

O. A. VORCE.
Weather-Strips.

No. 145,820.

Patented Dec. 23, 1873.

Fig. 1.

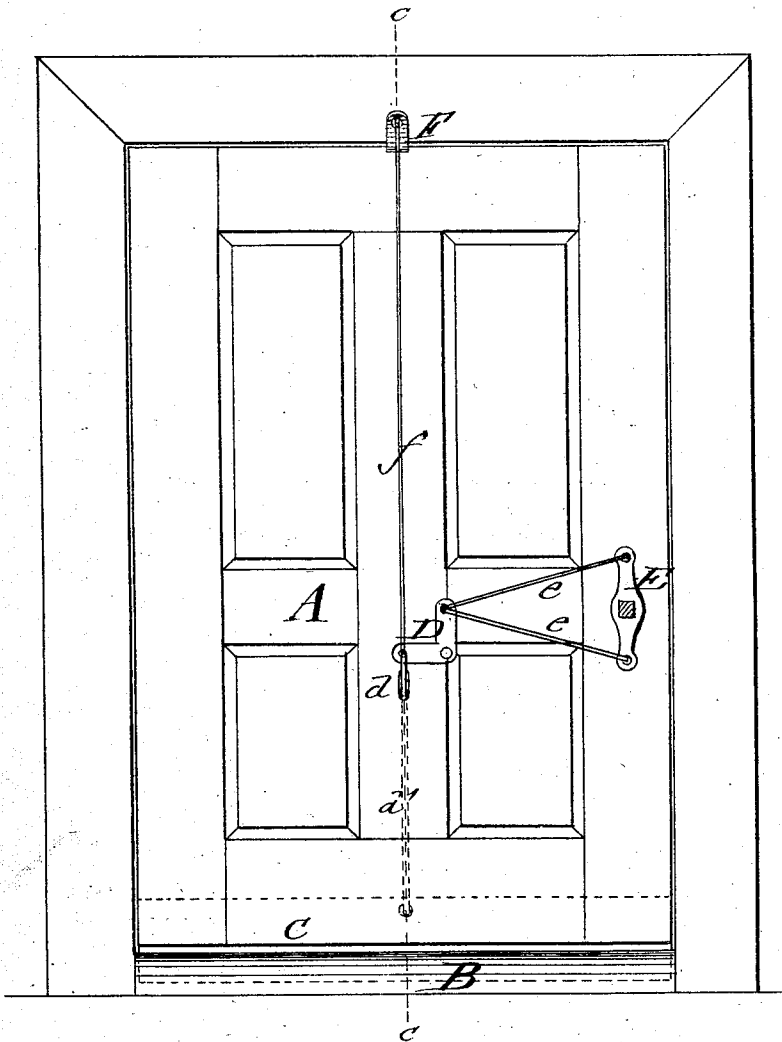
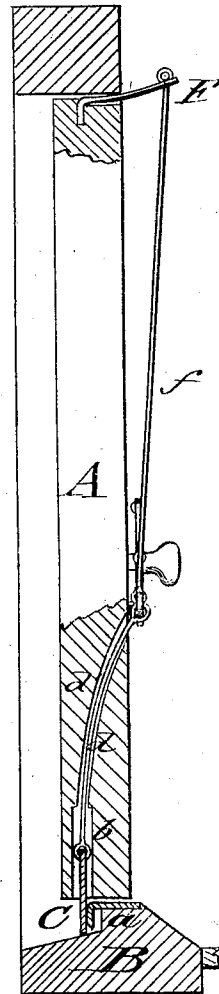


Fig. 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

OLIVER A. VORCE, OF KENTLAND, INDIANA.

IMPROVEMENT IN WEATHER-STRIPS.

Specification forming part of Letters Patent No. **145,820**, dated December 23, 1873; application filed November 8, 1873.

To all whom it may concern:

Be it known that I, OLIVER A. VORCE, of Kentland, in the county of Newton and State of Indiana, have invented a new and Improved Automatic Weather-Strip, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a front view of a door with my automatic weather-strip attached, and Fig. 2 a vertical transverse section of the same on the line *c c*, Fig. 1.

Similar letters of reference indicate corresponding parts.

The invention is an improvement in the class of weather-strips which are so connected with a door as to be operated by the knob-spindle thereof. My invention consists of a weather-strip, which is raised or lowered in a groove at the bottom of the door, by being connected to the spindle of the lock by suitable leverage, so that on opening the door the strip is raised and retained in position by a band-spring at the top part, which lowers the strip on the closing of the door by being depressed thereby.

In the drawing, A represents the outer door of a building, and B the door-sill, which is rabbeted in a suitable manner for a metallic cap-piece, *a*, which projects with its downward-bent part sufficiently far to prevent any moisture from rising from below on the same. The door A is provided with a groove, *b*, at the bottom part, in which the weather-strip C, of suitable metal, slides up and down when raised and lowered by a cord or wire, *d*, which passes through a perforation or guide-channel, *d'*, of the door, to the arm of a bell-crank lever, D, pivoted to the inside of the door A. The other arm of the lever D is connected by cords

or wires *e* to the ends of a double lever, E, which is firmly keyed to the spindle of the door-lock, raising thereby the weather-strip C, whether the door-knob is turned to the right or left. The arm of the bell-crank lever D, to which the cord or wire *d* is attached, is also connected by a cord or wire, *f*, to a strong band-spring, F, which is applied to the top of door A in such a manner that it is depressed on closing the door in the frame, and elevated when opening the same. Spring F is thereby called, by the turning of the door-knob and opening of the door, into immediate action, and retains the weather-strip C in an elevated position, allowing the same to drop down as soon as the door is closed. The strip C passes along the cap-piece *a* of the door-sill, bearing against the same, and excluding dust and moisture completely, forming thus, in combination with the cap-piece *a*, a very efficient self-acting weather-protecting device.

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

1. The automatic weather-strip C, which is raised and lowered in the door A, in connection with the bell-crank lever D, double spindle-lever E, and top-spring F, in combination with the door-sill B, having projecting cap-piece *a*, substantially as and for the purpose described.

2. The combination, with the door and door-casing, of the spring F, cords or rods *f d*, and strip C, as shown and described.

OLIVER A. VORCE.

Witnesses:

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