R. Bartley.

Weather Strip.

No. 57,845. Patented Sept. 11, 1866.

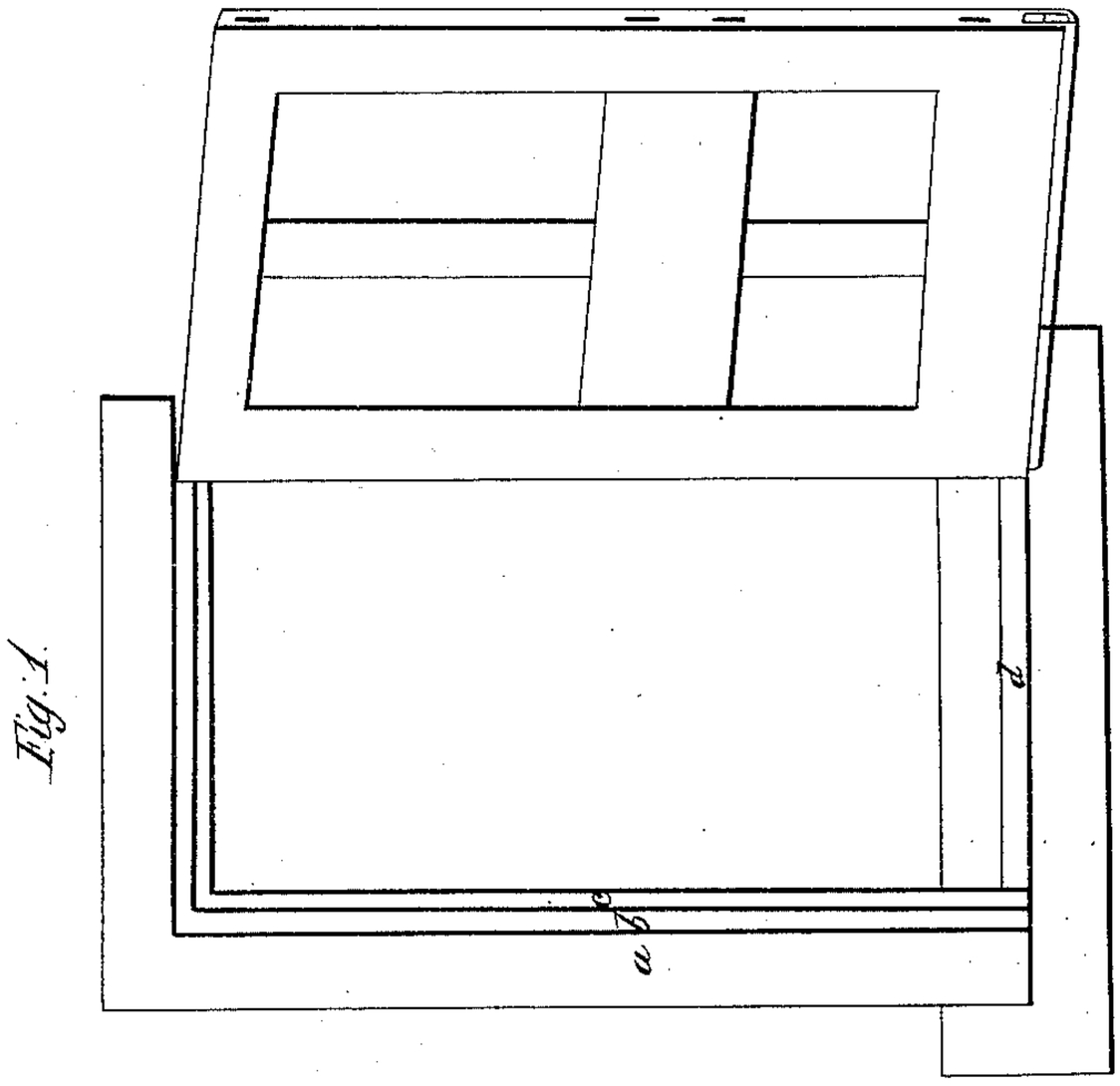

Fig. 1.

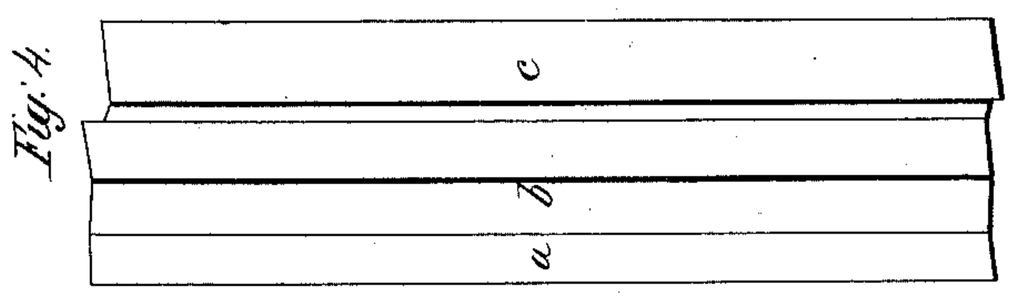

Fig. 4.

