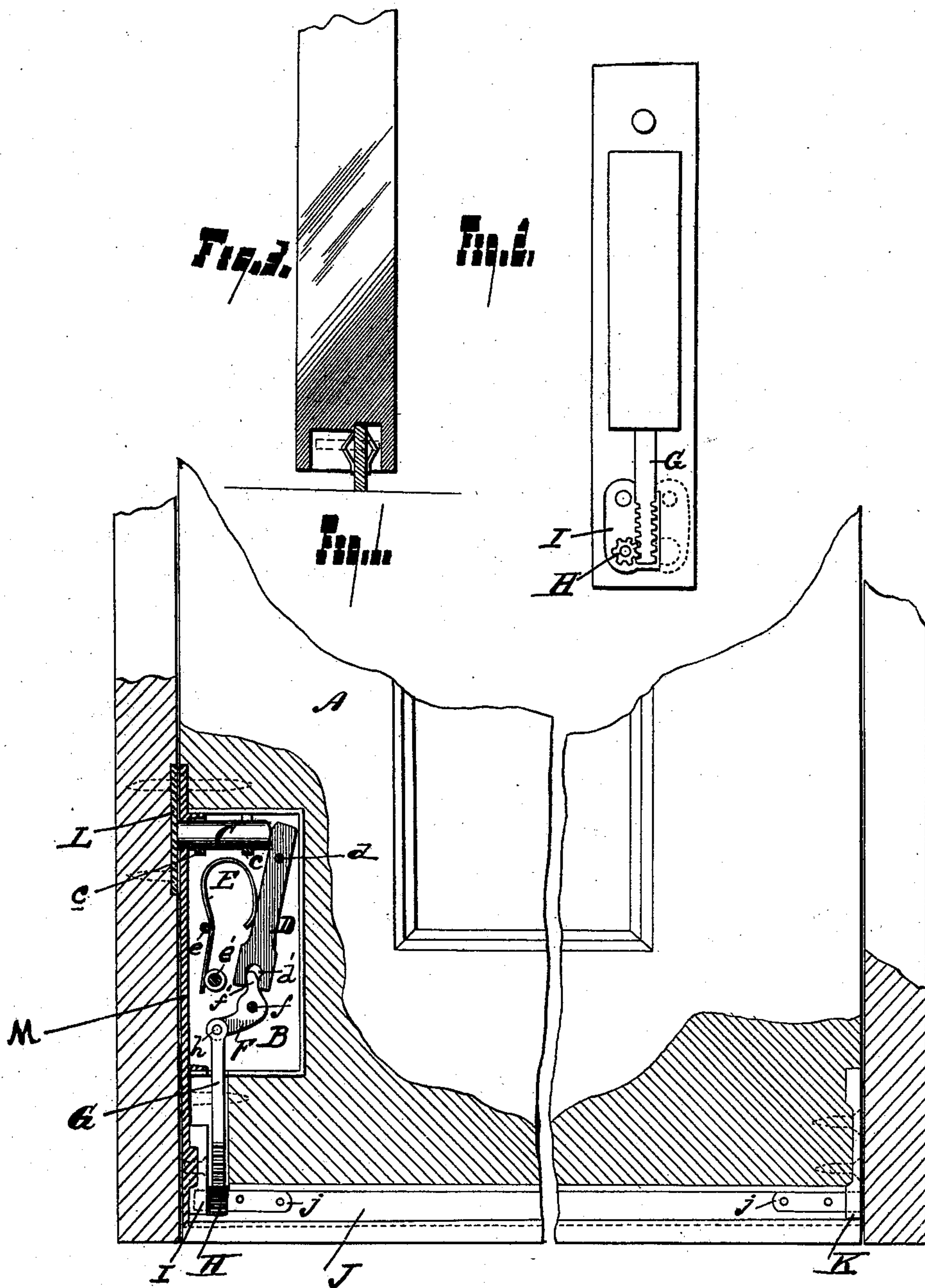


(No Model.)

G. EVERSON.
DUST AND COLD GUARD FOR DOORS.

No. 603,480.

Patented May 3, 1898.



WITNESSES

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UNITED STATES PATENT OFFICE.

GEORGE EVERSON, OF DETROIT, MICHIGAN.

