G. C. BIGELOW.

SELF ADJUSTING DOOR SILL.

No. 19,673. Patented Mar. 23, 1858.

Fig. 1

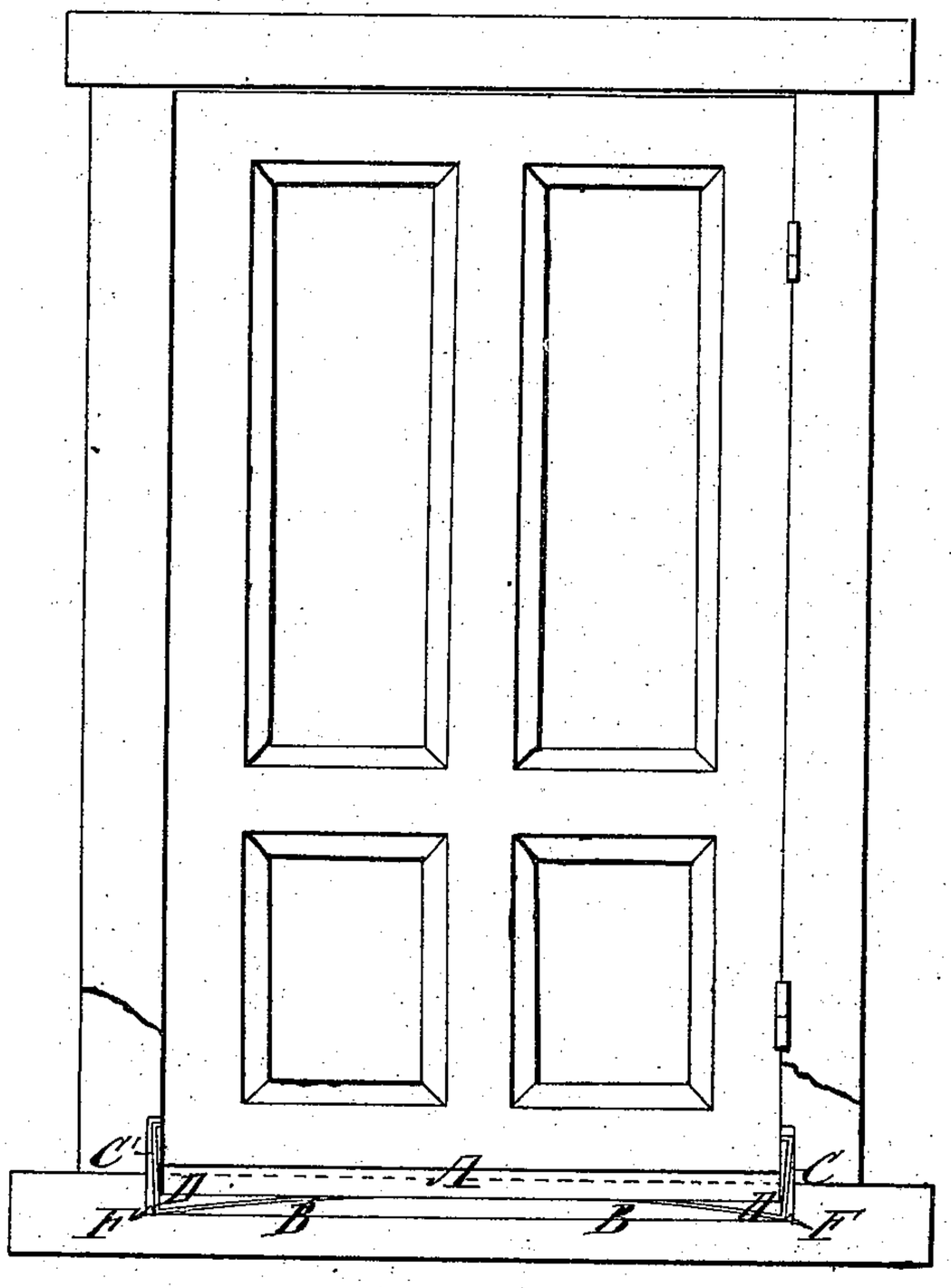
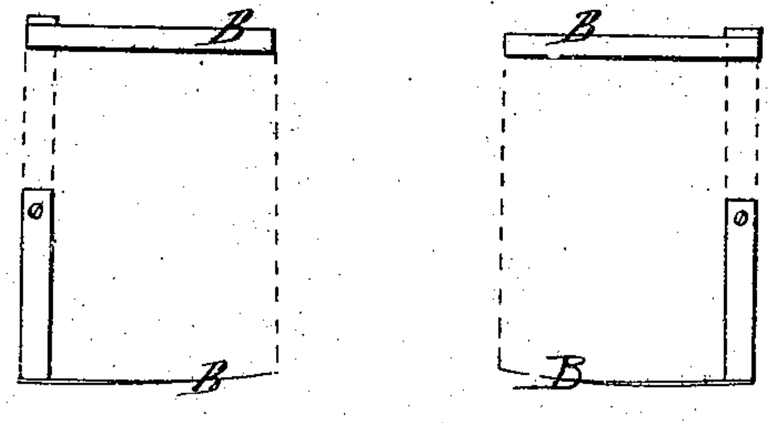