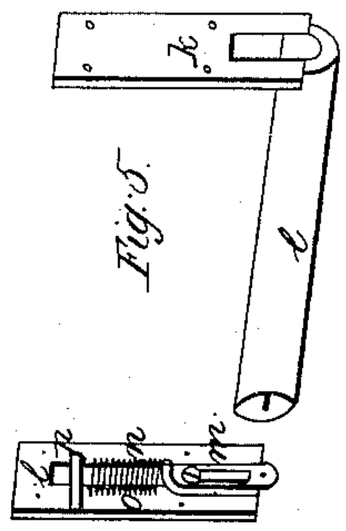

Fig. 5.

Fig. 3.

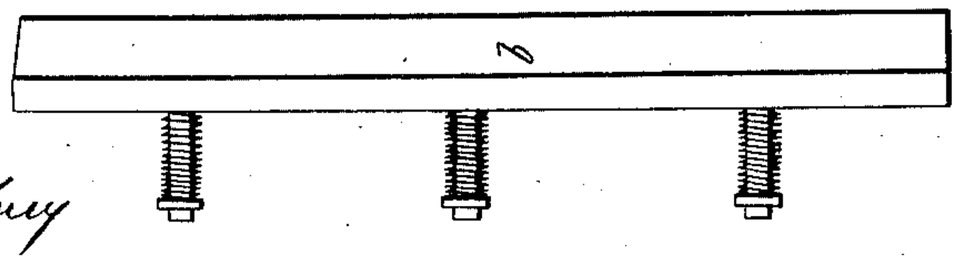

Fig. 2.

Witnesses;
Charles B. Stickney
Louis D. Stratton.

Inventor;
Robert Bartley

UNITED STATES PATENT OFFICE.

ROBERT BARTLEY, OF NORWALK, OHIO.

IMPROVED WEATHER-STRIP.

Specification forming part of Letters Patent No. **57,845**, dated September 11, 1866.

To all whom it may concern:

Be it known that I, ROBERT BARTLEY, of Norwalk, in the county of Huron, in the State of Ohio, have invented a new and Improved Self-Adjusting Roller Weather-Gage, attached to doors and French windows, adjustable to thresholds; also, self-adjustable jamb-packing for doors or windows, of which the following is a specification.

This self-adjusting roller weather-gage, to be made of metal, wood, or rubber, is made to turn upon a journal or pivot, as more particularly described in Figure 5 in the drawings, as seen by letter C, and is attached to bottom of doors and French windows, on each side, to the right and left of door and windows, as more particularly represented and described in said drawings, in the section represented by Fig. 5, as there seen, representing a perspective inside and outside view of said self-adjustable roller weather-gage.

The self-adjustable jamb-packing, also to be made of metal, wood, or rubber, but usually of wood, is attached in the sides and top of doorways or openings, perspective views of which are seen in the drawings represented by Figs. 2, 3, and 4.

Fig. 2 represents the jamb-packing by itself in perspective. Fig. 3 represents an inside view of the adjustable jamb-packing connected with the casing of doors or French windows. Fig. 4 represents the perspective view of the face-casing to doors, jamb-packing, and door-jamb or stop for the reception of the door or window, in combination.

And I do hereby declare that my invention, when applied to doors or French windows, renders them so adjustable by their own action, when being shut, by means of said roller weather-gage and jamb-packing, as, in case of the shrinking or swelling of doors or windows, to be easy of opening and shutting, and still, when shut, to be air-tight, and when being opened this self-adjustable roller weather-gage enables doors or French windows, when properly attached, to pass over carpets or other substances not too thick at ease, without hinderance or wear to either the roller weather-gage or to the carpet, and will, in case of storms, prevent the water from passing into the building under the door or window, over the threshold.

And I do hereby further declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Fig. 1 is a perspective view of a door and doorway or opening with my improvement attached, wherein the letter *a* represents the face-casing; letter *b*, the self-adjustable jamb-packing; letter *c*, the door-jamb or stop, against which the door rests when shut; letter *d*, the threshold of doors on which rests the self-adjusting roller weather-gage; and letter *e* represents the said self-adjusting roller weather-gage attached to bottom of the door or window, as the case may be. Said Fig. 1 represents the door opened from the inside of the room.

Fig. 2 represents the self-adjustable jamb-packing by itself, in perspective, with three screws attached, with heads to them, which screws are attached firmly to the jamb-packing, passing through a metallic stop made of sufficient length and depth to admit of an orifice for the screw to pass through, around which screw is placed a spiral spring made of wire of any convenient metal, coiled around said screw, one end pressing against said adjustable jamb-packing, (represented by letter *b*,) and the other end of said spiral spring resting against said metallic stop, said stop being made permanent and sunk into and down to a level with the surface of the inside face-casing, as shown more fully in the diagram, Fig. 3.

