

G. BASLER.
DOOR CHECK.

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Fig. 1.

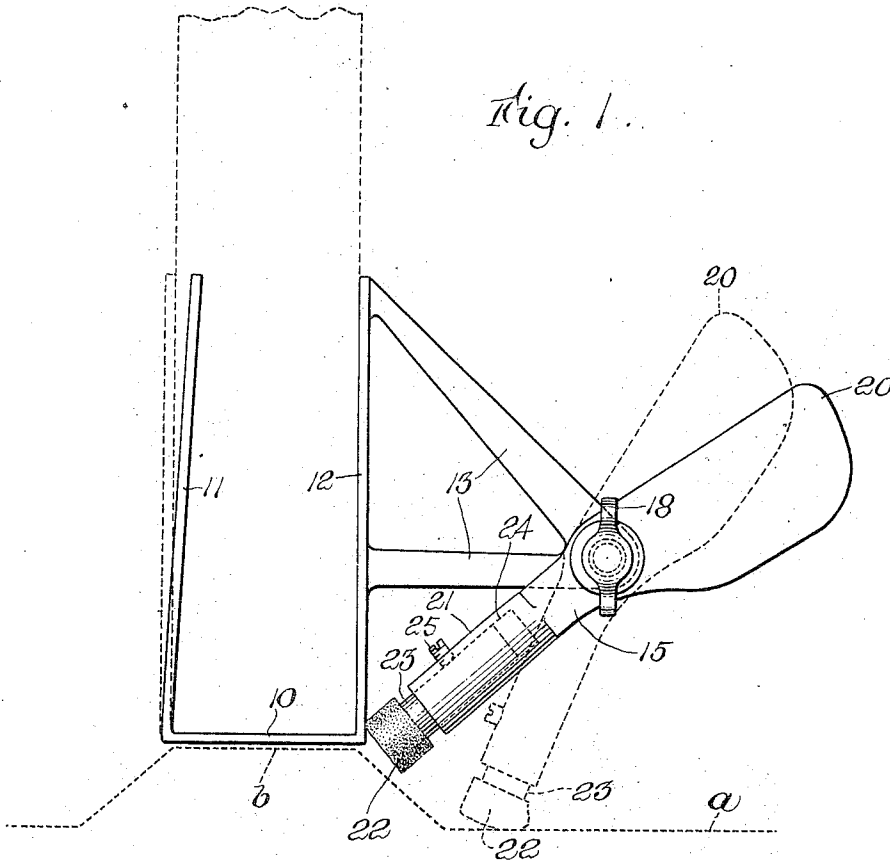
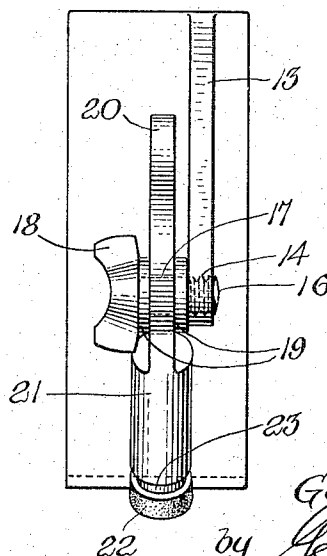


Fig. 2.



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UNITED STATES PATENT OFFICE.

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DOOR-CHECK.

1,044,728.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, GEORGE BASLER, a citizen of the United States, and resident of Lynn, county of Essex, State of Massachusetts, have invented an Improvement in Door-Checks, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

10 This invention relates to devices for checking the movement of doors, or like moving parts in one direction, and, while having other and more general fields of usefulness is especially designed for use on
15 factory or other doors which have a spring or weight connection normally tending to close the same. With such doors my improved device is adapted to cooperate to hold the door partly or wholly open, as
20 desired, and to be instantly disengaged by tripping by the foot to permit the door to close when desired.

A special object of the invention is to provide a door check which can be instantly
25 attached to a door without tools or manipulation of parts.

A further object of the invention is to provide a floor engaging element, having an adjusting capacity relative to its carrier,
30 so as to adapt it to engage different floor surfaces irrespective of the height of the door bottom relative thereto.

Still further features of the invention relate to an improved construction of
35 gravity acting check formed with a toe trip portion and to an improved arrangement for instantly locking the check in inoperative position at will.

The above, and other features of the invention will be better understood from the following detailed description, taken in connection with the accompanying drawings, and will be thereafter pointed out in the
40 appended claims.

Referring to the drawings, Figure 1 is a side elevation of my improved check as applied to a door, its operative position and a part of a door with a threshold being
45 shown in dotted lines. Fig. 2 is a front elevation of the improved device.

