

(No Model.)

H. HINCKLEY.
INDICATOR FOR DOORS.

No. 417,724.

Patented Dec. 24, 1889.

FIG 1

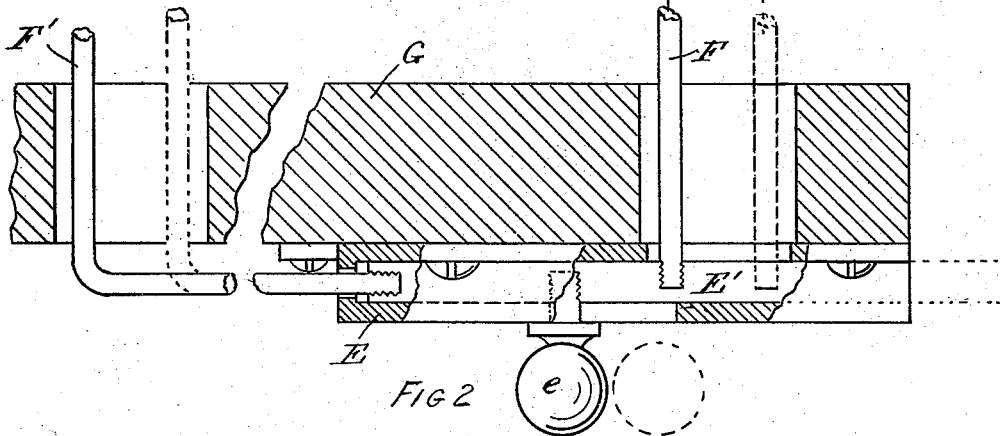
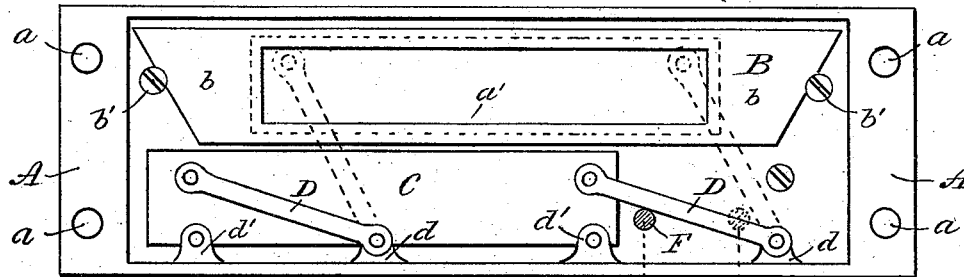


FIG 2

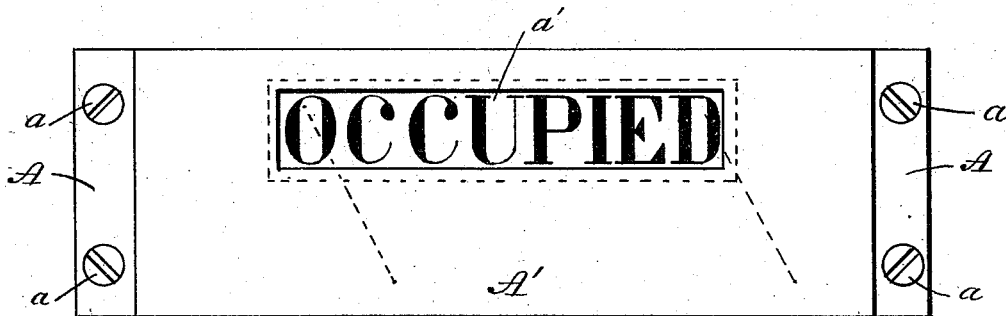


FIG 3

Witnesses
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HOWARD HINCKLEY, OF TRENTON, NEW JERSEY.

INDICATOR FOR DOORS.

SPECIFICATION forming part of Letters Patent No. 417,724, dated December 24, 1889.

Application filed March 30, 1889. Serial No. 305,372. (No model.)

To all whom it may concern:

Be it known that I, HOWARD HINCKLEY, a citizen of the United States, residing in Trenton, in the county of Mercer, in the State of New Jersey, have invented certain new and useful Improvements in Indicators for Doors, &c., of which the following is a full, clear, and exact specification and description, reference being had to the accompanying drawings, forming a part of this specification.