Fig. 3 represents the operation of the self-adjustable jamb-packing perspectively, in an inside view of it. Letter *b* shows the jamb-packing. Letter *f* shows an open space through the whole length between the door-jamb and jamb-packing. Letter *g* represents an open space or mortise sunk in the inside face-casing, to admit two or more screws, with said spiral springs around them, which lie therein, to pass forward and back by means of pressure upon the outside jamb-packing by the door or window when being shut. Letter *h* represents the screw and spiral spring around it as placed for use in said mortise. Letter *i* represents the metallic stop as sunk and fastened into the face-casing, with an orifice through it extending across said mortise on each side, then made permanent in a cross mortise or gain,

against which stop rests the end of the spiral spring, through which the screw plays forward and back by means of an open space left between said metallic stop and the outer edge of the inside face-casing, the head of said screw plying forward and back and stopping against said metallic stop. This space gives sufficient action of the screw, so as, when the pressure is made on the jamb-packing by the door or window, as they are being shut to, to cause the spiral spring surrounding the screw to compress and come together, or shortened, leaving a pressure back by the force or power of the reverse action of the spiral spring, so that when the door is again opened this reverse action of the spiral spring throws back to its proper place the jamb-packing, and also, when the door is shut, the jamb-packing recedes, closely attached all round to the edge of the door, and from the constant pressure or reverse action of the spiral spring the space or connection of door and jamb-packing is kept constantly tight, so that in case of shrinking or swelling of the door or window the doorway remains air-tight by means of this self-adjustable jamb-packing.

Fig. 4 represents, in combination, a perspective view of the face-casing, self-adjustable jamb-packing, and the door jamb or stop. Letter *a* shows the inside edge of the face-casing. Letter *b* shows the beveled front edge of the adjustable jamb-packing, wherein the door, in being shut to, by its edge first strikes this beveled-edge jamb-packing, and easily presses said packing back all around, and as the door goes back to the door-jamb, it thereby makes this connection perfectly air-tight, as represented more fully in diagram, Fig. 3. Letter *c* shows the space between the two lines in the drawing and diagram, Fig. 4, next above said letter *c*, which space shows the jamb or stop to the door.

Fig. 5 shows a perspective view of the self-adjustable weather-gage, in which letter *k* represents a metallic plate attached to the outside edges of the bottom of the door or window, fastened there by means of screws or nails. From the bottom or lower end of this plate, extending up in an oblong shape, is an opening. Letter *k* shows an outside view, and letter *l* an inside view, of said plate as attached to each end of said roller weather-gage, showing the connection of the slide, upright shaft, and spiral spring, as attached to said plate, as embedded in the sides of the door.

Upon the inside of said metallic plate, as shown in diagram, Fig. 5, (represented by letter *m*,) is attached a slide with an oblong open space in it the length of the opening in said plate, through which is passed a set-screw fastened in said plate, and between the head of which and said plate this slide is fixed. The head of said screw is shown by letter *n*. This head is flat on both sides of it, so that said slide can have easily an up-and-down motion, and is prevented thereby from coming off.

In the bottom of said slide is fixed a box, pointing inward, for the reception of the pivot or journal of the self-roller weather-gage. Said box is so made, with a point extending out so as to reach into an opening on each end of said roller weather-gage, that the pivot or journal, which does not come to an even surface of said roller weather-gage, may be admitted into said box, so that the rim of said roller weather-gage or its outer surface may come past the opening of said box, and close to said described plate, so that said roller may turn or roll readily by reverse action of the door, and still have no space for the admission of water under it, or to pass its ends during a storm or at any time, and with the design that the length of said roller weather-gage may fill the whole space in length of the door opening upon the threshold when the door is shut to.

At the upper end of said slide is attached a shoulder or head piece, rounded and flat on both sides, to which is attached firmly, extending up, a rounded shaft, which, at a proper distance, passes through a post fastened to said plate, extending at right angle inward, as shown by letter *p*. Around this shaft is placed a spiral spring made of wire, of sufficient length, which is shown by letter *o*, the lower end of said spring resting on the head of said slide, extending up, then, to and resting against the under side of the post, as shown by letter *p*. Said slide and shaft, being attached to each other and thus combined, are thus moved up and down, when the said self-roller weather-gage is made to fit into a groove made lengthwise in the bottom of door or window; and when said roller weather-gage passes over any substance or onto the threshold in shutting to, the door or French window compresses the spiral spring, and then by this self-action causes said shaft to pass up through said post, and when the pressure upward is removed, as it will be in opening the door or window, said spiral spring expands and throws back to its proper place the said self-adjustable weather-gage.

What I claim as new, and desire to secure by Letters Patent, is—

The roller E, in combination with the slide *m*, shaft *l*, spring *o*, and post *p*, for the purpose of rendering the space between the bottom of doors or windows and thresholds or window-sills air-tight, and at the same time of rendering the roller capable of passing over carpets or floors without hinderance or wear, substantially as described.

ROBERT BARTLEY.

In presence of—
C. L. HARSEN,
LOUIS D. STRATTON.