(Model.)

G. W. WINTERS.

DOOR CHECK.

No. 251,491. Patented Dec. 27, 1881.

Fig. 1.

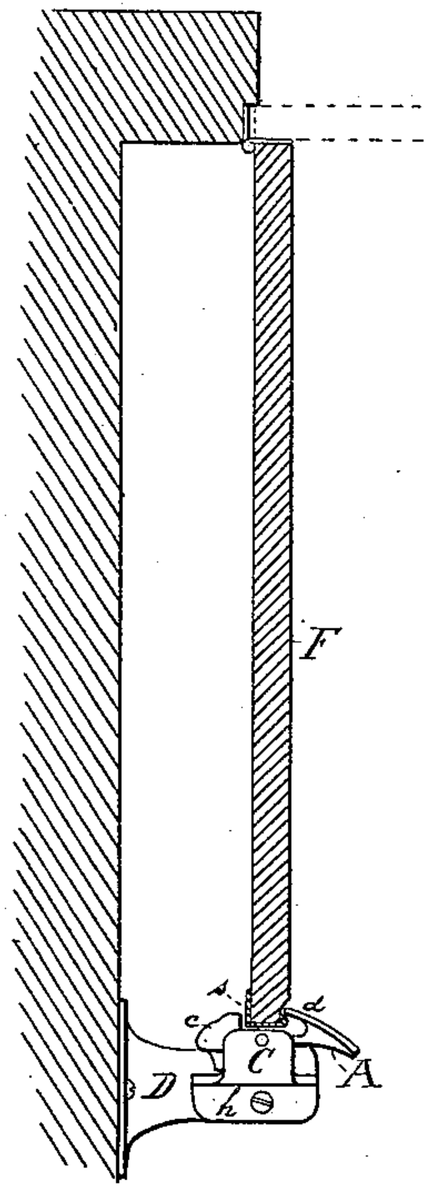


Fig. 5.

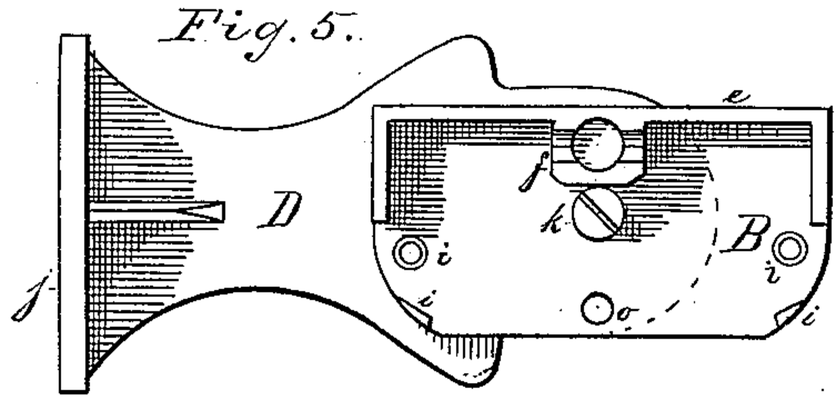


Fig. 6.

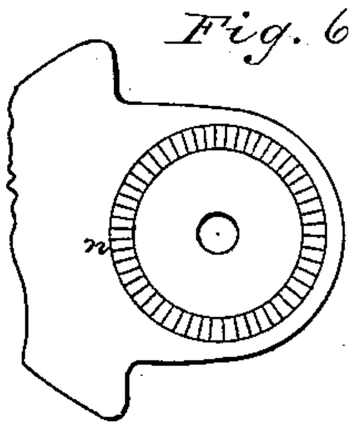


Fig. 2.

