

B. POULSON.

Door-Checks.

No. 137,237.

Patented March 25, 1873.

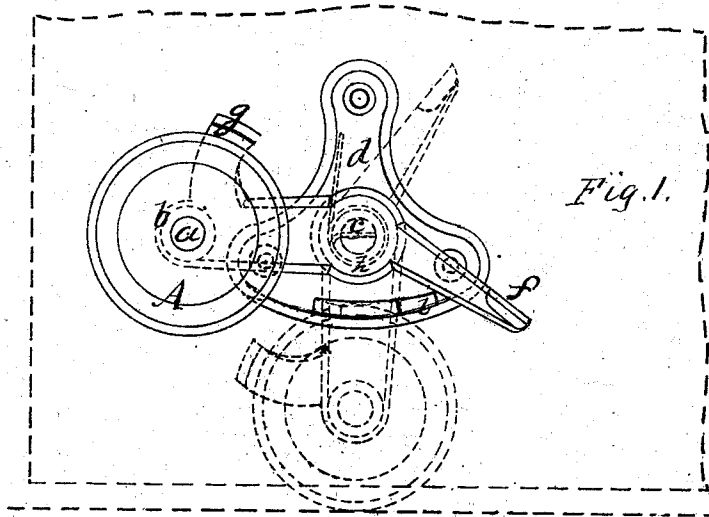


Fig. 1.

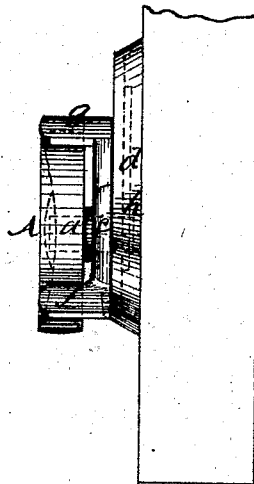


Fig. 2.

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IMPROVEMENT IN DOOR-CHECKS.

Specification forming part of Letters Patent No. 137,237, dated March 25, 1873.

To all whom it may concern:

Be it known that I, BRITTON POULSON, of Fort Wayne, in the county of Allen and State of Indiana, have invented certain new and useful Improvements in Door-Holders; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon, in which like letters refer to like parts in the different figures.

To enable others skilled in the arts to make and use my invention, I will proceed to describe its construction and operation.

In the drawing, Figure 1 is a front elevation. Fig. 2 is a side elevation.

The nature of my invention relates to the arrangement of an apparatus to be secured to the lower edge of a door, for the purpose of fastening the same in any desired position while open. This apparatus consists of an elastic wheel secured to one end of a suitable arm; said arm is pivoted at or near its center to a suitable base, upon which it oscillates freely, and is actuated by means of a helical spring; said arm extends from the pivot a suitable distance, where a foot-piece is formed; at its other extremity, in a convenient position over the wheel, another foot-piece is also formed, upon which the operator places his foot while adjusting the apparatus. The base-plate is also provided with a projection, which subserves the purpose of a double stop for the lever, preventing it from passing a certain desired point at either extremity of its oscillation. Thus by pressing the wheel downward, so as to cause the wheel to impinge on the floor, the arm carrying the wheel strikes said stop, and its progress is arrested. On the other hand, when the wheel is relieved, the arm, being actuated by the helical spring, elevates said wheel to a point where the other arm impinges said projection, and is arrested, thus holding the wheel in an elevated position, as will be more fully described.

In the drawing, A represents a wheel, which is made of any suitable elastic material cut in cylindrical rings. These rings are firmly clamped between suitable flanges, which form bearings for a stationary journal, *a*. Ax-

is *a* is formed on the end of arm *b*, and extends in a line at right angles to the direction of said arm *b*, as seen in the drawing, Fig. 2. Said arm *b* is pivoted at *c* to a base-plate, *d*, which is secured permanently to the lower edge of the inside of the door near the corner. Said arm extends from the pivot backward to a suitable distance, where a foot-piece is formed, as seen at *f*. *g* represents a foot-piece, which is formed at the front end of arm *b*, and is elevated above the wheel A, as seen in drawing. Base-plate *d* is flanged so as to leave a space under said plate. Within this space is situated a helical spring, *h*, the inner end of which is secured to the pivot *c* for the purpose of actuating the arm *b*, while the outer end is secured to the base-plate. Said spring is so adjusted as to support the arm *b* and wheel A in the position seen in full lines, Figs. 1 and 2, when the apparatus is not in actual use.

At the lower edge of the base-plate is a projection or stop, *i*, and an inclined surface. This stop and inclined surface subserve the double purpose of tightening or taking up any slack motion in the pivot *c* and holding the arm firmly, so as to prevent all lateral motion; also stopping or arresting the movement of the said arm, and confining it within the required limits.

Operation.

Secure the base-plate to the door in the required position, as seen by the broken section of the door in dotted lines. Open the door to any desired point, and place the toe of the foot on foot-piece *g*, and press it downward until the arm strikes stop *i*. At this point the wheel will be thrown in the position seen in dotted lines, Fig. 1, where it will impinge with considerable force on the surface of the floor, and the door will be firmly secured in position. Then the operator may apply pressure to the foot-piece *f*, which will relieve the wheel and the spring will immediately act to elevate the wheel to its original position, where it will be again arrested by stop *i*.

I do not claim, broadly, the use of an elastic wheel and pivot-arm, for I am aware that, as

applied to door-holders, these are not new; but

What I claim as new, and desire to secure by Letters Patent, is—

The combination of elastic wheel *A*, pivoted arm *b*, base-plate *d*, spring *h*, inclined plane and stop *i*, and foot-pieces *f* and *g*, the

whole being constructed, arranged, and operating substantially as specified.

BRITTON POULSON.

Attest:

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