My invention relates to an appliance for indicating whether an apartment (such, for example, as a water-closet) is occupied or not; and the object of my invention is to provide an indicator which may be readily operated to bring the sign into exposed position, and in which no springs are necessary to retract or conceal the sign when the apartment is vacated.

A further object of my invention is to provide means for shifting the sign from different points relative to the actuating-bolt.

In order that my invention may be fully understood, I will proceed to describe it with reference to the accompanying drawings, in which similar letters of reference indicate similar parts, and in which—

Figure 1 is a rear view of my improved indicator. Fig. 2 is a view, partially in horizontal section and partially in plan, of the actuating parts of the indicator in position on a door. Fig. 3 is a front or outer side view of the indicator.

It is generally desirable that the fact of occupancy or vacancy of such apartments as water-closets should be indicated by some visual sign, so as to avoid awkward intrusion upon the privacy of the user. The means whereby I accomplish this result are as follows:

A designates an oblong casing or housing, which is designed to be attached, as by screws, to the outer side of a door at a point convenient for inspection. The outer side or face A' of the casing A is formed with an elongated slot or opening *a'*, through which the signal is exposed to view. This opening is covered by a transparent panel or plate B, which protects the sign, while permitting the inscription thereon to be readily seen. The ends *b b* of the plate B are cut on oppositely-

inclined lines, as shown, which come adjacent to two screws *b' b'*, let into the front A' of the housing A at the inner side thereof. By this arrangement the plate is securely held in position and yet may be readily removed, if desired.

C is the sign-plate, which lies horizontally within the casing A, and said plate is pivotally connected by links or arms D to lugs *d*, formed upon the bottom of the casing A, as clearly shown in Fig. 1. Lugs *d' d'* are also preferably formed upon the bottom of the casing A, so as to alternate with the lugs *d*, and thus permit the sign-plate to operate in the reverse direction from that which it operates when the arms or links D are connected to the lugs *d*.

I will now describe the means for actuating the sign-plate C.

E designates a case or housing attached to the inner side of the door, and E' designates a bolt working endwise within the casing E, and provided with a protruding knob or handle *e*. As shown in the right-hand end of Fig. 2, a pin F extends outwardly from the bolt E' and engages beneath one of the arms D. It will thus be seen that when the bolt is thrown in one direction the sign-plate C will be raised and exposed through the slot *a*, while when the bolt is thrown in the opposite direction the plate will fall by gravity and the signal will be concealed, thus indicating that the apartment is empty. This dropping of the sign-plate by gravity is a valuable feature of my invention, as it enables me to dispense with springs in constructing my device, and thus greatly simplifies and cheapens the same.

In the construction described the bolt-casing E and the housing A are supposed to be exactly opposite to each other upon opposite sides of the door G, and the bolt E' is shown as the one which fastens and unfastens the door. In some cases, however, it is desirable to set the housing A in the middle of the door. When thus arranged, the pin F is dispensed with and an L-shaped pin F' is used in lieu thereof. In such case the pin F' extends from the inner end of the bolt, but operates at its outer part against the arm D, as before. It will thus be seen that I have produced a

simple and inexpensive form of indicator, which is durable in construction and reliable in operation.

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

1. In an indicator for apartments, the combination, with the door-bolt, of an arm projecting therefrom, a casing having a slot or opening for the display of a sign, a swinging gravitating sign-plate corresponding to said opening, and links pivotally connecting said sign-plate to the casing, one of said links being in the path of movement of the bolt projection, substantially as and for the purposes described.

2. In an indicator for apartments, the combination, with the door-bolt, of an arm projecting therefrom, a casing having a slot or opening for the display of a sign, a swinging gravitating sign-plate corresponding to said opening, links pivotally connecting said sign-plate to the casing, one of said links being in the path of movement of the bolt projection, and a transparent plate for covering the casing-slot, said plate having inclined ends and movable retaining-screws therefor, substantially as and for the purposes described.

HOWARD HINCKLEY.

Witnesses:

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