DUST AND COLD GUARD FOR DOORS.

SPECIFICATION forming part of Letters Patent No. 603,480, dated May 3, 1898.

Application filed June 6, 1896. Serial No. 594,608. (No model.)

To all whom it may concern:

Be it known that I, GEORGE EVERSON, a citizen of the United States, residing in the city of Detroit, in the county of Wayne and State of Michigan, have invented a certain new and useful improvement, the same being a device to attach to doors and being a guard against dust and cold, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to new and useful improvements in weather-strips or cold-guards for doors and the like; and it consists in the novel arrangement and construction of parts and combinations thereof, as hereinafter described and claimed.

In the drawings which accompany this specification, Figure 1 represents a sectional view of the lower part of a door embodying my invention. Fig. 2 is an elevation of the inclosing casing for the operating mechanism removed from the door and also showing the pinion for the weather-strip. Fig. 3 is a sectional view through the lower part of the door and strip.

A in Fig. 1 represents the door; B, a mortise therein adapted to receive the upper part of the device; M, a metal plate on the edge of the door covering said mortise.

C is a bolt which when the door is closed is brought into contact with a metal plate L on the jamb of the door, and is thereby forced through the bearings *c c*, in which it is slidably mounted, against a lever D, fulcrumed in the mortise at one end in the path of the bolt C. The lever D, being turned thereby on the pivot *d*, acts upon an elbow F or bent lever, which, turning on its pivot *f* by means of the joint of hinge *h*, pushes a rack-bar G downward, working in a recess or groove in the edge of the door, and mounted in bearings I and K is a weather-strip J, at one end of which is secured a pinion H, adapted to mesh with and be rotated by the rack-bar G to turn the weather-strip to contact with the threshold. The weather-strip comprises, preferably, a heavy felt strip held between two metal bars or strips J, as clearly shown in Fig. 3. The felt is reinforced by strips extending nearly to the edge thereof, and the same is turned with the strip J so as

to strike the threshold, floor, or carpet instantly on the closing of the door in such close contact as to effectually close the whole space under the door. On opening the door the pressure of the bolt C against the plate L is instantly relieved, and a spring F, secured in the mortise B and engaging the lever D, forces it backward, and the latter, acting on the bent lever F, draws up the rack-bar G, thus turning the pinion H, and thereby the strip J, with the felt strip, turns back into the groove in the bottom of the door in an opposite direction to the motion of the door to avoid friction. When the door is opened, the bolt C preferably projects from one-sixteenth to one-eighth of an inch outside the metal plate M, and it is the pressure of the bolt C against the metal plate L on the jamb of the door which works the weather-strip.

The invention is practically everlasting, because the friction on the felt strip is almost nothing, as the contrivance does not begin to work until the door is entirely closed, and when properly adjusted the felt will not touch the floor until the door is entirely closed and simultaneously therewith.

Having thus described the invention, what is claimed as new, and desired to be secured by Letters Patent, is—

1. The combination with a door or the like, of a weather-strip rotatively mounted thereon, a pinion on said weather-strip, a rack slidably mounted in the door and meshing with said pinion, a spring-pressed bolt mounted in the door and connections between said bolt and rack whereby a movement of the bolt causes the rack to rotate said strip.

2. The combination with a door or the like provided with a groove or channel in its edge, of a weather-strip rotatively mounted in said groove or channel, a sliding bolt adapted to project from the door and engage the jamb when the door is closed, a pinion on said weather-strip, a sliding rack engaging said pinion, a spring-pressed lever against which said bolt abuts, and an operative connection between the rack and the lever, substantially as described.

3. The combination with a door or the like, of a weather-strip rotatively mounted in a groove or channel in the lower edge thereof,

a pinion on said strip, a sliding bolt projecting from the door and adapted to strike the door-jamb when the door is closed, a spring-pressed lever against which the bolt abuts
5 pivoted in a mortise or recess in the door, and provided with a bifurcated end, a bent lever F fulcrumed in said mortise and having an arm engaging in the bifurcation of said lever,

a rack meshing with said pinion and connected to the other arm of said bent lever F, substantially as described.

GEORGE EVERSON.

In presence of—

PETER STENIUS,

CHARLES A. MARVIN.