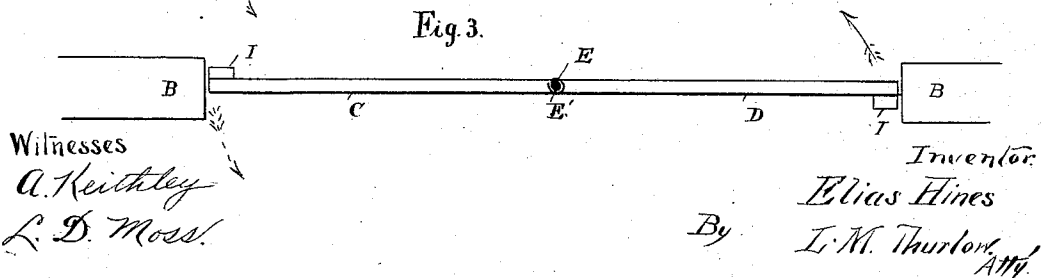
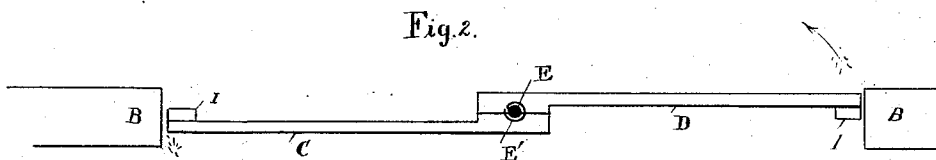
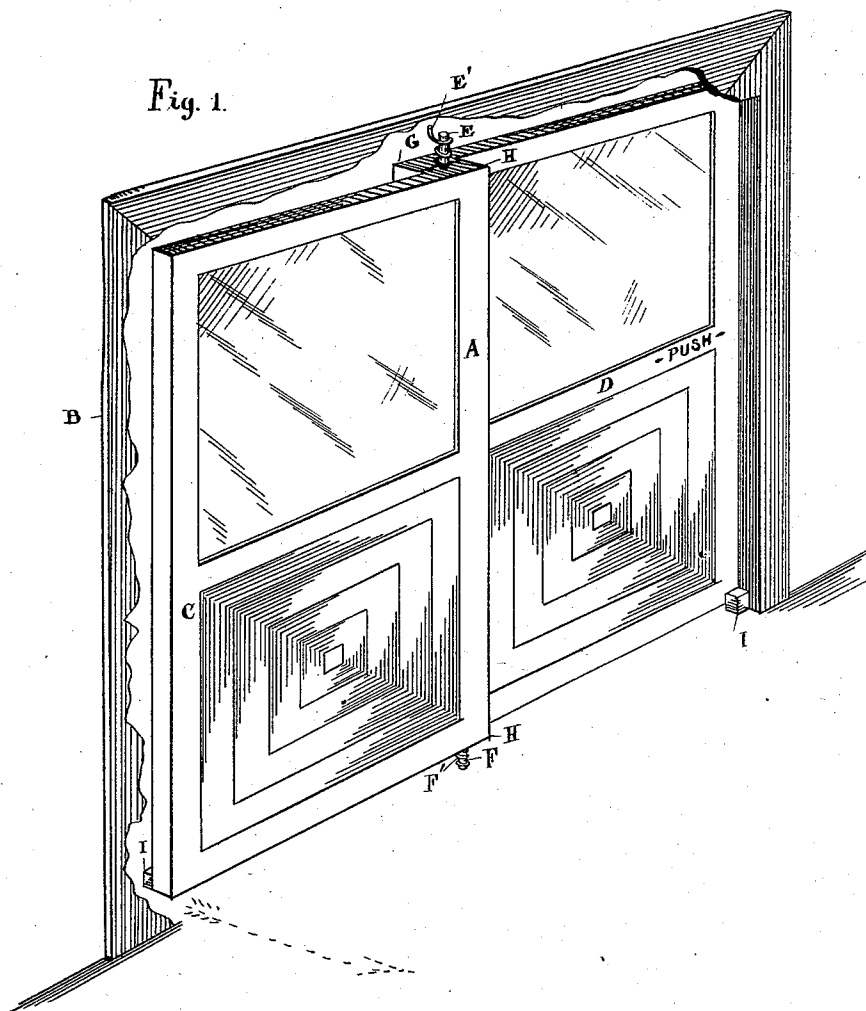


(No Model.)

