

B. F. BARKER.  
Improvement in Doors.

No. 116,010.

Patented June 20, 1871.

Fig. 1.

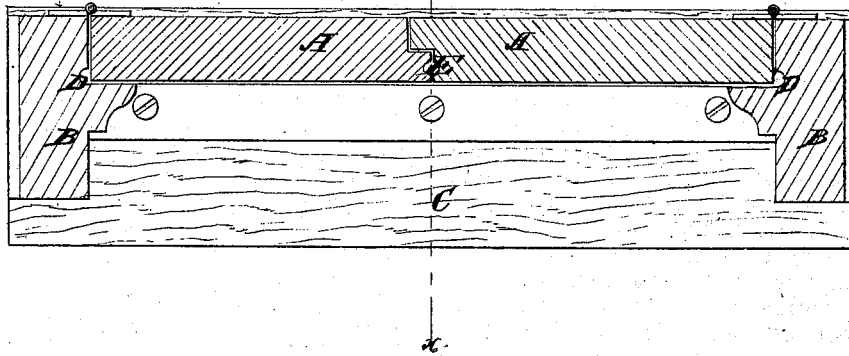
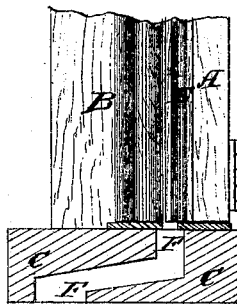


Fig. 2.



Witnesses:

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## UNITED STATES PATENT OFFICE.

BENJAMIN F. BARKER, OF BELFAST, MAINE.

## IMPROVEMENT IN DOORS.

Specification forming part of Letters Patent No. 116,010, dated June 20, 1871.

*To all whom it may concern:*

Be it known that I, BENJAMIN F. BARKER, of Belfast, in the county of Waldo and State of Maine, have invented a new and useful Improvement in Doors; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

This invention relates to improvements in outside doors of houses and other buildings; and it consists in having vertical grooves at the joints between the doors and frames; also between the two doors when two are used, leading into a horizontal groove along the side under the door or doors, and a passage therefrom to the earth or outside for the escape of rain, snow, or air blown into the cracks between the parts, and thereby to prevent beating into the house.

Figure 1 is a horizontal section through a double door and door-frame provided with my improvement, and Fig. 2 is a vertical section on the line *y y* of Fig. 1.

Similar letters of reference indicate corresponding parts.

A represents the doors; B, the door-posts; and C, the sill. D represents vertical grooves in the door-posts, one at each corner of the

rabbets, in which the doors close when shut. E is a vertical groove between the doors, partly formed in each. F is a horizontal groove in the upper side of the sill under the doors, extending from end to end, into which the said vertical grooves lead; and F is an escape-passage from groove E to the outside under the door-step, or to any convenient place for the discharge of the water.

The rain-water, snow, or air driven into the cracks by the wind will be arrested in the spaces formed by these vertical grooves, and will fall to the groove F and thence escape to the outside, and be thereby prevented from passing through into the building.

The grooves D may be partly or wholly formed in the door, if preferred.

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

In combination with an ordinarily-apertured sill, F C, the door A, having vertical grooves D E D at the joints thereof to form channels for the reception of air, water, and dust, and its guidance into the discharge-channel F of the sill.

BENJAMIN F. BARKER.

Witnesses:

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