The means for attaching my improved check to a door or the like may vary considerably, but in the preferred embodiment shown a spring clip formed of plate stock

bent to substantially rectangular form is 55 provided, forming a U-shaped clamp with a bottom 10 and sides 11, 12. The bottom 10 is of a width corresponding to the thickness of a standard door to which the device is to be applied, and the sides 11, 12 normally converge somewhat toward their open 60 ends. The plate stock of which the spring clip is formed is of some little thickness, as appears from Fig. 1 and thus, as the spring plate arms 11, 12 are sprung apart, as indicated in dotted lines in this figure, they 65 strongly grip the sides of the door so that the device is securely held in place thereon. A bracket 13 is fixed to the plate 11, being shown as formed integral therewith, this 70 bracket extending out from the spring clamp some little distance, where it is provided with a bearing 14 for the swinging check arm. This check arm, designated 15, is mounted to swing on an axis bolt 16, having a threaded extremity to engage the bearing 75 aperture 14. This axis bolt has a smooth portion 17 on which the check arm is mounted, and a thumb nut 18 for turning up the same to clamp the check arm to hold 80 the same in inoperative position when desired. Washers 19 may be provided at either side of the check arm, spacing the same from the thumb nut and from the bracket 13. The check arm 15 normally extends 85 diagonally, as seen in Fig. 1, having a relatively heavy upward extension 20 which over-balances the downward socket extension 21 and tends to hold the same with the friction tip or plug 22 at its end against the 90 plate portion 12, as shown. The friction tip or plug 22 may have various forms of adjustable engagement with its supporting arm 21, but in the preferred embodiment shown, a projection 23 from this tip or plug 95 fits adjustably up into a socket 24 formed in arm 21 and is clamped in adjusted position by a screw bolt 25. The friction plug 22 may be formed with its engaging surface of rubber, felt, or other material adapted 100 for the proper frictional engagement of a floor surface. This plug is adjusted in its carrying arm 21 so that as normally held against the spring clamp by the over-balancing action of the counter-weight arm 20, it 105 is some little distance above the floor surface indicated at *a*, the elevated threshold to which the door bottom is fitted being in-

licated at *b*. When so resting in inoperative position, the check arm is at a considerable inclination to the vertical shown as about 45°, although this may be varied, it being only necessary that it have a capacity for tilting from this position to engage the floor surface before reaching the vertical. It is desirable that the floor engaging position be at some little angle to the vertical, as shown, sufficient to insure a proper friction grip upon the floor, while not near enough straight up and down so that the check tip would be apt to wedge in to prevent easy disengagement; it will be understood that this engaging angle of the trip arm may be regulated to a nicety by the lengthening adjustment of the friction plug 22, as described.

In use, the spring plates 11, 12 are sprung apart and the device clamped on to a door ready for use, the thumb screw 18 being loosened so that the check arm can swing freely. The friction plug 22 is held up in inoperative position, as shown in full lines, by the counter-balancing weight 20, so that the door is not checked thereby except when desired, and in such case the counter-balancing portion 20 may be touched by the toe to swing the friction plug down against the floor, as seen in dotted lines when further movement of the door will cause the friction plug to strongly grip the floor surface and remain in operative position until knocked out by the toe, or otherwise. It will be understood that for the effective friction gripping of the tip or plug 22 against the floor in the manner described, and in connection with the counter-balancing weight constituted by the toe trip 20, the particular angle of friction engagement with the floor is important, and my improved means of mounting the friction tip enables convenient and ready adjustment to effect this end. When desired, the check arm 15 may be locked in inoperative position so as not to be liable to be tripped down for check action by turning up the thumb screw 18. By making the toe trip extension 20 heavy enough to constitute a counter-weight to normally swing the friction tip to inoperative position, I am enabled to combine in this one element the tripping and counter-weighting functions so that a separate counter-balance in the form of a spring, or otherwise, is unnecessary.

It is to be understood that while I have described my improved device as for use in connection with an ordinary building door and the adjacent floor, this is merely illustrative, the door typifying any member

movable adjacent and generally parallel to a backing surface.

Various of the details of construction may be modified without departing from the spirit of the invention and I therefore do not desire to be limited as to these, or in any other respects, except as set forth in the appended claims.

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

1. A device of the kind described, comprising a U-shaped spring clamp adapted to engage and grip the sides of a door, and a friction tip mounted to swing thereon to engage a floor surface, or to inoperative position out of contact therewith, said tip being arranged with provision to normally swing and rest against a portion of the clamp in an inoperative position.

2. A device of the kind described, comprising a holder adapted to be fixed to the bottom of a door, a check arm pivoted thereto on an axis parallel with the door and having a friction tip at one end, and a toe trip formed to also constitute a counter-weight at its other end, said counter-weight being adapted to hold the friction tip normally in inoperative position resting against a part of the holder.

3. A device of the kind described, comprising a holder adapted to be secured to the bottom of a door, a check arm mounted to swing thereon having a friction tip extending diagonally downward and inward toward the door, and a toe trip formed to also constitute a counter-weight extending to the other side of its pivotal axis upward and outward away from the door, said counter-weight being adapted to hold said tip normally in inoperative position.

4. A device of the kind described, comprising a holder adapted to be secured to the bottom of a door, a check arm pivotally mounted thereon with a friction tip at its lower end to swing toward and away from the door, said friction tip normally extending diagonally downward and inward toward the door, and an axis bolt for said check arm arranged for manual adjustment to clamp the same positively and immovably in inoperative position or unclamp the same at will.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

GEORGE BASLER.

Witnesses:

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