

No. 628,795.

C. B. HARKNESS.
DOOR CHECK.

Patented July 11, 1899.

(Application filed May 13, 1899.)

(No Model.)

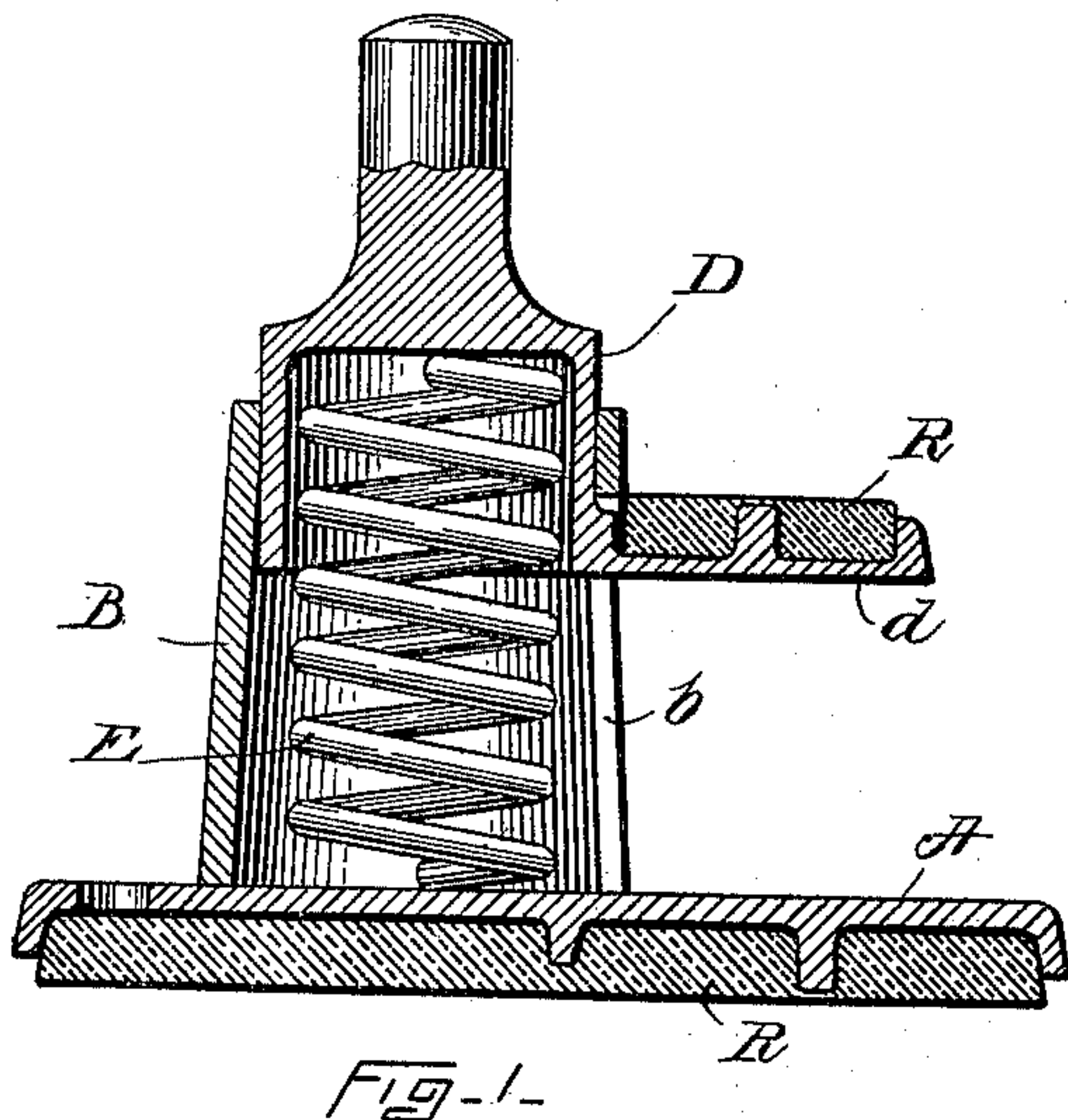


Fig-1-

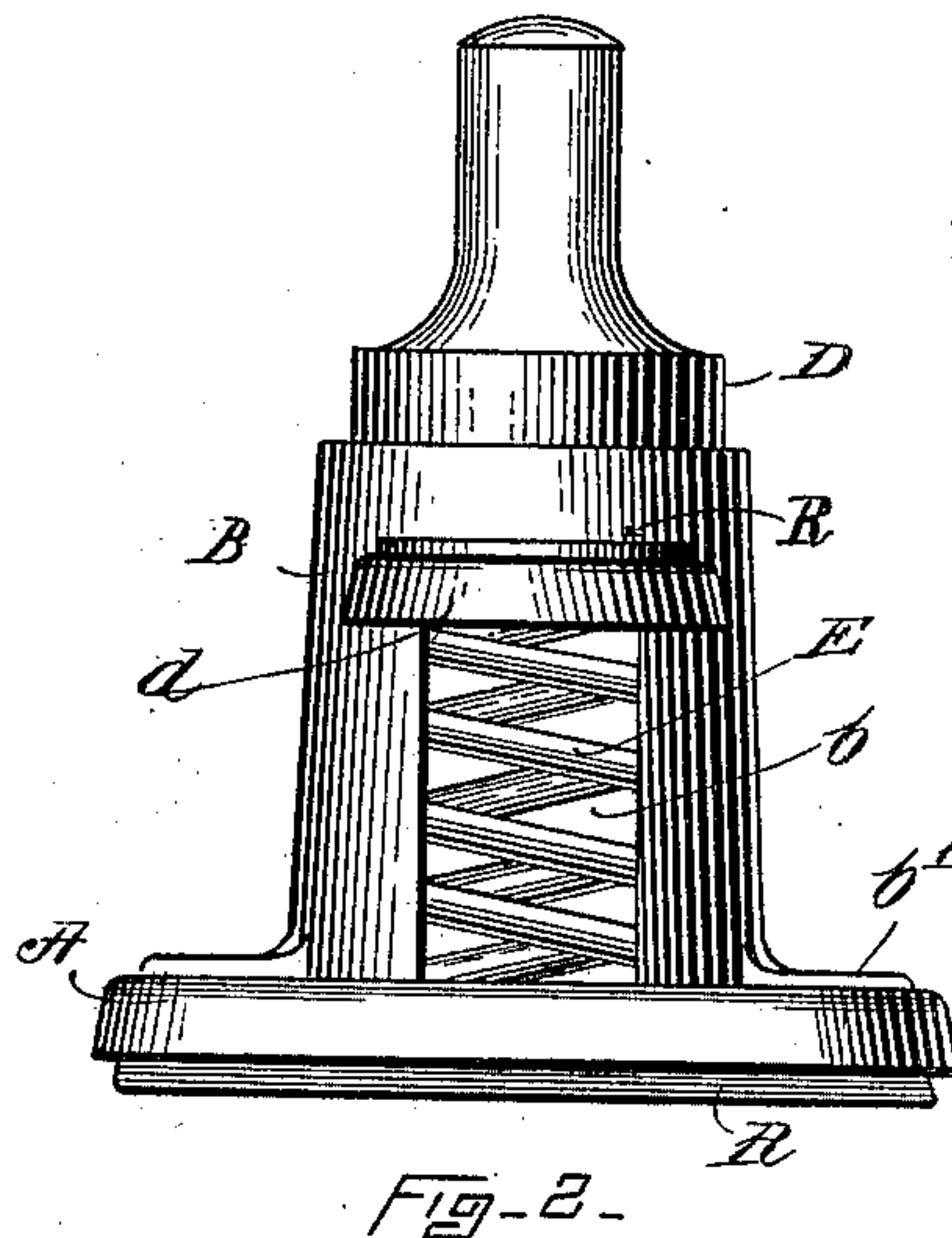


Fig-2-

