

E. W. SMITH.
DOOR STAY.
APPLICATION FILED JUNE 28, 1912.

1,055,817.

Patented Mar. 11, 1913.

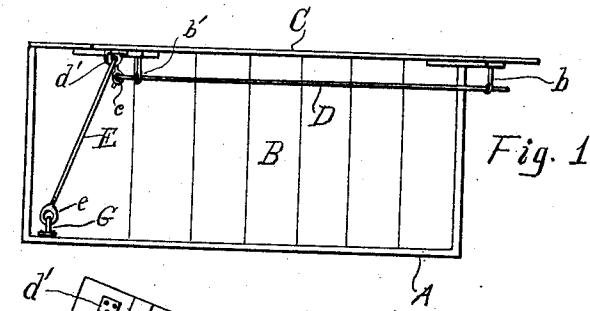


Fig. 1

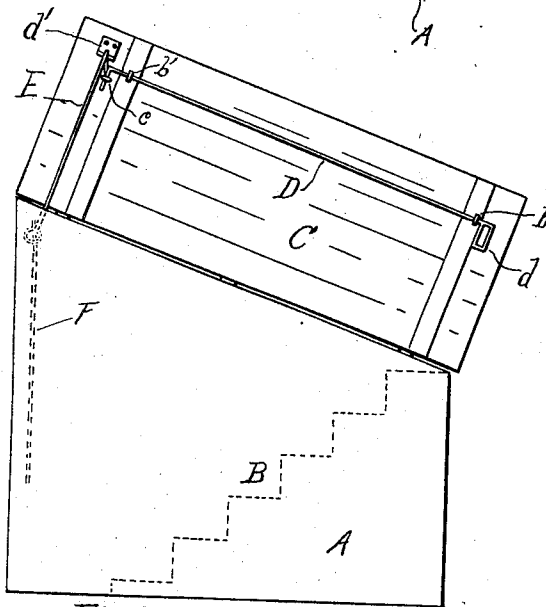


Fig. 2

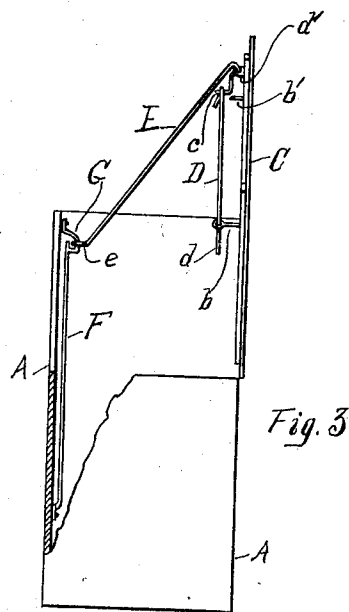


Fig. 3

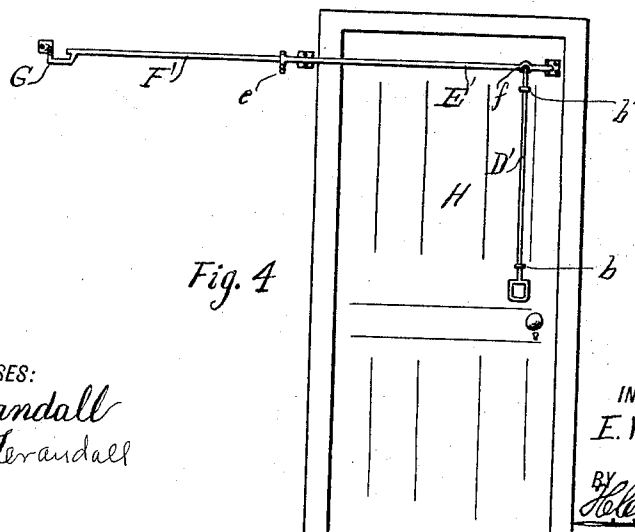


Fig. 4

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EARL W. SMITH, OF ANTHON, IOWA.

DOOR-STAY.

1,055,817.

Specification of Letters Patent.

Patented Mar. 11, 1913.

Application filed June 28, 1912. Serial No. 706,374.

