of rubber, rubber cloth, or other substance, which may be suitable for use in this connection. This strip E is folded and its edges are inserted and secured within the slots D, thus forming along the free outer edge of the hinged strip C the downwardly-inclined roll E′, which, when the strip C is folded down against the floor when the door is closed, will serve to form a much more serviceable and complete protection against the weather than the flat strips that have heretofore been used, and at the same time which will not present a freely extended or exposed edge, which in use is so liable to be folded under the strip to which it is attached.

F is a torsion-spring, which consists of a single heavy wire of brass or other suitable spring material. This spring is attached at its ends to the strips B and C, respectively, and is secured in place by staples F′, as shown. It will be seen that by this construction, the ends of the spring F being secured to the strips B and C, respectively, and held in place against the face of the strips by the staples F′, when the strip C is turned upon its hinges a rotary or twisting motion is imparted to the spring-wire F, and the tendency of the spring to overcome this twisting serves to hold the hinged strip C normally in

the position shown in Fig. 1 of the drawings.

Securely riveted or otherwise secured to the lower face of the strip C at one of its ends is a metallic strip G, the rounded free end of the said strip being extended a short distance beyond the end of the strip, and this extended end is adapted to enter the downwardly-inclined slit or guide G′, formed in the door-casing adjacent to the lower edge of the door, and the downward incline of this guide will serve to securely bind the outer edge of the weather-strip against the floor, and thus form a perfect weather-tight joint, as will be readily understood.

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

The herein-described improvement in weather-strips, the same comprising in combination a door, a strip or molding secured transversely across the face of the same near its lower edge, a weather-strip hinged at its rear edge to the lower face of the strip upon the door, a torsion-spring interposed between the strips, a strip of rubber or equivalent material folded along its longitudinal center and having its longitudinal edges secured within inclined slots formed in the outer edge of the weather-strip, a metallic strip secured to the lower face of the weather-strip at one of its ends and having its free end extended beyond the end of the strip, as described, and a slot or guide upon the door-casing and adapted to receive and guide the extension upon the weather-strip, substantially as described, and for the purpose specified.

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

WINFIELD S. CORPMAN.

Witnesses:

JOHN BRIGHTBILL,

JOHN C. BECK.