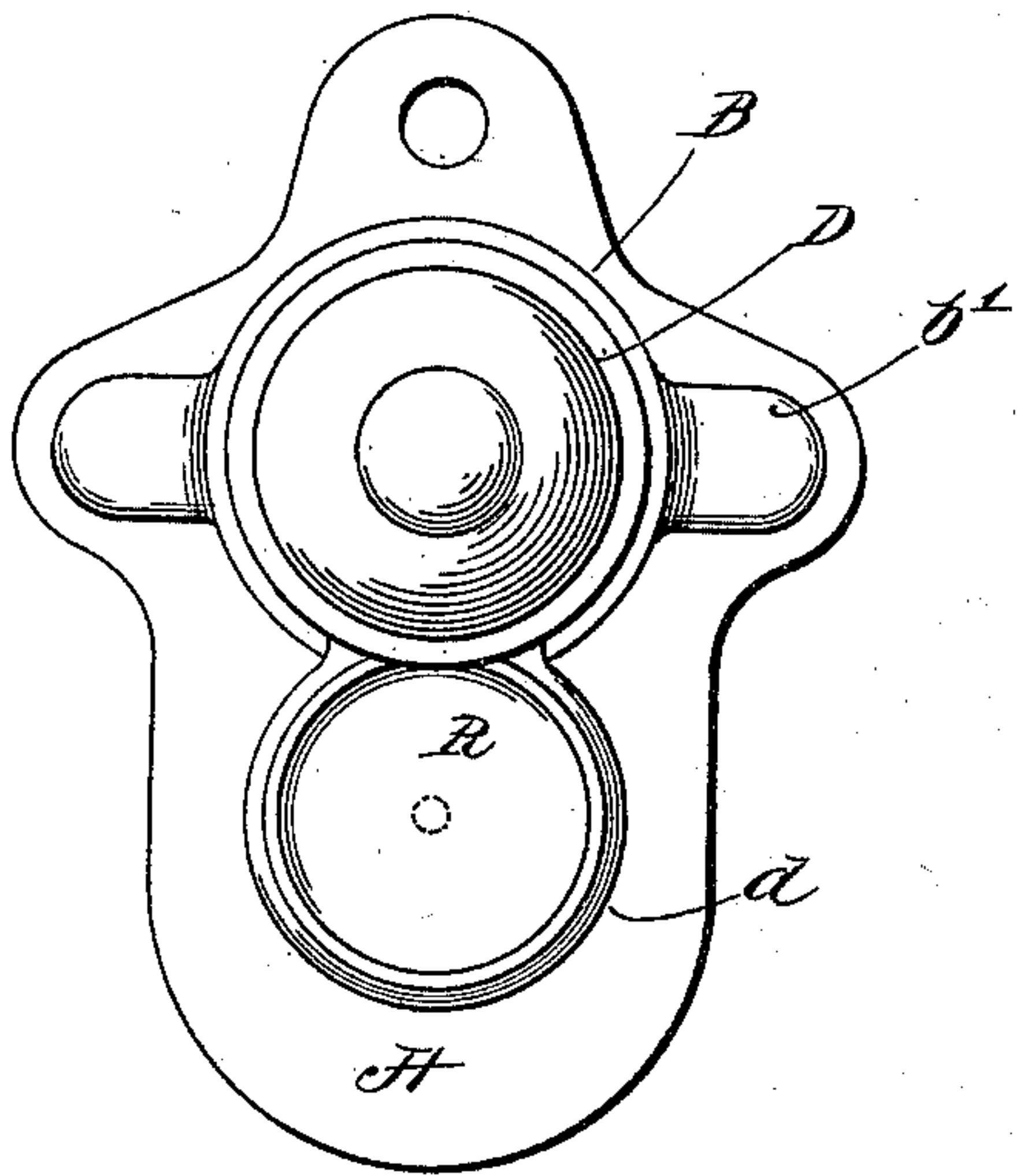


Fig-3-

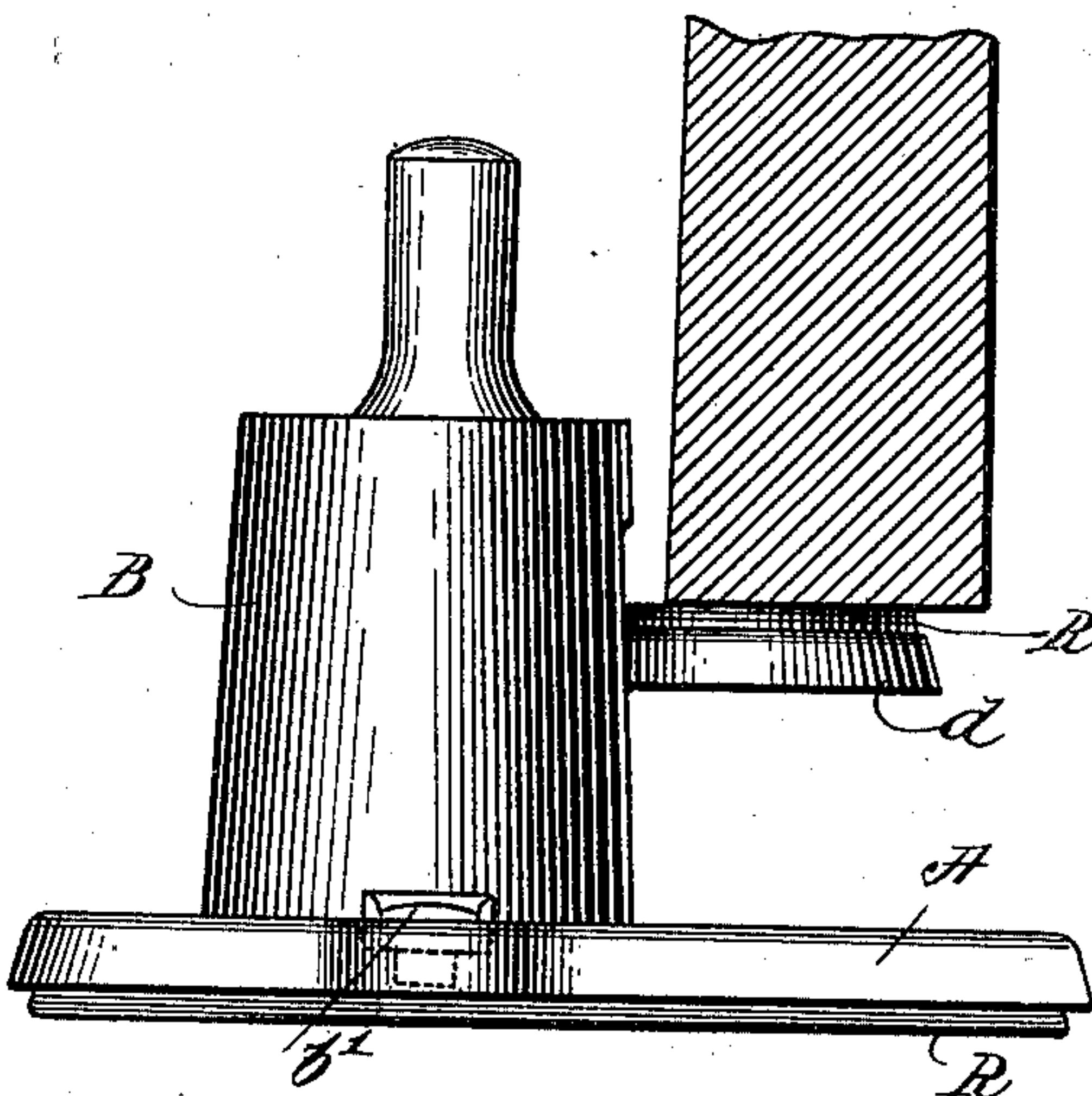


Fig-4-

WITNESSES.

Wm. H. Darnum,

A. W. Hamblen.

INVENTOR.

Charles Bradley Harkness
by O. R. Mitchell,
his attorney.