Fig. 2

Fig. 3



UNITED STATES PATENT OFFICE.

GEORGE C. BIGELOW, OF WORCESTER, MASSACHUSETTS.

SELF-ADJUSTING DOOR-SILL.

Specification of Letters Patent No. 19,673, dated March 23, 1858.

To all whom it may concern:

Be it known that I, GEORGE C. BIGELOW, of the city and county of Worcester and State of Massachusetts, have invented a certain new and useful Improvement in Constructing Door-Sills, styled "A Self-Closing Door-Sill;" and I do hereby declare that the following is a full and exact description of its construction and operation, reference being had to the accompanying drawings by the letters of reference marked thereon, in which drawings—

Figure 1 shows a door and its frame, the lower part of the frame being shown in section to show the position of the sill and levers when the door is closed. Fig. 2 shows the form of the levers as seen from above. Fig. 3 shows a variation of their form to adapt them to sliding doors, the same letters indicating the same parts in each.

My invention consists in making a movable sill A fitted to move in a groove in the frame of the door at the bottom, and with the springs B. B. underneath to just fill the groove even with the floor, when the springs are down, (or the door opened).

The springs B. B. are formed on the bent levers C′, C, which are let into similar grooves in the sides of the door frame, with their upper ends slightly projecting, a few inches above the floor to be operated by the door, and at the corners D, D, are placed screws F, F, to regulate the action of the springs. The end of one of the pieces C′, is made sloping or beveled, this is to be placed on the latch side or edge of the door, and the other at the hinge, as the action of the door on the latter is nearly direct and on the former more like that of a wedge or cam, and by adjusting the screws at the corners of the levers (and which form the fulcrums for them) the motion given by the door on closing to their upper parts is made to raise the movable sill A against the bottom of the door, with more or less force of the spring part of the levers, while on opening the door the sill drops level with the floor, allowing heavy furniture to be moved over it as easy as on other parts.

The construction may be somewhat varied to suit particular cases, one of which as adapted to sliding doors is shown in Fig. 3 in which the levers are bent so as to bring their upright parts on one side of the path of the door and are hung by screws or pins at their upper ends, the stop, or a projection on the door acting near the bend to throw up the spring; while for double doors the sill may be in two pieces, and the springs act near the middle of each, and thus on either door being closed its sill will be thrown up to close the joint and on both being opened the whole lies smooth and even.

Having thus fully described the nature and object of my invention, I would state that, I am aware that strips have been arranged in and on doors, to close the space between the door and sill; and that strips have been used in windows, that were forced out by springs behind them. These I do not claim but

What I do claim and desire to secure by Letters Patent is—

The constructing a movable door-sill that shall be level or even with the floor when the door is opened and when it is closed shall be raised to form a close fit to the bottom of the door, by means of the spring levers substantially as above set forth and described.

In witness whereof I hereunto set my hand in the presence of two witnesses.

GEORGE C. BIGELOW.

Witnesses:

AMOS E. BIGELOW,

JAS. G. ARNOLD.