

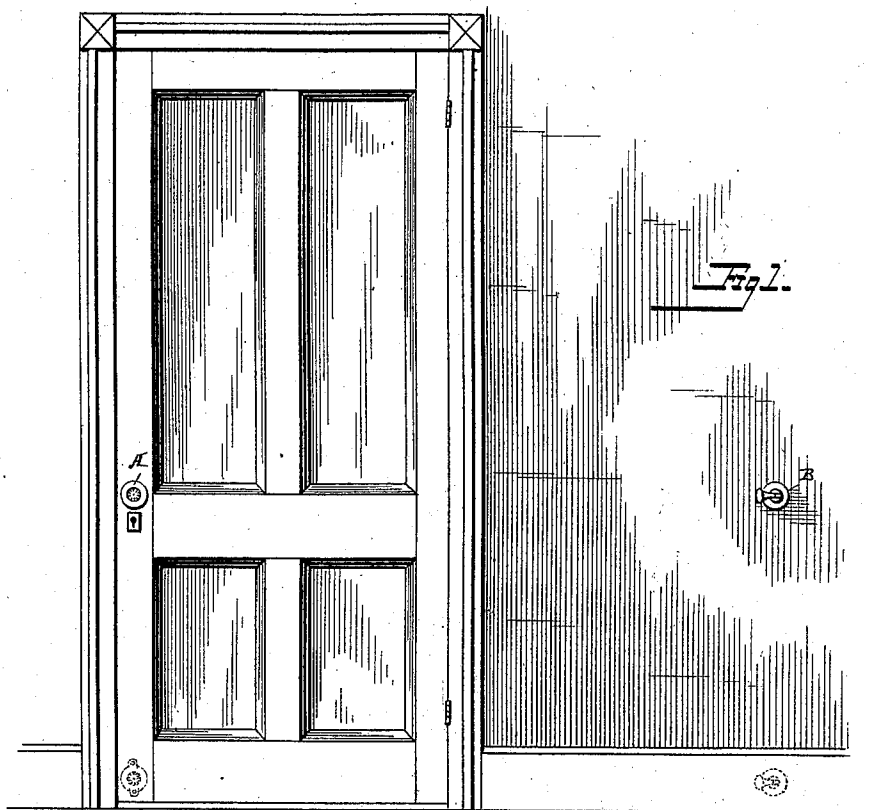
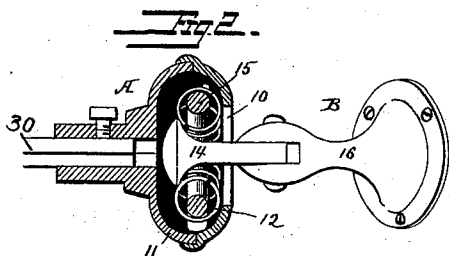
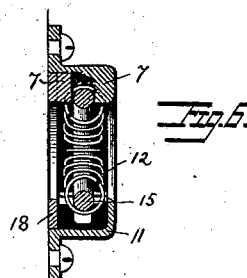
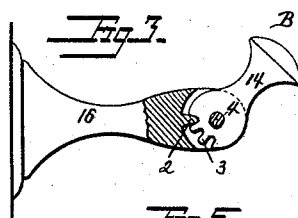
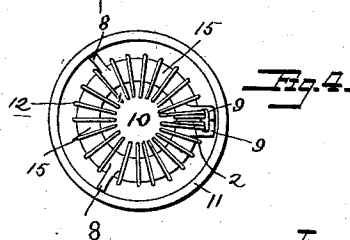
(No Model.)

G. H. LUSK.

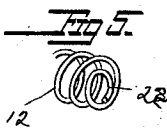
DOOR CHECK.

No. 372,034.

Patented Oct. 25, 1887.



Attest:
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attys

UNITED STATES PATENT OFFICE.

GEORGE H. LUSK, OF POMONA, FLORIDA.

DOOR-CHECK.

SPECIFICATION forming part of Letters Patent No. 372,034, dated October 25, 1887.

Application filed July 21, 1887. Serial No. 244,913. (No model.)

To all whom it may concern:

Be it known that I, GEORGE H. LUSK, a citizen of the United States, residing at Pomona, Putnam county, Florida, have invented certain new and useful Improvements in Door-Checks, of which the following is a specification.

This invention relates, generally, to door holders or checks employing two members, a shouldered head and an engaging-spring, that are each mounted independent of the other, one member secured to a fixture and the other to a movable part and adapted to be moved into contact with the fixed member, to be engaged thereby and temporarily hold the movable part against accidental disengagement.

The present invention consists in an improved structure whereby the operation of the door-check is rendered more effective.

In the accompanying drawings, illustrating a practical embodiment of the improved door-check, I have shown one member—the engaging-spring—applied to a casing, such as a door-knob, and the other member—the shouldered stud—applied to an arm adapted to be secured to the wall.