UNITED STATES PATENT OFFICE.

CHARLES BRADLEY HARKNESS, OF BOSTON, MASSACHUSETTS.

DOOR-CHECK.

SPECIFICATION forming part of Letters Patent No. 628,795, dated July 11, 1899.

Application filed May 13, 1899. Serial No. 716,627. (No model.)

To all whom it may concern:

Be it known that I, CHARLES BRADLEY HARKNESS, of Boston, Suffolk county, Massachusetts, have invented a new and useful Improved Door-Check, of which the following is a specification, reference being had to the accompanying drawings, in which—

Figure 1 is a central sectional side elevation of my device. Fig. 2 is a front elevation. Fig. 3 is a plan of Fig. 2. Fig. 4 is a side elevation showing the contrivance in operation.

My invention is a movable door-check designed to prevent a door from swinging upon its hinges and to hold it fixed in any desired position.

I have shown in a former patent granted to me, No. 565,896, dated August 18, 1896, a contrivance for attaining the same end, and my present invention is an improvement upon that contrivance by which certain defects are remedied and certain additional advantages attained.

In the drawings, A is a base.

B is a spring-box open at the top, which is secured to the base by screws *b'* and which has a slot *b* upon one side. The box B is mounted at one end of the base, and the slot faces the other end of the base. (See Figs. 1 and 3.) Within the box B another box D is placed, its upper end, which is closed, projecting through the open end of box B, and a bracket *d*, which is fast to the lower edge of box D, projects through the slot *b* in box B. Within the box B, its upper end resting within the box D, as shown, is a stout spring E, which tends constantly to eject box D from box B and which would succeed were it not for the bracket *d*, which engages the top of slot *b* and prevents this. It will be obvious that these various parts are assembled in the relations I have described before the box B is secured upon the base A.

Upon the bottom of the base A and upon the top of bracket *d* suitable strips of soft rubber R are secured.

The mode of operation is as follows: The check is placed upon the floor at the place where it is desired to hold the door, the foot of the operator is pressed upon the top of box

D, the spring E is compressed, and the bracket *d* forced down, if necessary, until it is in contact with the base A. The bottom of the door is then swung over the bracket *d* and the foot of the operator is lifted, allowing the spring E to throw up box D and all connected parts. The result is that the rubber R upon the bottom of base A is forced against the floor and the rubber upon the top of bracket *d* is forced against the bottom of the door, thus creating a strong frictional resistance to movement of the door in either direction.

The advantages of this construction over that shown in my prior patent are obvious, the principal one being that the contrivance can be used to check any door the bottom of which swings above the floor at a distance equal to or greater than the combined thickness of the base A and bracket *d*. In my earlier contrivance the telescoping boxes, with the contained spring, were placed beneath the door, and as it is obvious that the spring and boxes would require considerably more depth as a minimum than the mere thickness of two plates like base A and bracket *d* it is clear that the contrivance could not be placed beneath many doors—viz., those which swung at all close to the floor. The range of upward and downward movement in my present contrivance, in which the spring is operated at one side, is practically unlimited and is fully equal in one instrument to any variation likely to be found between doors, so that in my present contrivance one check can be used for any door in the house.

Another advantage of my present contrivance is its simplicity and the possibility of a direct application of the power of the operator in compressing and releasing the spring.

In practice I find that the base A should project well beyond the center of the bearing-surface of bracket *d*, for otherwise the check will manifest a tendency to tip. The drawings show the proportions which I have found successful.

It will be obvious that the bracket *d*, co-operating with the top of slot *b*, forms a stop to hold the two boxes in connection despite the effort of spring E, and this function is in-

dependent of its normal duty in engaging the bottom of the door.

• What I claim is—

5 The door-check above described, made up of a base A; box B mounted upon that base and having a slot *b*; box D within box B and carrying a bracket *d* which works within slot

b; spring E interposed between the boxes B and D, all organized and operating as described.

CHARLES BRADLEY HARKNESS.

Witnesses:

O. R. MITCHELL,

JOSEPH T. BRENNAN.