E. HINES.
DOOR.

No. 532,201.

Patented Jan. 8, 1895.



UNITED STATES PATENT OFFICE.

ELIAS HINES, OF PEORIA, ILLINOIS.

DOOR.

SPECIFICATION forming part of Letters Patent No. 532,201, dated January 8, 1895.

Application filed May 31, 1894. Serial No. 513,032. (No model.)

To all whom it may concern:

Be it known that I, ELIAS HINES, a citizen of the United States, residing at Peoria, in the county of Peoria and State of Illinois, have
5 invented certain new and useful Improvements in Doors; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains
10 to make and use the same.

This invention relates to improvements in doors and of that class of doors which are ordinarily used at all outside entrances to public or other buildings and known as storm
15 doors.

The object of the invention is to provide a door of an entirely new construction and so made and hung as to be swung with very little effort, and furthermore, the object is to
20 provide a door which will not and cannot be opened by wind or by strong drafts passing through the buildings.

Ordinarily doors for public buildings are heavy and cumbersome and require a very
25 great effort to open them for the reason that strong springs must be used so that the wind cannot open them.

In the drawings presented herewith, Figure 1 represents a perspective view of the door showing the mode of hanging same. Fig. 2
30 is a plan view of the door showing its position in the doorway and direction in which it swings. Fig. 3 is a plan view of a modified form of door embodying the same features above described.

A represents the door as placed within the opening in the casing B. This device is composed of two wings C and D which are joined together to form a single rigid door. The
40 two wings C and D overlap at their adjoining portions and form the shoulders G and H. At the top and bottom of the door thus formed, pins E and F respectively are inserted vertically. These pins form pivots for the door to swing upon; the pin E being socketed in the top of the casing B and the pin F in the floor. A coil spring E' surrounds the pin E,
45 one end being suitably attached to the door and the other end to the casing. A similar spring F' may also be placed on the lower pin F if desired.
50

A stop I may be fastened to the casing or to the floor to limit the swing of the door when seeking its normal or closed position.

The upper half of the wings C and D may 55 be supplied with glass if desired and the lower portion with paneling as in other doors. The door may also be made with an entirely plane surface as shown in Fig. 3, *i. e.*, with no offset as has been described, as it is not
60 absolutely essential.

The advantages of this door is the ease with which it is made to swing on its pivots. The weight of the door being evenly distributed on either side of the pivots, it is very
65 evident that the force or pressure required to swing the door will be quite small, and for the same reason, the spiral spring need not be of great strength. When a person enters the door he takes the right hand side. This he
70 will naturally do, as the right hand wing on either side is set back from the left side. Two persons passing in opposite directions will therefore assist each other in opening the
75 door.

In ordinary doors hung on hinges at one side, the springs are made stronger than necessary for the closing of the door, in order to withstand strong winds as hereinbefore stated, and they have been known to inflict
80 serious injuries on persons who were too slight to manage them. In view of this, then, the door described herein has another advantage—the door being mounted on the central pivots as it is, a gust of wind striking it has
85 no effect since it must strike the entire surface of the door. Thus the pressure on one side is neutralized by the pressure on the other side.

Having thus described my invention, what 90 I claim as new, and desire to secure by Letters Patent, is—

The combination, in a door, of the two wing sections C and D overlapping and joined at their adjacent edges whereby each of said
95 sections is parallel with but out of line with its neighbor for the purposes set forth, pivots E and F mounted in the top and bottom of the door at the juncture of the said wing sections, and the spring E' surrounding one of
100 the said pivots substantially as set forth and described.

In testimony whereof I affix my signature in presence of two witnesses.

ELIAS HINES.

Witnesses:

C. JOHNSON,
A. KEITHLEY.