In said drawings, Figure 1 is an elevation illustrating a door provided with a door-handle containing the engaging-spring and the shouldered stud secured to the wall adjacent to the door. Fig. 2 is a section of the door handle or knob and its spring and an elevation of the shouldered stud engaging the same. Fig. 3 is an elevation, partly in section, of the shouldered stud and its arm. Fig. 4 is an elevation of the retaining-spring, its supporting core and casing. Fig. 5 is a view of a portion of the spring, and Fig. 6 is a sectional elevation of a modified form of the casing containing the retaining-spring.

The door handle or knob A, except in the particulars hereinafter specified, is of the ordinary form, adapted to engage with the spindle 30 of the ordinary door-latch, and capable of being rotated to unlatch the same, and which knob is hollowed or formed of a casing, 11, having an opening, 10, in the center of its face of a size to permit the shouldered stud B to pass through the opening into the casing. This casing forms a holder for containing a coiled engaging-spring, 12, that is bent into circular form, as shown in Fig. 4, to provide

a central opening for the passage of the shouldered stud B. As is well understood, the spring 12 thus formed provides a yielding ring, which will permit the ready insertion of the head of the stud B through it until it encircles and grasps it around the narrowed portion of its shank 14 just in rear of its head. In order to permit this circular spring 12 to yield it must be so supported as to permit its ready expansion diametrically to allow the passage of the head of the stud through it. This is accomplished by providing the circular spring with a core, 15, lying within the coils of the spring. This core may be of any form so long as it will support the spring and allow it to expand and contract. It is preferably formed of a split ring, as this structure permits the forming of the coil of the spring independent thereof, so that it may be inserted over the core. The opposite ends of the coils, instead of being of the same size as those forming the spring, are made much smaller, as at 22, Fig. 5, for the purpose of allowing the said small coil to tightly grasp the core. In order, also, to confine the opposite ends of the coil together, and thus preserve the circular form of the spring, the core 15 is provided with projections 9, of hook or other shape and situate in close proximity to the split end of the ring, and in practice a couple of coils of each end of the spring, together with the small coils 22, will be confined between the said projections.

The spring 12 and its core 15 are kept in a central position within the casing 11 by providing one or more projections, 8, extending from the core against the side of the casing. The projections 9 may also be of sufficient length to act in conjunction with the projections 8 for the same purpose. Ribs 7 (see Fig. 6) may also be provided on the walls of the casing, so as to lie between the coils of the spring 12 and to bear upon opposite sides of the core, and thus prevent it from shifting its position in any direction, but permit the spring to expand and contract.

It is obvious that the ribs 7 might be of such shape as to obviate the use of the projections 8, and vice versa.

The shouldered stud B is adjustably mounted in an arm, 16, so that the position of its head may be fixed to suit the angle at which the door or other movable part in swinging will

bear to the wall or other fixture. This adjustment in the present instance is effected by providing a tooth, 2, formed in the socket of the arm 16, that is adapted to be engaged by teeth 3, formed on the end of the stud, which is held in the socket in the arm 16 by a removable pin, 4, so that the position of the stud may be changed by allowing the tooth 2 to engage other teeth of the stud.

The improvements herein are not limited in their use in connection with a door handle or knob, as it is obvious the device may be contained by an independent casing, as in Fig. 6, adapted to be secured to the door or other movable part at any place it may be desirable to place it, as shown in dotted lines, Fig. 1.

In Fig. 6 the casing 11 has an open back for the ready insertion of the circular spring 15, which is shown as closed by an annulus, 18, bearing a portion of the rib 7, before referred to, for sustaining the spring and its core in a fixed position.

While the check has been illustrated in connection with a door, it is to be understood that it may be applied to any other device which it is desired to hold temporarily in place, and that instead of securing the shouldered stud to a fixture it might be secured to the movable part and the casing carrying the engaging-spring secured to the fixture.

What I claim is—

1. In a door or other check, the combination, with a shouldered stud, of a casing, a

circular engaging-spring contained by said casing, and a core supporting the spring, substantially as described.

2. In a door or other check, the combination, with a shouldered stud, of a casing, a circular engaging-spring contained by said casing, a core supporting the spring, and projections sustaining the core in a fixed position and allowing the free expansion of the spring, substantially as described.

3. In a door or other check, a door-knob secured to the door-latch and capable of being rotated to unlatch the door, having an opening in its face and provided interiorly with an engaging spring, in combination with a shouldered stud to be engaged by said spring in the door-knob, substantially as described.

4. The combination of a split core, projections 9, formed on said core, and a coiled spring loosely enveloping the core and having small coils 2 for grasping the core between the projections 9, substantially as described.

5. The combination, with a shouldered stud and a casing provided with ribs 7, of a core supporting a coiled engaging-spring having projections 8, substantially as described.

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

GEORGE H. LUSK.

Witnesses:

F. L. FREEMAN,
GEO. H. GRAHAM.