To all whom it may concern:

Be it known that I, EARL W. SMITH, a citizen of the United States, residing at Anthon, in the county of Woodbury and State of Iowa, have invented certain new and useful Improvements in Door-Stays, of which the following is a specification.

My invention relates to doors and to means for holding them open in a given position, and has for its object the provision of means whereby a door when opened is held in that position firmly until released by means of a convenient lever.

The invention consists of the device here shown and described and in the novelty of construction, simplicity of arrangement and combination of parts, as will be specifically described and pointed out in the claims.

My invention relates to and is especially applicable to cellar doors but may be adapted to any door in use.

I have illustrated my invention in the accompanying drawing in which—

Figure 1 is a plan view of cellar door and cellar way showing the door held open by my device attached. Fig. 2 is a side view of the same, the steps of the cellar way and a part of the device being in dotted lines. Fig. 3 is an end view of Fig. 1, a part of the same being in section and a part broken away. Fig. 4 is a view of my invention as applied to an upright door.

Referring to the illustration in which like parts are indicated by similar letters of reference, A is the usual casing inclosing the steps B leading to the cellar, the whole being commonly called a "cellar way." C is the door thereof hinged at one side and shown open in the several views. To the inside of the door near the outer edge an operating lever D is freely supported in eye screws *b* and *b'* secured near the outer edge of the door. The lever is parallel with the longitudinal face of the door, the lower end of the lever being near the bottom and is bent to form a handle *d* convenient to the entrance. The upper end of the lever is bent at nearly right angles, the bent end entering the eye *c* of rod E, one end of the rod being bent above the eye to hook into an eye plate *d'* secured to the door above and to the outside of the screw eye *b'*. The rod E extends diagonally from the door when the door is open to the opposite side of the door-way, the opposite end bearing an eye *e* through which passes an upright

rod F secured at each end to the side of the cellar way near the inner end of the latter and extending from the top of the cellar way to near the bottom. The rod F is bent outwardly with reference to the cellar way at the secured ends so as to leave a passage way for the eye *e* which moves up and down upon the rod. At the upper end the rod F is bent to form a hook G opening upwardly in which the eye rests when the door is held open. When the door is closed the eye *e* is at the lower end of the rod F, the rods E and F being then nearly parallel. As the door is opened the eye follows up the rod until it is drawn into the hook where it is held against movement of the door. When desired to close the door the handle *d* is raised, turning the lever and raising its bent end so that the rod E is raised and the eye *e* lifted out of the hook. The door is then closed, the eye *e* following the rod F to the lower end.

In Fig. 4 the rod F' is secured to the wall and extends parallel with the rod E', the eye of the latter following the rod F' in the same manner, only the hook G of the rod F' extends downward instead of outward. The upright door H corresponds to the cellar door described, the lever D' extending along the front edge of the door in similar manner, but is hooked into the eye *f* of the rod E' and is lifted vertically instead of turned to release the rod E', raising the eye *e* out of the hook.

I have shown only two ways of attaching my device to doors, but other ways are so similar and so readily suggest themselves to those familiar with the subject that I do not consider it necessary to further illustrate them. I wish, however, to claim broadly all modifications of the means here shown or described which embody the principles on which my construction is based.

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

1. The combination of a door, a rod secured at one side of the door way and having a hook at one end thereof, a movable rod bearing at one end an eye adapted to follow the fixed rod and rest in the hook of the rod, the opposite end of the movable rod being pivoted to the door, and a lever adapted to engage the movable rod for lifting the eye of the movable rod from the hook.

2. The combination of a door, a vertical rod secured at one side of the door way and having a hook at the upper end, a movable rod bearing at one end an eye adapted to
5 follow the fixed rod and engage in the hook thereof, an eye plate secured to the door, the upper end of the movable rod being pivotally hooked in the eye plate, and a lever adapted to engage the hooked end of

the movable rod and lift the movable rod 10 from the hook in the fixed rod.

In witness whereof I have hereunto subscribed my name in the presence of two witnesses.

EARL W. SMITH.

Witnesses:

H. C. GARDINER,
H. W. PITKIN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."