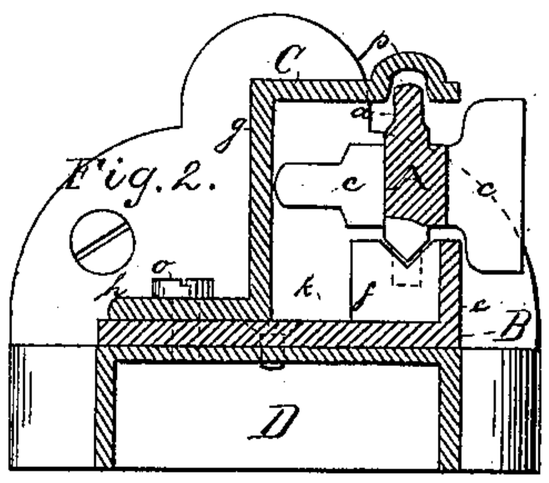


Fig. 3.

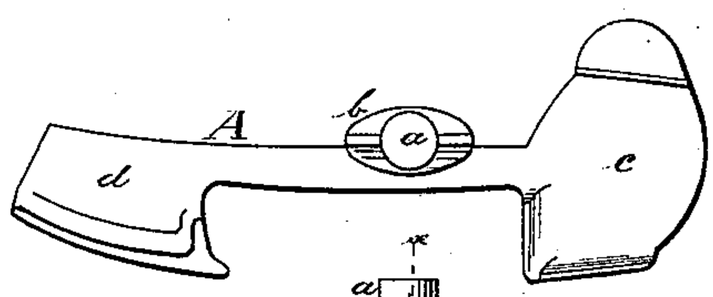
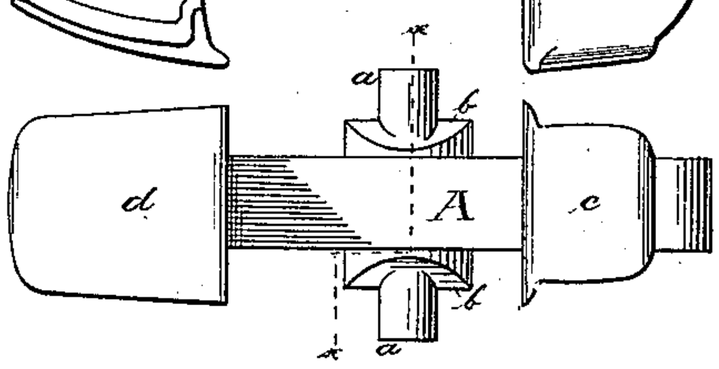


Fig. 4.



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UNITED STATES PATENT OFFICE.

GEORGE W. WINTERS, OF KNOXVILLE, IOWA.

DOOR-CHECK.

SPECIFICATION forming part of Letters Patent No. 251,491, dated December 27, 1881.

Application filed September 24, 1881. (Model.)

To all whom it may concern:

Be it known that I, GEORGE W. WINTERS, of Knoxville, in the county of Marion and State of Iowa, have invented a certain new and useful Improvement in Door-Checks, of which the following is a specification.

This invention has relation to improvements in door-fastenings for use in houses, railroad-cars, and vessels; and the object of my invention is to produce a device, which is simple and effective, for preventing a door from being thrown back against the wall, so as not to damage the plaster or paper by the key or knob of the lock, and to hold the door open, if desired, so that it will not swing to and fro from the effects of currents of air or other causes.

My invention consists in attaching to the base-board, or upon the floor, a fixture holding a vibrating hook-latch, which has pivotal inclines for automatically returning to and retaining the desired position in the fixture by its own gravity and without the use of a spring, said latch having a stop at one end for limiting the swing of the door and a curved hook at its opposite end, which will catch and hold the door, all as more fully hereinafter described and specifically claimed.

In the accompanying drawings, Figure 1 represents a sectional plan view of a door with my check in position for holding it open; Fig. 2, a cross-section of the door-check on line *x x* in Fig. 4; Fig. 3, a plan view; Fig. 4, a plan of the vibratable latch detached; Fig. 5, a plan view of the bracket and lower socket-plate of the door-check, and Fig. 6 a plan view of the end of the bracket.

Like letters represent corresponding parts in all the figures.

A denotes the vibrating latch. This is a curved bar with trunnions *a a*, projecting from both sides at about its middle, and having an oval hub, *b*, with longitudinal chamfered sides, so as to present sharp edges toward the ends of the trunnions. At one end this latch has a head, *c*, upon which is formed a rectangular shoulder with the central body of the latch, while its rear projecting end is rounded off, and butts against the rear of the cap-plate for limiting the swing movement of the latch. The opposite end of this latch is formed with a hook, *d*, having a rounded or beveled face. This latch A is secured between two plates, B and C. The plate B has cast a raised flange, *e*, to its front, and a step-bearing, *f*, to the middle thereof. This step-bearing has a socket for admitting either one of the trunnions *a* of the latch, and has a prismatic groove in its upper face that is diametrical with the socket and longitudinal to said plate. The cap-plate C is cast to the upper edge of a vertical plate, *g*, having a flange, *h*, to its base, which, being seated upon plate B, is secured thereto by a screw, *o*, four small lugs, *i i*, on plate B serving to steady the plate C in its acquired position. The plate C has a hub, *p*, cast to its top, and from the under side of the plate a socket is drilled into this hub for receiving and holding the upper trunnion *a* of the latch.

As will be noticed, the chamfered hub *b* of the latch A will fill the prismatic groove in step-bearing *f* of plate B when the latch is at rest and in line with the front edge of plate B; but by swinging said latch the sharp edges of the hub will have to follow the inclined sides of the groove in step-bearing *f*, whereby said latch is elevated, and as soon as released the latch will regain its former position by its gravity. By this arrangement the use of a spring is obviated.

The plate B can be secured directly upon the floor by wood-screws. Where carpets are laid, or for other reasons it is not desirable to fasten the plate upon the floor, the plate B is adjustably secured upon a bracket, D, which has a flange, *j*, that is screwed against the base-board of the room. For better strength and lightness I have the bracket D chamfered out at the bottom. The plate B is secured upon the end of bracket D by a screw, *k*, and for adjustably holding it in proper position a small stud or nipper, projecting from the under side of plate B, is to enter any one of a series of small notches, *n*, arranged on a circle around screw-hole *k*. This fixture is secured to the floor or base-board, so that the edge of the swinging door F will first come in contact with the end of the rounded face of latch-hook *d*, and will push said hook back, whereby the latch A will be somewhat turned and elevated, and after the door edge has passed said hook it will strike against the shoulder formed by head *c*, when the latch A will at once regain

its former position and the edge of the door will be locked between head *c* and hook *d*.

A small metal plate, *s*, Fig. 1, is let into the edge of the door for the point of the hook to catch behind and to prevent its turning, so that the door, before being closed, will have to be released first by pushing the hook back with the foot.

The trunnions *a* and hubs *b* of the latch are made alike on both sides for enabling the latch to be inserted between the plates either way for enabling this door-check to be applied to either right or left handed doors by simply reversing the latch after removing the screw *o*.

This device, as will be readily seen, is very simple and durable in its construction and reliable in its operation.

What I claim as my invention is—

1. The latch A, having head *c*, hook *d*, and trunnions *a*, with chamfered hubs *b*, secured between plate B, having socketed and grooved step *f*, and cap-plate C, having socket-hub *p*, the same being constructed and arranged substantially as and for the purpose set forth.

2. In a door-check, the plate B, in combination with bracket D, having flange *j*, and being adjustably secured thereon by a screw, K, and by a nipple entering any one of a series of recesses, *n*, all substantially as and for the purpose set forth.

3. In a door-check, the combination of a vibrating latch adapted to receive and hold a door, a bracket adapted to be secured to the base-board, plate B, adjustably secured to said bracket, and having lugs *i i*, and plate C, having vertical plate *g* and flange *h*, said latch vibrating between said plates B and C, substantially as and for the purpose set forth.

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